Usenet Newsgroup Archive: rec.radio.amateur.antenna

2008-07 - 2008-12

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Date span: 2008-07-01 through 2008-12-31

Source text: rec.radio.amateur.antenna.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 5,950

Message records with no readable body available in the source text: 2

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 04:38:37 UTC
From: ltdoc@yahoo.com
Message-ID: <02fdf8a4-9a70-480b-b04c-e1efd22c88e2@b1g2000hsg.googlegroups.com>
Source record: 24575

JS,
I may be misreading your post, excuse me if I am. But, how are arcing power transformers a part of a fireman's job, other than putting out any resulting fire? They certainly can't, and shouldn't try to repair them. And I don't know how they could turn one 'off', do you? Referring any complaints to the power company responsible for that arcing transformer is about all they can do. Expecting the Fire Department to 'fix' it is a little unreasonable.
- 'Doc

2. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 06:00:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4ch5tuqn1@news.albasani.net>
Source record: 24576

ltdoc@yahoo.com wrote:
> JS,
> I may be misreading your post, excuse me if I am. But, how are arcing
> power transformers a part of a fireman's job, other than putting out
> any resulting fire? They certainly can't, and shouldn't try to repair
> them. And I don't know how they could turn one 'off', do you?
> Referring any complaints to the power company responsible for that
> arcing transformer is about all they can do. Expecting the Fire
> Department to 'fix' it is a little unreasonable.
> - 'Doc
>

Ever owned a commercial building? Ever have the local FD do their annual inspection on it? Ever see a building closed to access because the FD has found it to be a fire hazard and has ordered corrections/demolition?

Whose responsibility do you think fire hazards with the potential to do major property damage to citizens and/or homes/businesses is?

You ever seen one of those xfrmrs explode releasing the oil inside? Gallons of burning oil begin released in a hurry is not only a serious danger to structures, it would do serious damage to pedestrians, etc.

Would you report it to the police? (well, possibly, but who do you think they would call?) The dog catcher? The coroner? The mayor? A high school principal? The local boy scout master? Well maybe, but here in California, I am pretty sure the responsibility would lie with the FD ...

You are joking with such a question, right?

Regards,
JS

3. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 06:05:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4chev$v8a$1@news.albasani.net>
Source record: 24577

ltdoc@yahoo.com wrote:
> JS,
> I may be misreading your post, excuse me if I am. But, how are arcing
> power transformers a part of a fireman's job, other than putting out
> any resulting fire? They certainly can't, and shouldn't try to repair
> them. And I don't know how they could turn one 'off', do you?
> Referring any complaints to the power company responsible for that
> arcing transformer is about all they can do. Expecting the Fire
> Department to 'fix' it is a little unreasonable.
> - 'Doc
>

FD "fix" the xfrmr? (well, in a round-about-way, YES! EXACTLY!)

Again, you are joking right?

Logic dictates they would call the power company whose
property/responsibility the xfrmr is and tell them it is SERIOUS fire
hazard which they cannot ignore ... and that would carry a LOT MORE
WEIGHT than "joe blow amateur" saying he had noise on his receiver.

But then, you already knew that ... silly!

Regards,
JS

4. Re: Rigexpert AA-200 antenna analyser

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 09:59:58 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <oenak.160024$Ek2.15755@newsfe17.ams2>
Source record: 24578

I've had my RigExpert AA-200 for a few weeks now and I'm impressed with it.
I have only had the MFJ-259 as a comparison.
This Analyser for what I use it for, is far superior to the MFJ-259 in all ways. This is just what I have experienced myself.. Others may prefer the MFJ. I can't think why though.
Using a small homebrew loop coupler to measure the frequency of my homebrew traps on the AA-200 was very consistent and repeatable, with the same reliable and accurate readings every time. I got a fantastic dip at resonance. Unlike my TR Dip meter and the MFJ-259. Both would be close each time but not spot on like the AA-200.
I found using the AA-200 for homebrew Antennas is very easy and nice to use.
I'm new to using Analysers , so I'm still learning. But I can't fault this Analyser in any way for what I use it for. It does every thing I want it to do and does it very well indeed, all the time and every time with out fail.
What amazes me is after using the MFJ-259 and the AA-200 is why people are still buying the MFJ. I know its cheaper, but after having two fail on me, well never again.

73 Andy

<Danny Richardson> wrote in message
news:nong441s97m4h4iu0ihq91dnc1ssqd57m6@4ax.com...
> On Thu, 05 Jun 2008 15:16:45 -0600, Larry Benko <xxw0qe@comcast.net>
> wrote:
>
>>Dale,
>>
>>Glad you are happy with the AA-200 but the ability to calibrate an
>>analyzer with standards at the end of a cable or through a filter is
>>IMHO the absolute most important feature an analyzer can have. The
>>difference in accuracy is huge. Additionally the ability to make
>>measurements with a tuned tracking receiver rather than a broadband
>>detector separates the toys from the real equipment in the presence of
>>other RF interference when making antenna measurements. Granted that
>>the absence of a PC is a plus but the larger screen of a notebook PC is
>>a big deal to me as is the ability to capture plots for others to see.
>>I would take the AIM4170 over the AA-200 any day. If you wish, take a
>>look at http://www.bnk.com/w0qe/AIM4170_page1.html for a detailed
>>examination of the AIM4170. I am in no way connected to Array Solutions
>>who sells the 4170.
>>
>>73,
>>Larry, W0QE
>>
>

> I'll second that Larry. If you really want to soar add a Bluetooth to
> RS232 serial adapter and battery to the AIM. That makes it much more
> convenient to use plus it will improve measurement accuracies by
> easily having everything floating above ground potential.
>
> 73,
> Danny, K6MHE
>
> .
>

5. Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 12:36:25 UTC
From: Alan Peake <adpeake@nosspam.activ8.net.au>
Message-ID: <486A24C9.4060504@nosspam.activ8.net.au>
Source record: 24579

Q. What is the optimum antenna type to give the maximum gain given a fixed overall length of elements? Or, alternately, what's the minimum amount of wire/tubing to give a specified gain? (Neglecting support structures)
As an example, for a gain of 15 dBi, an 11 element Yagi appears to have about the same gain as two stacked 6 element Yagis which collectively use one more element. But what about collinears, V Beams, arrays of different sized Yagis etc. etc.?
Just out of curiosity.

Alan

6. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 13:32:43 UTC
From: Dave <noone@nowhere.com>
Message-ID: <%lqak.130$P11.98@trndny06>
Source record: 24580

a parabolic reflector fed with a feedhorn. no 'elements', just a hole in a pipe and a big curved plate. you need to define the parameters a bit more. for instance with no reflectors or directors, just driven verticals you can make lots of gain. phased array radars have no wire/tubing elements, just holes in a plate each with its own transmitter/receiver. and how do you count dishes, corner reflectors, and the ground? by changing the height of an antenna you can drastically change the gain at some particular takeoff angle, so maybe you want to restrict it to free space. an do you want minimum element count, or total material length? a very long wire can create high gain lobes, but may not be very useful if you are thinking of something rotateable.

"Alan Peake" <adpeake@nosspam.activ8.net.au> wrote in message news:486A24C9.4060504@nosspam.activ8.net.au...
> Q. What is the optimum antenna type to give the maximum gain given a fixed
> overall length of elements? Or, alternately, what's the minimum amount of
> wire/tubing to give a specified gain? (Neglecting support structures)
> As an example, for a gain of 15 dBi, an 11 element Yagi appears to have
> about the same gain as two stacked 6 element Yagis which collectively use
> one more element. But what about collinears, V Beams, arrays of different
> sized Yagis etc. etc.?
> Just out of curiosity.
>
> Alan
>

7. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 14:56:14 UTC
From: "cybrinjn@gmail.com" <cybrinjn@gmail.com>
Message-ID: <6a25cd58-de20-4f95-97bb-a1c9ccc26663@m45g2000hsb.googlegroups.com>
Source record: 24581

On Jul 1, 2:05 am, John Smith <assemblywiz...@gmail.com> wrote:
> lt...@yahoo.com wrote:
> > JS,
> > I may be misreading your post, excuse me if I am. But, how are arcing
> > power transformers a part of a fireman's job, other than putting out
> > any resulting fire? They certainly can't, and shouldn't try to repair
> > them. And I don't know how they could turn one 'off', do you?
> > Referring any complaints to the power company responsible for that
> > arcing transformer is about all they can do. Expecting the Fire
> > Department to 'fix' it is a little unreasonable.
> > - 'Doc
>
> FD "fix" the xfrmr? (well, in a round-about-way, YES! EXACTLY!)
>
> Again, you are joking right?
>
> Logic dictates they would call the power company whose
> property/responsibility the xfrmr is and tell them it is SERIOUS fire
> hazard which they cannot ignore ... and that would carry a LOT MORE
> WEIGHT than "joe blow amateur" saying he had noise on his receiver.
>
> But then, you already knew that ... silly!
>
> Regards,
> JS

Amen to that! I have seen a fire marshal shut down a nightclub
when even the police couldn't. A fire marshal can shut down the
IRS!

8. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 15:26:27 UTC
From: ltdoc@yahoo.com
Message-ID: <ef0a6edc-f627-45d5-86b3-347e378d9c00@f63g2000hsf.googlegroups.com>
Source record: 24582

Have I ever seen... etc? Yes, I have. About the exploding
transformers, Fir Marshals, most of the other thingys too. Just
depending on where you live, a Fire Marshal usually does have quite a
bit of authority to recommend things. Same conditions, most places do
not allow that Marshal to have a "My word is final." authority.
That's usually reserved for the judicial system, except in cases of -
immediate- life/death circumstances. The case of that noise
transformer just doesn't fall into tha catagory, sorry 'bout that.
How do I know all that? Cuz I worked around that sort of thingy for 20
years.
- 'Doc

9. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 15:57:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4dk5l$36e$1@news.albasani.net>
Source record: 24583

ltdoc@yahoo.com wrote:
> ... The case of that noise
> transformer just doesn't fall into tha catagory, sorry 'bout that.
> How do I know all that? Cuz I worked around that sort of thingy for 20
> years.
> - 'Doc
>

Than that explains it; you just failed to read/comprehend the first post which began this thread ...

The danger he stated was not a "noise transformer", he said, and I quote here, "I live in town, three blocks from a failing transformer. At night you can see it arcing continuously. ..."

While it is true, the first, above ("noise transformer"), is not a serious danger involving the FD--the second surely is ("failing transformer"--"arcing continuously.")

Regards,
JS

10. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 16:05:57 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <5a90791c-3605-4562-8a29-8aaf64c3c200@27g2000hsf.googlegroups.com>
Source record: 24584

On 1 jul, 14:36, Alan Peake <adpe...@nosspam.activ8.net.au> wrote:
> Q. What is the optimum antenna type to give the maximum gain given a
> fixed overall length of elements? Or, alternately, what's the minimum
> amount of wire/tubing to give a specified gain? (Neglecting support
> structures)
> As an example, for a gain of 15 dBi, an 11 element Yagi appears to have
> about the same gain as two stacked 6 element Yagis which collectively
> use one more element. But what about collinears, V Beams, arrays of
> different sized Yagis etc. etc.?
> Just out of curiosity.
>
> Alan

Hello Alan,

There is no optimum antenna design that fits everything. Some factors:
Center Frequency
Side lobe level requirements
Gain requirements
Available materials
Required bandwidth.
Design skills / Experience
Ease of production
Number of antennas to be produced,
Available volume
Sentimental
Environmental aspects
Visibility (think of covert antennas).

There are (physical) limitations on antenna gain and antenna size.
Antennas with high gain must have a size far above wavelength.
Reduction of side lobes with given gain also requires a larger
antenna.

Omni directional gain requires large vertical antenna structures.
Every 3 dB gain increase, requires double the (vertical) size.

Best regards,

Wim
PA3DJS
www.tetech.nl
don't forget to remove abc when replying directly.

11. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 18:20:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <62b3c314-fd27-40ff-8dce-75d3f1aa07c4@59g2000hsb.googlegroups.com>
Source record: 24585

On Jul 1, 11:05 am, Wimpie <wimabc...@tetech.nl> wrote:
> On 1 jul, 14:36, Alan Peake <adpe...@nosspam.activ8.net.au> wrote:
>
> > Q. What is the optimum antenna type to give the maximum gain given a
> > fixed overall length of elements? Or, alternately, what's the minimum
> > amount of wire/tubing to give a specified gain? (Neglecting support
> > structures)
> > As an example, for a gain of 15 dBi, an 11 element Yagi appears to have
> > about the same gain as two stacked 6 element Yagis which collectively
> > use one more element. But what about collinears, V Beams, arrays of
> > different sized Yagis etc. etc.?
> > Just out of curiosity.
>
> > Alan
>
> Hello Alan,
>
> There is no optimum antenna design that fits everything. Some factors:
> Center Frequency
> Side lobe level requirements
> Gain requirements
> Available materials
> Required bandwidth.
> Design skills / Experience
> Ease of production
> Number of antennas to be produced,
> Available volume
> Sentimental
> Environmental aspects
> Visibility (think of covert antennas).
>
> There are (physical) limitations on antenna gain and antenna size.
> Antennas with high gain must have a size far above wavelength.
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> antenna.
>
> Omni directional gain requires large vertical antenna structures.
> Every 3 dB gain increase, requires double the (vertical) size.
>
> Best regards,
>
> Wim
> PA3DJSwww.tetech.nl
> don't forget to remove abc when replying directly.

May I offer a rebuttal to your use of "size:" with respect to
radiators?
The addition of radiators and a time varying field to a Gaussian field
shows that a radiator can be any size,shape or elevation as long as it
is in equilibrium.
This is because the result of additions to Gauss's static law results
in the same law of Maxwell.
It can also be seen that any deviation from a straight line format
which creats lumped loading must be neutralized since
radiation is related to distributed loads L and C. Thus shape or size
is a determination of the neutralisation of lumped loads
while attaining equilibrium. With the above in hand it can be seen
that Foucault current generates a field that elevates particles that
have attained a weak magnetic field by entering the earths system
which provides for their rejection or ejection. Per Newtons Law the
weak forces
involved (Fermi) create an oscillation of the radiator which is a
mirror image of arriving impulses upon a radiuator with the same
natural resonance.
It is only convention that calls for an radiator to be straight of
which a helix antenna is an excellent example ,where a continuation of
rotation back to the originating point provides for a full circuit in
equilibrium si9nce added lumped loads are cancelled. Examples of the
foucault current was provided earlier on this forum when describing
the separation of scrap metal by Foucault current rejection. As with
Newton, Faraday Gauss etc all laws depend on the theme of equilibrium
within a boundary of a balanced universe and not on minute sections
thereof.
Have a great week end
Art

12. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 18:58:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4duobpiq1@news.albasani.net>
Source record: 24586

Art Unwin wrote:

> ...
> May I offer a rebuttal to your use of "size:" with respect to
> radiators?
> The addition of radiators and a time varying field to a Gaussian field
> shows that a radiator can be any size,shape or elevation as long as it
> is in equilibrium.
> This is because the result of additions to Gauss's static law results
> in the same law of Maxwell.
> It can also be seen that any deviation from a straight line format
> which creats lumped loading must be neutralized since
> radiation is related to distributed loads L and C. Thus shape or size
> is a determination of the neutralisation of lumped loads
> while attaining equilibrium. With the above in hand it can be seen
> that Foucault current generates a field that elevates particles that
> have attained a weak magnetic field by entering the earths system
> which provides for their rejection or ejection. Per Newtons Law the
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> the separation of scrap metal by Foucault current rejection. As with
> Newton, Faraday Gauss etc all laws depend on the theme of equilibrium
> within a boundary of a balanced universe and not on minute sections
> thereof.
> Have a great week end
> Art

Art:

This mysterious "equilibrium" (which I seem to have a bit of problem
getting my mind wrapped about), although you, seemingly, sum up a group
of properties with a single word, isn't this just "resonance"--with
respect to conductor length/width, capacitance to surrounding objects
and the shape/form of the magnetic field produced by antenna currents, etc?

However, a thought did come to my mind ... with the new technique of
"taking pictures" of light waves/particles--if a super-strong
electromagnet was pulsed in an enclosure of excitable gas(es), perhaps

we could see some unknown/yet-unseen phenomenon ...

However, you are speaking of resonance, aren't you? <still-scratching-head>

Regards,
JS

13. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 19:09:40 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Uhvak.84$dz.6@trndny01>
Source record: 24587

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g4duobpiq1@news.albasani.net...
> Art Unwin wrote:
>
>> ...
>> May I offer a rebuttal to your use of "size:" with respect to
>> radiators?
>> The addition of radiators and a time varying field to a Gaussian field
>> shows that a radiator can be any size,shape or elevation as long as it
>> is in equilibrium.
>> This is because the result of additions to Gauss's static law results
>> in the same law of Maxwell.
>> It can also be seen that any deviation from a straight line format
>> which creats lumped loading must be neutralized since
>> radiation is related to distributed loads L and C. Thus shape or size
>> is a determination of the neutralisation of lumped loads
>> while attaining equilibrium. With the above in hand it can be seen
>> that Foucault current generates a field that elevates particles that
>> have attained a weak magnetic field by entering the earths system
>> which provides for their rejection or ejection. Per Newtons Law the
>> weak forces
>> involved (Fermi) create an oscillation of the radiator which is a
>> mirror image of arriving impulses upon a radiuator with the same
>> natural resonance.
>> It is only convention that calls for an radiator to be straight of
>> which a helix antenna is an excellent example ,where a continuation of
>> rotation back to the originating point provides for a full circuit in
>> equilibrium si9nce added lumped loads are cancelled. Examples of the
>> foucault current was provided earlier on this forum when describing
>> the separation of scrap metal by Foucault current rejection. As with
>> Newton, Faraday Gauss etc all laws depend on the theme of equilibrium
>> within a boundary of a balanced universe and not on minute sections
>> thereof.
>> Have a great week end
>> Art
>
> Art:
>
> This mysterious "equilibrium" (which I seem to have a bit of problem
> getting my mind wrapped about), although you, seemingly, sum up a group of
> properties with a single word, isn't this just "resonance"--with respect
> to conductor length/width, capacitance to surrounding objects and the
> shape/form of the magnetic field produced by antenna currents, etc?
>

> However, a thought did come to my mind ... with the new technique of
> "taking pictures" of light waves/particles--if a super-strong
> electromagnet was pulsed in an enclosure of excitable gas(es), perhaps we
> could see some unknown/yet-unseen phenomenon ...
>
> However, you are speaking of resonance, aren't you?
> <still-scratching-head>
>
> Regards,
> JS

no, he's not... its the cosmic equilibrium between his fictitious particles and the attraction of them the diamagnetic materials that makes antennas work... of course he can't explain why ferromagnetic materials also work as antennas, but that hasn't stopped him from spewing his garbage all over this group. if you keep scratching your head while you try to figure out what he is talking about you will run out of hair before you even get to first base.

14. Re: wireless rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 19:23:42 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g4e08qnnp1@news.service.uci.edu>
Source record: 24588

I was considering a similar problem recently and the thing that came
to mind was adapting bits and pieces of an Yaesu Atas system to a
rotator motor. FWIW.

ac6xg

Andrea wrote:
> Yes Jerry, you're right.
> In Italy it is not very used.... I will try to get some details on the
> internet.
>
> Thanks.
>
> Andrea.
>
> "Jerry" <jerrymartes@verizon.net> ha scritto nel messaggio
> news:rVT9k.125$4a3.60@trnddc04...
>
>> Hi Andrea , You can do yourself a favor by learning X-10. The
>>technology allows a limitless number of channels. You can, if you want
>>to, control the rotation with X-10, and also send positoon back thru your
>>AC lines.
>>
>> Jerry KD6JDJ
>>
>>
>>
>>
>>"Andrea" <fuffa2k5@gmail.com> wrote in message
>>news:vzS9k.17690$Ca.14375@twister2.libero.it...
>>
>>>Yes, but how I can see the position of my antenna?
>>>Maybe I'm missing something, but with the X10 I can move the antenna but
>>>I cannot "see" the position.
>>>
>>>Andrea.
>>>
>>>"Jerry" <jerrymartes@verizon.net> ha scritto nel messaggio
>>>news:YeQ9k.100$Ae3.45@trnddc05...
>>>
>>>> Hi Andrea
>>>>
>>>> If the power for the rotator is related to the AC system that powers
>>>>your house, you dont need "wireless". There is a common connection
>>>>already available to you, X-10.

>>>>
>>>> Jerry KD6JDJ
>>>>
>>>>
>>>>"Andrea" <fuffa2k5@gmail.com> wrote in message
>>>>news:YNP9k.107292$FR.361840@twister1.libero.it...
>>>>
>>>>>Thanks for all the comments.
>>>>>But the problem is how to get the control signal of the position back
>>>>>to the shack.
>>>>>
>>>>>Andrea.
>>>>>
>>>>>"Jerry" <jerrymartes@verizon.net> ha scritto nel messaggio
>>>>>news:l7P9k.231$bn3.123@trnddc07...
>>>>>
>>>>>>"Andrea" <fuffa2k5@gmail.com> wrote in message
>>>>>>news:fkJ9k.107115$FR.361657@twister1.libero.it...
>>>>>>
>>>>>>>Hi guys,
>>>>>>>Does enyone know if exist is a wireless rotator?
>>>>>>>I cannot run the control cable between the control box and the
>>>>>>>rotator.
>>>>>>>Any advice is very appreciated.
>>>>>>>
>>>>>>>Thanks
>>>>>>>
>>>>>>>Andrea.
>>>>>>
>>>>>> Hi Andrea
>>>>>>
>>>>>> Since there is power at the rotator, I assume there are power lines
>>>>>>there. I think you can figure a way to rotate thru an X-10 device.
>>>>>>
>>>>>> Jerry
>>>>>>
>>>>>
>>>>>
>>>>
>>>
>>
>
>

15. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 19:38:24 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8fffc3fb-bdc8-4ad4-9336-5a444782e197@l64g2000hse.googlegroups.com>
Source record: 24589

On Jul 1, 1:58 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > May I offer a rebuttal to your use of "size:" with respect to
> > radiators?
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> > which a helix antenna is an excellent example ,where a continuation of
> > rotation back to the originating point provides for a full circuit in
> > equilibrium si9nce added lumped loads are cancelled. Examples of the
> > foucault current was provided earlier on this forum when describing
> > the separation of scrap metal by Foucault current rejection. As with
> > Newton, Faraday Gauss etc all laws depend on the theme of equilibrium
> > within a boundary of a balanced universe and not on minute sections
> > thereof.
> > Have a great week end
> > Art
>
> Art:
>
> This mysterious "equilibrium" (which I seem to have a bit of problem
> getting my mind wrapped about), although you, seemingly, sum up a group
> of properties with a single word, isn't this just "resonance"--with
> respect to conductor length/width, capacitance to surrounding objects
> and the shape/form of the magnetic field produced by antenna currents, etc?
>
> However, a thought did come to my mind ... with the new technique of
> "taking pictures" of light waves/particles--if a super-strong

> electromagnet was pulsed in an enclosure of excitable gas(es), perhaps
> we could see some unknown/yet-unseen phenomenon ...
>
> However, you are speaking of resonance, aren't you? <still-scratching-head>
>
> Regards,
> JS

No. Resonance is a quality of equilibrium but equilibrium is not
necessarily a part of resonance.
For instance, a full wavelength corresponding to a period of
oscillation is a form in equilibrium
where as a fractional wavelength can be resonant but certainly in
equilibrium
This really ia at the bottom of Newtons law regarding action and
reaction where all forces around a point
must equal zero. For instance if we have a member that is carrying an
alternating current applying such law states that there is
no moving charge on the inside of the member and where all charges on
the surface are in static form. The same law is used to determine the
likes oif skin depth.Now I have a problem with fractional WL current
carrying members where the surface charges move to one end which
suggests a internally moving charge. This effect can be seen when
comparing a dipole with a quad where the dipole can create corona at
the ends as the charges pile up as they look for a place to go doing
the time space of one period
where as a quad is a full WL anmd in equilibrium.
Maxwells law is based on equilibrium which means it can accoun t for
what is known as the "week force" which Einstein searched for in vain
for his GUT theory., Its inclusion in the laws of the masters was by
mathematical derivitation where they could not devine it even tho it
is one of the basic four forces of the Universe, the CLASSICAL model.
Now with my adaptation of gauss';s law which provides a picture of
radiation the appearance of weak eddy currents give rise to this
unknown weak force. With computers which are based around equilibrium
and Maxwell and now my extension of Gaussian law will provide the
result of that weak force by placing a radiator tipped from right
angles to the earths surface since all inside of a gaussian field MUST
be in equilibrium. If you need more explanation just ask for it or get
hold of a physics professor who is not a ham!
Regards
Art
Art

16. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 19:39:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4e14v$ug1$1@news.albasani.net>
Source record: 24590

Dave wrote:

> ...
> no, he's not... its the cosmic equilibrium between his fictitious particles
> and the attraction of them the diamagnetic materials that makes antennas
> work... of course he can't explain why ferromagnetic materials also work as
> antennas, but that hasn't stopped him from spewing his garbage all over this
> group. if you keep scratching your head while you try to figure out what he
> is talking about you will run out of hair before you even get to first base.
>
>

Actually, there is only one alternative--the ether ... something which I
wish they will explore with new techniques ... Something (ether) which
even Einstein acknowledged. However, why Art would "waltz" around
something which is already being explored/argued, and cloak that
"waltzing" in an unfamiliar term(s) is simply beyond me ... unless ones'
point is obsfucation.

Regards,
JS

17. Re: Transmission line choke - copper pipe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 19:51:36 UTC
From: No Spam <no@spam.com>
Message-ID: <qJidnTtP3bVVF_fVnZ2dnUVZ_vWdnZ2d@comcast.com>
Source record: 24591

Would a section of 1/2" copper pipe work as a good choke? Simply slid over the coax?

I've seen lightning chokes where about a 8ft piece of copper pipe was slide over coax to choke off a lightning surge.

18. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 19:52:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4e1u1hp1@news.albasani.net>
Source record: 24592

Art Unwin wrote:

> ...
> No. Resonance is a quality of equilibrium but equilibrium is not
> necessarily a part of resonance.
> For instance, a full wavelength corresponding to a period of
> oscillation is a form in equilibrium
> where as a fractional wavelength can be resonant but certainly in
> equilibrium
> This really ia at the bottom of Newtons law regarding action and
> reaction where all forces around a point
> must equal zero. For instance if we have a member that is carrying an
> alternating current applying such law states that there is
> no moving charge on the inside of the member and where all charges on
> the surface are in static form. The same law is used to determine the
> likes oif skin depth.Now I have a problem with fractional WL current
> carrying members where the surface charges move to one end which
> suggests a internally moving charge. This effect can be seen when
> comparing a dipole with a quad where the dipole can create corona at
> the ends as the charges pile up as they look for a place to go doing
> the time space of one period
> where as a quad is a full WL anmd in equilibrium.
> Maxwells law is based on equilibrium which means it can accoun t for
> what is known as the "week force" which Einstein searched for in vain
> for his GUT theory., Its inclusion in the laws of the masters was by
> mathematical derivitation where they could not devine it even tho it
> is one of the basic four forces of the Universe, the CLASSICAL model.
> Now with my adaptation of gauss';s law which provides a picture of
> radiation the appearance of weak eddy currents give rise to this
> unknown weak force. With computers which are based around equilibrium
> and Maxwell and now my extension of Gaussian law will provide the
> result of that weak force by placing a radiator tipped from right
> angles to the earths surface since all inside of a gaussian field MUST
> be in equilibrium. If you need more explanation just ask for it or get
> hold of a physics professor who is not a ham!
> Regards
> Art
> Art

Hmmm ... sounds to me of the magnetic component of the antenna current reacting with, or acting upon, the ether and creating the rf wave phenomenon (waves/particles/etc.) ... there are a millions ways, perhaps, to refer to this, as yet unproven effect/affect, but this theory has already been on the table for centuries ... discarded and then reincarnated at least once ...

Regards,
JS

19. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 19:58:39 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g4e2aboci1@news.service.uci.edu>
Source record: 24593

Art Unwin wrote:

> With the above in hand it can be seen
> that Foucault current generates a field that elevates particles that
> have attained a weak magnetic field by entering the earths system
> which provides for their rejection or ejection. Per Newtons Law the
> weak forces
> involved (Fermi) create an oscillation of the radiator which is a
> mirror image of arriving impulses upon a radiuator with the same
> natural resonance.

Hi Art -

You have a unique way of making simple notions seem utterly
ridiculous. :-)

ac6xg

20. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 20:04:25 UTC
From: Bernard Peters <sis@boom.bang>
Message-ID: <qJidnTpP3bVUEPfVnZ2dnUVZ_vWdnZ2d@comcast.com>
Source record: 24594

On Mon, 30 Jun 2008 16:33:55 +0000, Michael wrote:

> I live in town, three blocks from a failing transformer. At night you
> can see it arcing continuously. This produces an S8 noise level on my
> Icom 718. The power company has been completely uncooperative now for 6
> months of my complaining.
>
> Even though I was warned that a loop antenna would not help with a noise
> source this close, I put up a 75 meter full wave loop anyway. I was
> desperate.
>

I have had excellent results with eliminating urban near field RF noise
with loop antennas such as my T2FD. Went from s7 noise floor to almost
nothing. Desirable signals went from S7 to S6, but S7 in a S7 noise floor
is not anywhere usable as a S6 in a near quite noise floor!

Also, if the arc is visible on the xformer, I'd call the fire dept

21. Re: Transmission line choke - copper pipe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 20:05:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4e2m5$216$1@news.albasani.net>
Source record: 24595

No Spam wrote:
> Would a section of 1/2" copper pipe work as a good choke? Simply slid
> over the coax?
>
> I've seen lightning chokes where about a 8ft piece of copper pipe was
> slide over coax to choke off a lightning surge.

If the pipe was attached at the outside of the coax, at the antenna feed and have a length of 1/4, 1/2 wavelength, etc. (depending on antenna type/length), I would suspect it would be an "easier" path for the rf currents which were flowing on the outside of the coax, and they would now choose the path of the pipe--wouldn't you? However, another way of looking at this particular situation would be you just added another element to the antenna!

However, I suspect you are suggesting chucking that (1/4?) wavelength of pipe over the coax an no specific point and with no direct connection to the coax; and, in that case, I would have to experiment, do research or ask someone with experience ... however, I suspect not ...

Regards,
JS

22. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 20:54:59 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e32213c6-f6e1-4edd-83ef-6c4a9cb4b0b2@d45g2000hsc.googlegroups.com>
Source record: 24596

On Jul 1, 2:39 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Dave wrote:
> > ...
> > no, he's not... its the cosmic equilibrium between his fictitious particles
> > and the attraction of them the diamagnetic materials that makes antennas
> > work... of course he can't explain why ferromagnetic materials also work as
> > antennas, but that hasn't stopped him from spewing his garbage all over this
> > group. if you keep scratching your head while you try to figure out what he
> > is talking about you will run out of hair before you even get to first base.
>
> Actually, there is only one alternative--the ether ... something which I
> wish they will explore with new techniques ... Something (ether) which
> even Einstein acknowledged. However, why Art would "waltz" around
> something which is already being explored/argued, and cloak that
> "waltzing" in an unfamiliar term(s) is simply beyond me ... unless ones'
> point is obsfucation.
>
> Regards,
> JS

I have no knoweledge of that but I would like to follow up. Can you
give me some pointers on the subject so I may obtain some further
knowledge
For my part everything that I have stated can be proven and known to
exist
It is the hands of most hams who are interest in antenna programs to
follow
the trail that I point to with respect to arrays in equilibrium for
which the programs
are made from, instead of direction to planar arrays which I suspect
that Maxwell
and others new nothing about

23. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 21:15:29 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <104f410c-7e1f-4484-a224-ab01325eb7ab@79g2000hsk.googlegroups.com>
Source record: 24597

On Jul 1, 2:58 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Art Unwin wrote:
> > With the above in hand it can be seen
> > that Foucault current generates a field that elevates particles that
> > have attained a weak magnetic field by entering the earths system
> > which provides for their rejection or ejection. Per Newtons Law the
> > weak forces
> > involved (Fermi) create an oscillation of the radiator which is a
> > mirror image of arriving impulses upon a radiuator with the same
> > natural resonance.
>
> Hi Art -
>
> You have a unique way of making simple notions seem utterly
> ridiculous. :-)
>
> ac6xg

Jim
You are now doing your job as a teacher and a ham not a physicist.
The first two jobs are about repeating what is in the books parrot
fashion
and to prevent change . A physicist, which you are not, accepts
the
possibility that all is not known and is willing to question or debate
a
subject instead of exercising free speech without substance.
Using what education you have on the subject state in clear terms as
to why
what you are refering to is ridiculous so your posts have some meaning
that
others can follow inteligently
Regards
Art

24. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 21:37:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4e82icpd1@news.albasani.net>
Source record: 24598

Art Unwin wrote:

>> ...
> I have no knoweledge of that but I would like to follow up. Can you
> give me some pointers on the subject so I may obtain some further
> knowledge

What part the ether being acknowledged by Einstein? Colleges, papers, physicists exploring the existence/properties of the ether? What? You can't read? You can't use Google? You missed my posts quoting Einsteins last mention of the ether? Help me out here ...

> For my part everything that I have stated can be proven and known to
> exist

I would even accept the arrls' material is what "really exists" (this material will only need to be revised if and when the existence of the ether can be known for certain and its' properties exploited though new designs--mostly.) And, is in line with all presently accepted theory--up to the point where the discussions begin of whether light (and therefore rf) is composed of waves and/or particles or some phenomenon which exhibits both of these characteristics but is separate in existence, in some way. AND, whether rf/light "shoots" across a true "nothing" or "strikes the chords of the ether" and transverses a media which we can not see and know its properties, yet?"

What? You are introducing a "third theory" which does not deal with shooting photons and nothing (well, you can shoot light waves through gases and glass, obviously!), or waves and a media?

It would seem to me your "equilibrium" must either deal with a "nothing" or an ether ...

In my mind, all antenna theory revolves around a few simple truths:

1) The antennas ELECTRICAL length relates DIRECTLY to what frequencies it is efficient at.

2) Antennas are subject to laws of ac resistance.

3) Antennas are subject to knows laws of inductance.

4) Antennas are subject to know laws of capacitance.

5) All of the above, in one form or another, contribute to and define an antenna impedance.

Some of us just wonder if the ether exists, and whether knowing its' properties, if so, might give one a break through into antenna designs not yet even though of ...

> It is the hands of most hams who are interest in antenna programs to
> follow
> the trail that I point to with respect to arrays in equilibrium for
> which the programs
> are made from, instead of direction to planar arrays which I suspect
> that Maxwell
> and others new nothing about

Except for a few hams, most notable Cecil, Richard Clark, Walter Maxwell, etc., most are the "appliance users" and/or "brass pounders of yesteryear." What remains is ill suited to find anything other than a rare contact on contest/field-day, or perhaps a new keying device capable of creating one more character per minute ...

You will forgive me if I examine your motives, if pure of heart, I am sure they will stand as fitting ...

No Art, I think you are confused and using an "equilibrium" to keep from coming to terms with that, or you are "obsfucating us, with intent!"

But then, I could just be confused myself ...

Regards,
JS

25. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 22:35:04 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g4ebfm$rk6$1@news.service.uci.edu>
Source record: 24599

Art Unwin wrote:
> On Jul 1, 2:58 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>
>>Art Unwin wrote:
>>
>>>With the above in hand it can be seen
>>>that Foucault current generates a field that elevates particles that
>>>have attained a weak magnetic field by entering the earths system
>>>which provides for their rejection or ejection. Per Newtons Law the
>>>weak forces
>>>involved (Fermi) create an oscillation of the radiator which is a
>>>mirror image of arriving impulses upon a radiuator with the same
>>>natural resonance.
>>
>>Hi Art -
>>
>>You have a unique way of making simple notions seem utterly
>>ridiculous. :-)
>>
>>ac6xg
>
>
> Jim
> You are now doing your job as a teacher and a ham not a physicist.

I don't have a job on the internet, Art. I was just speaking plainly
and honestly.

ac6xg

26. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 23:19:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6aae02cc-f5f3-4531-b56b-742274c0014d@d77g2000hsb.googlegroups.com>
Source record: 24600

On Jul 1, 5:35 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Art Unwin wrote:
> > On Jul 1, 2:58 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>
> >>Art Unwin wrote:
>
> >>>With the above in hand it can be seen
> >>>that Foucault current generates a field that elevates particles that
> >>>have attained a weak magnetic field by entering the earths system
> >>>which provides for their rejection or ejection. Per Newtons Law the
> >>>weak forces
> >>>involved (Fermi) create an oscillation of the radiator which is a
> >>>mirror image of arriving impulses upon a radiuator with the same
> >>>natural resonance.
>
> >>Hi Art -
>
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> >>ridiculous. :-)
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> >>ac6xg
>
> > Jim
> > You are now doing your job as a teacher and a ham not a physicist.
>
> I don't have a job on the internet, Art. I was just speaking plainly
> and honestly.
>
> ac6xg

But you supplied no substanc! You did not share what you were talking
about
or a point of contention just a use of free speech as in graphitty If
you had
knowledge of what I was speaking off then you could have delved in and
explain your comments
but you are deficient. I don't have time to teach a parrot another
line
Art

27. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 23:47:49 UTC
From: Alan Peake <adpeake@nosspam.activ8.net.au>
Message-ID: <486AC225.8010208@nosspam.activ8.net.au>
Source record: 24451

Dave wrote:
> a parabolic reflector fed with a feedhorn. no 'elements', just a
> hole in a pipe and a big curved plate. you need to define the
> parameters a bit more.

OK, maximum gain for a single frequency, free space, sidelobes and back-front ratio not important. Not concerned about number of elements - only minimum total material length. Doesn't need to be rotatable - this is a purely theoretical exercise.

Parabolic reflector sounds good but it's a bit hard to quantify for the purposes of minimising total material length. Perhaps one could use a wire mesh dish. Would that use more or less material than a Yagi? I would imagine that a phased array radar could use the wire mesh approach but the same questions would apply as for the parabolic reflector. Same for corner reflectors.
Arrays of driven elements may be promising but the few such antennae that I've simulated so far, use more material than Yagis for the same gain.

Alan

28. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-01 23:49:36 UTC
From: Alan Peake <adpeake@nosspam.activ8.net.au>
Message-ID: <486AC290.4010209@nosspam.activ8.net.au>
Source record: 24452

Wimpie wrote:

> There is no optimum antenna design that fits everything. Some factors:

This a theoretical exercise - see my reply to Dave.
Alan

29. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 00:02:18 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9ACEC1AA5BF6EVeebleFetzer@216.250.184.7>
Source record: 24453

In news:02fdf8a4-9a70-480b-b04c-e1efd22c88e2@b1g2000hsg.googlegroups.com ltdoc@yahoo.com wrote:

> I may be misreading your post, excuse me if I am. But, how are arcing
> power transformers a part of a fireman's job, other than putting out
> any resulting fire?

I think the expectation is that the fire department would be sensitive to something that has an obvious potential for starting a fire.

Fire departments also know who to talk to at the power company to get things turned off during fire emergencies, who might either be the same people who would actually care about an arcing transformer or would know who would.

Lastly, fire departments are local and easier to deal with than the FCC.

--
Bert Hyman St. Paul, MN bert@iphouse.com

30. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 00:02:59 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c88bd12e-d451-4eb9-b547-889b51cf2fd0@p25g2000hsf.googlegroups.com>
Source record: 24454

On Jul 1, 4:37 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> > I have no knoweledge of that but I would like to follow up. Can you
> > give me some pointers on the subject so I may obtain some further
> > knowledge
>
> What part the ether being acknowledged by Einstein? Colleges, papers,
> physicists exploring the existence/properties of the ether? What? You
> can't read? You can't use Google? You missed my posts quoting
> Einsteins last mention of the ether? Help me out here ...
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> > For my part everything that I have stated can be proven and known to
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>
> I would even accept the arrls' material is what "really exists" (this
> material will only need to be revised if and when the existence of the
> ether can be known for certain and its' properties exploited though new
> designs--mostly.) And, is in line with all presently accepted
> theory--up to the point where the discussions begin of whether light
> (and therefore rf) is composed of waves and/or particles or some
> phenomenon which exhibits both of these characteristics but is separate
> in existence, in some way. AND, whether rf/light "shoots" across a true
> "nothing" or "strikes the chords of the ether" and transverses a media
> which we can not see and know its properties, yet?"
>
> What? You are introducing a "third theory" which does not deal with
> shooting photons and nothing (well, you can shoot light waves through
> gases and glass, obviously!), or waves and a media?
>
> It would seem to me your "equilibrium" must either deal with a "nothing"
> or an ether ...
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> In my mind, all antenna theory revolves around a few simple truths:
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> it is efficient at.
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> 2) Antennas are subject to laws of ac resistance.
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> 3) Antennas are subject to knows laws of inductance.
>

> 4) Antennas are subject to know laws of capacitance.
>
> 5) All of the above, in one form or another, contribute to and define an
> antenna impedance.
>
> Some of us just wonder if the ether exists, and whether knowing its'
> properties, if so, might give one a break through into antenna designs
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> > It is the hands of most hams who are interest in antenna programs to
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> > the trail that I point to with respect to arrays in equilibrium for
> > which the programs
> > are made from, instead of direction to planar arrays which I suspect
> > that Maxwell
> > and others new nothing about
>
> Except for a few hams, most notable Cecil, Richard Clark, Walter
> Maxwell, etc., most are the "appliance users" and/or "brass pounders of
> yesteryear." What remains is ill suited to find anything other than a
> rare contact on contest/field-day, or perhaps a new keying device
> capable of creating one more character per minute ...
>
> You will forgive me if I examine your motives, if pure of heart, I am
> sure they will stand as fitting ...
>
> No Art, I think you are confused and using an "equilibrium" to keep from
> coming to terms with that, or you are "obsfucating us, with intent!"
>
> But then, I could just be confused myself ...
>
> Regards,
> JS

John if you have no comprehension of equilibrium you will never be
able to define aether
Equilibrium is the essence of the universe confined to an arbitary
boundary where all forces about a point equals zero.
If they were not equal zero then the boundary breaks and we break from
equilibrium untill all forces equal zero
This is what Newton means when he made the statement Every action has
an equal and opposite reaction.
Before you can even think of the so called aether then the confining
boundary of all boundaries must be determined which is where some say
GOD sits. The sun sits in its own arbitary boundary where heat
byproducts exist with the sun itself. When the position of the sun
shifts within its boundary then equilibrium is lost and equilibrium is
only then retained by removal of excess forces that detract from
equilibrium. It is commonly understood that it is nuclear byproduct
that upset equilibrium until the p-roduct is removed from within the

arbitary boundary. These are known as Neutrinos which are displaced particles with nuclear content such that they have not fully decayed. These particles when released from the arbitary border have next to zero orbital spin such that their exit is of scattered form but their numbers are in the billions per square metre. But they do have an affinity to diamagnetic materials which appears to be the most common mass of our universe. since as a substance it does not absorb free electons to rotate with said mass i.e. it rests upon the surfaces.It is these very same particles illustrated in Gaussian law of statics where the arbitary field is in equilibrium..
See. you cannot escape from the term equilibrium while in our universe but you can ignore it until equilibrium is broken and where your future is unknown. Hopefully the earths pole will move back from Siberia so that all do not have to worry.We have no people skilled in physics so there will be no debate other than the use of free speech without content
Regards
Art
Art

31. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 00:16:16 UTC
From: Dave <noone@nowhere.com>
Message-ID: <kNzak.140$wa1.100@trndny07>
Source record: 24455

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c88bd12e-d451-4eb9-b547-889b51cf2fd0@p25g2000hsf.googlegroups.com...
> On Jul 1, 4:37 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> Art Unwin wrote:
> the use of free speech
> without content
> Regards
> Art

Exactly what art is best at!

32. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 00:40:42 UTC
From: Dave <noone@nowhere.com>
Message-ID: <e8Aak.128$9W.91@trndny04>
Source record: 24456

"Alan Peake" <adpeake@nosspam.activ8.net.au> wrote in message
news:486AC225.8010208@nosspam.activ8.net.au...
>
>
> Dave wrote:
> > a parabolic reflector fed with a feedhorn. no 'elements', just a
> > hole in a pipe and a big curved plate. you need to define the
> > parameters a bit more.
>
> OK, maximum gain for a single frequency, free space, sidelobes and
> back-front ratio not important. Not concerned about number of elements -
> only minimum total material length. Doesn't need to be rotatable - this is
> a purely theoretical exercise.
>
> Parabolic reflector sounds good but it's a bit hard to quantify for the
> purposes of minimising total material length. Perhaps one could use a
> wire mesh dish. Would that use more or less material than a Yagi? I
> would imagine that a phased array radar could use the wire mesh approach
> but the same questions would apply as for the parabolic reflector. Same
> for corner reflectors.
> Arrays of driven elements may be promising but the few such antennae
> that I've simulated so far, use more material than Yagis for the same
> gain.
>
> Alan
>

length is not a property of 'material'. mass, volume, their ratio, density,
conductivity, color, hardness, etc, are properties that can be measured.
'theoretically' the best antenna is a conductor from the source to the
receiver. a parabolic reflector can have area and thickness, therefore
volume, but the area is variable depending on how thick or thin you can make
it. any wire can be made into a parabolic reflector by smashing it thin
enough, witness the reflectors used on deep space satellites that are
extremely thin and light. or the metallic coating of a telescope mirror
that may be only a few atoms thick and yet yields tremendous gain. phased
arrays for radar get better as you remove more material from the surface
they are built from, the more holes, the better the pattern can be... so
less is more. arrays of driven elements, like the lpda, while looking
impressive and using lots of material, perform poorly at a single frequency,
but have the advantage of performing equally poorly over a wide range of
frequencies. designing antennas is a game of tradeoffs.... bandwidth for
gain, size for efficiency, gain for size, add in weight or some other
constraint like diameter and length of tubing, or dollars worth of

materials, and you add a whole new dimension. and then you need 'practicality'. as our friend art has found, you can feed parameters into an optimizer program and let it run wild and get a supergain antenna that fits in a shoebox, but try to build it and you get an air cooled dummy load... or something that only induces currents on the support structure or feedline.

the first step of engineering an antenna is to constrain the design with practical measures... frequency range, size, weight, wind load area, cost. then research possible alternative designs. then tweak the possible designs carefully to see if they can be adjusted for your specific use. but be very careful, if you suddenly find the tweaked design providing much larger gains or varying greatly from the starting point, back up and see what has happened... something is wrong. the most common problem is that someone takes a standard yagi and puts it into an optimizer and sets it for 'max gain' at one frequency, with no other constraints. the optimizer chugs along and the gain goes up, and up, and up, and up!!! but when you look at the results there are several elements bunched around the driven element and the feedpoint impedance has gone down to a fraction of an ohm. don't apply for a patent like art, throw it out and start over with more reasonable constraints. give it a range of frequencies, constrain the feedpoint impedance to a useful range, limit the element spacing, the total boom length, etc, until it gives you something slightly tweaked for your specific application but not off in left field.

33. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 01:09:37 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <486ad553$0$60071$8046368a@newsreader.iphouse.net>
Source record: 24457

```
Art Unwin wrote:
> On Jul 1, 5:35 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>> Art Unwin wrote:
>>> On Jul 1, 2:58 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>>>> Art Unwin wrote:
>>>>> With the above in hand it can be seen
>>>>> that Foucault current generates a field that elevates particles that
>>>>> have attained a weak magnetic field by entering the earths system
>>>>> which provides for their rejection or ejection. Per Newtons Law the
>>>>> weak forces
>>>>> involved (Fermi) create an oscillation of the radiator which is a
>>>>> mirror image of arriving impulses upon a radiuator with the same
>>>>> natural resonance.
>>>> Hi Art -
>>>> You have a unique way of making simple notions seem utterly
>>>> ridiculous. :-)
>>>> ac6xg
>>> Jim
>>> You are now doing your job as a teacher and a ham not a physicist.
>> I don't have a job on the internet, Art. I was just speaking plainly
>> and honestly.
>>
>> ac6xg
>
> But you supplied no substanc! You did not share what you were talking
> about
> or a point of contention just a use of free speech as in graphitty If
> you had
> knowledge of what I was speaking off then you could have delved in and
> explain your comments
> but you are deficient. I don't have time to teach a parrot another
> line
> Art

Art, you are sooooo amusing. You are one of the reasons I read this group.

You make statements that haven't a shred of connection with reality, are
not testable, make statements about what you yourself have said or
"published" that aren't accurate, not even a little, and then you have
the unmitigated gaul to tell people they have said nothing.

You are wonderful!

tom
K0TAR
```

34. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 01:27:05 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <e52868d2-b558-4dfe-af62-5b57c801d137@t12g2000prg.googlegroups.com>
Source record: 24458

John Smith wrote:
> Art Unwin wrote:
>
> > ...
> > May I offer a rebuttal to your use of "size:" with respect to
> > radiators?
> > The addition of radiators and a time varying field to a Gaussian field
> > shows that a radiator can be any size,shape or elevation as long as it
> > is in equilibrium.
> > This is because the result of additions to Gauss's static law results
> > in the same law of Maxwell.
> > It can also be seen that any deviation from a straight line format
> > which creats lumped loading must be neutralized since
> > radiation is related to distributed loads L and C. Thus shape or size
> > is a determination of the neutralisation of lumped loads
> > while attaining equilibrium. With the above in hand it can be seen
> > that Foucault current generates a field that elevates particles that
> > have attained a weak magnetic field by entering the earths system
> > which provides for their rejection or ejection. Per Newtons Law the
> > weak forces
> > involved (Fermi) create an oscillation of the radiator which is a
> > mirror image of arriving impulses upon a radiuator with the same
> > natural resonance.
> > It is only convention that calls for an radiator to be straight of
> > which a helix antenna is an excellent example ,where a continuation of
> > rotation back to the originating point provides for a full circuit in
> > equilibrium si9nce added lumped loads are cancelled. Examples of the
> > foucault current was provided earlier on this forum when describing
> > the separation of scrap metal by Foucault current rejection. As with
> > Newton, Faraday Gauss etc all laws depend on the theme of equilibrium
> > within a boundary of a balanced universe and not on minute sections
> > thereof.
> > Have a great week end
> > Art
>
> Art:
>
> This mysterious "equilibrium" (which I seem to have a bit of problem
> getting my mind wrapped about), although you, seemingly, sum up a group
> of properties with a single word, isn't this just "resonance"--with
> respect to conductor length/width, capacitance to surrounding objects
> and the shape/form of the magnetic field produced by antenna currents, etc?
>
> However, a thought did come to my mind ... with the new technique of

> "taking pictures" of light waves/particles--if a super-strong
> electromagnet was pulsed in an enclosure of excitable gas(es), perhaps
> we could see some unknown/yet-unseen phenomenon ...
>
> However, you are speaking of resonance, aren't you? <still-scratching-head>
>
> Regards,
> JS

John, my grandfather used to have some old radio books. One of them
talked about equilibriun as tunning the antenna feedlines so as to
have equal current in both lines. I can only guess that this is what
Art means.

Jimmie

35. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 01:30:20 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e2a52bb9-ccce-44d7-8669-9be1c48a130d@z72g2000hsb.googlegroups.com>
Source record: 24459

On Jul 1, 7:16 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:c88bd12e-d451-4eb9-b547-889b51cf2fd0@p25g2000hsf.googlegroups.com...
>
> > On Jul 1, 4:37 pm, John Smith <assemblywiz...@gmail.com> wrote:
> >> Art Unwin wrote:
> > > the use of free speech
> > > without content
> > > Regards
> > > Art
>
> Exactly what art is best at!

David ,you have never won a debate on this newsgroup and you never
will.
You are just another Andy Cap waving hands espousing various
falsehoods.
You have never come up with anything of cosequence that was factual in
the face of disagreement. Never!
And it is too late in life for you to correct it You can still live
happilly ever after if you stop pretending you are what you are not
Your sparcity of knoweledge becomes evident as you exercise the
priviledge of free speech which is why I am a supporter of free
speech ., If you were knowledgable in the art and mathematics you
would have shown the World how a relationship between Gauss and
Maxwell could never be. If you were knowledgable in the arts you would
have explained the eddy current but again you can't. If you were
knoweledgable in antenna programs you would be aware of arrays in
equilibrium but you can't. If you were aware that radiators do not
have to be straight under Maxwellian law you would have but you cant.
If you were aware of magnetic fields that something in air you would
have mentioned it but you didn't. Fact is you do not have the
mathematics knowledge to disprove these things or the get up and go to
make an antenna in equilibrium to prove anything and the measuring of
its oscillations with respect to SWR is certainly beyond your
capability.Carry on with your free speech as I find it so
representitive of what you actually are without further investigation.
Art

36. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 02:28:00 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <486ae7b1$0$60078$8046368a@newsreader.iphouse.net>
Source record: 24460

Art Unwin wrote:
> On Jul 1, 7:16 pm, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:c88bd12e-d451-4eb9-b547-889b51cf2fd0@p25g2000hsf.googlegroups.com...
>>
>>> On Jul 1, 4:37 pm, John Smith <assemblywiz...@gmail.com> wrote:
>>>> Art Unwin wrote:
>>> the use of free speech
>>> without content
>>> Regards
>>> Art
>> Exactly what art is best at!
>
> David ,you have never won a debate on this newsgroup and you never
> will.

Hmmm, who else here hasn't?

> happilly ever after if you stop pretending you are what you are not
> Your sparcity of knoweledge becomes evident as you exercise the

Spellchecker needed.

> priviledge of free speech which is why I am a supporter of free
> speech ., If you were knowledgable in the art and mathematics you

The "art". So this is witchcraft? Because that is roughly what you
have been espousing your whole career on this NG.

> Maxwell could never be. If you were knowledgable in the arts you would

Spelling again. YUou must be a fast "typer".

> have explained the eddy current but again you can't. If you were
> knoweledgable in antenna programs you would be aware of arrays in

Oops, it's consistent.

> equilibrium but you can't. If you were aware that radiators do not
> have to be straight under Maxwellian law you would have but you cant.

Gee, not straight. Hmmmm. Maybe you mean like a circular thing, maybe
a wavelength in circumference?. Oh, it's a LOOP! Wow, someone ought
to investigate this possibility! It might work!

And let's see, what would happen if one folded a half wave dipole around
until it became almost a square? I think I'll call it a "Squalo"!!!

You know a guy might make a buck off these ideas, but it's just too crazy for the ham or professional radio engineering crowd, so it'll never get made. After all, we conventional types only believe in "straight" antennas.

Art, yuh gotta luv 'im.

tom
K0TAR

37. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 03:24:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1cb3eb73-9a6e-40c1-8eb4-2d0d76ecdee4@e53g2000hsa.googlegroups.com>
Source record: 24461

On Jul 1, 8:09 pm, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
> > On Jul 1, 5:35 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> >> Art Unwin wrote:
> >>> On Jul 1, 2:58 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> >>>> Art Unwin wrote:
> >>>>> With the above in hand it can be seen
> >>>>> that Foucault current generates a field that elevates particles that
> >>>>> have attained a weak magnetic field by entering the earths system
> >>>>> which provides for their rejection or ejection. Per Newtons Law the
> >>>>> weak forces
> >>>>> involved (Fermi) create an oscillation of the radiator which is a
> >>>>> mirror image of arriving impulses upon a radiuator with the same
> >>>>> natural resonance.
> >>>> Hi Art -
> >>>> You have a unique way of making simple notions seem utterly
> >>>> ridiculous. :-)
> >>>> ac6xg
> >>> Jim
> >>> You are now doing your job as a teacher and a ham not a physicist.
> >> I don't have a job on the internet, Art. I was just speaking plainly
> >> and honestly.
>
> >> ac6xg
>
> > But you supplied no substanc! You did not share what you were talking
> > about
> > or a point of contention just a use of free speech as in graphitty If
> > you had
> > knowledge of what I was speaking off then you could have delved in and
> > explain your comments
> > but you are deficient. I don't have time to teach a parrot another
> > line
> > Art
>
> Art, you are sooooo amusing. You are one of the reasons I read this group.
>
> You make statements that haven't a shred of connection with reality, are
> not testable, make statements about what you yourself have said or
> "published" that aren't accurate, not even a little, and then you have
> the unmitigated gaul to tell people they have said nothing.
>
> You are wonderful!
>

> tom
> K0TAR

David I have said many technical things as I see it. Nobody has given me good reason why it cannot be so
Every day false hoods are given without corroberating facts. Nobody but nobody has supplied reasonable doubt.
Now many people on this newsgroup make up stories or just lie. David a little while ago described an antenna that I made of high gain which was a result of an optimiser. One big lie! I can't model my antenna since it is made of pre twisted wire.The fact is that I am beginning to believe that many posters are not educated as they pretend they are. Computer programs abound but nobody has taken me up regarding antenna programs that I have made. Is everybody incapable or just lazy. Another point the denial of the mathematics in the dispute with respect to Gauss and Maxwell. Why was this a point of contention when no facts were supplied to deny it. Then we come to eddy curfrents and a particle rejection field. Levitation is very well known.Eddy currents are also well known and is the reason for laminations in transformers,. Why is it that such things are unknown to educated posters? Every day there is a post that suggest of an old wives tale but posters accept it without rebuttal. Why? Don,t you care about the spreading of such things? Why not a rebuttal from anybody. Why did your post stick a finger in my eye with out needed substance that pushed you to post?
Fact is that some suggest that they have an educqation without stating that it is 50 years old and they have forgotten most.
This is why many threads exceed 1000 posts. The posts have no substance in relation to the discussion at hand or attempts to change the subject. If I remember correctly Tom you were one of those who could not accept the mathematics supplied by Davis but without offering to identify errors of mathematics and still haven't.
Thank goodness for free speech so one can quickly see who they are and what they are.
Art

38. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 04:13:17 UTC
From: ltdoc@yahoo.com
Message-ID: <63bdad6b-6cb1-4867-ba81-9dc35e8e9c71@8g2000hse.googlegroups.com>
Source record: 24462

Free speech.
Yes Art, you have the right to say almost anything you want. You do not have the 'right' to think people are going to believe/listen to you, especially after some of your previous 'speeches'. (Lump me in that 'Al Cap' category. Do we get registration numbers?)
Before I'm reminded not to encourage 'trolls', I'll quit.
- 'Doc

39. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 04:16:54 UTC
From: ltdoc@yahoo.com
Message-ID: <51d3b71f-9d4b-44a1-8f1a-66031143f02c@z72g2000hsb.googlegroups.com>
Source record: 24463

```
...substitute 'arcing' for 'noisy', same thing applies.
- 'Doc
```

40. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 04:24:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4evt8$1kr$1@news.albasani.net>
Source record: 24464

Art Unwin wrote:
>>
>> ...

You will forgive me for forgoing including the full context of your post, I trust ...

I will continue to listen, brother ...

Regards,
JS

41. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 04:29:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4f07j$2ee$1@news.albasani.net>
Source record: 24465

ltdoc@yahoo.com wrote:
> ...substitute 'arcing' for 'noisy', same thing applies.
> - 'Doc
>

Hmmm ... are you sure that is a 1:1 ratio?

My gawd man, if you are involved in IT, I certainly hope it is NOT with
any "we" do business with! <frown>

I truly pity you, brother ...

Regards,
JS

42. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 04:36:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4f0k9$3bh$1@news.albasani.net>
Source record: 24466

Bert Hyman wrote:

> ...
> Fire departments also know who to talk to at the power company to get
> things turned off during fire emergencies, who might either be the same
> people who would actually care about an arcing transformer or would know
> who would.
>
> Lastly, fire departments are local and easier to deal with than the FCC.
>

Bert:

In this case, at least, our logic is toe-to-toe, and at least a good
place to begin ... but like I indicated--not everyone seems to be doing
their "jobs" these day--but then, you already knew that. <wink>

Warm regards,
JS

43. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 07:17:23 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <lYFak.13845$mh5.12238@nlpi067.nbdc.sbc.com>
Source record: 24467

Tom Ring wrote:
> Art Unwin wrote:
>> On Jul 1, 5:35 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>>> Art Unwin wrote:
>>>> On Jul 1, 2:58 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>>>>> Art Unwin wrote:
>>>>>> With the above in hand it can be seen
>>>>>> that Foucault current generates a field that elevates particles that
>>>>>> have attained a weak magnetic field by entering the earths system
>>>>>> which provides for their rejection or ejection. Per Newtons Law the
>>>>>> weak forces
>>>>>> involved (Fermi) create an oscillation of the radiator which is a
>>>>>> mirror image of arriving impulses upon a radiuator with the same
>>>>>> natural resonance.
>>>>> Hi Art -
>>>>> You have a unique way of making simple notions seem utterly
>>>>> ridiculous. :-)
>>>>> ac6xg
>>>> Jim
>>>> You are now doing your job as a teacher and a ham not a physicist.
>>> I don't have a job on the internet, Art. I was just speaking plainly
>>> and honestly.
>>>
>>> ac6xg
>>
>> But you supplied no substanc! You did not share what you were talking
>> about
>> or a point of contention just a use of free speech as in graphitty If
>> you had
>> knowledge of what I was speaking off then you could have delved in and
>> explain your comments
>> but you are deficient. I don't have time to teach a parrot another
>> line
>> Art
>
> Art, you are sooooo amusing. You are one of the reasons I read this group.
>
> You make statements that haven't a shred of connection with reality, are
> not testable, make statements about what you yourself have said or
> "published" that aren't accurate, not even a little, and then you have
> the unmitigated gaul to tell people they have said nothing.
>
> You are wonderful!
>

> tom
> K0TAR

I like the term "unmitigated gaul." It reminds me, somehow, of the
present leader of France.
73,
Tom Donaly, KA6RUH

44. SEX MOVIES WITH ACTRESS PORN VIDEOS

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 09:14:07 UTC
From: jothika <jothika007@gmail.com>
Message-ID: <57ec3cc4-59ab-494b-830d-a456fa0d4841@a32g2000prf.googlegroups.com>
Source record: 24468

SEX MOVIES WITH ACTRESS PORN VIDEOS
SEXY BOOBS WITH HOT SEXY PICTURES
ACTRESS NUDE SEX GALLARY
****
http://amothini.blogspot.com
****
free download hot movies
latest cini clips
images,pictures,and videos
****
http://amothini.blogspot.com
****

45. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 11:44:57 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ZSJak.155$qW.116@trndny03>
Source record: 24469

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:e2a52bb9-ccce-44d7-8669-9be1c48a130d@z72g2000hsb.googlegroups.com...
> On Jul 1, 7:16 pm, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:c88bd12e-d451-4eb9-b547-889b51cf2fd0@p25g2000hsf.googlegroups.com...
>>
>> > On Jul 1, 4:37 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> >> Art Unwin wrote:
>> > the use of free speech
>> > without content
>> > Regards
>> > Art
>>
>> Exactly what art is best at!
>
> David ,you have never won a debate on this newsgroup and you never
> will.

i didn't know it was a competition.

> You are just another Andy Cap waving hands espousing various
> falsehoods.

if i remember right Andy Cap stated truisms in odd situations, but its been
a while since i have read comics... that where you glean your wisdom from
art?

> You have never come up with anything of cosequence that was factual in
> the face of disagreement. Never!

thats because you don't believe the proven facts, only your distorted little
view of it.

> If you were knowledgable in the art and mathematics you
> would have shown the World how a relationship between Gauss and
> Maxwell could never be.

Gauss's law is part of Maxwell's equations, they all work together and are
part of all the modeling programs that you used to like, but now claim can't
model your latest creation. and what happened to your half wave equilibrium
elements, they gone now?

> If you were knowledgable in the arts you would
> have explained the eddy current but again you can't.

as one of my past lives i wrote software for simulating eddy currents in copper or aluminum sheets for magnetic shielding of transformer vaults in hospitals. if your antennas utilize or depend on eddy currents then i understand completely why they should be classed as air cooled dummy loads.

> If you were
> knoweledgable in antenna programs you would be aware of arrays in
> equilibrium but you can't.

my arrays are very well in 'equilibrium'... except right now some of the elements are a bit bent from the winter ice so i have to go up and replace them to get the 4/4/4/4 stack on 20m back in equilibrium... right now i can hear the imbalance and it is very annoying.

> If you were aware that radiators do not
> have to be straight under Maxwellian law you would have but you cant.

right, and i have some folded and bent and circular radiators, but straight is so much easier to build.

> If you were aware of magnetic fields that something in air you would
> have mentioned it but you didn't.

say what? magnetic fields do something in the air??

> Fact is you do not have the
> mathematics knowledge to disprove these things or the get up and go to
> make an antenna in equilibrium to prove anything and the measuring of
> its oscillations with respect to SWR is certainly beyond your
> capability.

fact is, you have presented nothing to prove what you claim besides handwaving. you can't even mathematically define equilibrium. and like the ancients you have to rely on a mysterious aether to make your warped view of the world work.

> Carry on with your free speech as I find it so
> representitive of what you actually are without further investigation.
> Art

same with you, i need a good laugh now and then.

46. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 13:24:11 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g4fvhr$r3u$1@f04n12.cac.psu.edu>
Source record: 24470

Bert Hyman wrote:
> In news:02fdf8a4-9a70-480b-b04c-e1efd22c88e2@b1g2000hsg.googlegroups.com
> ltdoc@yahoo.com wrote:
>
>> I may be misreading your post, excuse me if I am. But, how are arcing
>> power transformers a part of a fireman's job, other than putting out
>> any resulting fire?
>
> I think the expectation is that the fire department would be sensitive
> to something that has an obvious potential for starting a fire.

Keep in mind that as far as the fire department is concerned, that arcing transformer is already "on fire". Fire departments are trained to respond to electrical fires, which include downed power lines. That arcing transformer looks a lot like the arcing from a power line - just on a smaller scale. They work with the power companies, who have the responsibility of turning off the power, while the FD takes care of whatever extra fire that happens.

Do the immediate neighbors know the transformer is malfunctioning? Does the power company know? Not taking care of that would be gross negligence. A discreet caal to the Fire department might help, maybe even a call to the home insurance company (you'd be surprised how helpful they can be when property they insure is at risk.

> Fire departments also know who to talk to at the power company to get
> things turned off during fire emergencies, who might either be the same
> people who would actually care about an arcing transformer or would know
> who would.

> Lastly, fire departments are local and easier to deal with than the FCC.

In this case, definitely. There is a clear danger. The FCC is of better use when there are problems that are more nuisance than danger to the public.

- 73 de Mike N3LI -

47. Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 13:38:30 UTC
From: Ron Walters <rwalters@numail.org>
Message-ID: <486b84d6$0$80799$4c5efa9e@news.corp.moreusenet.net>
Source record: 24471

After reading several articles both on and off the WEB regarding a center fed antenna, only one article mentioned a recommended length for the feed line.

My shack is located on the second floor of a new home, (24') #8 ground wire to 8' ground stake with a further connection to the common ground point for the power and the rebar in the pored walls and flooring of the basement, telephone and cable. I plan on additional ground rods around the property and at a new tower. In a new home so progress is on-going.

The 1:1 current balum used to convert the 450 ohm balance line is external to the tuner, use about two feet of coax from the balum to the tuner.

Antenna is cut for 80 meters and using about 60-70 ft of line to center of the antenna. Where the antenna lines leave the shack is about four 4 ft from the location inside of the rig and floor mounted PC.

I use the antenna on all bands until such time I complete a new tower installation. I want to minimize stray RF around the shack since I rely on a PC and digital sound card as my primary source for ham enjoyment. I have already had some problems with a USB keyboard that I think may have been effected by RF when running over 50 watts on 20 meters only.

One article recommended odd multiples of a wave length is desirable at the lowest operating frequency while other articles don't address this.

I am having no problem with a match using the tuner on all bands 80-6 meters.

Have used the center fed antenna since 1976 but always had the shack on the ground level and had a good and effective ground system short runs with feed lines around the 90 to 100ft in length. never had a RF problem or surge problem.

Any recommended WEB sites or comments are welcomed.

73 de
Ron W4LDE

48. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 14:00:22 UTC
From: ltdoc@yahoo.com
Message-ID: <b53c1209-77d7-4d97-8f00-5c559a996cca@x35g2000hsb.googlegroups.com>
Source record: 24472

:)

I think my point has been 'gotten across'. Not to everyone, but that
seldom happens about anything. There really are advantages to being
thought of as the 'village idiot'...
- 'Doc

49. Re: Rigexpert AA-200 antenna analyser

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 14:20:26 UTC
From: ltdoc@yahoo.com
Message-ID: <a6fb56ed-4020-42d3-a571-59266c460cca@e53g2000hsa.googlegroups.com>
Source record: 24473

For what it's worth...

I own an MFJ analyzer, not the RigExpert AA-200. Why? 'Cuz I can afford it, can't afford the RigExpert. While extreme accuracy would certainly be nice, I just don't have a need for that accuracy. If it get's into the ball park, that's usually close enough. The MFJ thingy is also a bit more convenient for me to use, no need for a computer, doesn't weigh a ton, and I can afford it. Is it the best? (Qualified) NO! But it works. Would I like to have that RigExpert AA-200? Sure! But not enough to buy one. Ahem... if someone should decide to give their's away.... (hold my breath, right?)
- 'Doc

50. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 14:25:46 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <JdMak.11935$jl5.7777@flpi148.ffdc.sbc.com>
Source record: 24474

Ron Walters wrote:
> Any recommended WEB sites or comments are welcomed.

If your ground wire is an appreciable percentage of
a wavelength, it is a radiating element grounded at
one end, i.e. not a ground. An artificial ground
might help to reduce RF in the shack.

If your antenna is balanced, you don't need an RF
ground.
--
73, Cecil http://www.w5dxp.com

51. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 14:50:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4g4j8ckq1@news.albasani.net>
Source record: 24475

Art Unwin wrote:

> ...
> John if you have no comprehension of equilibrium you will never be
> able to define aether
> ...
> Art

Hmmm ... before we define "the great equilibrium", I would like to first demonstrate the properties of that "elusive ether"--but I see, a bit better now, your stand on "equilibrium."

Thanks Art,
regards,
JS

52. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 15:02:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4g5adegd1@news.albasani.net>
Source record: 24476

ltdoc@yahoo.com wrote:
> :)
>
> I think my point has been 'gotten across'. Not to everyone, but that
> seldom happens about anything. There really are advantages to being
> thought of as the 'village idiot'...
> - 'Doc

Doc:

One thing should be made clear, I DO NOT think you the 'village idiot.'

I can be abrasive, please do not take that abrasiveness as an indication
of my opinion of you and/or your text ... your contributions to the
discussions here are appreciated and of value ...

Warm regards,
JS

53. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 15:03:55 UTC
From: Dave <noone@nowhere.com>
Message-ID: <vNMak.174$P11.105@trndny06>
Source record: 24477

"Ron Walters" <rwalters@numail.org> wrote in message
news:486b84d6$0$80799$4c5efa9e@news.corp.moreusenet.net...
> After reading several articles both on and off the WEB regarding a
> center fed antenna, only one article mentioned a recommended length for
> the feed line.

some antennas, like the g5rv rely on a particular length of feedline because it becomes part of the antenna and radiates on certain bands. others use it as an impedance transformer.

> One article recommended odd multiples of a wave length is desirable at
> the lowest operating frequency while other articles don't address this.

that is a myth that has been around for many years. there is no 'magic length' that works better than others, except maybe the shortest length that reaches from the antenna to the transmitter. The only reasons to use longer lengths is if you need to use it as an impedance transformer because the antenna isn't matched to the line, or to allow for future rearrangement of the shack. what can be handy about the 1/2 wavelength line is if the antenna isn't matched to the line impedance the antenna impedance will be repeated every 1/2 wavelength along the line. so if you have a 300 ohm antenna and a 50 ohm coax, every 1/2 wavelength along the line you will see the 300 ohms again. this of course only works on harmonically related bands.

54. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 15:08:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4g5l3evi1@news.albasani.net>
Source record: 24478

Cecil Moore wrote:
> Ron Walters wrote:
>> Any recommended WEB sites or comments are welcomed.
>
> If your ground wire is an appreciable percentage of
> a wavelength, it is a radiating element grounded at
> one end, i.e. not a ground. An artificial ground
> might help to reduce RF in the shack.
>
> If your antenna is balanced, you don't need an RF
> ground.

Cecil:

Say I had a situation where I must use a ground wire which IS an
appreciable percentage of a wavelength ... and don't wish it to radiate.

Could I accomplish this by using coax as the ground-wire and choking the
outer braid by sufficient windings on a toroid core, and grounding the
center conductor and the braid to earth though good and deep grounding
spikes or wires?

Regards,
JS

55. Re: Optimised antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 15:48:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b5fe9c8e-acd1-4150-959b-4826dbb6ca96@c58g2000hsc.googlegroups.com>
Source record: 24479

On Jul 2, 9:50 am, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > John if you have no comprehension of equilibrium you will never be
> > able to define aether
> > ...
> > Art
>
> Hmmm ... before we define "the great equilibrium", I would like to first
> demonstrate the properties of that "elusive ether"--but I see, a bit
> better now, your stand on "equilibrium."
>
> Thanks Art,
> regards,
> JS

Great. Just made an antenna whip for somebody to play with but my
effort to build the variometer was a total flopCoupling was just not
close
enough but at least the guy can have fun over the holidays
Regards
Art

56. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 15:54:20 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <541a011c-1249-4ae8-992b-c2abc8e20fa2@y22g2000prd.googlegroups.com>
Source record: 24480

On Jul 2, 8:08 am, John Smith <assemblywiz...@gmail.com> wrote:
> Cecil Moore wrote:
> > Ron Walters wrote:
> >> Any recommended WEB sites or comments are welcomed.
>
> > If your ground wire is an appreciable percentage of
> > a wavelength, it is a radiating element grounded at
> > one end, i.e. not a ground. An artificial ground
> > might help to reduce RF in the shack.
>
> > If your antenna is balanced, you don't need an RF
> > ground.
>
> Cecil:
>
> Say I had a situation where I must use a ground wire which IS an
> appreciable percentage of a wavelength ... and don't wish it to radiate.
>
> Could I accomplish this by using coax as the ground-wire and choking the
> outer braid by sufficient windings on a toroid core, and grounding the
> center conductor and the braid to earth though good and deep grounding
> spikes or wires?
>
> Regards,
> JS

The only way to keep a wire--e.g., piece of coax--from being a
radiator is to keep net current at zero. If there's no net current,
you didn't need the wire anyway (at that frequency, at least). If
it's a protective ground for mains frequency, it will probably still
work for that purpose if you add ferrite for RF choking.

57. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 16:33:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4gak3$p3n$1@news.albasani.net>
Source record: 24481

K7ITM wrote:

> ...
> The only way to keep a wire--e.g., piece of coax--from being a
> radiator is to keep net current at zero. If there's no net current,
> you didn't need the wire anyway (at that frequency, at least). If
> it's a protective ground for mains frequency, it will probably still
> work for that purpose if you add ferrite for RF choking.
>

K7ITM:

I was hoping the rf/dc/ac could reach ground via a very low
resistance/impedance to rf on the inner surface of the braid and the
center conductor ...

While it would be virtually impossible to reduce rf on the outer braid
to absolute zero, I was hoping the choke would provide sufficient
impedance to rf to where it became near negligible, at least for
practical purposes.

Regards,
JS

58. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 16:36:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4gaq5$p3n$2@news.albasani.net>
Source record: 24482

John Smith wrote:
> ... I was hoping the choke would provide sufficient
> impedance to rf to where it became near negligible, at least for
> practical purposes.
>

In the above, change "sufficent" to low ...

Regards,
JS

59. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 17:10:18 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <2EOak.16$EQ5.10@newsfe07.lga>
Source record: 24483

```
"Dave" <noone@nowhere.com> wrote in message news:vNMak.174$P11.105@trndny06...
>
> "Ron Walters" <rwalters@numail.org> wrote in message
> news:486b84d6$0$80799$4c5efa9e@news.corp.moreusenet.net...
> > After reading several articles both on and off the WEB regarding a
> > center fed antenna, only one article mentioned a recommended length for
> > the feed line.
>
> some antennas, like the g5rv rely on a particular length of feedline because
> it becomes part of the antenna and radiates on certain bands. others use it
> as an impedance transformer.
```

It is also a myth that the feedline for the g5rv requires a particular length because it becomes part of the antenna and radiates on certain bands. At the antenna terminals the feedline becomes a transmission line with opposite directions of current on each conductor. Thus the fields developed around each conductor cancel resulting in no radiation from the feedline if it's dressed at 90° from the antenna.

```
In addition, it's also a myth that the feedline of a shortened antenna radiates.
Some believe that the portion of the feedline that makes up for the missing
length of the shortened antenna radiates--tain't so.

Walt, W2DU
```

60. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 18:51:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <J6Qak.20595$co7.17911@nlpi066.nbdc.sbc.com>
Source record: 24484

John Smith wrote:
> Say I had a situation where I must use a ground wire which IS an
> appreciable percentage of a wavelength ... and don't wish it to radiate.
> Could I accomplish this by using coax as the ground-wire and choking the
> outer braid by sufficient windings on a toroid core, and grounding the
> center conductor and the braid to earth though good and deep grounding
> spikes or wires?

Offhand, I would say you could accomplish a DC ground
that way but not an RF ground and not much lightning
protection.
--
73, Cecil http://www.w5dxp.com

61. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 19:36:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4glc9$f0g$1@news.albasani.net>
Source record: 24485

Cecil Moore wrote:

> ...
> Offhand, I would say you could accomplish a DC ground
> that way but not an RF ground and not much lightning
> protection.

I suspect you to be correct; a "free ride" is just too much to hope for
in these times.

Well, even a dc/60hz ground which does not radiate rf can be useful.

Regards,
JS

62. Re: Rigexpert AA-200 antenna analyser

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 20:33:44 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <vCRak.83122$ft1.31795@newsfe14.ams2>
Source record: 24486

Fair enough, Doc. That's why I went for the MFJ in the first place.
It's not heavy, comes with its own carrying case with shoulder strap and its very portable.
I don't know where you get the need for a computer from.
You don't need a PC to use the AA-200. Its a added bonus if you want to connect it to a computer but you don't need to.
In fact, apart from testing the software and updating the firmware I haven't found the need to use the computer with it since. Not for what I need it for at the moment. This will probably change over time.
I get all the readings on the display of the AA-200 itself. So I get the best of both words.

73 Andy

<ltdoc@yahoo.com> wrote in message
news:a6fb56ed-4020-42d3-a571-59266c460cca@e53g2000hsa.googlegroups.com...
> For what it's worth...
>
> I own an MFJ analyzer, not the RigExpert AA-200. Why? 'Cuz I can
> afford it, can't afford the RigExpert. While extreme accuracy would
> certainly be nice, I just don't have a need for that accuracy. If it
> get's into the ball park, that's usually close enough. The MFJ thingy
> is also a bit more convenient for me to use, no need for a computer,
> doesn't weigh a ton, and I can afford it. Is it the best?
> (Qualified) NO! But it works. Would I like to have that RigExpert
> AA-200? Sure! But not enough to buy one. Ahem... if someone should
> decide to give their's away.... (hold my breath, right?)
> - 'Doc
>
>

63. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 20:44:40 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1673d371-4b74-45ea-99f0-ee91def4dd19@u6g2000prc.googlegroups.com>
Source record: 24487

On Jul 2, 9:33 am, John Smith <assemblywiz...@gmail.com> wrote:
> K7ITM wrote:
> > ...
> > The only way to keep a wire--e.g., piece of coax--from being a
> > radiator is to keep net current at zero. If there's no net current,
> > you didn't need the wire anyway (at that frequency, at least). If
> > it's a protective ground for mains frequency, it will probably still
> > work for that purpose if you add ferrite for RF choking.
>
> K7ITM:
>
> I was hoping the rf/dc/ac could reach ground via a very low
> resistance/impedance to rf on the inner surface of the braid and the
> center conductor ...
>
> While it would be virtually impossible to reduce rf on the outer braid
> to absolute zero, I was hoping the choke would provide sufficient
> impedance to rf to where it became near negligible, at least for
> practical purposes.
>
> Regards,
> JS

If there's a net RF current, there's a net RF current, and it will radiate. It matters not a whit whether you say the net is on the inside or the outside or distributed between them in any proportion. If you choke things so there's no net current, you may as well not have bothered putting the wire/coax/whatever in to begin with. Consider what the current on the inside of the outer conductor must be if the coax is acting as a transmission line, and consider where that current goes at the "top" end of the piece you suggest.

To keep RF "out of the shack," put a Faraday cage around the shack and don't turn RF loose inside that cage. Then it doesn't matter (with respect to RF "in the shack") whether the Faraday cage is connected to "ground" or not.

What exactly is "ground," anyway? Do you think it has magical properties? What ARE its properties? What does it do for you?

64. anyone looking for truck tool box antenna mount?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 20:47:59 UTC
From: Radio_Dick <rspost@mail.com>
Message-ID: <b89deced-b273-4366-8d69-4ccbd525cc26@56g2000hsm.googlegroups.com>
Source record: 24488

I'm looking for a truck (any make) owner who is looking for an antenna mount for a truck bed tool box. Ideally I'd like to find someone who wants to mount a Hi-Q, High Sierra, Tarheel, etc. brand of HF antenna although the mount was designed to work with smaller antennas as well.

If interested please contact me off-line. You can see the prototype photo at: http://www.repdesign.us/gpage23.html.

73,
Dick Post, N7EMW
www.repDesign.us

65. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 22:07:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4gu79$v0$1@news.albasani.net>
Source record: 24489

K7ITM wrote:

> ...
> If there's a net RF current, there's a net RF current, and it will
> radiate. It matters not a whit whether you say the net is on the
> inside or the outside or distributed between them in any proportion.
> ...

Really, then I can throw away the current choke on my coax to my 1/2 wave vertical then? I THINK NOT!!! And, I DON'T think there is rf on the outside of the coax shield--I DO think there is on the inside of the braid ...

> ...
> What exactly is "ground," anyway? Do you think it has magical
> properties? What ARE its properties? What does it do for you?

Find an improperly grounded kw xmitter/liner whose case is hot with rf and running into a noticeable SWR, now touch a sharp corner of the case with your finger. Pay attention to the hissing noise(s), the flesh being vaporized into a white smoke, the characteristic white, deep penetrating, slow-to-heal rf burn(s) on your finger, etc.

Now ground the case and touch the sharp corner--notice the lack of pain?

Now, that you should get you started with what a ground is ... got anymore questions?

Now, I can explain all that without having to bring magic into the argument--but hell, go ahead, give me your "magical" version if you would like ...

Regards,
JS

66. HF Biconical Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 22:14:34 UTC
From: TommieTippee@yahoo.com
Message-ID: <ad51b618-66bd-46d4-9bb0-61abf6489631@k37g2000hsf.googlegroups.com>
Source record: 24490

I remember (some years ago) when I was a kid travelling a lot overseas with my parents, embassy rooftops and ships seemed to sprout HF Biconical antennas.

This was when satellites were not as widespread as they are now, and I guess most diplomatic (ciphered I guess) and maritime traffic passed over HF.

Why would this type of antenna have been preferred? Why don't amateurs use this type of antenna more? How do HF Biconnicals stack up against other HF antennas? Can they be trapped for mulitband use and/or loaded to reduce size?

I'd kind of like to home-brew a 20m one. Any ideas? Designs? Modelling software for them?

Tommie

67. Re: HF Biconical Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-02 23:32:03 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <8IGdnZXIu-evjfHVnZ2dnUVZ8sbinZ2d@bt.com>
Source record: 24491

<TommieTippee@yahoo.com> wrote in message
news:ad51b618-66bd-46d4-9bb0-61abf6489631@k37g2000hsf.googlegroups.com...
>I remember (some years ago) when I was a kid travelling a lot overseas
> with my parents, embassy rooftops and ships seemed to sprout HF
> Biconical antennas.
>
> This was when satellites were not as widespread as they are now, and I
> guess most diplomatic (ciphered I guess) and maritime traffic passed
> over HF.
>
> Why would this type of antenna have been preferred? Why don't
> amateurs use this type of antenna more? How do HF Biconnicals stack
> up against other HF antennas? Can they be trapped for mulitband use
> and/or loaded to reduce size?
>
> I'd kind of like to home-brew a 20m one. Any ideas? Designs?
> Modelling software for them?
>
>
> Tommie

Tommie,

Embassies needed to have reliable communication links. Most foreign embassies were equipped with transmitters capable of generating kilowatts of power if needed across the whole HF band. Efficiency wasn't a high priority, being able to send and receive messages reliably was all that mattered. Most of the routine daily traffic would have been encrypted teleprinter stuff sent via permanent scheduled radio links. In times of diplomatic tension, the regular frequencies might be jammed and hence the necessity to have equipment that was frequency agile and of sufficiently high power output to punch through deliberate interference.

Biconical antennas can be tuned across a wide range of frequencies and require less real estate than many other arrangements. Height is always good with antennas and the costs of providing lofty rooftop support structures and high powered transmitters with non interruptable power supplies are not really an issue for any diplomatic service.

Most of the old cargo ships used wire antennas running from the masts at either end of the ship. These were quite efficient and cheap. The disadvantage was that the rope halyards needed maintenance together with the hoisting blocks and wire antennas themselves. Funnel fumes wreak havok on phosphor bronze wires and insulators in a marine salt environment. Then the antennas needed to be lowered and stowed every time cargo was loaded or

discharged so that the cranes could work. The phosphor bronze wires would become work hardened through stretching and eventually break unexpectedly. I always had a complete new set of antennas with insulators and couplings made up in the radio room ready to replace any failures.

Oil tankers switched to whips fairly early on as the prospect of insulator arcing near to vapour venting from a fuel tank presented real hazards for the crews. Container ships also tend to rely on whip antennas because their stay in port is usually measured in the number of hours between successive high tides. There isn't time to keep raising and lowering antennas running the length of the ship.

The inefficiency of the whips is compensated for by increasing transmitter power. Not the most cost effective or ideal way for an amateur station to run.

As you can see, the requirements of commercial radio traffic are very different from those of amateur stations, although amateur stations may well use and adapt commercial techniques when necessary due to site restrictions or to provide reliable emergency communications for disaster relief, etc.

There is plenty of antenna modelling software that will allow you to explore their performance on the web, try EZNEC for a start.

Hope this helps.

Mike G0ULI

68. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 00:30:02 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <465cd362-919b-49a0-915b-cdb1c58aeddf@l28g2000prd.googlegroups.com>
Source record: 24492

On Jul 2, 3:07 pm, John Smith <assemblywiz...@gmail.com> wrote:
> K7ITM wrote:
> > ...
> > If there's a net RF current, there's a net RF current, and it will
> > radiate. It matters not a whit whether you say the net is on the
> > inside or the outside or distributed between them in any proportion.
> > ...
>
> Really, then I can throw away the current choke on my coax to my 1/2
> wave vertical then? I THINK NOT!!! And, I DON'T think there is rf on
> the outside of the coax shield--I DO think there is on the inside of the
> braid ...

...which is balanced by the RF on the center conductor. If it doesn't radiate, there's no net current; the center conductor current is equal in magnitude and opposite in phase to the current on the adjacent inside of the outer conductor. Why would you think that what you quoted above would imply that you could get rid of the choke on your transmission line, if you want to keep the line from having a net current and therefore radiating? It says just the opposite. But of course, you already knew that, didn't you? Sorry, rhetorical question.

69. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 00:40:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4h75m$h0b$1@news.albasani.net>
Source record: 24493

K7ITM wrote:

>
> If there's a net RF current, there's a net RF current, and it will
> radiate. It matters not a whit whether you say the net is on the
> inside or the outside or distributed between them in any proportion.
> If you choke things so there's no net current, you may as well not
> have bothered putting the wire/coax/whatever in to begin with.
> Consider what the current on the inside of the outer conductor must be
> if the coax is acting as a transmission line, and consider where that
> current goes at the "top" end of the piece you suggest.
>
> To keep RF "out of the shack," put a Faraday cage around the shack and
> don't turn RF loose inside that cage. Then it doesn't matter (with
> respect to RF "in the shack") whether the Faraday cage is connected to
> "ground" or not.
>
> What exactly is "ground," anyway? Do you think it has magical
> properties? What ARE its properties? What does it do for you?

Interesting ... suggesting that if an inductance/capacitance it added
into the shield (or center conductor) and in series with such, so that
the current voltages between the center conductor and braid are 90
degrees lagging/leading that a net current would be possible between the
inside braid and the center conductor. But, still due to the choke on
the outer braid--impossible there (well, vastly reduced.)

Hmmm ... a name for it? Perhaps "Tuned Ground" or "Tunable Ground." <grin>

Regards,
JS

70. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 02:38:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4he2qptd1@registered.motzarella.org>
Source record: 24494

K7ITM wrote:

> ...
> ...which is balanced by the RF on the center conductor. If it doesn't
> radiate, there's no net current; the center conductor current is equal
> in magnitude and opposite in phase to the current on the adjacent
> inside of the outer conductor. Why would you think that what you
> quoted above would imply that you could get rid of the choke on your
> transmission line, if you want to keep the line from having a net
> current and therefore radiating? It says just the opposite. But of
> course, you already knew that, didn't you? Sorry, rhetorical
> question.

Actually, it took me awhile to put this together, your picture of "the ground" given in your text ...

Basically, we are two blind men, you have the trunk of the elephant in hand, me the foot ... but now that I think about it, I remember what picture the trunk brought to my mind ...

A radiating ground I have used before, my first exposure to one instance of it was like this:

In college, living in a couple of rooms rented to me by an individual having a home near the campus, I resided on the third floor of an old victorian (and, keep in mind, building codes were rather sparse back then.) The plumbing had been "reworked" and sections of it replaced with pvc. The old steam radiators had, had their piping removed in the basement level. In despiration, I had to resort to a wire ran around the base boards of the rooms and "adjusted" for various freqs/bands. This ground DID, indeed, radiate. Indeed, the "fuzz" on the video signal of the tv sets proved this absolutely--at times. The am band on a radio was also, frequently, troubled by my signals/rfi.

All the above, because the owner did not want "wires ran about."

The "ground wire" I was proposing would attempt to function as a transmission line, and simply carry the signals to a suitable ground; Whether you made that a legitimate number of buried radials of suitable length, a wire ran above ground and through the bushes, a wire connecting a few ground rods, or a run to the pipe in the basement, etc., would be at the users discretion ... however, the "ground wire" would be made to NOT radiate, or radiate as little as possible ... that is "the ground" (but actually, a "grounding transmission line") I was proposing with the coax.

Regards,
JS

71. Test Preparation Software

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 03:26:05 UTC
From: Webmaster <webmaster@oaklanesoftware.com>
Message-ID: <8FXak.12437$rH1.7168@newsfe20.lga>
Source record: 24495
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc

Test Preparation Software

Pass your US FCC ham radio license test with ease. Our test preparation software
serves as a training aid to help amateurs and prospective amateurs pass the VEC's administered test. When you can consistently pass the test given by our test preparation software, you will almost certainly pass an actual test.

Our ham radio license test preparation software uses the latest officially released VEC's approved question pools. The program breaks the test into different sub-element. Integrated into the software are illustrations and Part 97 rules pertaining to the current question. The program tracks the progress of the tests taken. Once you have mastered each sub-element you are ready for the official test.

Visit our web site at http://www.hamradiolicense.net for more information.

72. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 03:27:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4hgv3$d5p$1@news.albasani.net>
Source record: 24496

John Smith wrote:
>> ...
> the current voltages between the center conductor and braid are 90
> degrees lagging/leading that a net current would be possible between the
>> ...

In the above, 90 = 180 ... just caught that ...

JS

73. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 12:33:47 UTC
From: ltdoc@yahoo.com
Message-ID: <84aad2b4-755e-4bf4-a6cb-d035c11ed798@d45g2000hsc.googlegroups.com>
Source record: 24497

Hey! I worked hard for that title. I expect it to be used! I don't
expect any bowing or scraping, but you WILL acknowledge the title!
- 'Doc

74. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 15:59:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4it17$60k$1@news.albasani.net>
Source record: 24498

ltdoc@yahoo.com wrote:
> Hey! I worked hard for that title. I expect it to be used! I don't
> expect any bowing or scraping, but you WILL acknowledge the title!
> - 'Doc
>
>

LOL ...

Really don't know what to say ... have a good day. :-)

Regards,
JS

75. Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 16:08:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <59ae9fd0-6cf5-46c4-8b7b-4757271fdec4@s50g2000hsb.googlegroups.com>
Source record: 24499

I am trying to understand why a low swr repetitive over a band of
frequencies is considered by hams to be a dummy load.! This
consistently shows up in statements by the itelligensia of this
newsgroup. Following up on the logic of that idea it would suggest
that if swr was totally constant (not sure how that could be) then
all radiation must be zero or self cancelling.?
This thus suggests that if a log periodic antenna was unlimitted in
the number of elements used would in the limit drop down to zero
radiation!. So following the thinking of this group the oscillations
that I show on my page

unwinantennas.com/

as a progression towards zero radiation since Q eventually is going to
equal zero.
Is this why the decreasing oscillation is defined as a dummy load on
this newsgroup?
The term comes up so often that I am compelled to look for what I am
missing, especially since carbon
is conductive and thus in the minds of many must therefore be
radiative!
Ofcourse the statement bandied around that if a material is
condunctive then it must radiatiate
could become fact instead of an old wives tales if stated enough
times.
Art

76. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 17:25:36 UTC
From: nm5k@wt.net
Message-ID: <c80ef1ac-c180-4e9a-8c51-af7e4a2bb058@z24g2000prf.googlegroups.com>
Source record: 24500

On Jul 3, 11:08 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> I am trying to understand why a low swr repetitive over a band of
> frequencies is considered by hams to be a dummy load.!

Has nothing to do with it. SWR and antenna efficiency are
not related. Also SWR and common mode currents, or
the lack of are not related.

>This
> consistently shows up in statements by the itelligensia of this
> newsgroup.

Not by me. But I can't hardly spell itelligensia without help,
much less be one..
A man has to know his limitations.

>Following up on the logic of that idea it would suggest
> that if swr was totally constant (not sure how that could be) then
> all radiation must be zero or self cancelling.?

That is Art logic...

> This thus suggests that if a log periodic antenna was unlimitted in
> the number of elements used would in the limit drop down to zero
> radiation!. So following the thinking of this group the oscillations
> that I show on my page
>
> unwinantennas.com/
>
> as a progression towards zero radiation since Q eventually is going to
> equal zero.

Could I interest your cat in a pair of fuzzy mittens?

> Is this why the decreasing oscillation is defined as a dummy load on
> this newsgroup?

No.

> The term comes up so often that I am compelled to look for what I am
> missing, especially since carbon
> is conductive and thus in the minds of many must therefore be
> radiative!

If Star Trek is to be believed, you are a carbon unit.
Tie a shielded feed line to your big toe and get back to
us on the amount of DX worked.
I'll even grant you the benefit of a doubt, and let you ground

your other toe to a suitable ground rod, radials, etc if needed
for proper operation of the carbon unit miracle whip.

> Ofcourse the statement bandied around that if a material is
> condunctive then it must radiatiate
> could become fact instead of an old wives tales if stated enough
> times.

I think it would hurt to see that statement repeated too many
times regardless if true or not.

The problem with your antenna will not be explained using fairy
tales and perceptions of what you think other hams might think.
All you need is regular old proven textbook theory which is available
to most anyone. If you have burned all your books in a past
fit of intellectual rage, maybe you should consider stocking up on
a few new ones. You can buy them online and have them delivered
via UPS, USPS, and other freight carriers. So you don't even have
to step outside the front door to gain this new perspective on the
"Unwin" antenna.

77. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 17:35:04 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g4j2k8$r5q$1@f04n12.cac.psu.edu>
Source record: 24501

Ron Walters wrote:
> After reading several articles both on and off the WEB regarding a
> center fed antenna, only one article mentioned a recommended length for
> the feed line.

There is a webpage that calculates the correct length of the feedline
for an antenna:

http://www.qsl.net/w4sat/howlong.htm

> My shack is located on the second floor of a new home, (24') #8 ground
> wire to 8' ground stake with a further connection to the common ground
> point for the power and the rebar in the pored walls and flooring of the
> basement, telephone and cable. I plan on additional ground rods around
> the property and at a new tower. In a new home so progress is on-going.
>
> The 1:1 current balum used to convert the 450 ohm balance line is
> external to the tuner, use about two feet of coax from the balum to the
> tuner.

> Antenna is cut for 80 meters and using about 60-70 ft of line to center
> of the antenna. Where the antenna lines leave the shack is about four 4
> ft from the location inside of the rig and floor mounted PC.
>
> I use the antenna on all bands until such time I complete a new tower
> installation. I want to minimize stray RF around the shack since I rely
> on a PC and digital sound card as my primary source for ham enjoyment.
> I have already had some problems with a USB keyboard that I think may
> have been effected by RF when running over 50 watts on 20 meters only.
>
> One article recommended odd multiples of a wave length is desirable at
> the lowest operating frequency while other articles don't address this.

Since you are using ladder line, you don't really want a hwole lot of
extra length, since you'd have to figure out what to do with it. Ladder
line doesn't like being wound up - note this is what I've been told, I
never experimented myself. But it stands to reason.

> I am having no problem with a match using the tuner on all bands 80-6
> meters.

The setup should work well. The grounding system isn't ideal, but we
work with what we have.

> Have used the center fed antenna since 1976 but always had the shack on
> the ground level and had a good and effective ground system short runs
> with feed lines around the 90 to 100ft in length. never had a RF

> problem or surge problem.

I'm not clear. Do you have an RFI problem now? Seems as if your steup will work FB.

- 73 de Mike N3LI -

78. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 18:05:30 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <adbfcfda-f1d7-4cc0-9e75-c6e892385f5d@27g2000hsf.googlegroups.com>
Source record: 24502

On Jul 3, 12:25 pm, n...@wt.net wrote:
> On Jul 3, 11:08 am, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > I am trying to understand why a low swr repetitive over a band of
> > frequencies is considered by hams to be a dummy load.!
>
> Has nothing to do with it. SWR and antenna efficiency are
> not related. Also SWR and common mode currents, or
> the lack of are not related.
>
> >This
> > consistently shows up in statements by the itelligensia of this
> > newsgroup.
>
> Not by me. But I can't hardly spell itelligensia without help,
> much less be one..
> A man has to know his limitations.
>
> >Following up on the logic of that idea it would suggest
> > that if swr was totally constant (not sure how that could be) then
> > all radiation must be zero or self cancelling.?
>
> That is Art logic...
>
> > This thus suggests that if a log periodic antenna was unlimitted in
> > the number of elements used would in the limit drop down to zero
> > radiation!. So following the thinking of this group the oscillations
> > that I show on my page
>
> > unwinantennas.com/
>
> > as a progression towards zero radiation since Q eventually is going to
> > equal zero.
>
> Could I interest your cat in a pair of fuzzy mittens?
>
> > Is this why the decreasing oscillation is defined as a dummy load on
> > this newsgroup?
>
> No.
>
> > The term comes up so often that I am compelled to look for what I am
> > missing, especially since carbon
> > is conductive and thus in the minds of many must therefore be

> > radiative!
>
> If Star Trek is to be believed, you are a carbon unit.
> Tie a shielded feed line to your big toe and get back to
> us on the amount of DX worked.
> I'll even grant you the benefit of a doubt, and let you ground
> your other toe to a suitable ground rod, radials, etc if needed
> for proper operation of the carbon unit miracle whip.
>
> > Ofcourse the statement bandied around that if a material is
> > condunctive then it must radiatiate
> > could become fact instead of an old wives tales if stated enough
> > times.
>
> I think it would hurt to see that statement repeated too many
> times regardless if true or not.
>
> The problem with your antenna will not be explained using fairy
> tales and perceptions of what you think other hams might think.
> All you need is regular old proven textbook theory which is available
> to most anyone. If you have burned all your books in a past
> fit of intellectual rage, maybe you should consider stocking up on
> a few new ones. You can buy them online and have them delivered
> via UPS, USPS, and other freight carriers. So you don't even have
> to step outside the front door to gain this new perspective on the
> "Unwin" antenna.

You did not present any logical thiknking on the subjet
Following the logic of my posting it shows a clear conflict between
normal thinking and mine. On on side we have the standard statement
that if it is conductive then it is radiative a pretty common
statement on this news group
Yet a dummy load is conductive ie carbon but is not considered
radiative, a clear conflict
My point of view which is objected to is that radiation is a measure
of the resistivity of the
current carrying material because that alone creates eddy current
depth sometimes refer to skin depth
dependent on the depth of current flow. Now eddy currents varies in
all current carrying members
where as carbon eddy production properties are minimal to zero even
tho it curries current, which is why it
it is chosen for a dummy load ie carbon does not produce a skin depth
of eddy current.
Thus the common thinking of a dummy load does not radiate or a current
carrying member always radiates
presents a problem In my thinking as neutrinos particle which is a
type of carbon because it is a side product of fusion
Thus by my definition a carbon byproduct will never rest on a carbon
product as a "free" electron

thus radiation cannot occur! The conclusion of the above logic is that a superconducting member
cannot radiate because resistivity is zero. On the other side of the coin copper has resistivity thus must be able to radiate
regardless of its resistivity contentand the swr figure represents the deviating frequency of the oscillating radiation which is in a direct opposition to the general thinking of today.Now your logic is a direct representation of the level of education you have attained
i.e.did not complete hight school. Since there are members who have exceeded this level on the group I assume there will be a
stepped ascention in the level of logic where both you and I will benefit.
Art

79. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 18:13:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4j4stmva1@news.albasani.net>
Source record: 24503

Art Unwin wrote:
>> ...
> Yet a dummy load is conductive ie carbon but is not considered
> radiative, a clear conflict
>> ...
> Art

Naaa ... NOT even close!

Dummy Load = A man carrying a BIG round rock downhill. <grin>

Regards,
JS

80. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 19:26:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1dbc787b-cc76-4ffa-91cd-d979e184ef73@s50g2000hsb.googlegroups.com>
Source record: 24504

On Jul 3, 1:13 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> >> ...
> > > Yet a dummy load is conductive ie carbon but is not considered
> > > radiative, a clear conflict
> >> ...
> > > Art
>
> Naaa ... NOT even close!
>
> Dummy Load = A man carrying a BIG round rock downhill. <grin>
>
> Regards,
> JS

John
I wanted a succession of logic starting from the bottom with respect
to education
and finishing on some hight lights and intuition with respect to
antennas and radiation
which is what this forum is for. You are entering much to early since
we all know that
the level of education and achievements with subsequent promotions
come with a rush
ONLY after a ham person retires from a mundane working life. You have
been to college and are still working
so there are many posters awaiting their rightfull positioin to post
and should not be pushed aside
at this early point.. Shame for shame hi hi Go back to the prior
posting to check and see whether the logic presented if any
is a close match to yours and then retreat until later. Note with
respect to logic I placed myself at the bottom to see if my logic will
survive by the time we get to the self perceived experts and who
amoungst them spoke out of turn!
Regards
Art

81. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 19:29:13 UTC
From: Dave <noone@nowhere.com>
Message-ID: <dM9bk.204$wa1.28@trndny07>
Source record: 24505

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:g4j2k8$r5q$1@f04n12.cac.psu.edu...
> Ron Walters wrote:
>> After reading several articles both on and off the WEB regarding a
>> center fed antenna, only one article mentioned a recommended length for
>> the feed line.
>
>
> There is a webpage that calculates the correct length of the feedline for
> an antenna:
>
> http://www.qsl.net/w4sat/howlong.htm
>

I love it, the perfect answer at the click of a button!

82. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 19:37:33 UTC
From: Dave <noone@nowhere.com>
Message-ID: <1U9bk.215$9W.161@trndny04>
Source record: 24506

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:adbfcfda-f1d7-4cc0-9e75-c6e892385f5d@27g2000hsf.googlegroups.com...
> On Jul 3, 12:25 pm, n...@wt.net wrote:
>> On Jul 3, 11:08 am, Art Unwin <ArthurUn...@gmail.com> wrote:
>>
>> > I am trying to understand why a low swr repetitive over a band of
>> > frequencies is considered by hams to be a dummy load.!
>>
>> Has nothing to do with it. SWR and antenna efficiency are
>> not related. Also SWR and common mode currents, or
>> the lack of are not related.
>>
>> >This
>> > consistently shows up in statements by the itelligensia of this
>> > newsgroup.
>>
>> Not by me. But I can't hardly spell itelligensia without help,
>> much less be one..
>> A man has to know his limitations.
>>
>> >Following up on the logic of that idea it would suggest
>> > that if swr was totally constant (not sure how that could be) then
>> > all radiation must be zero or self cancelling.?
>>
>> That is Art logic...
>>
>> > This thus suggests that if a log periodic antenna was unlimitted in
>> > the number of elements used would in the limit drop down to zero
>> > radiation!. So following the thinking of this group the oscillations
>> > that I show on my page
>>
>> > unwinantennas.com/
>>
>> > as a progression towards zero radiation since Q eventually is going to
>> > equal zero.
>>
>> Could I interest your cat in a pair of fuzzy mittens?
>>
>> > Is this why the decreasing oscillation is defined as a dummy load on
>> > this newsgroup?
>>
>> No.
>>
>> > The term comes up so often that I am compelled to look for what I am

>> > missing, especially since carbon
>> > is conductive and thus in the minds of many must therefore be
>> > radiative!
>>
>> If Star Trek is to be believed, you are a carbon unit.
>> Tie a shielded feed line to your big toe and get back to
>> us on the amount of DX worked.
>> I'll even grant you the benefit of a doubt, and let you ground
>> your other toe to a suitable ground rod, radials, etc if needed
>> for proper operation of the carbon unit miracle whip.
>>
>> > Ofcourse the statement bandied around that if a material is
>> > condunctive then it must radiatiate
>> > could become fact instead of an old wives tales if stated enough
>> > times.
>>
>> I think it would hurt to see that statement repeated too many
>> times regardless if true or not.
>>
>> The problem with your antenna will not be explained using fairy
>> tales and perceptions of what you think other hams might think.
>> All you need is regular old proven textbook theory which is available
>> to most anyone. If you have burned all your books in a past
>> fit of intellectual rage, maybe you should consider stocking up on
>> a few new ones. You can buy them online and have them delivered
>> via UPS, USPS, and other freight carriers. So you don't even have
>> to step outside the front door to gain this new perspective on the
>> "Unwin" antenna.
>
> You did not present any logical thiknking on the subjet

just following your lead i guess.

> Following the logic of my posting it shows a clear conflict between
> normal thinking and mine.

ah, so that is it. your logic is not normal thinking.

> In my thinking as neutrinos particle which is a
> type of carbon because it is a side product of fusion

is this an example of your abnormal thinking? seems pretty strange that a
small uncharged particle that passes through most matter as if it weren't
there could be a type of carbon which is an atom.

> Thus by my definition a carbon byproduct will never rest on a carbon
> product as a "free" electron
> thus radiation cannot occur!

i just loaded up some graphite from a pencil (another form of carbon) and it
did indeed radiate.

> The conclusion of the above logic is that
> a superconducting member
> cannot radiate because resistivity is zero.

Whoa! then what about the guy that has patented a superconductive antenna??? you aren't going to tell me now that they issue patents for things that don't work????

83. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 20:02:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4jb89$4qo$1@news.albasani.net>
Source record: 24507

Art Unwin wrote:

>> ...
> Regards
> Art

Sorry Art. Just couldn't resist. That was one of my great Elmers' favorite jokes ... as a younger man, I failed to find as much humor in it as I do today--strange, huh? Maybe Alzheimer Disease is that way ... <grin>

Regards,
JS

84. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 20:06:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4jbh4$4qo$2@news.albasani.net>
Source record: 24508

Dave wrote:

>> ...
>> http://www.qsl.net/w4sat/howlong.htm
>>
>
> I love it, the perfect answer at the click of a button!
>
>

Well, I will never accuse you two of not having a highly developed sense of humor! (and, that calculator is actually HIGHLY ACCURATE--error factor less than .00000000000000000000000001% <grin>)

At first I missed the importance of that URL, thanks for posting a reply to the original--I got a chance to use it. LOL!

Warm regards,
JS

85. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 20:32:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7bb65e50-50e7-4433-a7e1-107effb6f029@h1g2000prh.googlegroups.com>
Source record: 24509

On Jul 3, 3:02 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> > > Regards
> > > Art
>
> Sorry Art. Just couldn't resist. That was one of my great Elmers'
> favorite jokes ... as a younger man, I failed to find as much humor in
> it as I do today--strange, huh? Maybe Alzheimer Disease is that way ...
> <grin>
>
> Regards,
> JS

thats o.k. john. we quickly got back on track in terms of succession

86. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 21:23:30 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <mrbbk.474$HY.19@trnddc01>
Source record: 24510

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:adbfcfda-f1d7-4cc0-9e75-c6e892385f5d@27g2000hsf.googlegroups.com...
> On Jul 3, 12:25 pm, n...@wt.net wrote:
>> On Jul 3, 11:08 am, Art Unwin <ArthurUn...@gmail.com> wrote:

> Following the logic of my posting it shows a clear conflict between
> normal thinking and mine.

The operative words being "normal thinking and mine (Art's)"

That about sums it up.

87. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 21:58:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4ji27$jg6$1@news.albasani.net>
Source record: 24511

Dale Parfitt wrote:
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:adbfcfda-f1d7-4cc0-9e75-c6e892385f5d@27g2000hsf.googlegroups.com...
>> On Jul 3, 12:25 pm, n...@wt.net wrote:
>>> On Jul 3, 11:08 am, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>> Following the logic of my posting it shows a clear conflict between
>> normal thinking and mine.
>
> The operative words being "normal thinking and mine (Art's)"
>
> That about sums it up.

Well, yes and no ...

When you consider that the "normal IQ" is between 100-110 for the USA,
as a whole, and depending on the area in question (a survey onboard a
quality campus would blow that out of the water--and an IQ of 120+ used
to automatically qualify you for OTS (other qualifications
pending/applying) ... one could come up with a scenario(s) where
"normal" is not, necessarily, all that desirable ...

Regards,
JS

88. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 22:00:34 UTC
From: Dave <noone@nowhere.com>
Message-ID: <6_bbk.190$rb1.144@trndny08>
Source record: 24512

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g4jbh4$4qo$2@news.albasani.net...
> Dave wrote:
>
> >> ...
>>> http://www.qsl.net/w4sat/howlong.htm
>>>
>>
>> I love it, the perfect answer at the click of a button!
>
> Well, I will never accuse you two of not having a highly developed sense
> of humor! (and, that calculator is actually HIGHLY ACCURATE--error factor
> less than .00000000000000000000000001% <grin>)
>
> At first I missed the importance of that URL, thanks for posting a reply
> to the original--I got a chance to use it. LOL!
>
> Warm regards,
> JS

my formula is a little more complicated than the web site though. i take
the distance from the shack to the antenna, add in the width of the shack
(assuming some day i'll move the radio that it connects to somewhere else),
then add a couple feet more just for good measure.

89. Re: Open Wire fed lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 22:04:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4jie9$jg6$2@news.albasani.net>
Source record: 24513

Dave wrote:

> ...
> my formula is a little more complicated than the web site though. i take
> the distance from the shack to the antenna, add in the width of the shack
> (assuming some day i'll move the radio that it connects to somewhere else),
> then add a couple feet more just for good measure.
>
>

Absolutely, I had overlooked that error myself ...

If you notify "him" of that error/bug, I should imagine he would
immediately incorporate your "upgrade!" :-)

Regards,
JS

90. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 22:16:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <44289ceb-49d9-4af4-b83f-28a0882492df@x35g2000hsb.googlegroups.com>
Source record: 24514

On Jul 3, 4:58 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Dale Parfitt wrote:
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >news:adbfcfda-f1d7-4cc0-9e75-c6e892385f5d@27g2000hsf.googlegroups.com...
> >> On Jul 3, 12:25 pm, n...@wt.net wrote:
> >>> On Jul 3, 11:08 am, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> >> Following the logic of my posting it shows a clear conflict between
> >> normal thinking and mine.
>
> > The operative words being "normal thinking and mine (Art's)"
>
> > That about sums it up.
>
> Well, yes and no ...
>
> When you consider that the "normal IQ" is between 100-110 for the USA,
> as a whole, and depending on the area in question (a survey onboard a
> quality campus would blow that out of the water--and an IQ of 120+ used
> to automatically qualify you for OTS (other qualifications
> pending/applying) ... one could come up with a scenario(s) where
> "normal" is not, necessarily, all that desirable ...
>
> Regards,
> JS

Correct..... Normal in America is to strive to be a lemming
I can't be normal as it takes me more than one try to discern the
characters in the picture
which is needed before one can post

91. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-03 23:51:19 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <62799042-fbcb-4deb-982e-2f2df7ea9600@d77g2000hsb.googlegroups.com>
Source record: 24515

```
On Jul 3, 5:16 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Jul 3, 4:58 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
>
>
> > Dale Parfitt wrote:
> > > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> > >news:adbfcfda-f1d7-4cc0-9e75-c6e892385f5d@27g2000hsf.googlegroups.com...
> > >> On Jul 3, 12:25 pm, n...@wt.net wrote:
> > >>> On Jul 3, 11:08 am, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > >> Following the logic of my posting it shows a clear conflict between
> > >> normal thinking and mine.
>
> > > The operative words being "normal thinking and mine (Art's)"
>
> > > That about sums it up.
>
> > Well, yes and no ...
>
> > When you consider that the "normal IQ" is between 100-110 for the USA,
> > as a whole, and depending on the area in question (a survey onboard a
> > quality campus would blow that out of the water--and an IQ of 120+ used
> > to automatically qualify you for OTS (other qualifications
> > pending/applying) ... one could come up with a scenario(s) where
> > "normal" is not, necessarily, all that desirable ...
>
> > Regards,
> > JS
>
> Correct........ Normal in America is to strive to be a lemming
> I can't be normal as it takes me more than one try to discern the
> characters in the picture
> which is needed before one can post
'
You know John, since America gives the 'right to bear arms' you would
think that the population would understand
that a projectile must have rotation to follow a straight line
trajectory.
Straight line trajectory is also a property of radiation, so we not
only have to eject particles at rest
from a radiator surface but we also have to apply 'twist' to the
ejected particle otherwise the particles will scatter!
Again the foucault or eddy currents come to the fore where their
```

circulatory action apply torgue to the ejected particle
Why is it so hard for Americans to understand that radiation is a result of radial ejection of particles via a rejective rotary magnetic field ?. Especially when particles in equilibrium is part and parcel of Gaussian law which when extended to the same environment as the Maxwellian law? Today we have total resistance to this evidence and instead prefer to act like lemmings rather than face change.
Regards
Art
I haven't purchased a ARRL publication for years but I suspect they are still talking of radiation as being wave form.

92. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 00:19:14 UTC
From: ltdoc@yahoo.com
Message-ID: <3bdbfcbb-b8fe-48ad-9fd4-15fa32eb0026@y38g2000hsy.googlegroups.com>
Source record: 24516

Art,
I think you had better stick to antennas, leave firearms alone,
don't go there. One of your earlier
statements covers all this very well. There's nothing wrong with
being normal, you know.
- 'Doc

(Also, don't run with scissors!)

93. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 00:43:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4jroe$5g3$1@news.albasani.net>
Source record: 24517

Art Unwin wrote:

> '
> You know John, since America gives the 'right to bear arms' you would
> think that the population would understand
>> ...

Hmmm, got rid of my .357 ... just have an old, but in excellent shape, .45 ... I am not sure, but I suspect this would stop a "home invader"--even if you missed and hit him in the hand ...

> ...
> Why is it so hard for Americans to understand that radiation is a
> result of radial ejection of particles via a rejective rotary magnetic
> field ?. Especially when particles in equilibrium is part and parcel
> of Gaussian law which when extended to the same environment as the
> Maxwellian law? Today we have total resistance to this evidence and
> instead prefer to act like lemmings rather than face change.
> Regards
> Art
> I haven't purchased a ARRL publication for years but I suspect they
> are still talking of radiation as being wave form.

Hmmm ... I am still holding out a bit longer before calling the jury in ... the new developments of being able to take "pictures" of light waves/particles needs completely explored and given time for the technology to improve/mature.

But, it certainly looks the absolute proof of what light "is", is a LOT closer at hand. :-)

Regards,
JS

94. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 00:45:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2c320996-cd15-4615-9ad1-08eae3056386@79g2000hsk.googlegroups.com>
Source record: 24518

On Jul 3, 7:19 pm, lt...@yahoo.com wrote:
> Art,
> I think you had better stick to antennas, leave firearms alone,
> don't go there. One of your earlier
> statements covers all this very well. There's nothing wrong with
> being normal, you know.
> - 'Doc
>
> (Also, don't run with scissors!)

Great, more free speech which provides more understanding as who and
what you are.
I encourage all to exercise free speech so all can see and understand
what motivates you
and why you spend so much time on the couch! By the way you don't have
a doctorate so you have no
such education for which we should acknowledge or respect!
Speak up, love to hear from you.
Art]

95. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 00:47:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4jrvp$5g3$2@news.albasani.net>
Source record: 24519

John Smith wrote:

> ...
> But, it certainly looks the absolute proof of what light "is", is a LOT
> closer at hand. :-)
>
> Regards,
> JS

Yanno, they have NOT even taken a "picture" of a HIGH POWER RF wave
though an excitable gas (MASER), yet. Let's see that first ...

Regards,
JS

96. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 01:07:23 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <99da16ce-d28d-4b3e-bf5d-4c43198660e5@25g2000hsx.googlegroups.com>
Source record: 24520

On Jul 3, 7:43 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > '
> > You know John, since America gives the 'right to bear arms' you would
> > think that the population would understand
>
> >> ...
>
> Hmmm, got rid of my .357 ... just have an old, but in excellent shape,
> .45 ... I am not sure, but I suspect this would stop a "home
> invader"--even if you missed and hit him in the hand ...
>
> > ...
> > Why is it so hard for Americans to understand that radiation is a
> > result of radial ejection of particles via a rejective rotary magnetic
> > field ?. Especially when particles in equilibrium is part and parcel
> > of Gaussian law which when extended to the same environment as the
> > Maxwellian law? Today we have total resistance to this evidence and
> > instead prefer to act like lemmings rather than face change.
> > Regards
> > Art
> > I haven't purchased a ARRL publication for years but I suspect they
> > are still talking of radiation as being wave form.
>
> Hmmm ... I am still holding out a bit longer before calling the jury in
> ... the new developments of being able to take "pictures" of light
> waves/particles needs completely explored and given time for the
> technology to improve/mature.
>
> But, it certainly looks the absolute proof of what light "is", is a LOT
> closer at hand. :-)
>
> Regards,
> JS

John , nothing wrong in having a weapon to protect your home and
rights.
It is when those same weapons are used to threaten and scare the
populace
that things go wrong especially when they suggests such threats to
repell free speech
and for all to read before hand! So a projectile must have rotation to
travel in a straight line
but you must not mention that as it is tyrinical. But he did come in

on time as I anticipated
and applied logic to antennas as he sees it. Soon others will take
their turn since logic
applied is getting closer to the norm
When the President was on a train aproaching my town a porter cried
out "ten minuits to Normal"
with respect to the upcoming rail road station
That is how the book by the presidents adviser from Texas was named
i.e. Ten minuits from Normal
so I am very familiar with Normal people
Regards
Art

97. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 01:21:55 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <486d7b35$0$60068$8046368a@newsreader.iphouse.net>
Source record: 24521

Art Unwin wrote:
> I am trying to understand why a low swr repetitive over a band of
> frequencies is considered by hams to be a dummy load.! This

That is NOT what was stated. As usual you aren't paying attention.

tom
K0TAR

98. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 01:24:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4ju44$mf9$1@news.albasani.net>
Source record: 24522

Art Unwin wrote:

>> ...
> so I am very familiar with Normal people
> Regards
> Art

OK, enough said; and this final comment of mine ends this "normal"
thread ... at least for myself.

You know as well as I, normal is much over-rated. Normal people are
just not that interesting. While violent nuts are a drag; and, nuts
which live in true "La La Land" cannot be tolerated for long periods of
time--the most interesting people lie in between these and "normal" ...

Regards,
JS

99. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 01:41:32 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <486d7fcd$0$60072$8046368a@newsreader.iphouse.net>
Source record: 24523

Art Unwin wrote:
> presents a problem In my thinking as neutrinos particle which is a
> type of carbon because it is a side product of fusion

Well, that will sure cause heartburn for a lot of physicists, who believe it is a lepton, while carbon is an atom. Also the neutrino is massless as far as we know, and carbon very definitely has mass.

Now why do I think you will now tell me I, and the whole world of physics, is wrong?

tom
K0TAR

100. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 01:49:28 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <486d81a8$0$90338$8046368a@newsreader.iphouse.net>
Source record: 24524

Art Unwin wrote:
> On Jul 3, 1:13 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> Art Unwin wrote:
> John
> I wanted a succession of logic starting from the bottom with respect
> to education
> and finishing on some hight lights and intuition with respect to
> antennas and radiation
> which is what this forum is for. You are entering much to early since
> we all know that
> the level of education and achievements with subsequent promotions
> come with a rush
> ONLY after a ham person retires from a mundane working life. You have

Which is why professionals like (names that came to mind first that I could also spell, nothing else intended) Uda, Reisert, and Cebik have had no effect whatsoever on the antennas that surround you.

tom
K0TAR

101. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 02:46:43 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c15c105b-f408-4a37-8fd5-3e99ce0aa4fb@x41g2000hsb.googlegroups.com>
Source record: 24525

On Jul 3, 8:49 pm, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
> > On Jul 3, 1:13 pm, John Smith <assemblywiz...@gmail.com> wrote:
> >> Art Unwin wrote:
> > > John
> > > I wanted a succession of logic starting from the bottom with respect
> > > to education
> > > and finishing on some hight lights and intuition with respect to
> > > antennas and radiation
> > > which is what this forum is for. You are entering much to early since
> > > we all know that
> > > the level of education and achievements with subsequent promotions
> > > come with a rush
> > > ONLY after a ham person retires from a mundane working life. You have
> >
> > Which is why professionals like (names that came to mind first that I
> > could also spell, nothing else intended) Uda, Reisert, and Cebik have
> > had no effect whatsoever on the antennas that surround you.
> >
> > tom
> > K0TAR

Exactly. When they retired curiosity stayed with them and we learned
from their findings
There is little curiousity here which only gives people the past to
sieze upon with antenna bashing.
So they promote themselves as something they are not to prevent
learning from what I am sharing.
Nobody, but nobody has found fault with my findings because curiousity
left when they retired such
that they have nothing left to debate. Ofcourse that is not all bad,
no strain occures in bashing the messenger !.
I would be happy if somebody could find a fault in my findings to put
my mind at rest and I can move on
but trying to put fear in my mind by the bashing just plants my feet
more firmly in the ground
I find it so wiered that men of education denied the education
provided by the extension of Gauss when the mathematics are placed
before them to which they could find no fault. Probably because of
lack of knowledge in books behind which they could find safety.
We have a book writer here whose work was taken to task by another. If
he manages to get that same book published will you take shelter
behind what is written regardless of its quality? I find no shame in
what I am sharing and I will never be silenced so my feet turn to lead

in the face of wrong doing applied to others who have done no wrong.That is exactly how Hitler came to power where those who did nothing got their just deserts.
Art

102. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 03:00:44 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <486d925e$0$60065$8046368a@newsreader.iphouse.net>
Source record: 24526

Art Unwin wrote:

> what I am sharing and I will never be silenced so my feet turn to lead
> in the face of wrong doing applied to others who have done no
> wrong.That is exactly how Hitler came to power where those who did
> nothing got their just deserts.
> Art

You are a very sick person. Get help.

tom
K0TAR

103. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 03:39:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <71212a81-b5a6-4957-86b5-bd80028ecda2@l42g2000hsc.googlegroups.com>
Source record: 24527

On Jul 3, 10:00 pm, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
> > what I am sharing and I will never be silenced so my feet turn to lead
> > in the face of wrong doing applied to others who have done no
> > wrong.That is exactly how Hitler came to power where those who did
> > nothing got their just deserts.
> > Art
>
> You are a very sick person. Get help.
>
> tom
> K0TAR

Make your point by proving it. Many will stand behind you
with that comment but first prove the mathematics presented are in
error.
That would certainly separate you from others who are not educated to
determine same
other than sharing with others what and who you are.
When those mathematics are proved to be in error my whole findings
fall apart .
. Where I would lose credence where you would gain without the need
for
insult which gains nothing. Is there not anybody in this world can
prove that the extended law of Gauss
when subject to the addition of radiators and a time varying field is
not the equal of Maxwells law?
Anybody from any country of any color or religeon willing to present
to Americans that indeed the
laws become the same? Or do you find the possibility of insults from
americans to daunting to speak up?
Be strong
Regards
Art

104. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 04:06:55 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <486da1e0$0$90338$8046368a@newsreader.iphouse.net>
Source record: 24528

Art Unwin wrote:
> On Jul 3, 10:00 pm, Tom Ring <news0...@taring.org> wrote:
>> Art Unwin wrote:
>>> what I am sharing and I will never be silenced so my feet turn to lead
>>> in the face of wrong doing applied to others who have done no
>>> wrong.That is exactly how Hitler came to power where those who did
>>> nothing got their just deserts.
>>> Art
>> You are a very sick person. Get help.
>>
>> tom
>> K0TAR
>
> Make your point by proving it. Many will stand behind you
> with that comment but first prove the mathematics presented are in
> error.
> That would certainly separate you from others who are not educated to
> determine same
> other than sharing with others what and who you are.
> When those mathematics are proved to be in error my whole findings
> fall apart .
> . Where I would lose credence where you would gain without the need
> for
> insult which gains nothing. Is there not anybody in this world can
> prove that the extended law of Gauss
> when subject to the addition of radiators and a time varying field is
> not the equal of Maxwells law?
> Anybody from any country of any color or religeon willing to present
> to Americans that indeed the
> laws become the same? Or do you find the possibility of insults from
> americans to daunting to speak up?
> Be strong
> Regards
> Art

This was not an insult Art, this was in reference to the last sentence
in your statement which follows -

>>> That is exactly how Hitler came to power where those who did
>>> nothing got their just deserts.
>>> Art

Sounds like a lightly veiled threat to me.

tom
K0TAR

105. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 04:35:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4k9b4$9fq$1@news.albasani.net>
Source record: 24529

Tom Ring wrote:

>
> >>> That is exactly how Hitler came to power where those who did
> >>> nothing got their just deserts.
> >>> Art
>
> Sounds like a lightly veiled threat to me.
>
> tom
> K0TAR

You need to study your history.

Sounds like this to me:

First they came for the Communists,
and I didnï¿½t speak up,
because I wasnï¿½t a Communist.
Then they came for the Jews,
and I didnï¿½t speak up,
because I wasnï¿½t a Jew.
Then they came for the Catholics,
and I didnï¿½t speak up,
because I was a Protestant.
Then they came for me,
and by that time there was no one
left to speak up for me.

by Rev. Martin Niemoller, 1945

Sick is attempting to "point" everything at ones' self. Sick is
thinking everyone in the world is "out to get you" ... be careful ... it
WAS about Hitler, and what those who do nothing deserve.

Regards,
JS

106. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 04:58:23 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3617a36e-1fa0-4a60-836d-11a0f77a7626@f63g2000hsf.googlegroups.com>
Source record: 24530

On Jul 3, 11:06 pm, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
> > On Jul 3, 10:00 pm, Tom Ring <news0...@taring.org> wrote:
> >> Art Unwin wrote:
> >>> what I am sharing and I will never be silenced so my feet turn to lead
> >>> in the face of wrong doing applied to others who have done no
> >>> wrong.That is exactly how Hitler came to power where those who did
> >>> nothing got their just deserts.
> >>> Art
> >> You are a very sick person. Get help.
>
> >> tom
> >> K0TAR
>
> > Make your point by proving it. Many will stand behind you
> > with that comment but first prove the mathematics presented are in
> > error.
> > That would certainly separate you from others who are not educated to
> > determine same
> > other than sharing with others what and who you are.
> > When those mathematics are proved to be in error my whole findings
> > fall apart .
> > . Where I would lose credence where you would gain without the need
> > for
> > insult which gains nothing. Is there not anybody in this world can
> > prove that the extended law of Gauss
> > when subject to the addition of radiators and a time varying field is
> > not the equal of Maxwells law?
> > Anybody from any country of any color or religeon willing to present
> > to Americans that indeed the
> > laws become the same? Or do you find the possibility of insults from
> > americans to daunting to speak up?
> > Be strong
> > Regards
> > Art
>
> This was not an insult Art, this was in reference to the last sentence
> in your statement which follows -
>
> >>> That is exactly how Hitler came to power where those who did
> >>> nothing got their just deserts.
> >>> Art
>
> Sounds like a lightly veiled threat to me.

>
> tom
> K0TAR

Gee, I have no idea why you say that.
I want somebody, probably from outside America who knows something about mathematics, communist, muslim or otherwise
who can inform the american ham where the similarity lies between Gauss and Maxwell . This is mainly an american forum
and they are determined to deny any mathematics that supplies a similarity between these two gentlemen from Europe. Mathematics shown up to now showed that Gaussian law of statics when extended to include a radiator and a time varying field cannot, and does not,equal Maxwell's law despite the mathematic manouvaring that show that they are the same. They also bring in to question antenna programs with optimizer that produce arrays where all is in equilibrium, or programs that show radiators tipped with respect to ground
as a response to Foucault current ala the weak field, required by the masters prior to Maxwell. We all know the statement regarding garbage in means garbage out and that is the label they are determined to foist upon all. The equality of these laws leads to the fact that a radiator may be of 'any shape, size or elevation as long as it is in equilibrium and is capable of producing eddy currents'.
This suggests to me that some members are full bent on preventing this knowledge being shared with all, for why I do not know
Even tho it was an american with a doctorate working for the space department who supplied confirming mathematics.
There is a need for efficient electrically full wave antennas contained within a smaller volume hitherto known and nobody can stop the advance of science where curiousity abounds. Somebody some where will produce one and then the race will be on but it disappoints me that it will not be America where the fall of the dollar will continue world wide.
Why american antenna engineers continue to pursue small efficient fractional antenna I do not know when the above presents the means of point radiation which leads to more efficient radiators of a smaller volume. I need a mathematician to come forward to blow this scheming apart for the benefit of all including those on the other side of the pond.
Happy fourth of July to all Americans and hopefully change is near.
Best regards
Art Unwin KB9MZ......Personal page...."unwinantennas.com/"

107. Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 10:52:36 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <Shnbk.178582$NN3.81944@newsfe08.ams2>
Source record: 24531

I want to measure and cut some coax for 14.200 MHz. It is to be connected to my Cushcraft MA5B
I have cut off a 100 feet of RG-213 coax and have put a PL-259 on one end. I have a T connector connected to the analyse with a 50 Ohm dummy load on one side of the T and the 100 feet of coax on the other side of the T.
I then go into SWR mode on the Analyser and sweep, the nearest dip it gives is at 13.105 MHz. I expected it to be nearer to 14 MHz. Would this be about right?

Before I start cutting bits off the coax I wanted to make sure that this is correct or is there is a better way?

How crucial is the length of coax in the first place?

73 Andy

108. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 11:19:12 UTC
From: Jeff <jeff@local.host>
Message-ID: <486e0764$0$1346$834e42db@reader.greatnowhere.com>
Source record: 24532

"Andy" <dx90@blueyounder.co.uk> wrote in message
news:Shnbk.178582$NN3.81944@newsfe08.ams2...
>I want to measure and cut some coax for 14.200 MHz. It is to be connected
>to my Cushcraft MA5B
> I have cut off a 100 feet of RG-213 coax and have put a PL-259 on one end.
> I have a T connector connected to the analyse with a 50 Ohm dummy load on
> one side of the T and the 100 feet of coax on the other side of the T.
> I then go into SWR mode on the Analyser and sweep, the nearest dip it
> gives is at 13.105 MHz. I expected it to be nearer to 14 MHz. Would this
> be about right?
>
> Before I start cutting bits off the coax I wanted to make sure that this
> is correct or is there is a better way?
>
> How crucial is the length of coax in the first place?
>
> 73 Andy

Since the MA5B instructions say that the feeder length is not important, why
do you need to cut the feeder to a particular length??

Jeff

109. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 11:50:56 UTC
From: Dave <noone@nowhere.com>
Message-ID: <A8obk.224$rb1.211@trndny08>
Source record: 24533

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:3617a36e-1fa0-4a60-836d-11a0f77a7626@f63g2000hsf.googlegroups.com...
> On Jul 3, 11:06 pm, Tom Ring <news0...@taring.org> wrote:
>> Art Unwin wrote:
>> > On Jul 3, 10:00 pm, Tom Ring <news0...@taring.org> wrote:
>> >> Art Unwin wrote:
>> >>> what I am sharing and I will never be silenced so my feet turn to
>> >>> lead
>> >>> in the face of wrong doing applied to others who have done no
>> >>> wrong.That is exactly how Hitler came to power where those who did
>> >>> nothing got their just deserts.
>> >>> Art
>> >> You are a very sick person. Get help.
>>
>> >> tom
>> >> K0TAR
>>
>> > Make your point by proving it. Many will stand behind you
>> > with that comment but first prove the mathematics presented are in
>> > error.
>> > That would certainly separate you from others who are not educated to
>> > determine same
>> > other than sharing with others what and who you are.
>> > When those mathematics are proved to be in error my whole findings
>> > fall apart .
>> > . Where I would lose credence where you would gain without the need
>> > for
>> > insult which gains nothing. Is there not anybody in this world can
>> > prove that the extended law of Gauss
>> > when subject to the addition of radiators and a time varying field is
>> > not the equal of Maxwells law?
>> > Anybody from any country of any color or religeon willing to present
>> > to Americans that indeed the
>> > laws become the same? Or do you find the possibility of insults from
>> > americans to daunting to speak up?
>> > Be strong
>> > Regards
>> > Art
>>
>> This was not an insult Art, this was in reference to the last sentence
>> in your statement which follows -
>>
>> >>> That is exactly how Hitler came to power where those who did
>> >>> nothing got their just deserts.

>> >>> Art
>>
>> Sounds like a lightly veiled threat to me.
>>
>> tom
>> K0TAR
>
> Gee, I have no idea why you say that.
> I want somebody, probably from outside America who knows something
> about mathematics, communist, muslim or otherwise
> who can inform the american ham where the similarity lies between
> Gauss and Maxwell . This is mainly an american forum
> and they are determined to deny any mathematics that supplies a
> similarity between these two gentlemen from Europe. Mathematics shown
> up to now showed that Gaussian law of statics when extended to include
> a radiator and a time varying field cannot, and does not,equal
> Maxwell's law despite the mathematic manouvaring that show that they
> are the same. They also bring in to question antenna programs with
> optimizer that produce arrays where all is in equilibrium, or programs
> that show radiators tipped with respect to ground
> as a response to Foucault current ala the weak field, required by the
> masters prior to Maxwell. We all know the statement regarding garbage
> in means garbage out and that is the label they are determined to
> foist upon all. The equality of these laws leads to the fact that a
> radiator may be of 'any shape, size or elevation as long as it is in
> equilibrium and is capable of producing eddy currents'.
> This suggests to me that some members are full bent on preventing this
> knowledge being shared with all, for why I do not know
> Even tho it was an american with a doctorate working for the space
> department who supplied confirming mathematics.
> There is a need for efficient electrically full wave antennas
> contained within a smaller volume hitherto known and nobody can stop
> the advance of science where curiousity abounds. Somebody some where
> will produce one and then the race will be on but it disappoints me
> that it will not be America where the fall of the dollar will continue
> world wide.
> Why american antenna engineers continue to pursue small efficient
> fractional antenna I do not know when the above presents the means of
> point radiation which leads to more efficient radiators of a smaller
> volume. I need a mathematician to come forward to blow this scheming
> apart for the benefit of all including those on the other side of the
> pond.
> Happy fourth of July to all Americans and hopefully change is near.
> Best regards
> Art Unwin KB9MZ......Personal page...."unwinantennas.com/"
>

art never has understood that one of maxwell's 4 laws is really gauss' law
in disguise... sometimes written with a D instead of E to confuse the
clueless, its an important part of electrostatics.

110. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 11:57:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Veobk.233$P11.88@trndny06>
Source record: 24534

"Jeff" <jeff@local.host> wrote in message
news:486e0764$0$1346$834e42db@reader.greatnowhere.com...
>
> "Andy" <dx90@blueyounder.co.uk> wrote in message
> news:Shnbk.178582$NN3.81944@newsfe08.ams2...
>>I want to measure and cut some coax for 14.200 MHz. It is to be connected
>>to my Cushcraft MA5B
>> I have cut off a 100 feet of RG-213 coax and have put a PL-259 on one
>> end.
>> I have a T connector connected to the analyse with a 50 Ohm dummy load on
>> one side of the T and the 100 feet of coax on the other side of the T.
>> I then go into SWR mode on the Analyser and sweep, the nearest dip it
>> gives is at 13.105 MHz. I expected it to be nearer to 14 MHz. Would this
>> be about right?
>>
>> Before I start cutting bits off the coax I wanted to make sure that this
>> is correct or is there is a better way?
>>
>> How crucial is the length of coax in the first place?
>>
>> 73 Andy
>
> Since the MA5B instructions say that the feeder length is not important,
> why do you need to cut the feeder to a particular length??
>
> Jeff
>

with velocity factor of .66 for generic rg-213 i get 12.988MHz being 2
wavelengths... but why do you care?

here is how to calculate the right length, no fancy measurement equipment
needed.
http://www.qsl.net/w4sat/howlong.htm

111. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 12:06:25 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <2bg1k5-mvj.ln1@p400bob.personal.cox.net>
Source record: 24538

Hi Andy

I think you'll will get into a large discussion over this!

I am no means an expert on this topic and everytime I need to be, I have to relearn a few things. In my experience though the almost only time I want to cut coax to length is if I am using it for Z transformation between antenna and TX. Like if the antenna has a Z of 100r I will end up using odd quarter wave multiples of 75r coax to "match" the system. I also use it to cut stubs for notch/band pass filtering and tuning . For one project I remember using a quarter wave length across the 5V terminals of an old SMPS to reduce radiation on about 75MHz.

What I am getting at is if the TX source Z is 50r and the antenna load Z is 50r any length of coax will do. The effect of tuning the coax length will be most evident if the system is reactive at either end. How much that difference it really makes I dont have experience in. I tend to shy away from coax systems in this case anyway as high VSWR on the line itself is a recipe for a large loss of system efficiency. (ie it has become part of the system tuning and can be regarded as a lossy load)

I normally use resonance/dip oscillator to determine length. If you only have a VSWR device you can figure the length by actually leaving the far end open or short and actually going for a maximum rather than dip.

I apologize for not giving you a definitive answer.

Cheers Bob VK2YQA

Andy wrote:
> I want to measure and cut some coax for 14.200 MHz. It is to be connected
> to my Cushcraft MA5B

112. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 12:48:35 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <3qi1k5-g2k.ln1@p400bob.personal.cox.net>
Source record: 24537

Hi Dave

One of the pitfalls is that although a VF of .66 (or .87 for foam) is
common it can vary considerably.

I dont think I have ever seen manufacturers VF specs with a tolerance
listed. In fact I dont think I have ever seen a manufacturers spec
include VF!

Of course it depends on how critical the application is. In my
experience for example 4:1 coaxial baluns on 2m always need to be tuned...

Cheers Bob VK2YQA

Dave wrote:
f
>>
>
> with velocity factor of .66 for generic rg-213 i get 12.988MHz being 2
> wavelengths... but why do you care?
>
> here is how to calculate the right length, no fancy measurement equipment
> needed.
> http://www.qsl.net/w4sat/howlong.htm
>
>

113. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 12:58:14 UTC
From: ltdoc@yahoo.com
Message-ID: <37b54d74-1021-4b0f-8374-38fe494a7778@79g2000hsk.googlegroups.com>
Source record: 24535

Of the two questions, how to do the 'finding the right length of feed line', and 'is it important', the last question sort of takes precedence. It just isn't that important at all.
The first question. It's been a while since I've looked at the instruction manual, but I think the analyzer's book should tell you how to go about it. (I'm too lazy to look, so take that for what it's worth.)
- 'Doc

114. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 13:01:57 UTC
From: ltdoc@yahoo.com
Message-ID: <9eaf717c-ed05-4fa5-b485-5d0418685266@c58g2000hsc.googlegroups.com>
Source record: 24536

Great misdirection Art. Get those shields up, stuff'll just bounce
off.
- 'Doc

115. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 13:16:31 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Popbk.253$9W.203@trndny04>
Source record: 24539

right, and for impedance transformers and stubs you have to take that into account and tune them individually. I do that for my stub filters here. But this is a case of how long to make it from the antenna to the radio from what little he told us, so vf is not important.

"Bob Bob" <bob3bob3@suddenlink.net> wrote in message news:3qi1k5-g2k.ln1@p400bob.personal.cox.net...
> Hi Dave
>
> One of the pitfalls is that although a VF of .66 (or .87 for foam) is
> common it can vary considerably.
>
> I dont think I have ever seen manufacturers VF specs with a tolerance
> listed. In fact I dont think I have ever seen a manufacturers spec
> include VF!
>
> Of course it depends on how critical the application is. In my
> experience for example 4:1 coaxial baluns on 2m always need to be tuned...
>
> Cheers Bob VK2YQA
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> Dave wrote:
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>> wavelengths... but why do you care?
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>> here is how to calculate the right length, no fancy measurement equipment
>> needed.
>> http://www.qsl.net/w4sat/howlong.htm
>>
>>

116. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 13:26:59 UTC
From: Jeff <jeff@local.host>
Message-ID: <486e2593$0$1345$834e42db@reader.greatnowhere.com>
Source record: 24540

"> What I am getting at is if the TX source Z is 50r and the antenna load Z
> is 50r any length of coax will do.

Yes, of course, (neglecting any loss in the cable).

>The effect of tuning the coax length
> will be most evident if the system is reactive at either end. How much
> that difference it really makes I dont have experience in.

It makes no difference to the vswr, all changing the cable length will do is
change its phase.
(again neglecting loss in the cable, and assuming that the cable impedance
matches the source).

73
Jeff

117. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 14:40:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <DDqbk.9549$89.1711@nlpi069.nbdc.sbc.com>
Source record: 24541

Bob Bob wrote:
> In my experience though the almost only time I
> want to cut coax to length is if I am using it for Z transformation
> between antenna and TX.

Unfortunately, when SWR > 1:1, 50 ohms is at the
center of the SWR circle and is the target impedance
to which it is impossible to transform (unless feedline
losses are very high). :-)
--
73, Cecil http://www.w5dxp.com

118. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 15:05:24 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <086ed55e-59bd-4dc1-86f5-9cb50cf57a26@i76g2000hsf.googlegroups.com>
Source record: 24542

```
On Jul 4, 6:50 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:3617a36e-1fa0-4a60-836d-11a0f77a7626@f63g2000hsf.googlegroups.com...
>
>
>
> > On Jul 3, 11:06 pm, Tom Ring <news0...@taring.org> wrote:
> >> Art Unwin wrote:
> >> > On Jul 3, 10:00 pm, Tom Ring <news0...@taring.org> wrote:
> >> >> Art Unwin wrote:
> >> >>> what I am sharing and I will never be silenced so my feet turn to
> >> >>> lead
> >> >>> in the face of wrong doing applied to others who have done no
> >> >>> wrong.That is exactly how Hitler came to power where those who did
> >> >>> nothing got their just deserts.
> >> >>> Art
> >> >> You are a very sick person. Get help.
>
> >> >> tom
> >> >> K0TAR
>
> >> > Make your point by proving it. Many will stand behind you
> >> > with that comment but first prove the mathematics presented are in
> >> > error.
> >> > That would certainly separate you from others who are not educated to
> >> > determine same
> >> > other than sharing with others what and who you are.
> >> > When those mathematics are proved to be in error my whole findings
> >> > fall apart .
> >> > . Where I would lose credence where you would gain without the need
> >> > for
> >> > insult which gains nothing. Is there not anybody in this world can
> >> > prove that the extended law of Gauss
> >> > when subject to the addition of radiators and a time varying field is
> >> > not the equal of Maxwells law?
> >> > Anybody from any country of any color or religeon willing to present
> >> > to Americans that indeed the
> >> > laws become the same? Or do you find the possibility of insults from
> >> > americans to daunting to speak up?
> >> > Be strong
> >> > Regards
> >> > Art
>
```

> >> This was not an insult Art, this was in reference to the last sentence
> >> in your statement which follows -
>
> >> >>> That is exactly how Hitler came to power where those who did
> >> >>> nothing got their just deserts.
> >> >>> Art
>
> >> Sounds like a lightly veiled threat to me.
>
> >> tom
> >> K0TAR
>
> > Gee, I have no idea why you say that.
> > I want somebody, probably from outside America who knows something
> > about mathematics, communist, muslim or otherwise
> > who can inform the american ham where the similarity lies between
> > Gauss and Maxwell . This is mainly an american forum
> > and they are determined to deny any mathematics that supplies a
> > similarity between these two gentlemen from Europe. Mathematics shown
> > up to now showed that Gaussian law of statics when extended to include
> > a radiator and a time varying field cannot, and does not,equal
> > Maxwell's law despite the mathematic manouvaring that show that they
> > are the same. They also bring in to question antenna programs with
> > optimizer that produce arrays where all is in equilibrium, or programs
> > that show radiators tipped with respect to ground
> > as a response to Foucault current ala the weak field, required by the
> > masters prior to Maxwell. We all know the statement regarding garbage
> > in means garbage out and that is the label they are determined to
> > foist upon all. The equality of these laws leads to the fact that a
> > radiator may be of 'any shape, size or elevation as long as it is in
> > equilibrium and is capable of producing eddy currents'.
> > This suggests to me that some members are full bent on preventing this
> > knowledge being shared with all, for why I do not know
> > Even tho it was an american with a doctorate working for the space
> > department who supplied confirming mathematics.
> > There is a need for efficient electrically full wave antennas
> > contained within a smaller volume hitherto known and nobody can stop
> > the advance of science where curiousity abounds. Somebody some where
> > will produce one and then the race will be on but it disappoints me
> > that it will not be America where the fall of the dollar will continue
> > world wide.
> > Why american antenna engineers continue to pursue small efficient
> > fractional antenna I do not know when the above presents the means of
> > point radiation which leads to more efficient radiators of a smaller
> > volume. I need a mathematician to come forward to blow this scheming
> > apart for the benefit of all including those on the other side of the
> > pond.
> > Happy fourth of July to all Americans and hopefully change is near.
> > Best regards
> > Art Unwin KB9MZ......Personal page...."unwinantennas.com/"

>
> art never has understood that one of maxwell's 4 laws is really gauss' law
> in disguise... sometimes written with a D instead of E to confuse the
> clueless, its an important part of electrostatics.

But David you made a career of saying that you cannot add radiators
and a time varying field to
Gaussian law of statics.!
You are repeating the same method that Richard took by quietly
submitting to the fact that you were wrong during the last year and
now finally can see the light. Better late than never! Now you are
in position of that fact, get yourself an optimizer antenna program
and with one line where all dimensions are different i.e not planar.
Then come back and explain to the rest of America why the radiator is
tipped with respect to earth
(Tip review the combination of Foucault currents on diamagnetic
materials)

David I am so pleased that you have finally moved back into physics
Even learning to change the units of onbe law (SI) to the units of
another. Maybe other americans on the newsgroup will now follow you
without bashing other believers that it cannot be so.

Best regards
Art Unwin KB9MZ.....xg

119. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 16:04:42 UTC
From: richardharrison@webtv.net
Message-ID: <20337-486E4A1A-645@storefull-3252.bay.webtv.net>
Source record: 24543

Art wrote:
"Why American antenna engineers continue to pursue small efficient fractional antenna(s) I do not know(,) when the above (Unwin Antenna) presents the means of point radiation which leads to more efficient radiators of smaller volume."

Enough bafflegab. As Sgt. Joe Friday used to say: "Just give us the facts".

Best regards, Richard Harrison, KB5WZI

120. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 16:16:32 UTC
From: "H. Adam Stevens" <mayatwo@earthlink.net>
Message-ID: <mqOdnQGmPbhM0fPVnZ2dnUVZ_hWdnZ2d@earthlink.com>
Source record: 24544

"How crucial is the length of coax in the first place?"
As long as all the impedances are matched, and they are with RG-213 and a MA5B, length is irrelevant except that as-short-as-possible minimizes resistive losses.

73, H.
NQ5H

"Andy" <dx90@blueyounder.co.uk> wrote in message
news:Shnbk.178582$NN3.81944@newsfe08.ams2...
>I want to measure and cut some coax for 14.200 MHz. It is to be connected
>to my Cushcraft MA5B
> I have cut off a 100 feet of RG-213 coax and have put a PL-259 on one end.
> I have a T connector connected to the analyse with a 50 Ohm dummy load on
> one side of the T and the 100 feet of coax on the other side of the T.
> I then go into SWR mode on the Analyser and sweep, the nearest dip it
> gives is at 13.105 MHz. I expected it to be nearer to 14 MHz. Would this
> be about right?
>
> Before I start cutting bits off the coax I wanted to make sure that this
> is correct or is there is a better way?
>
> How crucial is the length of coax in the first place?
>
> 73 Andy
>

121. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 16:22:52 UTC
From: nm5k@wt.net
Message-ID: <ee5a0836-660d-45c6-996a-1d1f3be94e42@v26g2000prm.googlegroups.com>
Source record: 24545

On Jul 3, 11:58 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> > This was not an insult Art, this was in reference to the last sentence
> > in your statement which follows -
>
> > >>> That is exactly how Hitler came to power where those who did
> > >>> nothing got their just deserts.
> > >>> Art
>
> > Sounds like a lightly veiled threat to me.
>
> > tom
> > K0TAR
>
> Gee, I have no idea why you say that.
> I want somebody, probably from outside America who knows something
> about mathematics, communist, muslim or otherwise
> who can inform the american ham where the similarity lies between
> Gauss and Maxwell .

What? Are you telling us that you don't know math, and
request help to "inform" the American ham about Gauss
and Maxwell?

Let me get this right.. We all want to be clear on this.
You don't know or understand math very well, but you
want someone who does know math to "prove" a theory
cooked up by a person who doesn't use or know math
very well.
So, obviously if you don't know math very well, you must
not have used any to come to your conclusions.

What makes you so sure that the arrival of such a person
with credible math skills will verify and prove your
claims?
That doktor from MIT sure didn't do you any good.
I assume he at least knows a little math...

Sure seems like a stretch to me. We all know how you
came to your conclusions. And math didn't have anything
to do with it. Your antenna was spawned by twiddling
with an antenna modeling and optimization program.

I am sure that there are plenty here who do have the
math skills to calculate most any problem you were to

pose to them.

People can't check the math if no math is given for
them to check.
So what is your excuse for this gross omission?
And don't mention that doktor from MIT.
He didn't provide any math to check either.
What was his excuse for this gross omission?
Oh yea, I remember.. He ducked out and ran off
before giving his excuse.

Of course, you could greatly speed up your quest for
validation if you installed the antenna and ran tests
against known reference antennas.
You would know very quickly if your antenna lives
up to your hype or not.
You would not need any mathematicians to see
if your theory holds water. You would *KNOW*
without all the whiny histrionics.
Your pissing and moaning about peoples levels of
education strikes me as hilarious when you write
and spell on the level of the average 4th grader.

I don't know who your teachers were, but I feel
certain they must have been incompetent.
Either that, or in your advancing old fartism, you
have gradually lost most everything you were once
taught.
Either that or you just want to be different.
Which is it?

When are you going to get off your ass and actually
try one of these antennas in the real world?
If you won't do it, how can you expect anyone else
to want to mess with it?
The "normal" person will pretty much know it doesn't
work even before trying it. So there is not much
incentive to break a sweat is there?
If you want to prove that your air cooled dummy load
can be an effective radiator, it's all up to you.
Not us.
If you want me to break a sweat to disprove your
antenna, I expect to be well paid for my trouble.
You will also pay for expenses. IE: the hundreds of
feet of 22 gauge wire, two shoe boxes, etc..
If you wish, I will do your work for you for $6,150.00
$6k going to me, the $150 to cover parts and other
expenses.
You can send the check to my listed QRZ address.
After receiving said funds, I will provide detailed
test results within a week.

Note that I require payment before doing the test
just to ensure I actually get paid.
I'm fairly sure that the results of the test will be
unfavorable to your cause, which will likely lead
you to decide not to pay your bill.

122. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 17:01:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7367a553-3c2a-411a-b8f6-50c161ca09df@k30g2000hse.googlegroups.com>
Source record: 24546

On Jul 4, 11:04 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "Why American antenna engineers continue to pursue small efficient
> fractional antenna(s) I do not know(,) when the above (Unwin Antenna)
> presents the means of point radiation which leads to more efficient
> radiators of smaller volume."
>
> Enough bafflegab. As Sgt. Joe Friday used to say: "Just give us the
> facts".
>
> Best regards, Richard Harrison, KB5WZI

Richard after all your denials regarding tipped antennas which you say
is a myth we are now getting close
to showing same via a computor program with optimizer which will show
it is not a myth. You will soon have to decide whether computor
programs with respect to antennas are complete garbage i.e. garbage in
garbage out or..... that antennas must be tipped for max vertical
gain. My guess that this will be shown first by a European since they
have a need for smaller antennas and still are willing to experiment
with antennas rather than declaring "all is known" Slowly the
correllation between static particles and Maxwell is being understood.
I never thought David would finally acknowledge the mathematics even
tho there are many who reject the fact. Now we have Richard ,not you,
David and myself on one side banded together against the antenna
bashers. The next move showing a tipped vertical generated by an
optimizer will bring another one over to my side. We then will see
that the static particles that is part of Gauss is ejected from a
radiator like an elevated frog, used for novelty reasons, show that
radiatiation is by particles and not a wave will bring another antenna
basher over to the Gaussian side. Then people will see how an eddy
current applies spin to a departing
particle such that it will attain a straight line trajectory for
communication and the change over will become a flood and you will be
left alone as an old man who cannot accept change While others are
making small antennas now that it can be seen that a radiator can be
any size shape or varied elevation as long as it is in equilibrium
This being the start of this journey connecting a gaussian field in
equilibrium to the mechanics of communication
Art
KB9MZ
unwinantennas.com/

123. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 17:03:35 UTC
From: Dave <noone@nowhere.com>
Message-ID: <HJsbk.237$rb1.161@trndny08>
Source record: 24547

```
"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:086ed55e-59bd-4dc1-86f5-9cb50cf57a26@i76g2000hsf.googlegroups.com...
> On Jul 4, 6:50 am, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:3617a36e-1fa0-4a60-836d-11a0f77a7626@f63g2000hsf.googlegroups.com...
>>
>>
>>
>> > On Jul 3, 11:06 pm, Tom Ring <news0...@taring.org> wrote:
>> >> Art Unwin wrote:
>> >> > On Jul 3, 10:00 pm, Tom Ring <news0...@taring.org> wrote:
>> >> >> Art Unwin wrote:
>> >> >>> what I am sharing and I will never be silenced so my feet turn to
>> >> >>> lead
>> >> >>> in the face of wrong doing applied to others who have done no
>> >> >>> wrong.That is exactly how Hitler came to power where those who did
>> >> >>> nothing got their just deserts.
>> >> >>> Art
>> >> >> You are a very sick person. Get help.
>>
>> >> >> tom
>> >> >> K0TAR
>>
>> >> > Make your point by proving it. Many will stand behind you
>> >> > with that comment but first prove the mathematics presented are in
>> >> > error.
>> >> > That would certainly separate you from others who are not educated
>> >> > to
>> >> > determine same
>> >> > other than sharing with others what and who you are.
>> >> > When those mathematics are proved to be in error my whole findings
>> >> > fall apart .
>> >> > . Where I would lose credence where you would gain without the need
>> >> > for
>> >> > insult which gains nothing. Is there not anybody in this world can
>> >> > prove that the extended law of Gauss
>> >> > when subject to the addition of radiators and a time varying field
>> >> > is
>> >> > not the equal of Maxwells law?
>> >> > Anybody from any country of any color or religeon willing to present
>> >> > to Americans that indeed the
>> >> > laws become the same? Or do you find the possibility of insults
>> >> > from
```

>> >> > americans to daunting to speak up?
>> >> > Be strong
>> >> > Regards
>> >> > Art
>>
>> >> This was not an insult Art, this was in reference to the last sentence
>> >> in your statement which follows -
>>
>> >> >>> That is exactly how Hitler came to power where those who did
>> >> >>> nothing got their just deserts.
>> >> >>> Art
>>
>> >> Sounds like a lightly veiled threat to me.
>>
>> >> tom
>> >> K0TAR
>>
>> > Gee, I have no idea why you say that.
>> > I want somebody, probably from outside America who knows something
>> > about mathematics, communist, muslim or otherwise
>> > who can inform the american ham where the similarity lies between
>> > Gauss and Maxwell . This is mainly an american forum
>> > and they are determined to deny any mathematics that supplies a
>> > similarity between these two gentlemen from Europe. Mathematics shown
>> > up to now showed that Gaussian law of statics when extended to include
>> > a radiator and a time varying field cannot, and does not,equal
>> > Maxwell's law despite the mathematic manouvaring that show that they
>> > are the same. They also bring in to question antenna programs with
>> > optimizer that produce arrays where all is in equilibrium, or programs
>> > that show radiators tipped with respect to ground
>> > as a response to Foucault current ala the weak field, required by the
>> > masters prior to Maxwell. We all know the statement regarding garbage
>> > in means garbage out and that is the label they are determined to
>> > foist upon all. The equality of these laws leads to the fact that a
>> > radiator may be of 'any shape, size or elevation as long as it is in
>> > equilibrium and is capable of producing eddy currents'.
>> > This suggests to me that some members are full bent on preventing this
>> > knowledge being shared with all, for why I do not know
>> > Even tho it was an american with a doctorate working for the space
>> > department who supplied confirming mathematics.
>> > There is a need for efficient electrically full wave antennas
>> > contained within a smaller volume hitherto known and nobody can stop
>> > the advance of science where curiousity abounds. Somebody some where
>> > will produce one and then the race will be on but it disappoints me
>> > that it will not be America where the fall of the dollar will continue
>> > world wide.
>> > Why american antenna engineers continue to pursue small efficient
>> > fractional antenna I do not know when the above presents the means of
>> > point radiation which leads to more efficient radiators of a smaller
>> > volume. I need a mathematician to come forward to blow this scheming

>> > apart for the benefit of all including those on the other side of the
>> > pond.
>> > Happy fourth of July to all Americans and hopefully change is near.
>> > Best regards
>> > Art Unwin KB9MZ......Personal page...."unwinantennas.com/"
>>
>> art never has understood that one of maxwell's 4 laws is really gauss'
>> law
>> in disguise... sometimes written with a D instead of E to confuse the
>> clueless, its an important part of electrostatics.
>
> But David you made a career of saying that you cannot add radiators
> and a time varying field to
> Gaussian law of statics.!

Gauss' law is a statics law... always was and always will be. And i have pointed out to you repeatedly that it was already sufficiently integrated into maxwell's laws without you trying to muck around with them.

> Then come back and explain to the rest of America why the radiator is
> tipped with respect to earth

its tipped because you are a bit off of vertical, and have been for a long time from the sounds of it.

> Maybe other americans on the newsgroup will now follow you
> without bashing other believers that it cannot be so.

i hope not, this is our independence day from the idiocy that you have been spewing.

124. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 17:15:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0c7fbd04-de92-43a9-aa85-36db47bb4c60@z72g2000hsb.googlegroups.com>
Source record: 24548

On Jul 3, 11:35 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Tom Ring wrote:
>
> > >>> That is exactly how Hitler came to power where those who did
> > >>> nothing got their just deserts.
> > >>> Art
>
> > Sounds like a lightly veiled threat to me.
>
> > tom
> > K0TAR
>
> You need to study your history.
>
> Sounds like this to me:
>
> First they came for the Communists,
> and I didn't speak up,
> because I wasn't a Communist.
> Then they came for the Jews,
> and I didn't speak up,
> because I wasn't a Jew.
> Then they came for the Catholics,
> and I didn't speak up,
> because I was a Protestant.
> Then they came for me,
> and by that time there was no one
> left to speak up for me.
>
> by Rev. Martin Niemoller, 1945
>
> Sick is attempting to "point" everything at ones' self. Sick is
> thinking everyone in the world is "out to get you" ... be careful ... it
> WAS about Hitler, and what those who do nothing deserve.
>
> Regards,
> JS

Very well put. It why I am so proud of the UK as a Londoner for that
descision when all alone
on SEPTEMBER THREE 1939
We got hit pretty hard after that but it was the right thing to do

Art an XG

125. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 17:54:14 UTC
From: Dave <noone@nowhere.com>
Message-ID: <attbk.267$9W.175@trndny04>
Source record: 24549

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:7367a553-3c2a-411a-b8f6-50c161ca09df@k30g2000hse.googlegroups.com...
> On Jul 4, 11:04 am, richardharri...@webtv.net (Richard Harrison)
> wrote:
>> Art wrote:
>>
>> "Why American antenna engineers continue to pursue small efficient
>> fractional antenna(s) I do not know(,) when the above (Unwin Antenna)
>> presents the means of point radiation which leads to more efficient
>> radiators of smaller volume."
>>
>> Enough bafflegab. As Sgt. Joe Friday used to say: "Just give us the
>> facts".
>>
>> Best regards, Richard Harrison, KB5WZI
>
> Richard after all your denials regarding tipped antennas which you say
> is a myth we are now getting close
> to showing same via a computor program with optimizer which will show
> it is not a myth.

what is the myth? they will do something different than a true vertical
antenna, but probably nothing really useful.

> that antennas must be tipped for max vertical
> gain.

if you want gain straight up then yes, you must tip the radiator, preferably
by 90 degrees off vertical.

> I never thought David would finally acknowledge the mathematics even

You haven't shown any mathematics to acknowledge... only bafflegab and hand
waving.

> We then will see
> that the static particles that is part of Gauss is ejected from a
> radiator like an elevated frog, used for novelty reasons, show that
> radiatiation is by particles and not a wave will bring another antenna
> basher over to the Gaussian side. Then people will see how an eddy
> current applies spin to a departing
> particle such that it will attain a straight line trajectory for
> communication and the change over will become a flood and you will be
> left alone as an old man who cannot accept change While others are
> making small antennas now that it can be seen that a radiator can be
> any size shape or varied elevation as long as it is in equilibrium

> This being the start of this journey connecting a gaussian field in
> equilibrium to the mechanics of communication
> Art

a perfect example of bafflegab, doubletalk, and downright nonsense... art
can't really believe this and still be functional enough to type, so he must
be still trying to pull our collective legs.

126. Re: RoomCap Antenna - last results

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 17:56:16 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <fe397fd9-8f19-4c01-be36-d8b98555bdac@k37g2000hsf.googlegroups.com>
Source record: 24550

On Jun 28, 10:53 pm, Buck <usene...@lumpuckeroo.com> wrote:
> On Sat, 28 Jun 2008 14:34:31 -0700 (PDT), Art Unwin<ArthurUn...@gmail.com> wrote:
>
> Not one person has given good reason why the quoted antenna
>
> >cannot work as stated, not one. By mathematics or actually making one
> >since heckling is regarded as a suitable replacement for true
> >knowledge now in the present hobby of ham radio.
>
> First of all Felix has placed his project into such a 'top secret'
> status that even the contract to which one agrees is secret until
> after it is agreed to. When I told Felix I might buy his plans (IIRC
> they were only $35.00 at the time) but, I would need to first see the
> agreement, he cut off communications with me.
>
> I'll ask Felix again, what are the terms of agreement, or why are they
> secret until we paid for the plans?
>
> Because of his secrecy of his agreement, I can only speculate that he
> is looking for marks, suckers, or fools to buy his antenna plans.
> Only a fool would sign a check and turn it over to a stranger to fill
> in as he desires.
>
> Personally, I would love for Felix's antenna design to perform
> according to his claims. I would be proud to have his ugly pole on
> top of my car as I drive down the road working DX if it works as
> claimed. ("ugly pole" is not meant to be derogatory, see my car to
> understand.)
>
> And Art, the fact is that only Felix has the obligation of proof. As
> I see it, this is the issue:
> Felix has made certain claims to a product which he is selling. The
> evidence he is using to back up his claims doesn't hold up to the
> standards set to establish such claims. He may have tried, as in he
> tested his antenna against a loop, but there were discrepancies in his
> test that would skew the results.
>
> I think everyone knows that at one time, according to the laws of
> aerodynamics, a bumble bee could not fly. The laws have been changed
> so the Bumble-bee can now fly. Currently, I believe the general rules
> of antenna theory say that a properly made 1/4 wave ground plane will
> outperform a ground plane less than 1/10th wavelength in size. (I am
> sure some of the EEs here can prove this mathematically or offer some
> specific scientific law, but I am not trying to go there.) Felix

> claims to have an antenna that can defy this rule, therefore, the
> burden of proof lies on him, not the EEs in the group.
>
> I will not say that there is not a design that can break the general
> rule I stated above, but the evidence Felix is offering is sketchy at
> best.
>
Buck
You are misunderstanding the situation with his antenna. What he is
doing is putting as much wire into the air which old timers still talk
about and then taking on the problem of feeding it. Since an antenna
can be any shape or size when in equilibrium he is following the first
part and getting around the need for equilibrium to get a smaller
antenna. This is somewhat like the Rhode Island antenna where winding
or distortion of a antenna was accepted first and the effort to place
it in equilibrium was taken on later .This was done by including the
transmission line in the antenna system which made a "smaller" antenna
Regards
Art
> --
> 73 for now
> Buck, N4PGW
>
> www.lumpuckeroo.com
>
> "Small - broadband - efficient: pick any two."

127. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 18:07:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c6b5ba85-a387-4d9c-add3-546a85ab7fe8@l64g2000hse.googlegroups.com>
Source record: 24351

On Jul 4, 12:54 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:7367a553-3c2a-411a-b8f6-50c161ca09df@k30g2000hse.googlegroups.com...
>
>
>
> > On Jul 4, 11:04 am, richardharri...@webtv.net (Richard Harrison)
> > wrote:
> >> Art wrote:
>
> >> "Why American antenna engineers continue to pursue small efficient
> >> fractional antenna(s) I do not know(,) when the above (Unwin Antenna)
> >> presents the means of point radiation which leads to more efficient
> >> radiators of smaller volume."
>
> >> Enough bafflegab. As Sgt. Joe Friday used to say: "Just give us the
> >> facts".
>
> >> Best regards, Richard Harrison, KB5WZI
>
> > Richard after all your denials regarding tipped antennas which you say
> > is a myth we are now getting close
> > to showing same via a computor program with optimizer which will show
> > it is not a myth.
>
> what is the myth? they will do something different than a true vertical
> antenna, but probably nothing really useful.
>
> > that antennas must be tipped for max vertical
> > gain.
>
> if you want gain straight up then yes, you must tip the radiator, preferably
> by 90 degrees off vertical.
>
> > I never thought David would finally acknowledge the mathematics even
>
> You haven't shown any mathematics to acknowledge... only bafflegab and hand
> waving.
>
> > We then will see
> > that the static particles that is part of Gauss is ejected from a
> > radiator like an elevated frog, used for novelty reasons, show that
> > radiatiation is by particles and not a wave will bring another antenna

> > basher over to the Gaussian side. Then people will see how an eddy
> > current applies spin to a departing
> > particle such that it will attain a straight line trajectory for
> > communication and the change over will become a flood and you will be
> > left alone as an old man who cannot accept change While others are
> > making small antennas now that it can be seen that a radiator can be
> > any size shape or varied elevation as long as it is in equilibrium
> > This being the start of this journey connecting a gaussian field in
> > equilibrium to the mechanics of communication
> > Art
>
> a perfect example of bafflegab, doubletalk, and downright nonsense... art
> can't really believe this and still be functional enough to type, so he must
> be still trying to pull our collective legs.

David check it out to show the World why it is bafflegab,
The same thing was stated when the Gaussian/Maxwell
mathematics was given on this newsgroup. Be a hero and show the World
why America is correct and I am in error
Your chance to make the July 4 a day to remember for American hams
Ofcourse you can make an antenna where all lumped loads are cancelled
to form an antenna in equilibrium but that would mean getting up from
your
couch and putting your six pack down. Not very likely
Art

128. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 18:27:21 UTC
From: Dave <noone@nowhere.com>
Message-ID: <dYtbk.83$0V1.41@trndny01>
Source record: 24352

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c6b5ba85-a387-4d9c-add3-546a85ab7fe8@l64g2000hse.googlegroups.com...
> On Jul 4, 12:54 pm, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:7367a553-3c2a-411a-b8f6-50c161ca09df@k30g2000hse.googlegroups.com...
>>
>>
>>
>> > On Jul 4, 11:04 am, richardharri...@webtv.net (Richard Harrison)
>> > wrote:
>> >> Art wrote:
>>
>> >> "Why American antenna engineers continue to pursue small efficient
>> >> fractional antenna(s) I do not know(,) when the above (Unwin Antenna)
>> >> presents the means of point radiation which leads to more efficient
>> >> radiators of smaller volume."
>>
>> >> Enough bafflegab. As Sgt. Joe Friday used to say: "Just give us the
>> >> facts".
>>
>> >> Best regards, Richard Harrison, KB5WZI
>>
>> > Richard after all your denials regarding tipped antennas which you say
>> > is a myth we are now getting close
>> > to showing same via a computor program with optimizer which will show
>> > it is not a myth.
>>
>> what is the myth? they will do something different than a true vertical
>> antenna, but probably nothing really useful.
>>
>> > that antennas must be tipped for max vertical
>> > gain.
>>
>> if you want gain straight up then yes, you must tip the radiator,
>> preferably
>> by 90 degrees off vertical.
>>
>> > I never thought David would finally acknowledge the mathematics even
>>
>> You haven't shown any mathematics to acknowledge... only bafflegab and
>> hand
>> waving.
>>

>> > We then will see
>> > that the static particles that is part of Gauss is ejected from a
>> > radiator like an elevated frog, used for novelty reasons, show that
>> > radiatiation is by particles and not a wave will bring another antenna
>> > basher over to the Gaussian side. Then people will see how an eddy
>> > current applies spin to a departing
>> > particle such that it will attain a straight line trajectory for
>> > communication and the change over will become a flood and you will be
>> > left alone as an old man who cannot accept change While others are
>> > making small antennas now that it can be seen that a radiator can be
>> > any size shape or varied elevation as long as it is in equilibrium
>> > This being the start of this journey connecting a gaussian field in
>> > equilibrium to the mechanics of communication
>> > Art
>>
>> a perfect example of bafflegab, doubletalk, and downright nonsense... art
>> can't really believe this and still be functional enough to type, so he
>> must
>> be still trying to pull our collective legs.
>
> David check it out to show the World why it is bafflegab,
> The same thing was stated when the Gaussian/Maxwell
> mathematics was given on this newsgroup. Be a hero and show the World
> why America is correct and I am in error

From "Fields And Waves In Communication Electronics" Ramo, Whinnery, and Van Duzer, 2nd printing 1967... ppg 237 they have just stated the 4 classical Maxwell's equations in integral form and are explaining them in words. equation (1) is the surface integral of the vector displacement = the volume integral of the charge density.... which they explain as "Equation (1) is seen to be the familiar form of Gauss's law utilized so much in Chapter 2. Now that we are concerned with fields which are a function of time, the interpretation is that the electric flux flowing out of any closed surface _at a given instant_ is equal to the charge enclosed by the surface _at that instant_" (emphasis shown by _ x_ is THEIRS not mine). Now note art, that this shows that the classical Gauss's law that you are trying to add into the Maxwell equations is indeed already there. Also, as they point out it implicitly accounts for time variation without the need to add a specific time term to the equations.

> Your chance to make the July 4 a day to remember for American hams
> Ofcourse you can make an antenna where all lumped loads are cancelled
> to form an antenna in equilibrium but that would mean getting up from
> your
> couch and putting your six pack down. Not very likely
> Art

six pack! ugh, i haven't touched a six pack in years, i much prefer real beer. is that your problem art, too many cheap six packs??

129. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 19:21:53 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ee0b0c2a-e631-4cdc-9f98-6fd1c1124ec7@m36g2000hse.googlegroups.com>
Source record: 24353

On Jul 4, 1:27 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:c6b5ba85-a387-4d9c-add3-546a85ab7fe8@l64g2000hse.googlegroups.com...
>
>
>
> > On Jul 4, 12:54 pm, "Dave" <no...@nowhere.com> wrote:
> >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
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> >>news:7367a553-3c2a-411a-b8f6-50c161ca09df@k30g2000hse.googlegroups.com...
>
> >> > On Jul 4, 11:04 am, richardharri...@webtv.net (Richard Harrison)
> >> > wrote:
> >> >> Art wrote:
>
> >> >> "Why American antenna engineers continue to pursue small efficient
> >> >> fractional antenna(s) I do not know(,) when the above (Unwin Antenna)
> >> >> presents the means of point radiation which leads to more efficient
> >> >> radiators of smaller volume."
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> >> >> Enough bafflegab. As Sgt. Joe Friday used to say: "Just give us the
> >> >> facts".
>
> >> >> Best regards, Richard Harrison, KB5WZI
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> >> > Richard after all your denials regarding tipped antennas which you say
> >> > is a myth we are now getting close
> >> > to showing same via a computor program with optimizer which will show
> >> > it is not a myth.
>
> >> what is the myth? they will do something different than a true vertical
> >> antenna, but probably nothing really useful.
>
> >> > that antennas must be tipped for max vertical
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>
> >> if you want gain straight up then yes, you must tip the radiator,
> >> preferably
> >> by 90 degrees off vertical.
>
> >> > I never thought David would finally acknowledge the mathematics even
>
> >> You haven't shown any mathematics to acknowledge... only bafflegab and

> >> hand
> >> waving.
>
> >> > We then will see
> >> > that the static particles that is part of Gauss is ejected from a
> >> > radiator like an elevated frog, used for novelty reasons, show that
> >> > radiatiation is by particles and not a wave will bring another antenna
> >> > basher over to the Gaussian side. Then people will see how an eddy
> >> > current applies spin to a departing
> >> > particle such that it will attain a straight line trajectory for
> >> > communication and the change over will become a flood and you will be
> >> > left alone as an old man who cannot accept change While others are
> >> > making small antennas now that it can be seen that a radiator can be
> >> > any size shape or varied elevation as long as it is in equilibrium
> >> > This being the start of this journey connecting a gaussian field in
> >> > equilibrium to the mechanics of communication
> >> > Art
>
> >> a perfect example of bafflegab, doubletalk, and downright nonsense... art
> >> can't really believe this and still be functional enough to type, so he
> >> must
> >> be still trying to pull our collective legs.
>
> > David check it out to show the World why it is bafflegab,
> > The same thing was stated when the Gaussian/Maxwell
> > mathematics was given on this newsgroup. Be a hero and show the World
> > why America is correct and I am in error
>
> From "Fields And Waves In Communication Electronics" Ramo, Whinnery, and Van
> Duzer, 2nd printing 1967... ppg 237 they have just stated the 4 classical
> Maxwell's equations in integral form and are explaining them in words.
> equation (1) is the surface integral of the vector displacement = the
> volume integral of the charge density.... which they explain as "Equation
> (1) is seen to be the familiar form of Gauss's law utilized so much in
> Chapter 2. Now that we are concerned with fields which are a function of
> time, the interpretation is that the electric flux flowing out of any closed
> surface _at a given instant_ is equal to the charge enclosed by the surface
> _at that instant_" (emphasis shown by _ x_ is THEIRS not mine). Now note
> art, that this shows that the classical Gauss's law that you are trying to
> add into the Maxwell equations is indeed already there. Also, as they point
> out it implicitly accounts for time variation without the need to add a
> specific time term to the equations.
>
> > Your chance to make the July 4 a day to remember for American hams
> > Ofcourse you can make an antenna where all lumped loads are cancelled
> > to form an antenna in equilibrium but that would mean getting up from
> > your
> > couch and putting your six pack down. Not very likely
> > Art
>

> six pack! ugh, i haven't touched a six pack in years, i much prefer real
> beer. is that your problem art, too many cheap six packs??

Wrong.
The chapter gives NO mention of the role of static particles in
radiation. Gauss never did apply an extension to his law of statics to
reveal that a radiator can be any size , shape or elevation as long as
the laws of equilibrium is in effect to make a dynamic field. This is
clear indication that a radiator must be of a wavelength or more that
is radiating which does not include the addition of a ground plane as
part of the radiator.
In addition, all laws only refer to distributed loads as a function
of radiation and equilibrium and where lumped loads have no part in
the equations. Equilibrium is also the datum proof where the charge
within a conductor must be zero so that the law of Newton can be
preserved (action and reaction)
By using the law of statics you find the importance of ":equilibrium"
that
Maxwell purloined as well as a new aproach to the sequences involved
in radiation
There is no question that the laws of Maxwell are not correct because
each law he purloined
included this stipulation as well as the extension to the gaussian law
of statics which
supplies the picture that Maxwell's laws are lacking. It is these same
particles alluded in Gaussian law
that are the true carriers of communication in radio where they are
ejected from the radiator surface with spin provided by the opresence
of eddy currents. Without the applied spin you cannot have a straight
line trajectory.
Ofcourse you can supply another reason why nature included particles
in communication which would really thrill me to bits.
But I am very pleased you are returning to written laws for proof even
tho you misinterprete them. On the other hand you can verify that the
requirement of equilibrium is preserved within Maxwells laws and thus
antenna computer programs such that the tilted vertical
is not removed from the subject of antennas. It was me that
speculated that these same particles were neutrinos that are radio
active and thus subject to decay that obtain a weak magnetic field
from entry to the earth's magnetic field which are present in the
billions per square metre on our native earth. It is also the
wavelength data that supplies the information regarding the parallel
tank circuit which is a pertinent part of all radiation. All these
items I have found to intersect like a jigsaw puzzle that adequately
describes the mechanics of radiation which hither to was unknown.
Unless ofcourse you have studies that are contrary to the above. If
you have, take them to the International conference on small antennas
organised in San Diego U.S.next week by the American IEEE where you
can drink in the applause of the World's experts
Regards

unwinantennas.com/

130. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 19:42:42 UTC
From: Dave <noone@nowhere.com>
Message-ID: <S2vbk.89$0V1.85@trndny01>
Source record: 24354

```
"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:ee0b0c2a-e631-4cdc-9f98-6fd1c1124ec7@m36g2000hse.googlegroups.com...
> On Jul 4, 1:27 pm, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:c6b5ba85-a387-4d9c-add3-546a85ab7fe8@l64g2000hse.googlegroups.com...
>>
>>
>>
>> > On Jul 4, 12:54 pm, "Dave" <no...@nowhere.com> wrote:
>> >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>> >
>> >>news:7367a553-3c2a-411a-b8f6-50c161ca09df@k30g2000hse.googlegroups.com...
>> >
>> >> > On Jul 4, 11:04 am, richardharri...@webtv.net (Richard Harrison)
>> >> > wrote:
>> >> >> Art wrote:
>> >
>> >> >> "Why American antenna engineers continue to pursue small efficient
>> >> >> fractional antenna(s) I do not know(,) when the above (Unwin
>> >> >> Antenna)
>> >> >> presents the means of point radiation which leads to more efficient
>> >> >> radiators of smaller volume."
>> >
>> >> >> Enough bafflegab. As Sgt. Joe Friday used to say: "Just give us the
>> >> >> facts".
>> >
>> >> >> Best regards, Richard Harrison, KB5WZI
>> >
>> >> > Richard after all your denials regarding tipped antennas which you
>> >> > say
>> >> > is a myth we are now getting close
>> >> > to showing same via a computor program with optimizer which will
>> >> > show
>> >> > it is not a myth.
>> >
>> >> what is the myth? they will do something different than a true
>> >> vertical
>> >> antenna, but probably nothing really useful.
>> >
>> >> > that antennas must be tipped for max vertical
>> >> > gain.
>> >
>> >> if you want gain straight up then yes, you must tip the radiator,
```

>> >> preferably
>> >> by 90 degrees off vertical.
>>
>> >> > I never thought David would finally acknowledge the mathematics even
>>
>> >> You haven't shown any mathematics to acknowledge... only bafflegab and
>> >> hand
>> >> waving.
>>
>> >> > We then will see
>> >> > that the static particles that is part of Gauss is ejected from a
>> >> > radiator like an elevated frog, used for novelty reasons, show that
>> >> > radiatiation is by particles and not a wave will bring another
>> >> > antenna
>> >> > basher over to the Gaussian side. Then people will see how an eddy
>> >> > current applies spin to a departing
>> >> > particle such that it will attain a straight line trajectory for
>> >> > communication and the change over will become a flood and you will
>> >> > be
>> >> > left alone as an old man who cannot accept change While others are
>> >> > making small antennas now that it can be seen that a radiator can be
>> >> > any size shape or varied elevation as long as it is in equilibrium
>> >> > This being the start of this journey connecting a gaussian field in
>> >> > equilibrium to the mechanics of communication
>> >> > Art
>>
>> >> a perfect example of bafflegab, doubletalk, and downright nonsense...
>> >> art
>> >> can't really believe this and still be functional enough to type, so
>> >> he
>> >> must
>> >> be still trying to pull our collective legs.
>>
>> > David check it out to show the World why it is bafflegab,
>> > The same thing was stated when the Gaussian/Maxwell
>> > mathematics was given on this newsgroup. Be a hero and show the World
>> > why America is correct and I am in error
>>
>> From "Fields And Waves In Communication Electronics" Ramo, Whinnery, and
>> Van
>> Duzer, 2nd printing 1967... ppg 237 they have just stated the 4 classical
>> Maxwell's equations in integral form and are explaining them in words.
>> equation (1) is the surface integral of the vector displacement = the
>> volume integral of the charge density.... which they explain as "Equation
>> (1) is seen to be the familiar form of Gauss's law utilized so much in
>> Chapter 2. Now that we are concerned with fields which are a function of
>> time, the interpretation is that the electric flux flowing out of any
>> closed
>> surface _at a given instant_ is equal to the charge enclosed by the
>> surface

>> _at that instant_" (emphasis shown by _ x_ is THEIRS not mine). Now
>> note
>> art, that this shows that the classical Gauss's law that you are trying
>> to
>> add into the Maxwell equations is indeed already there. Also, as they
>> point
>> out it implicitly accounts for time variation without the need to add a
>> specific time term to the equations.
>>
>> > Your chance to make the July 4 a day to remember for American hams
>> > Ofcourse you can make an antenna where all lumped loads are cancelled
>> > to form an antenna in equilibrium but that would mean getting up from
>> > your
>> > couch and putting your six pack down. Not very likely
>> > Art
>>
>> six pack! ugh, i haven't touched a six pack in years, i much prefer real
>> beer. is that your problem art, too many cheap six packs??
>
> Wrong.
> The chapter gives NO mention of the role of static particles in
> radiation.

of course not, the aether was firmly debunked before they wrote that.

> Gauss never did apply an extension to his law of statics to
> reveal that a radiator can be any size , shape or elevation as long as
> the laws of equilibrium is in effect to make a dynamic field.

of course not, his law is a static law, it was maxwell that brought together
the 6 equations necessary to describe waves and dynamics.

> This is
> clear indication that a radiator must be of a wavelength or more that
> is radiating which does not include the addition of a ground plane as
> part of the radiator.

bull. half wave radiators are just fine, and you can get any size conductor
to radiate.

rest of bull snipped... enough for today, i'm going to enjoy some nice old
scotch and enjoy the rest of the holiday.

131. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 19:52:27 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ba6219e8-f46e-4a1b-a91f-69b1f54d17f9@e39g2000hsf.googlegroups.com>
Source record: 24355

```
On Jul 4, 2:42 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:ee0b0c2a-e631-4cdc-9f98-6fd1c1124ec7@m36g2000hse.googlegroups.com...
>
>
>
> > On Jul 4, 1:27 pm, "Dave" <no...@nowhere.com> wrote:
> >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >>news:c6b5ba85-a387-4d9c-add3-546a85ab7fe8@l64g2000hse.googlegroups.com...
>
> >> > On Jul 4, 12:54 pm, "Dave" <no...@nowhere.com> wrote:
> >> >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >> >>news:7367a553-3c2a-411a-b8f6-50c161ca09df@k30g2000hse.googlegroups.com...
>
> >> >> > On Jul 4, 11:04 am, richardharri...@webtv.net (Richard Harrison)
> >> >> > wrote:
> >> >> >> Art wrote:
>
> >> >> >> "Why American antenna engineers continue to pursue small efficient
> >> >> >> fractional antenna(s) I do not know(,) when the above (Unwin
> >> >> >> Antenna)
> >> >> >> presents the means of point radiation which leads to more efficient
> >> >> >> radiators of smaller volume."
>
> >> >> >> Enough bafflegab. As Sgt. Joe Friday used to say: "Just give us the
> >> >> >> facts".
>
> >> >> >> Best regards, Richard Harrison, KB5WZI
>
> >> >> > Richard after all your denials regarding tipped antennas which you
> >> >> > say
> >> >> > is a myth we are now getting close
> >> >> > to showing same via a computor program with optimizer which will
> >> >> > show
> >> >> > it is not a myth.
>
> >> >> what is the myth? they will do something different than a true
> >> >> vertical
> >> >> antenna, but probably nothing really useful.
>
> >> >> > that antennas must be tipped for max vertical
```

> >> >> > gain.
>
> >> >> if you want gain straight up then yes, you must tip the radiator,
> >> >> preferably
> >> >> by 90 degrees off vertical.
>
> >> >> > I never thought David would finally acknowledge the mathematics even
>
> >> >> You haven't shown any mathematics to acknowledge... only bafflegab and
> >> >> hand
> >> >> waving.
>
> >> >> > We then will see
> >> >> > that the static particles that is part of Gauss is ejected from a
> >> >> > radiator like an elevated frog, used for novelty reasons, show that
> >> >> > radiatiation is by particles and not a wave will bring another
> >> >> > antenna
> >> >> > basher over to the Gaussian side. Then people will see how an eddy
> >> >> > current applies spin to a departing
> >> >> > particle such that it will attain a straight line trajectory for
> >> >> > communication and the change over will become a flood and you will
> >> >> > be
> >> >> > left alone as an old man who cannot accept change While others are
> >> >> > making small antennas now that it can be seen that a radiator can be
> >> >> > any size shape or varied elevation as long as it is in equilibrium
> >> >> > This being the start of this journey connecting a gaussian field in
> >> >> > equilibrium to the mechanics of communication
> >> >> > Art
>
> >> >> a perfect example of bafflegab, doubletalk, and downright nonsense...
> >> >> art
> >> >> can't really believe this and still be functional enough to type, so
> >> >> he
> >> >> must
> >> >> be still trying to pull our collective legs.
>
> >> > David check it out to show the World why it is bafflegab,
> >> > The same thing was stated when the Gaussian/Maxwell
> >> > mathematics was given on this newsgroup. Be a hero and show the World
> >> > why America is correct and I am in error
>
> >> From "Fields And Waves In Communication Electronics" Ramo, Whinnery, and
> >> Van
> >> Duzer, 2nd printing 1967... ppg 237 they have just stated the 4 classical
> >> Maxwell's equations in integral form and are explaining them in words.
> >> equation (1) is the surface integral of the vector displacement = the
> >> volume integral of the charge density.... which they explain as "Equation
> >> (1) is seen to be the familiar form of Gauss's law utilized so much in
> >> Chapter 2. Now that we are concerned with fields which are a function of
> >> time, the interpretation is that the electric flux flowing out of any

> >> closed
> >> surface _at a given instant_ is equal to the charge enclosed by the
> >> surface
> >> _at that instant_" (emphasis shown by _ x_ is THEIRS not mine). Now
> >> note
> >> art, that this shows that the classical Gauss's law that you are trying
> >> to
> >> add into the Maxwell equations is indeed already there. Also, as they
> >> point
> >> out it implicitly accounts for time variation without the need to add a
> >> specific time term to the equations.
>
> >> > Your chance to make the July 4 a day to remember for American hams
> >> > Ofcourse you can make an antenna where all lumped loads are cancelled
> >> > to form an antenna in equilibrium but that would mean getting up from
> >> > your
> >> > couch and putting your six pack down. Not very likely
> >> > Art
>
> >> six pack! ugh, i haven't touched a six pack in years, i much prefer real
> >> beer. is that your problem art, too many cheap six packs??
>
> > Wrong.
> > The chapter gives NO mention of the role of static particles in
> > radiation.
>
> of course not, the aether was firmly debunked before they wrote that.
>
> > Gauss never did apply an extension to his law of statics to
> > reveal that a radiator can be any size , shape or elevation as long as
> > the laws of equilibrium is in effect to make a dynamic field.
>
> of course not, his law is a static law, it was maxwell that brought together
> the 6 equations necessary to describe waves and dynamics.
>
> > This is
> > clear indication that a radiator must be of a wavelength or more that
> > is radiating which does not include the addition of a ground plane as
> > part of the radiator.
>
> bull. half wave radiators are just fine, and you can get any size conductor
> to radiate.
>
> rest of bull snipped... enough for today, i'm going to enjoy some nice old
> scotch and enjoy the rest of the holiday.

Woww, you have slipped back into the abyss again. Statics and
radiation do not mix!
Have a happy Guy Faukes day with the fireworks
Art

132. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 20:13:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4m09a$t18$1@news.albasani.net>
Source record: 24356

Art Unwin wrote:

>> ...
>> rest of bull snipped... enough for today, i'm going to enjoy some nice old
>> scotch and enjoy the rest of the holiday.
>
> Woww, you have slipped back into the abyss again. Statics and
> radiation do not mix!
> Have a happy Guy Faukes day with the fireworks
> Art

Methinks that may have already been the scotch ... ;-)

Anyway, my "1/2 wave" omini-vertical is a "full wave antenna!"

180 degrees of the rf wave, proper, is in the radiator--180 degrees is
in the counterpoise (mirrored, of course--or, 180 degrees out of phase
with the radiator (and, of course, is a radiator itself.) This is
mostly due to the current unun/choke at the base of the radiator, on the
coax. Else it does have a tendency to attempt to use the coax as a
counterpoise ...

Anyway ... yawn ... a full wave is being supported in the antenna
hardware proper.

Regards,
JS

133. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 20:28:29 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <34f94f5a-b760-4141-912f-bb6bd2176dc0@y21g2000hsf.googlegroups.com>
Source record: 24357

On Jul 4, 3:13 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> >> rest of bull snipped... enough for today, i'm going to enjoy some nice old
> >> scotch and enjoy the rest of the holiday.
>
> > Woww, you have slipped back into the abyss again. Statics and
> > radiation do not mix!
> > Have a happy Guy Faukes day with the fireworks
> > Art
>
> Methinks that may have already been the scotch ... ;-)
>
> Anyway, my "1/2 wave" omini-vertical is a "full wave antenna!"
>
> 180 degrees of the rf wave, proper, is in the radiator--180 degrees is
> in the counterpoise (mirrored, of course--or, 180 degrees out of phase
> with the radiator (and, of course, is a radiator itself.) This is
> mostly due to the current unun/choke at the base of the radiator, on the
> coax. Else it does have a tendency to attempt to use the coax as a
> counterpoise ...
>
> Anyway ... yawn ... a full wave is being supported in the antenna
> hardware proper.
>
> Regards,
> JS

A good way of looking at it for the layman since dividing a full wave
radiation by two you get close to the correct answer except for a
couple of ohms. But even that falls down with respect to a horizontal
dipole which is not in equilibrium and thus corrona can form at the
ends. With a quad antenna it then be comes in equilibrium where
Maxwells laws apply without chinanigans. Remember ground plains are
nothing but resisters carrying current and do not radiate because of
zero skin depth. The FCC covers this with broadcasters b y limiting
the level of ground plain resistance to I think about 2 ohms to cut
down non radiative losses.
All very fascinating stuff because the total circuit is then of a
parallel circuit nature with the inclusion of a dampening resister.
Cheers
Art

134. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 22:15:10 UTC
From: richardharrison@webtv.net
Message-ID: <19688-486EA0EE-758@storefull-3253.bay.webtv.net>
Source record: 24358

Art wrote:
"On the other hand you can verify that the requirements of equilibrium
is preserved within Maxwell`s laws and thus antenna computer programs
such that the tilted vertical is not removed from the subject of
antennas."

The preceding confusion not withstanding, surely you must have aligned
antenna elements to vertical or horizontal positions to maximize signal.
I`ve done so countless times while optimizing microwave paths.

Terman quantifies (look it up for the math, Art) signal degradation
caused by misalignment on page 923 of his 1955 opus. I`ll extract one
sentence:
"It will be observed that the quantity
(E cos psi cos theta) is the component of the field strength which has a
wavefront parallel to the antenna and is polarized in the same plane as
the antenna."

The programs Art refers to don`t contradict either Maxwell or Terman.

Best regards, Richard Harrison, KB5WZI

135. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 22:29:54 UTC
From: rick frazier <rickf@rickfrazier.com>
Message-ID: <486EA462.8090004@rickfrazier.com>
Source record: 24359

Not sure where you get the swr repetitive over a band of frequencies stuff, (perhaps I don't read enough of the group messages) but to reply relative to dummy loads in general....

Yep, Dummy Loads do radiate, they just don't radiate very well. In fact, most of them are encased in a metal enclosure of some sort to provide two major functions, reducing the radiation, and to provide oil or other medium for cooling.

On the other hand, your statement/question concerning whether anything that conducts also radiates, the answer is "yes" so long as it isn't shielded by something else, the skin effect helps provide that shielding (coax, with fields on the center conductor and the inside of the shield) or in a configuration that cancels the radiation with an equal and opposite radiation (twisted pairs, ladder line). Relative to carbon life forms, I've successfully loaded a tree and made (local) contacts, but the efficiency was probably near zero. Though many items may conduct and therefore radiate, their efficiency and effectivity as an antenna can be so low as to be readily compared to transmitting on a dummy load. Thus it is not unusual to hear ham conversations describing a given antenna/configuration as a dummy load...

--Rick

Art Unwin wrote:
> I am trying to understand why a low swr repetitive over a band of
> frequencies is considered by hams to be a dummy load.! This
> consistently shows up in statements by the itelligensia of this
> newsgroup. Following up on the logic of that idea it would suggest
> that if swr was totally constant (not sure how that could be) then
> all radiation must be zero or self cancelling.?
> This thus suggests that if a log periodic antenna was unlimitted in
> the number of elements used would in the limit drop down to zero
> radiation!. So following the thinking of this group the oscillations
> that I show on my page
>
> unwinantennas.com/
>
> as a progression towards zero radiation since Q eventually is going to
> equal zero.
> Is this why the decreasing oscillation is defined as a dummy load on
> this newsgroup?
> The term comes up so often that I am compelled to look for what I am
> missing, especially since carbon
> is conductive and thus in the minds of many must therefore be

> radiative!
> Ofcourse the statement bandied around that if a material is
> condunctive then it must radiatiate
> could become fact instead of an old wives tales if stated enough
> times.
> Art

136. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-04 23:55:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <55c48a0b-9c6b-4fe9-9c2f-caf204aef791@z66g2000hsc.googlegroups.com>
Source record: 24360

On Jul 4, 5:15 pm, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "On the other hand you can verify that the requirements of equilibrium
> is preserved within Maxwell`s laws and thus antenna computer programs
> such that the tilted vertical is not removed from the subject of
> antennas."
>
> The preceding confusion not withstanding, surely you must have aligned
> antenna elements to vertical or horizontal positions to maximize signal.
> I`ve done so countless times while optimizing microwave paths.
The difference is extremely small similar to who wins a 100 metre race
but there is still
one winner

>
> Terman quantifies (look it up for the math, Art) signal degradation
> caused by misalignment on page 923 of his 1955 opus. I`ll extract one
> sentence:
> "It will be observed that the quantity
> (E cos psi cos theta) is the component of the field strength which has a
> wavefront parallel to the antenna and is polarized in the same plane as
> the antenna."

Yes they do!

Terman does not include the eddy currents vector where computer
programs based on Gauss and Maxwell and other masters do.
The angle of difference is similar to that seen as the pitch angle of
a helix antenna.
With your love of Terman you can now state that computor programs are
garbage
since they promote what you call a "myth"

>
> The programs Art refers to don`t contradict either Maxwell or Terman.
As I said earlier, yes they do with respect to Terman.
I challenge you to find in Terman the implications of Foucault current
with respect to antennas
and diamagnetic materials such as aluminum gold and copper which are
prime examples of material with suitable resistivity values
that provide ejection or levitation effects when moved thru a magnetic
field
It is nothing new, The vector has been there all the time it is just
that many don;'t mess with it because it is small and a devil to

calculate.
Richard why not give it up? You will never make the antenna, you can't operate computor programs and I suspect you cannot perform a google search, so progress beyond Terman is an impossibility for you. If eddy currents are omitted any structure thus made cannot be in equilibrium since this is the mystery "weak" force that Einstein struggled for in vain and thus drove him towards forming quantum mechanics., The masters made room for this force even tho they did not know what caused it but that vector was required to conform with equilibrium closed vector field
>
> Best regards, Richard Harrison, KB5WZI

137. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 01:56:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <00d0738a-cb0a-4f74-878e-6170967881de@79g2000hsk.googlegroups.com>
Source record: 24361

On Jul 4, 5:29 pm, rick frazier <ri...@rickfrazier.com> wrote:
> Not sure where you get the swr repetitive over a band of frequencies
> stuff, (perhaps I don't read enough of the group messages) but to reply
> relative to dummy loads in general....

This comes from the radiator listed on my page
unwinantennas.com/

>
> Yep, Dummy Loads do radiate, they just don't radiate very well. In

very true
> fact, most of them are encased in a metal enclosure of some sort to
> provide two major functions, reducing the radiation, and to provide oil
> or other medium for cooling.
>
> On the other hand, your statement/question concerning whether anything
> that conducts also radiates, the answer is "yes" so long as it isn't

In a very general sense this is true because most if not all materials
at room temperature
have resistivity which is a measure of radiation. But there are some
materials that lose their resistivity
at extremely low temperatures of which the best known is a super
conductor

> shielded by something else, the skin effect helps provide that shielding
> (coax, with fields on the center conductor and the inside of the shield)
> or in a configuration that cancels the radiation with an equal and
> opposite radiation (twisted pairs, ladder line).

I have doubts about twisted pairs which is what I use for my
antennas.
The reason for crossed wires for me is to cancel lumped capacitances
and where the reversal of turns cancels imposed loaded inductances
Thus the length of wire used consists of only distributed loads as
required by Maxwells law
with length being N times wavelength. I have seen reference to
canceled radiation in some
antenna books but if I remember correctly the cancelling effect
occurs on near field radiation only.

Relative to carbon
> life forms, I've successfully loaded a tree and made (local) contacts,
> but the efficiency was probably near zero. Though many items may
> conduct and therefore radiate, their efficiency and effectivity as an

> antenna can be so low as to be readily compared to transmitting on a
> dummy load. Thus it is not unusual to hear ham conversations describing
> a given antenna/configuration as a dummy load...

Interesting that you refer to life forms where carbon undergoes
various changes and classifications
as it decays, (c13) in the extreme. Tho I have seen some strata of
earth listed
as a carbon but then elsewhere as a mineral which I find confusing!
Ofcourse a tree consist of molecules
of water which is a diamagnetic material. Thus will have particals
drawn to rest upon it to radiate as well as particles
released by updrafts in a rainstorm allowing the particles to return
back to a suitable place in
quantum form as with lightning
Good posting
Regards
Art KB9MZ
>
> --Rick
>
> Art Unwin wrote:
> > I am trying to understand why a low swr repetitive over a band of
> > frequencies is considered by hams to be a dummy load.! This
> > consistently shows up in statements by the itelligensia of this
> > newsgroup. Following up on the logic of that idea it would suggest
> > that if swr was totally constant (not sure how that could be) then
> > all radiation must be zero or self cancelling.?
> > This thus suggests that if a log periodic antenna was unlimitted in
> > the number of elements used would in the limit drop down to zero
> > radiation!. So following the thinking of this group the oscillations
> > that I show on my page
>
> > unwinantennas.com/
>
> > as a progression towards zero radiation since Q eventually is going to
> > equal zero.
> > Is this why the decreasing oscillation is defined as a dummy load on
> > this newsgroup?
> > The term comes up so often that I am compelled to look for what I am
> > missing, especially since carbon
> > is conductive and thus in the minds of many must therefore be
> > radiative!
> > Ofcourse the statement bandied around that if a material is
> > condunctive then it must radiatiate
> > could become fact instead of an old wives tales if stated enough
> > times.
> > Art

138. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 06:41:15 UTC
From: ltdoc@yahoo.com
Message-ID: <3940df7d-9ac2-4538-8f90-aba4d52ca8eb@k13g2000hse.googlegroups.com>
Source record: 24362

Gentlemen,
Well, I'm afraid it's time to reveal the truth to Art. Now that he's hit upon the tree thing, he honestly doesn't have far to go before discovering all of our secrets. While I admit that he hasn't yet touched on the mysteries of citric acid, he will shortly, I mean, it's only a very short jump, right?
Art,
You have been the focus of a conspiracy. Yes, your suspicions have been correct, it was a conspiracy by those of us 'in the know'. We have been doing all that we can to deter you from your venture into these mysteries. I'm sure you can see where the world is just not ready for them as yet. That was the reason, the world is just not ready for the revelation yet.
But it's time for this to end, the conspiracy thingy I mean.
Congratulations, I really didn't think you would make it, but you have.
I also believe you can understand that it takes time to turn this action of ours around and give you the deserved recognition you have earned. Be patient, it will happen shortly. In the mean time, you might give further thought on that citric acid (limes, lemons, etc.) thing and particle release. I knew you were 'close' when you mentioned trees!
Hang on, it's coming...
- 'Doc

139. PUFF 2.1

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 07:46:19 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <QvSdnTlJxaQPu_LVnZ2dnUVZ_r3inZ2d@comcast.com>
Source record: 24363

Does anybody have a manual for the microwave design package PUFF 2.1? Without the manual it is sort of hard to use. Also the source code would be nice. There is a package on the Internet that lets you recompile the code to run natively on Linux but does not include the source. I have the DOS version of the program now that runs in "dosbox" in Linux, but I would like to try the native version if I can. It seems that the California Institute of Technology isn't actively selling it any more. They direct people to try getting the German version etc or you have to buy some expensive book to get it.

http://www.its.caltech.edu/~mmic/puff.html

http://wwwhome.cs.utwente.nl/~ptdeboer/ham/puff.html (compile notes for Linux)

http://www.gerstlauer.de/puff/ (see bottom of page for zip file of executable file to download)

http://www.dosbox.com/information.php?page=0 (GPL licensed dosbox for various platforms)

--
Regards,
Leland C. Scott
KC8LDO

140. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 13:21:32 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <g4nsh8$8mg$1@aioe.org>
Source record: 24364

"Art Unwin" wrote
> On Jul 4, 5:29 pm, rick frazier wrote:
>> Not sure where you get the swr repetitive over a band of frequencies
>> stuff, (perhaps I don't read enough of the group messages) but to reply
>> relative to dummy loads in general....
>
> This comes from the radiator listed on my page
> unwinantennas.com/

Art -

The most important measure of an antenna is the amount of field intensity it can produce at a given distance in a given direction, per watt of applied r-f power. So far you have written nothing specific about this for the "Unwin" antenna.

Note that a transmission line feeding a 20 dB series attenuator attached to the input of a 100% efficient antenna will show very high return loss to the r-f source (> 40 dB plus the twice the cable loss). But that antenna system will radiate little of the available EM energy, nonetheless.

Could you please comment on the measured or at least the calculated RADIATION CHARACTERISTICS of your antenna, compared to a matched 1/2-wave dipole at that frequency (or an isotropic radiator), and tell us how you arrived at them?

If you can do that, and your results can be scientifically duplicated by others, you will have removed the source of a lot of the skepticism you read here and in your similar threads on eHam.net.

Otherwise it will be "more of the same," which (let us hope) is or should not be your goal.

RF

141. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 13:46:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1a6f3a8b-3fdc-4616-93ba-c29723957805@x41g2000hsb.googlegroups.com>
Source record: 24365

On Jul 5, 8:21 am, "Richard Fry" <r...@adams.net> wrote:
> "Art Unwin" wrote> On Jul 4, 5:29 pm, rick frazier wrote:
> >> Not sure where you get the swr repetitive over a band of frequencies
> >> stuff, (perhaps I don't read enough of the group messages) but to reply
> >> relative to dummy loads in general....
>
> > This comes from the radiator listed on my page
> > unwinantennas.com/
>
> _____
>
> Art -
>
> The most important measure of an antenna is the amount of field intensity it
> can produce at a given distance in a given direction, per watt of applied
> r-f power. So far you have written nothing specific about this for the
> "Unwin" antenna.
>
> Note that a transmission line feeding a 20 dB series attenuator attached to
> the input of a 100% efficient antenna will show very high return loss to the
> r-f source (> 40 dB plus the twice the cable loss). But that antenna system
> will radiate little of the available EM energy, nonetheless.
>
> Could you please comment on the measured or at least the calculated
> RADIATION CHARACTERISTICS of your antenna, compared to a matched 1/2-wave
> dipole at that frequency (or an isotropic radiator), and tell us how you
> arrived at them?
>
> If you can do that, and your results can be scientifically duplicated by
> others, you will have removed the source of a lot of the skepticism you read
> here and in your similar threads on eHam.net.
>
> Otherwise it will be "more of the same," which (let us hope) is or should
> not be your goal.
>
> RF

No.More of the same is not my goal nor is it to respond to every
request.
The mathematision or doctorrate type can do it solely by mathematics.
The computor program is built on those mathematics. and a antenna
program
will ALWAYs produce radiators in equilibrium which means at an angle.
Even without

a optimiser you can do it on Eznec but it would be laborious but it can be done.
People are enamoured with the Yagi so thay always insert planar type figures thus the
program which is designed around equilibrium. If the goal is small efficient radiators then
equilibrium must be present starting with a full wavelength that can then be placed in a small volume.
It is the smaller efficient radiators and arrays that I have pursued since radiation per unit length is solely a measure
that correlates with resistivity and it is that where my conclusions lie. Gain itself is a whole different matter
cannot show it's worth

142. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 15:20:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4o3gd$5kk$1@news.albasani.net>
Source record: 24366

Art Unwin wrote:

>> ...
> Art
> KB9MZ
> unwinantennas.com/

Art:

1) I am not including your text.
2) You have struck upon an area I sift for clues.
3) Einstein did, indeed, realize that in those "weak forces",
undoubtedly, lies some important clues/finds.
4) Einstein even noted that the properties of the ether where/are
"unknowable", at least at the time he made such statement(s) and to this
present day.

Take an aluminum disk with a hole in the center to match an old wax
record and the hole the size of an old records. Tape a magnet to the
phonograph arm. Place the magnet/phonograph-arm on the aluminum disk and
spin it up to 78 rpm. The magnet floats ...

Magnetic fields/fluxes--electric-currents generated in the aluminum disk
are using "work energy" to float the magnet and maintain it at a
respectable height above the disk. This is not a "negligible"
phenomenon, it is used to levitate magnetic trains in Japan.

In our antennas, a certain amount of power IS doing a "like"
affect/effect. It IS wasting some amount of power in doing this ... it
is DOING "something" we are NOT taking into account.

Is this all related to the "weak forces" mentioned by Einstein? Probably.

Are these forces ignored in most if not all antenna calculations (or,
hidden in "magic numbers?") Yes.

Will new breakthroughs in antenna design result from the exploration of
these forces. I would guess that answer to be anywhere from maybe to
probably ...

And, there are even more of our "calculations" which ignore, or cloak in
magic numbers, such "abnormalities" ... like the old maps of ancient
mariners--these are areas, on these maps (antenna books, antenna
software, formulas, charts, etc.) with areas which are marked with a
peculiar notation, "In these areas lie monsters!" And they are shunned
and made "fun" of by most the members of this newsgroup; strange, if you
ask me ...

The future holds the truths (much like the X-Files! <grin>)

Regards,
JS

143. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 16:34:13 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0bd3f5e5-482e-4831-aa04-a51193294241@2g2000hsn.googlegroups.com>
Source record: 24367

On Jul 5, 10:20 am, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> > > Art
> > > KB9MZ
> > > unwinantennas.com/
>
> Art:
>
> 1) I am not including your text.
> 2) You have struck upon an area I sift for clues.
> 3) Einstein did, indeed, realize that in those "weak forces",
> undoubtedly, lies some important clues/finds.
> 4) Einstein even noted that the properties of the ether where/are
> "unknowable", at least at the time he made such statement(s) and to this
> present day.
>
> Take an aluminum disk with a hole in the center to match an old wax
> record and the hole the size of an old records. Tape a magnet to the
> phonograph arm. Place the magnet/phonograph-arm on the aluminum disk and
> spin it up to 78 rpm. The magnet floats ...
>
> Magnetic fields/fluxes--electric-currents generated in the aluminum disk
> are using "work energy" to float the magnet and maintain it at a
> respectable height above the disk. This is not a "negligible"
> phenomenon, it is used to levitate magnetic trains in Japan.
>
> In our antennas, a certain amount of power IS doing a "like"
> affect/effect. It IS wasting some amount of power in doing this ... it
> is DOING "something" we are NOT taking into account.
>
> Is this all related to the "weak forces" mentioned by Einstein? Probably.
>
> Are these forces ignored in most if not all antenna calculations (or,
> hidden in "magic numbers?") Yes.
>
> Will new breakthroughs in antenna design result from the exploration of
> these forces. I would guess that answer to be anywhere from maybe to
> probably ...
>
> And, there are even more of our "calculations" which ignore, or cloak in
> magic numbers, such "abnormalities" ... like the old maps of ancient

> mariners--these are areas, on these maps (antenna books, antenna
> software, formulas, charts, etc.) with areas which are marked with a
> peculiar notation, "In these areas lie monsters!" And they are shunned
> and made "fun" of by most the members of this newsgroup; strange, if you
> ask me ...
>
> The future holds the truths (much like the X-Files! <grin>)
>
> Regards,
> JS

Well you are spot on in general terms but the numbers are there.
Farady, newton and others recognised that the Universe is within a
bounday
and from this vectors form. Each of the masters used this theorem ie
thrust and counter thrust
in ALL oif l their work So they would calculate all forces around a
point until a polygon of vectors were formed and where it was a closed
circuit which signified equilibrium.Now all the masters aproached the
laws of electromagnetism in the same way and each with the final check
with respect to equilibrium as the final check. All of the masters
aproached electromagnetics from different perspectives and there were
a lot of them. But every one of them came up with a polygon of vectors
that did not complete the circle tho all had the same missing vector
space. So they included this space us a vector the creation of which
was unknown but certainly present otherwise equilibrium would not
prevail. Foucault showed the rotative force, Corriolis, in his work
with the long pendulum which is why on my page I used a ploy from the
pendulum to dampen the response of the antenna vibrations. IN YOUR
CASE YOU ARE LOOKING FOR THE AETHER. But the eather can never be found
since boundaries within the universe exist with each other like a
bubble bath since our universe is just one bubble of many just like a
mass of frogs spawn.
Getting back to the weak force which is a vector of small length and
angle in the big picture of things such as with eddy current brakes as
you pointed out, but in the bigger scheme of things the same forces
act on earth as with a tornado where magnetic fields are huge
where elevation easily occurres within the vortex. In England after a
heavy storm it is not unusual to find vlumps of frogs that had fallen
from the sky because they consist of water a diamagnetic material,
that is drawn up into the sky and fall when their temperature falls to
a certain point. So with electromagnetism it can now be shown that the
weak force searched for by physicist is a direct result from a
magnetic fieldor force always makes a reactionary magnetic field or
force but the originating magnetic field quickly overwelms the
reactionary field (eddy current) which mask their presence.
However ,when the fields are time varying as with high frequency
within the tank circuit the time constant of the circuit makes them
more apparent and thus must be included in any laws revolving around
equilibrium.

The importance of this finding to me is that where the yagi is formed around collective coupling and recoupling to infinity,
radiators or arrays based on a border based on equilibrium achieves maximum radiation as a system where the coupling system
can never get to infinity. A small difference ofcource but one has finality where the other does not.
You may not follow my writing as it is always poor but hopefully you will see a small smigeon of scientific discovery in what I am presenting and how this weak force search by all finally comes into play because of the inter phase changes that occur in a tank circuit..Now I know it is impossible for some on this forum that cannot possibly follow the above b ut I do take delight when they do make a "authorative" posting as part of free speech which highlights the degree of expertise they reallyhave despite the self perceived qualities that they seek for to impress.By the way John I do have problems with the validation aspect of posting possibly because of spot eye problems. Does this affect you in any way?I can never get thru ia just one try
Best regards
Art

144. Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 16:42:20 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <e4ae9836-71d2-4075-9823-fa1a11a90375@34g2000hsh.googlegroups.com>
Source record: 24368

I've seen the Lazy H mentioned in many antenna books over the years, so I decided to try one on 10 meters. According to the ARRL handbook the Lazy H is two collinear elements stacked on above the other, Each collinear element is made up of two 1/2 wave elements. I chose to use 5/8 wave spacing between the top and bottom elements. I connected the top and bottom elements with 450 ohm 16 gauge stranded ladder line (window line). After building the antenna I verified connectivity between the top and bottom right elements and the top and bottom left elements. I color coded the end insulators on each side so I could easily see which top and bottom elements were connected to each other. The antenna book says to connect the 450 ohm ladder line from the antenna tuner to the middle of the 450 ladder line that connects top and bottom elements. Ok done. Now I put up the antenna and make sure the top and bottom elements are in phase. That is both left connected elements are on the left and both right connected element are on the right. I also make sure there is no twist in the ladder line connecting the top and bottom elements. I also checked the other ends of the 450 ohm ladder line feeding the antenna has connectivity at the antenna, and the left and right sides of the ladder line do not have connectivity. The 450 ohm ladder line feeding the antenna is about 200 feet long.
Now I bring the 450 ohm feedline in to the house, hook it to my Dentron MT-2000 antenna tuner with the 4:1 balun inside, tune it up, and it sucks! Both my half wave horizontal dipole and my Solarcon Max-2000 blow it away on incoming skip even in the preferred direction of the lazy H. I rechecked my connections and the lengths of the elements and spacing and they are correct. I did take in to account the velocity factor of the 450 ladder line that connects the top elements to the bottom elements. The antenna book says the length of the 450 ladder lien between the antenna and the antenna tuner can e any lenght.
The bottom element is at least 1/2 wave of the ground, and the top element is 5/8ths wave above that. What did I do wrong?

Michael

145. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 16:47:40 UTC
From: Dave <noone@nowhere.com>
Message-ID: <MANbk.303$9W.202@trndny04>
Source record: 24369

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:1a6f3a8b-3fdc-4616-93ba-c29723957805@x41g2000hsb.googlegroups.com...
> On Jul 5, 8:21 am, "Richard Fry" <r...@adams.net> wrote:
>> "Art Unwin" wrote> On Jul 4, 5:29 pm, rick frazier wrote:
>> >> Not sure where you get the swr repetitive over a band of frequencies
>> >> stuff, (perhaps I don't read enough of the group messages) but to
>> >> reply
>> >> relative to dummy loads in general....
>>
>> > This comes from the radiator listed on my page
>> > unwinantennas.com/
>>
>> _____
>>
>> Art -
>>
>> The most important measure of an antenna is the amount of field intensity
>> it
>> can produce at a given distance in a given direction, per watt of applied
>> r-f power. So far you have written nothing specific about this for the
>> "Unwin" antenna.
>>
>> Note that a transmission line feeding a 20 dB series attenuator attached
>> to
>> the input of a 100% efficient antenna will show very high return loss to
>> the
>> r-f source (> 40 dB plus the twice the cable loss). But that antenna
>> system
>> will radiate little of the available EM energy, nonetheless.
>>
>> Could you please comment on the measured or at least the calculated
>> RADIATION CHARACTERISTICS of your antenna, compared to a matched 1/2-wave
>> dipole at that frequency (or an isotropic radiator), and tell us how you
>> arrived at them?
>>
>> If you can do that, and your results can be scientifically duplicated by
>> others, you will have removed the source of a lot of the skepticism you
>> read
>> here and in your similar threads on eHam.net.
>>
>> Otherwise it will be "more of the same," which (let us hope) is or should
>> not be your goal.
>>
>> RF

>
> No.More of the same is not my goal nor is it to respond to every
> request.
> The mathematision or doctorrate type can do it solely by mathematics.
> The computor program is built on those mathematics. and a antenna
> program
> will ALWAYs produce radiators in equilibrium which means at an angle.
> Even without
> a optimiser you can do it on Eznec but it would be laborious but it
> can be done.
> People are enamoured with the Yagi so thay always insert planar type
> figures thus the
> program which is designed around equilibrium. If the goal is small
> efficient radiators then
> equilibrium must be present starting with a full wavelength that can
> then be placed in a small volume.
> It is the smaller efficient radiators and arrays that I have pursued
> since radiation per unit length is solely a measure
> that correlates with resistivity and it is that where my conclusions
> lie. Gain itself is a whole different matter
> cannot show it's worth

in other words, he hasn't, he won't, and he doesn't care... therefore, more of the same handwaving and meaningless bafflegab. he doesn't have the math background to present his theory in any kind of a coherent form, nor of course could he ever measure his neutrino/carbon vortex crud because it doesn't exist, so he keeps going back to the same old crap... its not even funny any more, just sad.

146. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 16:56:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4o94g$g72$1@news.albasani.net>
Source record: 24370

Art Unwin wrote:
> ...
>> IN YOUR
>> CASE YOU ARE LOOKING FOR THE AETHER. But the eather can never be
>> found since boundaries within the universe exist with each other
like >> a bubble bath since our universe is just one bubble of many just
like >> a mass of frogs spawn.
>> ...
> Best regards
> Art

If we are not equally open to all areas mentioned in your last post, I would at least grant you the right, interest, etc. in your explorations--there is "something" there alright ...

Your quoted text, above, I see different. The "universe" is like a hollow sphere. This spheres structure is penetrated by a LOT of holes. Just inside the spheres structure is a rubber bladder (balloon if you will.) This rubber bladder is under pressure, until it has expanded out though the holes in the spheres structure and formed spheres made from the material of the rubber bladder. In one of those lies our universe ...

Sorry I could not think of a better way to suggest this idea in time for this post ... previously I have only held it as a mental picture to myself ...

Regards,
JS

147. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 17:00:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4o9bpgqe1@news.albasani.net>
Source record: 24371

Art Unwin wrote:
> ... IN YOUR
> CASE YOU ARE LOOKING FOR THE AETHER. But the eather can never be found
> ...
> Best regards
> Art

And, you are correct:

Aether = Eather = Ether

The first two I just consider "old world", and/or English spellings.
Since we Americans have "murdered" the Queens English, why not this word
also? <grin>

Regards,
JS

148. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 17:16:21 UTC
From: nm5k@wt.net
Message-ID: <0d86d689-cf98-4bde-8f4c-0351c833af7f@26g2000hsk.googlegroups.com>
Source record: 24372

On Jul 5, 11:42 am, Michael <spamt...@shadowstorm.com> wrote:
> I also make sure there is no twist in the ladder line
> connecting the top and bottom elements.

I'd have to look at a diagram of the lazy H, but I think that
is your problem. The elements need to be transposed.
Which means you want a 1/2 twist in the connecting
ladder line. IE: the bottom left should connect to the
top right, and visa versa.

149. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 17:27:28 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <bcc22500-bcec-4c16-a4c6-fb428331ecb8@m36g2000hse.googlegroups.com>
Source record: 24373

On Jul 5, 11:47 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:1a6f3a8b-3fdc-4616-93ba-c29723957805@x41g2000hsb.googlegroups.com...
>
>
>
> > On Jul 5, 8:21 am, "Richard Fry" <r...@adams.net> wrote:
> >> "Art Unwin" wrote> On Jul 4, 5:29 pm, rick frazier wrote:
> >> >> Not sure where you get the swr repetitive over a band of frequencies
> >> >> stuff, (perhaps I don't read enough of the group messages) but to
> >> >> reply
> >> >> relative to dummy loads in general....
>
> >> > This comes from the radiator listed on my page
> >> > unwinantennas.com/
>
> >> _____
>
> >> Art -
>
> >> The most important measure of an antenna is the amount of field intensity
> >> it
> >> can produce at a given distance in a given direction, per watt of applied
> >> r-f power. So far you have written nothing specific about this for the
> >> "Unwin" antenna.
>
> >> Note that a transmission line feeding a 20 dB series attenuator attached
> >> to
> >> the input of a 100% efficient antenna will show very high return loss to
> >> the
> >> r-f source (> 40 dB plus the twice the cable loss). But that antenna
> >> system
> >> will radiate little of the available EM energy, nonetheless.
>
> >> Could you please comment on the measured or at least the calculated
> >> RADIATION CHARACTERISTICS of your antenna, compared to a matched 1/2-wave
> >> dipole at that frequency (or an isotropic radiator), and tell us how you
> >> arrived at them?
>
> >> If you can do that, and your results can be scientifically duplicated by
> >> others, you will have removed the source of a lot of the skepticism you
> >> read
> >> here and in your similar threads on eHam.net.

>
> >> Otherwise it will be "more of the same," which (let us hope) is or should
> >> not be your goal.
>
> >> RF
>
> > No.More of the same is not my goal nor is it to respond to every
> > request.
> > The mathematision or doctorrate type can do it solely by mathematics.
> > The computor program is built on those mathematics. and a antenna
> > program
> > will ALWAYs produce radiators in equilibrium which means at an angle.
> > Even without
> > a optimiser you can do it on Eznec but it would be laborious but it
> > can be done.
> > People are enamoured with the Yagi so thay always insert planar type
> > figures thus the
> > program which is designed around equilibrium. If the goal is small
> > efficient radiators then
> > equilibrium must be present starting with a full wavelength that can
> > then be placed in a small volume.
> > It is the smaller efficient radiators and arrays that I have pursued
> > since radiation per unit length is solely a measure
> > that correlates with resistivity and it is that where my conclusions
> > lie. Gain itself is a whole different matter
> > cannot show it's worth
>
> in other words, he hasn't, he won't, and he doesn't care... therefore, more
> of the same handwaving and meaningless bafflegab. he doesn't have the math
> background to present his theory in any kind of a coherent form, nor of
> course could he ever measure his neutrino/carbon vortex crud because it
> doesn't exist, so he keeps going back to the same old crap... its not even
> funny any more, just sad.

David,
at this stage in life it would very difficult for me to go thru the
math from the start
in the exercise of adding a a radiator and a time varying field to a
Gaussian field
to show it is the same asMaxwell equation, very few of us are. But
when you come across a theorem
that makes sense to you it is gravy added when a mathematician comes
along to supply the mathematics
which you can follow in part. Then when antenna computor programs
supply the ingredients of such an analysis
which proves the same you have to get excited. When you then apply
what is revealed in such a trail and succeed in making a smaller
antenna that anybody has made you stop questioning what you have
found. As an aside, where do you view the atributes of an antenna with
near constant SWR reponse would find most use. I know most will jump

to dummy load but this I ask in serious form.

150. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 17:33:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4obahkjs1@news.albasani.net>
Source record: 24374

nm5k@wt.net wrote:
> On Jul 5, 11:42 am, Michael <spamt...@shadowstorm.com> wrote:
>> I also make sure there is no twist in the ladder line
>> connecting the top and bottom elements.
>
> I'd have to look at a diagram of the lazy H, but I think that
> is your problem. The elements need to be transposed.
> Which means you want a 1/2 twist in the connecting
> ladder line. IE: the bottom left should connect to the
> top right, and visa versa.
>

Just quickly:

http://www.amwindow.org/tech/htm/tenmant/tenmant.htm
http://www.amwindow.org/tech/htm/tenmant/fig5.htm

http://www.kw2hv.com/lazy_h.html

http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=14923

Regards,
JS

151. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 18:10:50 UTC
From: richardharrison@webtv.net
Message-ID: <19484-486FB92A-821@storefull-3251.bay.webtv.net>
Source record: 24376

Art wrote:
"The computer program is built on those mathematics, and an antenna program will ALLWAYS produce radiators in equalibrium which means at an angle."

Arnold B. Bailey disagrees in "TV and Other Receiving Antennas". On page 367 he writes:
"The directional action of a rod antenna best can be analyzed by considering the rod as consisting of many tiny sections, connected together to form a metallic circuit. A typical small segment X - X is shown in Fig. 7-28 B; its position in a half-wave center-fed antenna is indicated in part (A) of the figure. Each tiny section may be taken sufficiently short compared to a wavelength so that the electromagnetic wave acts practically instantaneously throughout one section, and hence induces a substantially uniform current in that section. Such a short antenna segment has a simple directional response pattern, indicated in Fig. 7-28B, which is basic for all directivity calculations, since all antenns may be considered to be made up of these tiny segments. This fundamental response pattern varies as the cosine of the angle (which we shall call theta) between the direction of the incoming wave and the perpendicular through the center of the segment X - X, as indicated in part (B) of the figure. If E stands for the value of the field intensity (strength of the electric vector), then we can characterize the directional response by the relation Ecos theta, which gives us the relative magnitude of E for any wave direction relative to the antenna."

You probably have seen the figure-eight pattern of a dipole antenna and are already aware that maximum response is broadside to the antenna at its center. If the antenna is tilted away from the perpendicular its response is diminished. Other antennas have a similar response as all are made up of elemental segments.

Best regards, Richard Harrison, KB5WZI

152. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 18:15:05 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <72ec2059-81e5-4441-be10-d5c6f722413f@m44g2000hsc.googlegroups.com>
Source record: 24375

On Jul 5, 1:16 pm, n...@wt.net wrote:
> On Jul 5, 11:42 am, Michael <spamt...@shadowstorm.com> wrote:
>
> > I also make sure there is no twist in the ladder line
> > connecting the top and bottom elements.
>
> I'd have to look at a diagram of the lazy H, but I think that
> is your problem. The elements need to be transposed.
> Which means you want a 1/2 twist in the connecting
> ladder line. IE: the bottom left should connect to the
> top right, and visa versa.

As I understand it you only twist the interconnecting ladder line if you are feeding the Lazy H antenna at the bottom (end fire), but if you are feeding it in the middle of the interconnecting 450 ladder line then you leave out the twist. At least that's what I'm gathering from the pictures I have found.

One correction. I have a Dentron MT-3000a antenna tuners with a 4:1 balun and not the MT-2000.

153. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 18:32:44 UTC
From: Dave <noone@nowhere.com>
Message-ID: <g7Pbk.208$Z11.164@trndny05>
Source record: 24377

```
"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:bcc22500-bcec-4c16-a4c6-fb428331ecb8@m36g2000hse.googlegroups.com...
> On Jul 5, 11:47 am, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:1a6f3a8b-3fdc-4616-93ba-c29723957805@x41g2000hsb.googlegroups.com...
>>
>>
>>
>> > On Jul 5, 8:21 am, "Richard Fry" <r...@adams.net> wrote:
>> >> "Art Unwin" wrote> On Jul 4, 5:29 pm, rick frazier wrote:
>> >> >> Not sure where you get the swr repetitive over a band of
>> >> >> frequencies
>> >> >> stuff, (perhaps I don't read enough of the group messages) but to
>> >> >> reply
>> >> >> relative to dummy loads in general....
>>
>> >> > This comes from the radiator listed on my page
>> >> > unwinantennas.com/
>>
>> >> _______________________
>>
>> >> Art -
>>
>> >> The most important measure of an antenna is the amount of field
>> >> intensity
>> >> it
>> >> can produce at a given distance in a given direction, per watt of
>> >> applied
>> >> r-f power. So far you have written nothing specific about this for
>> >> the
>> >> "Unwin" antenna.
>>
>> >> Note that a transmission line feeding a 20 dB series attenuator
>> >> attached
>> >> to
>> >> the input of a 100% efficient antenna will show very high return loss
>> >> to
>> >> the
>> >> r-f source (> 40 dB plus the twice the cable loss). But that antenna
>> >> system
>> >> will radiate little of the available EM energy, nonetheless.
>>
>> >> Could you please comment on the measured or at least the calculated
```

>> >> RADIATION CHARACTERISTICS of your antenna, compared to a matched
>> >> 1/2-wave
>> >> dipole at that frequency (or an isotropic radiator), and tell us how
>> >> you
>> >> arrived at them?
>>
>> >> If you can do that, and your results can be scientifically duplicated
>> >> by
>> >> others, you will have removed the source of a lot of the skepticism
>> >> you
>> >> read
>> >> here and in your similar threads on eHam.net.
>>
>> >> Otherwise it will be "more of the same," which (let us hope) is or
>> >> should
>> >> not be your goal.
>>
>> >> RF
>>
>> > No.More of the same is not my goal nor is it to respond to every
>> > request.
>> > The mathematision or doctorrate type can do it solely by mathematics.
>> > The computor program is built on those mathematics. and a antenna
>> > program
>> > will ALWAYs produce radiators in equilibrium which means at an angle.
>> > Even without
>> > a optimiser you can do it on Eznec but it would be laborious but it
>> > can be done.
>> > People are enamoured with the Yagi so thay always insert planar type
>> > figures thus the
>> > program which is designed around equilibrium. If the goal is small
>> > efficient radiators then
>> > equilibrium must be present starting with a full wavelength that can
>> > then be placed in a small volume.
>> > It is the smaller efficient radiators and arrays that I have pursued
>> > since radiation per unit length is solely a measure
>> > that correlates with resistivity and it is that where my conclusions
>> > lie. Gain itself is a whole different matter
>> > cannot show it's worth
>>
>> in other words, he hasn't, he won't, and he doesn't care... therefore,
>> more
>> of the same handwaving and meaningless bafflegab. he doesn't have the
>> math
>> background to present his theory in any kind of a coherent form, nor of
>> course could he ever measure his neutrino/carbon vortex crud because it
>> doesn't exist, so he keeps going back to the same old crap... its not
>> even
>> funny any more, just sad.
>

> David,
> at this stage in life it would very difficult for me to go thru the
> math from the start
> in the exercise of adding a a radiator and a time varying field to a
> Gaussian field
> to show it is the same asMaxwell equation, very few of us are. But
> when you come across a theorem
> that makes sense to you it is gravy added when a mathematician comes
> along to supply the mathematics
> which you can follow in part. Then when antenna computor programs
> supply the ingredients of such an analysis
> which proves the same you have to get excited. When you then apply
> what is revealed in such a trail and succeed in making a smaller
> antenna that anybody has made you stop questioning what you have
> found. As an aside, where do you view the atributes of an antenna with
> near constant SWR reponse would find most use. I know most will jump
> to dummy load but this I ask in serious form.

I already gave you the quote that shows that Gauss's Law is part of Maxwell's equations already, you need no math for that. and since all the antenna design programs are based on Maxwell's equations they of course comply with Gauss's law... nothing exciting there.

the only use for a constant swr is to keep modern transceivers, that don't have a tuner, happy. swr has no correlation to performance of an antenna as far as gain or f/b or takeoff angle, things that are important to antenna design. i can take any antenna and give it a flat swr, there used to be a tuner on the market that did just that, until the league lab x-rayed it and found it was nothing but a dummy load potted in epoxy. the funny thing is, people liked it because it did exactly as it claimed, gave a perfect match across a wide frequency range... they didn't care that it turned a good percentage of their power into heat. so air cooled dummy loads as antennas can work, as long as you don't have anything better to compare it to... but I do, so I don't want one.

154. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 19:12:50 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8c8a12ab-2db4-402f-b355-ff5aa3688248@p25g2000hsf.googlegroups.com>
Source record: 24378

On Jul 5, 1:10 pm, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "The computer program is built on those mathematics, and an antenna
> program will ALLWAYS produce radiators in equalibrium which means at an
> angle."
>
> Arnold B. Bailey disagrees in "TV and Other Receiving Antennas". On page367 he writes:
>
> "The directional action of a rod antenna best can be analyzed by
> considering the rod as consisting of many tiny sections, connected
> together to form a metallic circuit. A typical small segment X - X is
> shown in Fig. 7-28 B; its position in a half-wave center-fed antenna is
> indicated in part (A) of the figure. Each tiny section may be taken
> sufficiently short compared to a wavelength so that the electromagnetic
> wave acts practically instantaneously throughout one section, and hence
> induces a substantially uniform current in that section. Such a short
> antenna segment has a simple directional response pattern, indicated in
> Fig. 7-28B, which is basic for all directivity calculations, since all
> antenns may be considered to be made up of these tiny segments. This
> fundamental response pattern varies as the cosine of the angle (which we
> shall call theta) between the direction of the incoming wave and the
> perpendicular through the center of the segment X - X, as indicated in
> part (B) of the figure. If E stands for the value of the field intensity
> (strength of the electric vector), then we can characterize the
> directional response by the relation Ecos theta, which gives us the
> relative magnitude of E for any wave direction relative to the antenna."
>
> You probably have seen the figure-eight pattern of a dipole antenna and
> are already aware that maximum response is broadside to the antenna at
> its center. If the antenna is tilted away from the perpendicular its
> response is diminished. Other antennas have a similar response as all
> are made up of elemental segments.
>
> Best regards, Richard Harrison, KB5WZI

Richard, I understand where you are coming from since all these books
say the same thing. This says that the majority wins and thus is all
known. Well I disagree with that philosophy but I reckonise it. So I
am pushing my findings until I Art Unwin comes to rest with a
majoritory. Since I have an antenna that duplicates those facts I can
only hope that Industry sees something that they want since money in
this world is the driving force.
I am thinking of placing a sample of a tipped antenna on m y page b ut

I fear that all will then blaime the computor program and or Maxwells laws. You just can't make horses drink!
Art

155. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 19:25:00 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <04f9ddac-8a14-4a80-adde-b82eb1c35e4a@8g2000hse.googlegroups.com>
Source record: 24379

On Jul 5, 1:32 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:bcc22500-bcec-4c16-a4c6-fb428331ecb8@m36g2000hse.googlegroups.com...
>
>
>
> > On Jul 5, 11:47 am, "Dave" <no...@nowhere.com> wrote:
> >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >>news:1a6f3a8b-3fdc-4616-93ba-c29723957805@x41g2000hsb.googlegroups.com...
>
> >> > On Jul 5, 8:21 am, "Richard Fry" <r...@adams.net> wrote:
> >> >> "Art Unwin" wrote> On Jul 4, 5:29 pm, rick frazier wrote:
> >> >> >> Not sure where you get the swr repetitive over a band of
> >> >> >> frequencies
> >> >> >> stuff, (perhaps I don't read enough of the group messages) but to
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> >> >> Art -
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> >> >> The most important measure of an antenna is the amount of field
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> >> >> applied
> >> >> r-f power. So far you have written nothing specific about this for
> >> >> the
> >> >> "Unwin" antenna.
>
> >> >> Note that a transmission line feeding a 20 dB series attenuator
> >> >> attached
> >> >> to
> >> >> the input of a 100% efficient antenna will show very high return loss
> >> >> to
> >> >> the
> >> >> r-f source (> 40 dB plus the twice the cable loss). But that antenna
> >> >> system

> >> >> will radiate little of the available EM energy, nonetheless.
>
> >> >> Could you please comment on the measured or at least the calculated
> >> >> RADIATION CHARACTERISTICS of your antenna, compared to a matched
> >> >> 1/2-wave
> >> >> dipole at that frequency (or an isotropic radiator), and tell us how
> >> >> you
> >> >> arrived at them?
>
> >> >> If you can do that, and your results can be scientifically duplicated
> >> >> by
> >> >> others, you will have removed the source of a lot of the skepticism
> >> >> you
> >> >> read
> >> >> here and in your similar threads on eHam.net.
>
> >> >> Otherwise it will be "more of the same," which (let us hope) is or
> >> >> should
> >> >> not be your goal.
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> >> >> RF
>
> >> > No.More of the same is not my goal nor is it to respond to every
> >> > request.
> >> > The mathematision or doctorrate type can do it solely by mathematics.
> >> > The computor program is built on those mathematics. and a antenna
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> >> > will ALWAYs produce radiators in equilibrium which means at an angle.
> >> > Even without
> >> > a optimiser you can do it on Eznec but it would be laborious but it
> >> > can be done.
> >> > People are enamoured with the Yagi so thay always insert planar type
> >> > figures thus the
> >> > program which is designed around equilibrium. If the goal is small
> >> > efficient radiators then
> >> > equilibrium must be present starting with a full wavelength that can
> >> > then be placed in a small volume.
> >> > It is the smaller efficient radiators and arrays that I have pursued
> >> > since radiation per unit length is solely a measure
> >> > that correlates with resistivity and it is that where my conclusions
> >> > lie. Gain itself is a whole different matter
> >> > cannot show it's worth
>
> >> in other words, he hasn't, he won't, and he doesn't care... therefore,
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> >> of the same handwaving and meaningless bafflegab. he doesn't have the
> >> math
> >> background to present his theory in any kind of a coherent form, nor of
> >> course could he ever measure his neutrino/carbon vortex crud because it
> >> doesn't exist, so he keeps going back to the same old crap... its not

> >> even
> >> funny any more, just sad.
>
> > David,
> > at this stage in life it would very difficult for me to go thru the
> > math from the start
> > in the exercise of adding a a radiator and a time varying field to a
> > Gaussian field
> > to show it is the same asMaxwell equation, very few of us are. But
> > when you come across a theorem
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> > along to supply the mathematics
> > which you can follow in part. Then when antenna computor programs
> > supply the ingredients of such an analysis
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> > what is revealed in such a trail and succeed in making a smaller
> > antenna that anybody has made you stop questioning what you have
> > found. As an aside, where do you view the atributes of an antenna with
> > near constant SWR reponse would find most use. I know most will jump
> > to dummy load but this I ask in serious form.
>
> I already gave you the quote that shows that Gauss's Law is part of
> Maxwell's equations already, you need no math for that. and since all the
> antenna design programs are based on Maxwell's equations they of course
> comply with Gauss's law... nothing exciting there.
>
> the only use for a constant swr is to keep modern transceivers, that don't
> have a tuner, happy. swr has no correlation to performance of an antenna as
> far as gain or f/b or takeoff angle, things that are important to antenna
> design. i can take any antenna and give it a flat swr, there used to be a
> tuner on the market that did just that, until the league lab x-rayed it and
> found it was nothing but a dummy load potted in epoxy. the funny thing is,
> people liked it because it did exactly as it claimed, gave a perfect match
> across a wide frequency range... they didn't care that it turned a good
> percentage of their power into heat. so air cooled dummy loads as antennas
> can work, as long as you don't have anything better to compare it to... but
> I do, so I don't want one.

David ,Gauss did a lot of work in his life time for which he is
recognised.
Are you saying that the "Gaussian law of static" was a prime mover of
Maxwells laws.
If this is so why does not Maxwells laws provide the role of particles
in radiation?
From my view point Gauss's contribution was supplied in other ways
that did not include the statics law but then I look forward to you
showing me where I am wrong

156. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 19:55:31 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <4cfacf6e-ef1b-414f-9372-11bb088a5faf@t54g2000hsg.googlegroups.com>
Source record: 24380

On 5 jul, 18:42, Michael <spamt...@shadowstorm.com> wrote:
> I've seen the Lazy H mentioned in many antenna books over the years,
> so I decided to try one on 10 meters. According to the ARRL handbook
> the Lazy H is two collinear elements stacked on above the other, Each
> collinear element is made up of two 1/2 wave elements. I chose to
> use 5/8 wave spacing between the top and bottom elements. I connected
> the top and bottom elements with 450 ohm 16 gauge stranded ladder line
> (window line). After building the antenna I verified connectivity
> between the top and bottom right elements and the top and bottom left
> elements. I color coded the end insulators on each side so I could
> easily see which top and bottom elements were connected to each other.
> The antenna book says to connect the 450 ohm ladder line from the
> antenna tuner to the middle of the 450 ladder line that connects top
> and bottom elements. Ok done. Now I put up the antenna and make sure
> the top and bottom elements are in phase. That is both left connected
> elements are on the left and both right connected element are on the
> right. I also make sure there is no twist in the ladder line
> connecting the top and bottom elements. I also checked the other
> ends of the 450 ohm ladder line feeding the antenna has connectivity
> at the antenna, and the left and right sides of the ladder line do not
> have connectivity. The 450 ohm ladder line feeding the antenna is
> about 200 feet long.
> Now I bring the 450 ohm feedline in to the house, hook it to my
> Dentron MT-2000 antenna tuner with the 4:1 balun inside, tune it up,
> and it sucks! Both my half wave horizontal dipole and my Solarcon
> Max-2000 blow it away on incoming skip even in the preferred direction
> of the lazy H. I rechecked my connections and the lengths of the
> elements and spacing and they are correct. I did take in to account
> the velocity factor of the 450 ladder line that connects the top
> elements to the bottom elements. The antenna book says the length of
> the 450 ladder lien between the antenna and the antenna tuner can e
> any lenght.
> The bottom element is at least 1/2 wave of the ground, and the top
> element is 5/8ths wave above that. What did I do wrong?
>
> Michael

Hi Michael,

Normally spoken the feedline between top to bottom elements is
0.5lambda long, without twist, feeding in the middle. The path from
feedpoint to end of the radiation elements is 0.75 lambda, giving an
almost real low input impedance (on order of 30 Ohms, depending on
thickness of radiating elements). In fact you have two full wave
dipoles fed in phase that give most radiation (ground ignored)

perpendicular to the array (bidirectional). There is a vertical null

Why choosing 5/8 lambda vertical element spacing? You create a vertical lobe and a null in the elevation radiation pattern under about 53 degrees. You also get a strong reactive input impedance, but this may not be a problem with the ladder line.

Did you do some indicative field strength measurements (diode detector) to find out whether it (and the elements) do(es) radiate (comparing to the other antennas)? It may also reveal some hidden things.

Maybe somebody knows a loss figure for your ladder line (at 28 MHz) to assess the losses in the line (200ft part) because of bad VSWR.

Best regards,

Wim
PA3DJS
www.tetech.nl
When you remove abc, the mail does work.

157. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 21:15:02 UTC
From: Dave <noone@nowhere.com>
Message-ID: <qvRbk.319$9W.163@trndny04>
Source record: 24381

```
"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:04f9ddac-8a14-4a80-adde-b82eb1c35e4a@8g2000hse.googlegroups.com...
> On Jul 5, 1:32 pm, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
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>> news:bcc22500-bcec-4c16-a4c6-fb428331ecb8@m36g2000hse.googlegroups.com...
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>> >> >> >> "Unwin" antenna.
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>> >> >> >> Note that a transmission line feeding a 20 dB series attenuator
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```

>> >> >> to
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>> >> >> r-f source (> 40 dB plus the twice the cable loss). But that
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>> >> >> dipole at that frequency (or an isotropic radiator), and tell us
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>> >> >> If you can do that, and your results can be scientifically
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>> >> >> you
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>> >> >> Otherwise it will be "more of the same," which (let us hope) is or
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>> > to show it is the same asMaxwell equation, very few of us are. But
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>> > to dummy load but this I ask in serious form.
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>> Maxwell's equations already, you need no math for that. and since all
>> the
>> antenna design programs are based on Maxwell's equations they of course
>> comply with Gauss's law... nothing exciting there.
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>> the only use for a constant swr is to keep modern transceivers, that
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>> have a tuner, happy. swr has no correlation to performance of an antenna
>> as
>> far as gain or f/b or takeoff angle, things that are important to antenna
>> design. i can take any antenna and give it a flat swr, there used to be
>> a
>> tuner on the market that did just that, until the league lab x-rayed it
>> and
>> found it was nothing but a dummy load potted in epoxy. the funny thing
>> is,
>> people liked it because it did exactly as it claimed, gave a perfect

>> match
>> across a wide frequency range... they didn't care that it turned a good
>> percentage of their power into heat. so air cooled dummy loads as
>> antennas
>> can work, as long as you don't have anything better to compare it to...
>> but
>> I do, so I don't want one.
>
> David ,Gauss did a lot of work in his life time for which he is
> recognised.
> Are you saying that the "Gaussian law of static" was a prime mover of
> Maxwells laws.
> If this is so why does not Maxwells laws provide the role of particles
> in radiation?
> From my view point Gauss's contribution was supplied in other ways
> that did not include the statics law but then I look forward to you
> showing me where I am wrong

well, your point of view is wrong.

158. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 21:32:20 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <778c0057-8e10-4990-8331-dba7bb176756@f63g2000hsf.googlegroups.com>
Source record: 24382

On Jul 5, 3:55 pm, Wimpie <wimabc...@tetech.nl> wrote:
> On 5 jul, 18:42, Michael <spamt...@shadowstorm.com> wrote:
>
>
>
> > I've seen the Lazy H mentioned in many antenna books over the years,
> > so I decided to try one on 10 meters. According to the ARRL handbook
> > the Lazy H is two collinear elements stacked on above the other, Each
> > collinear element is made up of two 1/2 wave elements. I chose to
> > use 5/8 wave spacing between the top and bottom elements. I connected
> > the top and bottom elements with 450 ohm 16 gauge stranded ladder line
> > (window line). After building the antenna I verified connectivity
> > between the top and bottom right elements and the top and bottom left
> > elements. I color coded the end insulators on each side so I could
> > easily see which top and bottom elements were connected to each other.
> > The antenna book says to connect the 450 ohm ladder line from the
> > antenna tuner to the middle of the 450 ladder line that connects top
> > and bottom elements. Ok done. Now I put up the antenna and make sure
> > the top and bottom elements are in phase. That is both left connected
> > elements are on the left and both right connected element are on the
> > right. I also make sure there is no twist in the ladder line
> > connecting the top and bottom elements. I also checked the other
> > ends of the 450 ohm ladder line feeding the antenna has connectivity
> > at the antenna, and the left and right sides of the ladder line do not
> > have connectivity. The 450 ohm ladder line feeding the antenna is
> > about 200 feet long.
> > Now I bring the 450 ohm feedline in to the house, hook it to my
> > Dentron MT-2000 antenna tuner with the 4:1 balun inside, tune it up,
> > and it sucks! Both my half wave horizontal dipole and my Solarcon
> > Max-2000 blow it away on incoming skip even in the preferred direction
> > of the lazy H. I rechecked my connections and the lengths of the
> > elements and spacing and they are correct. I did take in to account
> > the velocity factor of the 450 ladder line that connects the top
> > elements to the bottom elements. The antenna book says the length of
> > the 450 ladder lien between the antenna and the antenna tuner can e
> > any lenght.
> > The bottom element is at least 1/2 wave of the ground, and the top
> > element is 5/8ths wave above that. What did I do wrong?
>
> > Michael
>
> Hi Michael,
>
> Normally spoken the feedline between top to bottom elements is

> 0.5lambda long, without twist, feeding in the middle. The path from
> feedpoint to end of the radiation elements is 0.75 lambda, giving an
> almost real low input impedance (on order of 30 Ohms, depending on
> thickness of radiating elements). In fact you have two full wave
> dipoles fed in phase that give most radiation (ground ignored)
> perpendicular to the array (bidirectional). There is a vertical null
>
> Why choosing 5/8 lambda vertical element spacing? You create a
> vertical lobe and a null in the elevation radiation pattern under
> about 53 degrees. You also get a strong reactive input impedance, but
> this may not be a problem with the ladder line.
>
> Did you do some indicative field strength measurements (diode
> detector) to find out whether it (and the elements) do(es) radiate
> (comparing to the other antennas)? It may also reveal some hidden
> things.
>
> Maybe somebody knows a loss figure for your ladder line (at 28 MHz) to
> assess the losses in the line (200ft part) because of bad VSWR.
>
> Best regards,
>
> Wim
> PA3DJSwww.tetech.nl
> When you remove abc, the mail does work.

Hi Wim,
According to the ARRL handbook the highest gain is achieve with a
5/8ths wave spacing between the upper and lower elements. The
handbook gives the following figures for estimated gain.

3/8 wave spacing = 4.4 dbd
1/2 wave spacing = 5.9 dbd
5/8 wave spacing = 6.7 dbd
3/4 wave spacing = 6.6 dbd

EZNEC shows a similar gain peak with a 5/8th wave spacing between the
top and bottom elements.

It seems to works on 14 MHz (stacked dipoles at 14 MHz), but on 10
meters the single 10 meter dipole blows it away.

159. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 21:52:26 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ce912753-1d68-4fe4-bf6c-8a227df2e327@j22g2000hsf.googlegroups.com>
Source record: 24383

On Jul 5, 4:15 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:04f9ddac-8a14-4a80-adde-b82eb1c35e4a@8g2000hse.googlegroups.com...
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> > On Jul 5, 1:32 pm, "Dave" <no...@nowhere.com> wrote:
> >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
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> >>news:bcc22500-bcec-4c16-a4c6-fb428331ecb8@m36g2000hse.googlegroups.com...
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> >> > On Jul 5, 11:47 am, "Dave" <no...@nowhere.com> wrote:
> >> >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
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> >> >>news:1a6f3a8b-3fdc-4616-93ba-c29723957805@x41g2000hsb.googlegroups.com...
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> >> >> > On Jul 5, 8:21 am, "Richard Fry" <r...@adams.net> wrote:
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> >> >> >> >> frequencies
> >> >> >> >> stuff, (perhaps I don't read enough of the group messages) but
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> >> >> >> The most important measure of an antenna is the amount of field
> >> >> >> intensity
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> >> >> >> can produce at a given distance in a given direction, per watt of
> >> >> >> applied
> >> >> >> r-f power. So far you have written nothing specific about this for
> >> >> >> the
> >> >> >> "Unwin" antenna.
>
> >> >> >> Note that a transmission line feeding a 20 dB series attenuator
> >> >> >> attached

> >> >> >> to
> >> >> >> the input of a 100% efficient antenna will show very high return
> >> >> >> loss
> >> >> >> to
> >> >> >> the
> >> >> >> r-f source (> 40 dB plus the twice the cable loss). But that
> >> >> >> antenna
> >> >> >> system
> >> >> >> will radiate little of the available EM energy, nonetheless.
>
> >> >> >> Could you please comment on the measured or at least the calculated
> >> >> >> RADIATION CHARACTERISTICS of your antenna, compared to a matched
> >> >> >> 1/2-wave
> >> >> >> dipole at that frequency (or an isotropic radiator), and tell us
> >> >> >> how
> >> >> >> you
> >> >> >> arrived at them?
>
> >> >> >> If you can do that, and your results can be scientifically
> >> >> >> duplicated
> >> >> >> by
> >> >> >> others, you will have removed the source of a lot of the skepticism
> >> >> >> you
> >> >> >> read
> >> >> >> here and in your similar threads on eHam.net.
>
> >> >> >> Otherwise it will be "more of the same," which (let us hope) is or
> >> >> >> should
> >> >> >> not be your goal.
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> >> >> >> RF
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> >> >> > No.More of the same is not my goal nor is it to respond to every
> >> >> > request.
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> >> >> > The computor program is built on those mathematics. and a antenna
> >> >> > program
> >> >> > will ALWAYs produce radiators in equilibrium which means at an
> >> >> > angle.
> >> >> > Even without
> >> >> > a optimiser you can do it on Eznec but it would be laborious but it
> >> >> > can be done.
> >> >> > People are enamoured with the Yagi so thay always insert planar type
> >> >> > figures thus the
> >> >> > program which is designed around equilibrium. If the goal is small
> >> >> > efficient radiators then
> >> >> > equilibrium must be present starting with a full wavelength that can
> >> >> > then be placed in a small volume.
> >> >> > It is the smaller efficient radiators and arrays that I have pursued

> >> >> > since radiation per unit length is solely a measure
> >> >> > that correlates with resistivity and it is that where my conclusions
> >> >> > lie. Gain itself is a whole different matter
> >> >> > cannot show it's worth
>
> >> >> in other words, he hasn't, he won't, and he doesn't care... therefore,
> >> >> more
> >> >> of the same handwaving and meaningless bafflegab. he doesn't have the
> >> >> math
> >> >> background to present his theory in any kind of a coherent form, nor
> >> >> of
> >> >> course could he ever measure his neutrino/carbon vortex crud because
> >> >> it
> >> >> doesn't exist, so he keeps going back to the same old crap... its not
> >> >> even
> >> >> funny any more, just sad.
>
> >> > David,
> >> > at this stage in life it would very difficult for me to go thru the
> >> > math from the start
> >> > in the exercise of adding a a radiator and a time varying field to a
> >> > Gaussian field
> >> > to show it is the same asMaxwell equation, very few of us are. But
> >> > when you come across a theorem
> >> > that makes sense to you it is gravy added when a mathematician comes
> >> > along to supply the mathematics
> >> > which you can follow in part. Then when antenna computor programs
> >> > supply the ingredients of such an analysis
> >> > which proves the same you have to get excited. When you then apply
> >> > what is revealed in such a trail and succeed in making a smaller
> >> > antenna that anybody has made you stop questioning what you have
> >> > found. As an aside, where do you view the atributes of an antenna with
> >> > near constant SWR reponse would find most use. I know most will jump
> >> > to dummy load but this I ask in serious form.
>
> >> I already gave you the quote that shows that Gauss's Law is part of
> >> Maxwell's equations already, you need no math for that. and since all
> >> the
> >> antenna design programs are based on Maxwell's equations they of course
> >> comply with Gauss's law... nothing exciting there.
>
> >> the only use for a constant swr is to keep modern transceivers, that
> >> don't
> >> have a tuner, happy. swr has no correlation to performance of an antenna
> >> as
> >> far as gain or f/b or takeoff angle, things that are important to antenna
> >> design. i can take any antenna and give it a flat swr, there used to be
> >> a
> >> tuner on the market that did just that, until the league lab x-rayed it
> >> and

> >> found it was nothing but a dummy load potted in epoxy. the funny thing
> >> is,
> >> people liked it because it did exactly as it claimed, gave a perfect
> >> match
> >> across a wide frequency range... they didn't care that it turned a good
> >> percentage of their power into heat. so air cooled dummy loads as
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> >> can work, as long as you don't have anything better to compare it to...
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> > recognised.
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> > Maxwells laws.
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> > in radiation?
> > From my view point Gauss's contribution was supplied in other ways
> > that did not include the statics law but then I look forward to you
> > showing me where I am wrong
>
> well, your point of view is wrong.

O.K. you sound like you have the facts in front of you so I have no
alternative to do some research on the matter.
You could have saved me a lot of work if you pointed to a book or
something but I will dig anyway.
I will be gone for a while to see if I can find what you are looking
at. But then you have a reputation for lying
so you may have nothing but bluster!

160. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-05 22:49:27 UTC
From: Dave <noone@nowhere.com>
Message-ID: <XTSbk.323$9W.199@trndny04>
Source record: 24384

```
"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:ce912753-1d68-4fe4-bf6c-8a227df2e327@j22g2000hsf.googlegroups.com...
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>> >> >> >> >> >> "Art Unwin" wrote> On Jul 4, 5:29 pm, rick frazier wrote:
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> O.K. you sound like you have the facts in front of you so I have no
> alternative to do some research on the matter.
> You could have saved me a lot of work if you pointed to a book or
> something but I will dig anyway.
> I will be gone for a while to see if I can find what you are looking
> at. But then you have a reputation for lying
> so you may have nothing but bluster!

i quoted you chapter and verse, there's nothing else i can do.

161. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 00:34:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <26239146-3300-415e-bc20-6a0329323a62@d77g2000hsb.googlegroups.com>
Source record: 24385

On Jul 5, 5:49 pm, "Dave" <no...@nowhere.com> wrote:
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> >> >> >> > pursued
> >> >> >> > since radiation per unit length is solely a measure
> >> >> >> > that correlates with resistivity and it is that where my
> >> >> >> > conclusions
> >> >> >> > lie. Gain itself is a whole different matter
> >> >> >> > cannot show it's worth
> >
> >> >> >> in other words, he hasn't, he won't, and he doesn't care...
> >> >> >> therefore,
> >> >> >> more
> >> >> >> of the same handwaving and meaningless bafflegab. he doesn't have
> >> >> >> the
> >> >> >> math
> >> >> >> background to present his theory in any kind of a coherent form,
> >> >> >> nor
> >> >> >> of
> >> >> >> course could he ever measure his neutrino/carbon vortex crud
> >> >> >> because
> >> >> >> it
> >> >> >> doesn't exist, so he keeps going back to the same old crap... its
> >> >> >> not
> >> >> >> even
> >> >> >> funny any more, just sad.
> >
> >> >> > David,
> >> >> > at this stage in life it would very difficult for me to go thru the
> >> >> > math from the start
> >> >> > in the exercise of adding a a radiator and a time varying field to a
> >> >> > Gaussian field
> >> >> > to show it is the same asMaxwell equation, very few of us are. But
> >> >> > when you come across a theorem
> >> >> > that makes sense to you it is gravy added when a mathematician comes
> >> >> > along to supply the mathematics
> >> >> > which you can follow in part. Then when antenna computor programs
> >> >> > supply the ingredients of such an analysis

> >> >> > which proves the same you have to get excited. When you then apply
> >> >> > what is revealed in such a trail and succeed in making a smaller
> >> >> > antenna that anybody has made you stop questioning what you have
> >> >> > found. As an aside, where do you view the atributes of an antenna
> >> >> > with
> >> >> > near constant SWR reponse would find most use. I know most will jump
> >> >> > to dummy load but this I ask in serious form.
>
> >> >> I already gave you the quote that shows that Gauss's Law is part of
> >> >> Maxwell's equations already, you need no math for that. and since all
> >> >> the
> >> >> antenna design programs are based on Maxwell's equations they of
> >> >> course
> >> >> comply with Gauss's law... nothing exciting there.
>
> >> >> the only use for a constant swr is to keep modern transceivers, that
> >> >> don't
> >> >> have a tuner, happy. swr has no correlation to performance of an
> >> >> antenna
> >> >> as
> >> >> far as gain or f/b or takeoff angle, things that are important to
> >> >> antenna
> >> >> design. i can take any antenna and give it a flat swr, there used to
> >> >> be
> >> >> a
> >> >> tuner on the market that did just that, until the league lab x-rayed
> >> >> it
> >> >> and
> >> >> found it was nothing but a dummy load potted in epoxy. the funny
> >> >> thing
> >> >> is,
> >> >> people liked it because it did exactly as it claimed, gave a perfect
> >> >> match
> >> >> across a wide frequency range... they didn't care that it turned a
> >> >> good
> >> >> percentage of their power into heat. so air cooled dummy loads as
> >> >> antennas
> >> >> can work, as long as you don't have anything better to compare it
> >> >> to...
> >> >> but
> >> >> I do, so I don't want one.
>
> >> > David ,Gauss did a lot of work in his life time for which he is
> >> > recognised.
> >> > Are you saying that the "Gaussian law of static" was a prime mover of
> >> > Maxwells laws.
> >> > If this is so why does not Maxwells laws provide the role of particles
> >> > in radiation?
> >> > From my view point Gauss's contribution was supplied in other ways
> >> > that did not include the statics law but then I look forward to you

> >> > showing me where I am wrong
>
> >> well, your point of view is wrong.
>
> > O.K. you sound like you have the facts in front of you so I have no
> > alternative to do some research on the matter.
> > You could have saved me a lot of work if you pointed to a book or
> > something but I will dig anyway.
> > I will be gone for a while to see if I can find what you are looking
> > at. But then you have a reputation for lying
> > so you may have nothing but bluster!
>
> i quoted you chapter and verse, there's nothing else i can do.

The two laws of Gauss used in Maxwell are not laws with respect to particles.
I am now researching Heaviside to see if there is some derivitation there
But now I see you are playing games.It is just not true! I see that Feynman got the Nobel prize for describing the particals as Bosuns and "w:"which is a very long way from the gauusian trail of static particles!
So I will stop there as you are just playing games with the truth The bottom line is that the magnetic field created by Foucault current is the weak force in the Classic model and it was me that found it where Einstein and others failed. You just can't take that fact away from me. Really that is how it should have been with Maxwell and Heaviside and now me being born in the UK it is just a natural progression
Eat your heart out
Art Unwin KB9MZ
unwinantennas.com/

162. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 01:45:55 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <327f1bcf-0277-4fb9-92c6-abf803ac2c24@m73g2000hsh.googlegroups.com>
Source record: 24386

On Jul 5, 5:32 pm, Michael <spamt...@shadowstorm.com> wrote:
> On Jul 5, 3:55 pm, Wimpie <wimabc...@tetech.nl> wrote:
>
>
>
> > On 5 jul, 18:42, Michael <spamt...@shadowstorm.com> wrote:
>
> > > I've seen the Lazy H mentioned in many antenna books over the years,
> > > so I decided to try one on 10 meters. According to the ARRL handbook
> > > the Lazy H is two collinear elements stacked on above the other, Each
> > > collinear element is made up of two 1/2 wave elements. I chose to
> > > use 5/8 wave spacing between the top and bottom elements. I connected
> > > the top and bottom elements with 450 ohm 16 gauge stranded ladder line
> > > (window line). After building the antenna I verified connectivity
> > > between the top and bottom right elements and the top and bottom left
> > > elements. I color coded the end insulators on each side so I could
> > > easily see which top and bottom elements were connected to each other.
> > > The antenna book says to connect the 450 ohm ladder line from the
> > > antenna tuner to the middle of the 450 ladder line that connects top
> > > and bottom elements. Ok done. Now I put up the antenna and make sure
> > > the top and bottom elements are in phase. That is both left connected
> > > elements are on the left and both right connected element are on the
> > > right. I also make sure there is no twist in the ladder line
> > > connecting the top and bottom elements. I also checked the other
> > > ends of the 450 ohm ladder line feeding the antenna has connectivity
> > > at the antenna, and the left and right sides of the ladder line do not
> > > have connectivity. The 450 ohm ladder line feeding the antenna is
> > > about 200 feet long.
> > > Now I bring the 450 ohm feedline in to the house, hook it to my
> > > Dentron MT-2000 antenna tuner with the 4:1 balun inside, tune it up,
> > > and it sucks! Both my half wave horizontal dipole and my Solarcon
> > > Max-2000 blow it away on incoming skip even in the preferred direction
> > > of the lazy H. I rechecked my connections and the lengths of the
> > > elements and spacing and they are correct. I did take in to account
> > > the velocity factor of the 450 ladder line that connects the top
> > > elements to the bottom elements. The antenna book says the length of
> > > the 450 ladder lien between the antenna and the antenna tuner can e
> > > any lenght.
> > > The bottom element is at least 1/2 wave of the ground, and the top
> > > element is 5/8ths wave above that. What did I do wrong?
>
> > > Michael
>
> > Hi Michael,

>
> > Normally spoken the feedline between top to bottom elements is
> > 0.5lambda long, without twist, feeding in the middle. The path from
> > feedpoint to end of the radiation elements is 0.75 lambda, giving an
> > almost real low input impedance (on order of 30 Ohms, depending on
> > thickness of radiating elements). In fact you have two full wave
> > dipoles fed in phase that give most radiation (ground ignored)
> > perpendicular to the array (bidirectional). There is a vertical null
>
> > Why choosing 5/8 lambda vertical element spacing? You create a
> > vertical lobe and a null in the elevation radiation pattern under
> > about 53 degrees. You also get a strong reactive input impedance, but
> > this may not be a problem with the ladder line.
>
> > Did you do some indicative field strength measurements (diode
> > detector) to find out whether it (and the elements) do(es) radiate
> > (comparing to the other antennas)? It may also reveal some hidden
> > things.
>
> > Maybe somebody knows a loss figure for your ladder line (at 28 MHz) to
> > assess the losses in the line (200ft part) because of bad VSWR.
>
> > Best regards,
>
> > Wim
> > PA3DJSwww.tetech.nl
> > When you remove abc, the mail does work.
>
> Hi Wim,
> According to the ARRL handbook the highest gain is achieve with a
> 5/8ths wave spacing between the upper and lower elements. The
> handbook gives the following figures for estimated gain.
>
> 3/8 wave spacing = 4.4 dbd
> 1/2 wave spacing = 5.9 dbd
> 5/8 wave spacing = 6.7 dbd
> 3/4 wave spacing = 6.6 dbd
>
> EZNEC shows a similar gain peak with a 5/8th wave spacing between the
> top and bottom elements.
>
> It seems to works on 14 MHz (stacked dipoles at 14 MHz), but on 10
> meters the single 10 meter dipole blows it away.

Well I tried reducing the spacing between the top and bottom elements
to 1/2 wave spacing, but it still did not seem to make any
difference.

I've noticed in the past when working with ladder line that tuning an
antenna with an antenna tuner from about 14 MHz and down brings up the
receive verses by-passing the tuner completely, but that never seems

to happen once you reach 10 meters. I wonder if that has something to do with it.

163. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 02:44:32 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <njWbk.18080$NQ5.16300@bignews6.bellsouth.net>
Source record: 24387

I'm not sure, but if the Lazy H has Horizontal polarity and the folks you're trying to communicate with are using Verticals, there may be quite a bit of signal loss.
Since you mentioned it was for 11 meters, can we assume you're trying to communicate without using 'skip'?

164. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 03:01:45 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <1422489c-3728-480a-a19f-6f2b6ab82151@s50g2000hsb.googlegroups.com>
Source record: 24388

On Jul 5, 10:44 pm, "Hal Rosser" <hmros...@bellsouth.net> wrote:
> I'm not sure, but if the Lazy H has Horizontal polarity and the folks you're
> trying to communicate with are using Verticals, there may be quite a bit of
> signal loss.
> Since you mentioned it was for 11 meters, can we assume you're trying to
> communicate without using 'skip'?

It is meant for skip. I typed 10 meters at the start of the message,
but 11 meters in the Subject line. Old habits die hard as I started
on the CB band.

165. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 03:14:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4pdbtsjp1@news.albasani.net>
Source record: 24389

Michael wrote:
> On Jul 5, 10:44 pm, "Hal Rosser" <hmros...@bellsouth.net> wrote:
>> I'm not sure, but if the Lazy H has Horizontal polarity and the folks you're
>> trying to communicate with are using Verticals, there may be quite a bit of
>> signal loss.
>> Since you mentioned it was for 11 meters, can we assume you're trying to
>> communicate without using 'skip'?
>
> It meant for skip. I mean to type 10 meters. Old habits die hard as
> I started on the CB band.
>
> .

In my area, San Joaquin Valley, Ca--most 10m is on verticals ... while the guys running the "one size fits all" antennas--or, 80-10m (or, even 160-10m!) are mostly horiz--since a 10m is so easy, they slap up a 10m vertical also.

The "myth" that most noise is vertically polarized--well, I never subscribed to that (but, when I was a kid, I first believed it!) Most runs off above ground power-lines are even, somewhere, around a 45 degree angle (and, above ground power-lines are ALWAYS horiz polarized! Drive around and look, maybe they do it different in your area ... ???

And, now, most power-lines have went under-ground in my area ... vertical is fine with me and I don't send my signal skyward or into the ground, where it may reflect into the stratosphere anyway ...

Regards,
JS

166. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 04:04:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <BvXbk.13175$uE5.12324@flpi144.ffdc.sbc.com>
Source record: 24390

Michael wrote:
> According to the ARRL handbook the highest gain is achieve with a
> 5/8ths wave spacing between the upper and lower elements. The
> handbook gives the following figures for estimated gain.
>
> 3/8 wave spacing = 4.4 dbd
> 1/2 wave spacing = 5.9 dbd
> 5/8 wave spacing = 6.7 dbd
> 3/4 wave spacing = 6.6 dbd
>
> It seems to works on 14 MHz (stacked dipoles at 14 MHz), but on 10
> meters the single 10 meter dipole blows it away.

Quoting the ARRL Antenna Book: "It should be designed
for the higher of the two frequencies using 3/4 lamda
spacing between parallel elements. It will then operate
on the lower frequency ... with 3/8 lamda spacing.

If you have 5/8 lamda spacing on 20m, you will have
5/4 lamda spacing on 10m with poor performance.
--
73, Cecil http://www.w5dxp.com

167. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 05:09:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4pk29$ag4$1@news.albasani.net>
Source record: 24391

John Smith wrote:
> Michael wrote:
>> On Jul 5, 10:44 pm, "Hal Rosser" <hmros...@bellsouth.net> wrote:
>>> I'm not sure, but if the Lazy H has Horizontal polarity and the folks
>>> you're
>>> trying to communicate with are using Verticals, there may be quite a
>>> bit of
>>> signal loss.
>>> Since you mentioned it was for 11 meters, can we assume you're trying to
>>> communicate without using 'skip'?
>>
>> It meant for skip. I mean to type 10 meters. Old habits die hard as
>> I started on the CB band.
>>
>> .
>
> In my area, San Joaquin Valley, Ca--most 10m is on verticals ... while
> the guys running the "one size fits all" antennas--or, 80-10m (or, even
> 160-10m!) are mostly horiz--since a 10m is so easy, they slap up a 10m
> vertical also.
>
> The "myth" that most noise is vertically polarized--well, I never
> subscribed to that (but, when I was a kid, I first believed it!) Most
> runs off above ground power-lines are even, somewhere, around a 45
> degree angle (and, above ground power-lines are ALWAYS horiz polarized!
> Drive around and look, maybe they do it different in your area ... ???
>
> And, now, most power-lines have went under-ground in my area ...
> vertical is fine with me and I don't send my signal skyward or into the
> ground, where it may reflect into the stratosphere anyway ...
>
> Regards,
> JS

And, I almost forgot, ever attempt to get a horiz 20m+ ant on a mobile?
(I haven't!)

Regards,
JS

168. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 05:59:33 UTC
From: nm5k@wt.net
Message-ID: <3ab88147-e268-4c62-8c1d-646a74f5afaf@m3g2000hsc.googlegroups.com>
Source record: 24392

On Jul 5, 11:04 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Michael wrote:
> > According to the ARRL handbook the highest gain is achieve with a
> > 5/8ths wave spacing between the upper and lower elements. The
> > handbook gives the following figures for estimated gain.
>
> > 3/8 wave spacing = 4.4 dbd
> > 1/2 wave spacing = 5.9 dbd
> > 5/8 wave spacing = 6.7 dbd
> > 3/4 wave spacing = 6.6 dbd
>
> > It seems to works on 14 MHz (stacked dipoles at 14 MHz), but on 10
> > meters the single 10 meter dipole blows it away.
>
> Quoting the ARRL Antenna Book: "It should be designed
> for the higher of the two frequencies using 3/4 lamda
> spacing between parallel elements. It will then operate
> on the lower frequency ... with 3/8 lamda spacing.
>
> If you have 5/8 lamda spacing on 20m, you will have
> 5/4 lamda spacing on 10m with poor performance.
> --
> 73, Cecil http://www.w5dxp.com

Not only that, but will depend if feeding end fire, or broadside.
It's only as a broadside array that max gain is at 5/8 wl
spacing.
And he is feeding his as an end fire array. The elements would
need to be end to end IE: collinear, array to be fed as a broadside
array.
As an end fire, the spacing must be quite a bit closer. If I remember
right, max gain with an end fire array is appx 1/8 wl spacing.
But from my own experimenting around with them, it's not
ultra critical as far as getting them to work.
In my case, I was feeding each element with a separate
feed line, and changing lengths to steer the array.
It was quite crude, but worked pretty well.
In my case, I tried to compromise on the spacing so I
could feed it both end fire, and broadside. I think I used
about 1/4 wl.
I also used about the same scheme on 10m, using two
5/8 wl ground planes. I forgot the exact spacing I used.
It was more dictated by available mast/.vent pipe locations
more than trying to get an exact length.

But it was a compromise spacing, and I fed it both ways
depending on the pattern I wanted.

169. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 06:16:58 UTC
From: nm5k@wt.net
Message-ID: <4a83331e-02a7-4837-bac6-7f3d937e252f@x41g2000hsb.googlegroups.com>
Source record: 24393

On Jul 6, 12:59 am, n...@wt.net wrote:

> But it was a compromise spacing, and I fed it both ways
> depending on the pattern I wanted.

Just thinking about another thing.. I think feeding in phase
would give a bi directional pattern, but if he wanted an
omni directional pattern, I think he'd have to have the elements
90 degrees out of phase. But I fergot...
He could fire up eznec demo or whatever and he can
quickly get a pretty good idea what to expect in theory
with any particular spacing and phasing.
He could crudely steer the pattern if he used various
length feeders to each element.
Some also use the "L/C" phasing boxes to steer the
pattern. Again fairly crude compared to some methods,
but it will work. Just don't expect perfect textbook patterns.
You have to take what you get...
The ARRL antenna book has better methods if want
cleaner patterns.

170. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 06:33:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4pp0njhi1@news.albasani.net>
Source record: 24394

nm5k@wt.net wrote:
> On Jul 6, 12:59 am, n...@wt.net wrote:
>
>> But it was a compromise spacing, and I fed it both ways
>> depending on the pattern I wanted.
>
> Just thinking about another thing.. I think feeding in phase
> would give a bi directional pattern, but if he wanted an
> omni directional pattern, I think he'd have to have the elements
> 90 degrees out of phase. But I fergot...
> He could fire up eznec demo or whatever and he can
> quickly get a pretty good idea what to expect in theory
> with any particular spacing and phasing.
> He could crudely steer the pattern if he used various
> length feeders to each element.
> Some also use the "L/C" phasing boxes to steer the
> pattern. Again fairly crude compared to some methods,
> but it will work. Just don't expect perfect textbook patterns.
> You have to take what you get...
> The ARRL antenna book has better methods if want
> cleaner patterns.

Or, if you don't wish the built-in limitations of Eznec (the demo
version), try MMANA GAL. Will feed the same data to the nec engine(s.)

Regards,
JS

171. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 06:35:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4pp3tjhi2@news.albasani.net>
Source record: 24395

John Smith wrote:

> Or, if you don't wish the built-in limitations of Eznec (the demo
> version), try MMANA GAL. Will feed the same data to the nec engine(s.)
>
> Regards,
> JS
>

Forgot, should have given a URL to go with that:

http://mmhamsoft.amateur-radio.ca/mmana/index.htm

Regards,
JS

172. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 06:48:08 UTC
From: nm5k@wt.net
Message-ID: <9a270d80-3c28-48b4-a45b-c5e52a8ee7f9@a1g2000hsb.googlegroups.com>
Source record: 24396

On Jul 6, 1:16 am, n...@wt.net wrote:

Ya know what, I guess he is running as a broadside
array after all.. I was thinking he had the elements
horizontal, but after rereading the first post, he does
have them stacked.
And if they were in phase, that should be a broadside
array.
Sooo... I finally decided to check it in the program using
two 1/2 wave elements for 10m, with the lower element
at 1/2 wave up, "16 ft", and the upper one at appx 5/8 wave
higher. "37 ft"
Using the single lower element alone, I got 2.08 dbi.
Using both in phase, I got 6.8 dbi.. So, it should work
as planned.. Not sure what the problem would be though,
unless you have coupling problems with other metal in
the area, etc..

173. Re: Wrist Rocket Height

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 08:03:29 UTC
From: stuff@here.com
Message-ID: <stu074h32hqqdc7cap467ub4v00or2pig2@4ax.com>
Source record: 24397

On Fri, 06 Jun 2008 17:07:34 -0400, john Wiener <jawod@fuse.net>
wrote:

>Tim Shoppa wrote:
>> On May 15, 12:46 pm, "R.Scott" <w7...@yahoo.com> wrote:
>>> I'm trying to restring my Dipole up in a Pine (the tree has grown
>>> about 10 ft, and the rope needs replacing) so I got out my trusty
>>> Surgical tubing wrist rocket and a 1oz egg weight tied to my 15# test
>>> fishing rod/reel (only using the bottom eye).
>>>
>>> No matter how far I pulled back I got about 2/3s of the way up. Im
>>> estimating that is about the 35 ft level.
>>>
>>> Shouldn't a wrister go farther ???? need bigger weight ?
>>
>> How high are you trying to go? With everything in my favor (wind,
>> etc.) I could get over about a 50 foot branch with a wrist-slingshot
>> and a 1oz weight. And I think I was standing on a 12 foot ladder to do
>> it, and this was a "best ever" shot.
>>
>> Having the line catch on anything - grass, leaves, etc., is a major
>> downer. If there's no brush on the ground you might get a little more
>> height by spooling some line out in front of you.
>>
>> Others here regularly claim being able to get 100+ feet with a
>> slingshot. I never said out loud that they're exaggerating, but I know
>> I could just barely do half that. To get to 100feet I went straight to
>> a tennis ball cannon.

The guys at FD were putting the weight over the top of the athletic
field lights and those are about a 100. I can't but several of them
could. One it took about 5 tries. <:-))

Roger (K8RI) ARRL Life Member
N833R (World's oldest Debonair)
www.rogerhalstead.com

174. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 10:52:17 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <451699f7-eda3-44bf-bdf5-0aa4433ba507@26g2000hsk.googlegroups.com>
Source record: 24398

On 6 jul, 05:01, Michael <spamt...@shadowstorm.com> wrote:
> On Jul 5, 10:44 pm, "Hal Rosser" <hmros...@bellsouth.net> wrote:
>
> > I'm not sure, but if the Lazy H has Horizontal polarity and the folks you're
> > trying to communicate with are using Verticals, there may be quite a bit of
> > signal loss.
> > Since you mentioned it was for 11 meters, can we assume you're trying to
> > communicate without using 'skip'?
>
> It is meant for skip. I typed 10 meters at the start of the message,
> but 11 meters in the Subject line. Old habits die hard as I started
> on the CB band.

Hello Michael,

You mentioned that even your hor. dipole blows away the Lazy H (also for good orientation). This rules out every influence because of minimum elevation angle of main beam versus ground conductivity/ permittivity.

I assume that you are talking about several S-points. There must be something really wrong. The dipole close to ground will have some different impedance (then the upper). This will cause some phase error, but this should not lead to a drastic reduction of overall gain.

According to your postings, the construction is OK (no twist, feeding in the middle). I also assume that you have some spacing between the 5/8 lambda long vertical line and the actual feed line (of 200ft), to avoid coupling between the two.

It can be the line, or the tuner/balun. Line Losses increase and when your VSWR in the line is very high, this may increase the overall loss in your 450 Ohm feed line. If possible compare the field strength of your hor. dipole with field strength of the lazy H.

Other option is to find an unused frequency en put in lots of power and look for temperature increase.

Best regards,

Wim
PA3DJS
www.tetech.nl
The mail does function when you remove abc

175. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 11:14:38 UTC
From: ltdoc@yahoo.com
Message-ID: <fedac0d0-e8ba-46b2-8a25-861a13a9303a@t54g2000hsg.googlegroups.com>
Source record: 24399

" But now I see you are playing games.It is just not true! I see that Feynman got the Nobel prize for describing the particals as Bosuns and "w:"which is a very long way from the gauusian trail of static particles! So I will stop there as you are just playing games with the truth The bottom line is that the magnetic field created by Foucault current is the weak force in the Classic model and it was me that found it where Einstein and others failed. You just can't take that fact away from me. Really that is how it should have been with Maxwell and Heaviside and now me being born in the UK it is just a natural progression
Eat your heart out
Art Unwin KB9MZ
unwinantennas.com/"

Art,
You may be fond of the idea that you are being persecuted because of your being English, or from the UK, how ever you want to put it. If so, then I'm sorry to disappoint you, but your birth place has very little to do with how, I would suspect, most people think of you. (I'm also sure that part of the 'problem' has to do with translating between "King's/Queen's" English and what is spoken in the USA. Sorry 'bout that, but that's normal for any two languages. It works in the other direction too, so you are not alone.)
You are your own worst enemy as far as being taken seriously. You probably have no difficulty in 'following' your train of reasoning, but us 'lesser' people do have that problem. How about helping us with that problem? I have a suspicion that it will take a lot of time and work on your part (as in book sized volume?). But, unless you want it to take 'for ever' for you to be understood, it's going to take that effort. If we can't follow your train of logic, you're just not gonna sell many tickets to ride that train.
So, it's up to you.
- 'Doc

(I came to the realization that I wasn't ever going to be in the same 'class' as Einstein, Maxwell, and Heaviside a long time ago. And quite frankly, it doesn't bother me. Sort of like winning the lottery, first I have to buy a ticket, and I'm too cheap. What abilities I have just don't 'lean' in that direction.)

176. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 11:44:18 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <77aaa69e-4bb1-47cb-ba51-e7ae5bc6008e@l42g2000hsc.googlegroups.com>
Source record: 24400

On Jul 6, 12:04 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Michael wrote:
> > According to the ARRL handbook the highest gain is achieve with a
> > 5/8ths wave spacing between the upper and lower elements. The
> > handbook gives the following figures for estimated gain.
>
> > 3/8 wave spacing = 4.4 dbd
> > 1/2 wave spacing = 5.9 dbd
> > 5/8 wave spacing = 6.7 dbd
> > 3/4 wave spacing = 6.6 dbd
>
> > It seems to works on 14 MHz (stacked dipoles at 14 MHz), but on 10
> > meters the single 10 meter dipole blows it away.
>
> Quoting the ARRL Antenna Book: "It should be designed
> for the higher of the two frequencies using 3/4 lamda
> spacing between parallel elements. It will then operate
> on the lower frequency ... with 3/8 lamda spacing.
>
> If you have 5/8 lamda spacing on 20m, you will have
> 5/4 lamda spacing on 10m with poor performance.
> --
> 73, Cecil http://www.w5dxp.com

It is designed for the higher band.

177. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 13:08:36 UTC
From: derek <derekbluey@gmail.com>
Message-ID: <01bd1d3c-1f62-457a-89be-45f736e4c0e5@f36g2000hsa.googlegroups.com>
Source record: 24401

On Jul 6, 7:14 pm, lt...@yahoo.com wrote:

Doc
most posters who disagree with Art on this thread at least put
up an alternative to Art's claim's, you on the other hand have nothing
to offer as usual, so instead you attack the man as you did in times
past to no effect. The fellow tossers who used to follow are no longer
around, you are on your own!.
In my neck of the woods Doc's who are not on top of their subjects
are known as quack's, so I suggest before you post again you bone up
on the subject in question, or are you so far out of your depth that
you are only able to attack the man?.

178. Has anyone here actually built a Lazy H for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 13:34:01 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <36ea1601-2bef-41b5-8622-75a3e3f4abaa@d77g2000hsb.googlegroups.com>
Source record: 24402

Has anyone here actually built a Lazy H for 10 meters that worked?
In my previous post there was alot of references to published material on the Internet as well as alot of people using computer modeling software to check out the antenna. I've already done all that, but when I actually tried to build the antenna on 10 meters it did not work. It's performance was awful. When I try to tune it up on the antenna tuner (Dentron MT-3000a) the antenna adjustment on my tuner is almost all the way over to the right, and the transmitter adjustment was tweaked a little over to the right as well. I decided to try a different antenna tuner, so I hooked up my Drake MN-75 antenna tuner with the 4:1 balun installed and was once again I had to just about max out one of the variable capacitors to bring the SWR down. Once the SWR was down the receive was still way behind the Solarcon Max-2000 and the 10 meter horizontal dipole.
Has anyone actually built one of these and made it work well on 10 meters? If so how did you feed it/match it?

Michael

179. hot images

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 14:05:23 UTC
From: swetha <swethauda@gmail.com>
Message-ID: <26ff3661-77c9-4024-8bf6-b41d14b0e352@e39g2000hsf.googlegroups.com>
Source record: 24403

```
hot images
hot wallpapers
cool videos
**********************************
http://sathisr0.blogspot.com
**********************************
```

180. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 16:30:12 UTC
From: richardharrison@webtv.net
Message-ID: <20337-4870F314-1145@storefull-3252.bay.webtv.net>
Source record: 24404

Art wrote:
"If this is so, why do not Maxwell`s laws provide the role of particles in radiation?"

Maxwell`s equarions adequately describe electrical behavior without resort to particles.

Art should read "Radio-Electronic Transmission Fundamentals" by B. Whitfield Griffith, Jr. Its first chapter is: "A Brief History of Electrical Knowledge". Maxwell`s equations are covered in Chapter 38, "The Mechanism of Radiation".

On page 9, Griffirh wrote:
"Maxwell studied deeply the equations he had written and noted that they were similar in form to equations which were used to express the motion of waves in water. This made it clear to him that electromagnetic waves could exist, and he was able to calculate the speed at which they would travel.

Best regards, Richard Harrison, KB5WZI

181. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 17:06:34 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c6536763-5c25-4532-a39a-3856c464d037@c58g2000hsc.googlegroups.com>
Source record: 24405

On Jul 6, 11:30 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "If this is so, why do not Maxwell`s laws provide the role of particles
> in radiation?"
>
> Maxwell`s equarions adequately describe electrical behavior without
> resort to particles.
>
> Art should read "Radio-Electronic Transmission Fundamentals" by B.
> Whitfield Griffith, Jr. Its first chapter is: "A Brief History of
> Electrical Knowledge". Maxwell`s equations are covered in Chapter 38,
> "The Mechanism of Radiation".
>
> On page 9, Griffirh wrote:
> "Maxwell studied deeply the equations he had written and noted that they
> were similar in form to equations which were used to express the motion
> of waves in water. This made it clear to him that electromagnetic waves
> could exist, and he was able to calculate the speed at which they would
> travel.
>
> Best regards, Richard Harrison, KB5WZI

And did he mention the role of stati
cs or particles in radiation?
I keep on reading that radiation is not fully understood
in present day books!
Give me a book that does understand and provide
the role of particles and then make us all happy

182. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 17:49:05 UTC
From: richardharrison@webtv.net
Message-ID: <19484-48710591-1064@storefull-3251.bay.webtv.net>
Source record: 24406

Art wrote:
"I keep reading that radiatiation is not fully understood in present day books!"

Maybe so, but it is good enough for near perfect design of practical antennas.

Best regards, Richard Harrison, KB5WZI

183. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 17:55:48 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <3e6ab4bc-d9ff-4fa9-bd49-8c376a62c38b@t54g2000hsg.googlegroups.com>
Source record: 24407

On Jul 5, 12:42 pm, Michael <spamt...@shadowstorm.com> wrote:
> I've seen the Lazy H mentioned in many antenna books over the years,
> so I decided to try one on 10 meters. According to the ARRL handbook
> the Lazy H is two collinear elements stacked on above the other, Each
> collinear element is made up of two 1/2 wave elements. I chose to
> use 5/8 wave spacing between the top and bottom elements. I connected
> the top and bottom elements with 450 ohm 16 gauge stranded ladder line
> (window line). After building the antenna I verified connectivity
> between the top and bottom right elements and the top and bottom left
> elements. I color coded the end insulators on each side so I could
> easily see which top and bottom elements were connected to each other.
> The antenna book says to connect the 450 ohm ladder line from the
> antenna tuner to the middle of the 450 ladder line that connects top
> and bottom elements. Ok done. Now I put up the antenna and make sure
> the top and bottom elements are in phase. That is both left connected
> elements are on the left and both right connected element are on the
> right. I also make sure there is no twist in the ladder line
> connecting the top and bottom elements. I also checked the other
> ends of the 450 ohm ladder line feeding the antenna has connectivity
> at the antenna, and the left and right sides of the ladder line do not
> have connectivity. The 450 ohm ladder line feeding the antenna is
> about 200 feet long.
> Now I bring the 450 ohm feedline in to the house, hook it to my
> Dentron MT-2000 antenna tuner with the 4:1 balun inside, tune it up,
> and it sucks! Both my half wave horizontal dipole and my Solarcon
> Max-2000 blow it away on incoming skip even in the preferred direction
> of the lazy H. I rechecked my connections and the lengths of the
> elements and spacing and they are correct. I did take in to account
> the velocity factor of the 450 ladder line that connects the top
> elements to the bottom elements. The antenna book says the length of
> the 450 ladder lien between the antenna and the antenna tuner can e
> any lenght.
> The bottom element is at least 1/2 wave of the ground, and the top
> element is 5/8ths wave above that. What did I do wrong?
>
> Michael

I found an article that shows using a 1/4 wave matching stub at the
bottom of an end fire Lazy H with 1/2 wave spacing. Perhaps even
ladder line transmission line needs a matching stub.

http://www.ve7zsa.net/technical/advsgtxt/c15antenna_r00.htm

184. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 18:07:51 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <663ff2d0-a7d8-40fd-8b61-0d57582ab0c4@d45g2000hsc.googlegroups.com>
Source record: 24408

On Jul 6, 1:55 pm, Michael <spamt...@shadowstorm.com> wrote:
> On Jul 5, 12:42 pm, Michael <spamt...@shadowstorm.com> wrote:
>
>
>
> > I've seen the Lazy H mentioned in many antenna books over the years,
> > so I decided to try one on 10 meters. According to the ARRL handbook
> > the Lazy H is two collinear elements stacked on above the other, Each
> > collinear element is made up of two 1/2 wave elements. I chose to
> > use 5/8 wave spacing between the top and bottom elements. I connected
> > the top and bottom elements with 450 ohm 16 gauge stranded ladder line
> > (window line). After building the antenna I verified connectivity
> > between the top and bottom right elements and the top and bottom left
> > elements. I color coded the end insulators on each side so I could
> > easily see which top and bottom elements were connected to each other.
> > The antenna book says to connect the 450 ohm ladder line from the
> > antenna tuner to the middle of the 450 ladder line that connects top
> > and bottom elements. Ok done. Now I put up the antenna and make sure
> > the top and bottom elements are in phase. That is both left connected
> > elements are on the left and both right connected element are on the
> > right. I also make sure there is no twist in the ladder line
> > connecting the top and bottom elements. I also checked the other
> > ends of the 450 ohm ladder line feeding the antenna has connectivity
> > at the antenna, and the left and right sides of the ladder line do not
> > have connectivity. The 450 ohm ladder line feeding the antenna is
> > about 200 feet long.
> > Now I bring the 450 ohm feedline in to the house, hook it to my
> > Dentron MT-2000 antenna tuner with the 4:1 balun inside, tune it up,
> > and it sucks! Both my half wave horizontal dipole and my Solarcon
> > Max-2000 blow it away on incoming skip even in the preferred direction
> > of the lazy H. I rechecked my connections and the lengths of the
> > elements and spacing and they are correct. I did take in to account
> > the velocity factor of the 450 ladder line that connects the top
> > elements to the bottom elements. The antenna book says the length of
> > the 450 ladder lien between the antenna and the antenna tuner can e
> > any lenght.
> > The bottom element is at least 1/2 wave of the ground, and the top
> > element is 5/8ths wave above that. What did I do wrong?
>
> > Michael
>
> I found an article that shows using a 1/4 wave matching stub at the
> bottom of an end fire Lazy H with 1/2 wave spacing. Perhaps even
> ladder line transmission line needs a matching stub.

>
> http://www.ve7zsa.net/technical/advsgtxt/c15antenna_r00.htm

Looks like another user had similar problems with a Lazy H using 450
ladder line all the way to the tuner. Like me his will tune on 14 MHz
where it is basically stacked dipoles, but once you get to 10 meters
it is a no go. He tried 450 ohm ladder line to a balun as well.

http://forums.qrz.com/archive/index.php/t-135914.html

185. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 18:13:01 UTC
From: Dean Craft <harolddcraft@bellsouth.net>
Message-ID: <wT7ck.15520$CC.8328@bignews9.bellsouth.net>
Source record: 24409

Richard Harrison wrote:
> Art wrote:
> "I keep reading that radiatiation is not fully understood in present day
> books!"
>
> Maybe so, but it is good enough for near perfect design of practical
> antennas.
>
> Best regards, Richard Harrison, KB5WZI
>

It could be said also that it is good enough for practical design of
near perfect antennas. All of Art's voo-doo theory cannot hold even a
candle to either concept!

Dean -- W4IHK

186. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 18:25:25 UTC
From: Dave <noone@nowhere.com>
Message-ID: <p68ck.154$0V1.9@trndny01>
Source record: 24410

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c6536763-5c25-4532-a39a-3856c464d037@c58g2000hsc.googlegroups.com...
> On Jul 6, 11:30 am, richardharri...@webtv.net (Richard Harrison)
> wrote:
>> Art wrote:
>>
>> "If this is so, why do not Maxwell`s laws provide the role of particles
>> in radiation?"
>>
>> Maxwell`s equarions adequately describe electrical behavior without
>> resort to particles.
>>
>> Art should read "Radio-Electronic Transmission Fundamentals" by B.
>> Whitfield Griffith, Jr. Its first chapter is: "A Brief History of
>> Electrical Knowledge". Maxwell`s equations are covered in Chapter 38,
>> "The Mechanism of Radiation".
>>
>> On page 9, Griffirh wrote:
>> "Maxwell studied deeply the equations he had written and noted that they
>> were similar in form to equations which were used to express the motion
>> of waves in water. This made it clear to him that electromagnetic waves
>> could exist, and he was able to calculate the speed at which they would
>> travel.
>>
>> Best regards, Richard Harrison, KB5WZI
>
> And did he mention the role of stati
> cs or particles in radiation?

particles are not necessary, so of course not.

> I keep on reading that radiation is not fully understood
> in present day books!

which books? quotes please, not hand waving. i have given you quotes, now
you provide the ones that your theory is based on.

> Give me a book that does understand and provide
> the role of particles and then make us all happy

go back to one of the aetherist's and you can have all the particles
propagating waves that you want... but they still won't work like your
neutrino/carbon things hopping off diamagnetic materials.

187. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 18:52:02 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <mv8ck.66103$8k7.64201@fe111.usenetserver.com>
Source record: 24411

Art Unwin wrote:
> On Jul 5, 11:47 am, "Dave" <no...@nowhere.com> wrote:

> David,
> at this stage in life it would very difficult for me to go thru the
> math from the start
> in the exercise of adding a a radiator and a time varying field to a
> Gaussian field
> to show it is the same asMaxwell equation, very few of us are.

At this stage of my life, Arthur, it has become very difficult for me to take you seriously.

Dave K8MN

188. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 18:57:35 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <BA8ck.76936$xP2.19245@fe099.usenetserver.com>
Source record: 24412

derek wrote:
> On Jul 6, 7:14 pm, lt...@yahoo.com wrote:
>
>
> Doc
> most posters who disagree with Art on this thread at least put
> up an alternative to Art's claim's, you on the other hand have nothing
> to offer as usual, so instead you attack the man as you did in times
> past to no effect. The fellow tossers who used to follow are no longer
> around, you are on your own!.
> In my neck of the woods Doc's who are not on top of their subjects
> are known as quack's, so I suggest before you post again you bone up
> on the subject in question, or are you so far out of your depth that
> you are only able to attack the man?.

Arthur doesn't provide specifics. He doesn't provide the math. He is short on fact and long on misspelled pontification. Excuse me if I don't accept his wild claims at face value. If he can't explain them (and the burden of proof is on him), why should any of us be bothered?

Dave K8MN

189. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 19:14:35 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0ace8e71-243d-4153-8884-19e7bcaeaf5e@27g2000hsf.googlegroups.com>
Source record: 24413

On Jul 6, 12:49 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "I keep reading that radiatiation is not fully understood in present day
> books!"
>
> Maybe so, but it is good enough for near perfect design of practical
> antennas.
>
> Best regards, Richard Harrison, KB5WZI

But it does not lead to a path of small antennas!
I think it is really odd that hams defy or disbelieve what a antenna
optimizer supplies
Why are they not attacking computor programs? Or describe where they
are wrong
Yup, they believe sll is known and THEY are the masters

190. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 19:24:13 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6ca46693-4b92-4b10-a757-1c28788b3539@l42g2000hsc.googlegroups.com>
Source record: 24414

On Jul 6, 1:57 pm, Dave Heil <k...@frontiernet.net> wrote:
> derek wrote:
> > On Jul 6, 7:14 pm, lt...@yahoo.com wrote:
>
> > Doc
> > most posters who disagree with Art on this thread at least put
> > up an alternative to Art's claim's, you on the other hand have nothing
> > to offer as usual, so instead you attack the man as you did in times
> > past to no effect. The fellow tossers who used to follow are no longer
> > around, you are on your own!.
> > In my neck of the woods Doc's who are not on top of their subjects
> > are known as quack's, so I suggest before you post again you bone up
> > on the subject in question, or are you so far out of your depth that
> > you are only able to attack the man?.
>
> Arthur doesn't provide specifics. He doesn't provide the math. He is
> short on fact and long on misspelled pontification. Excuse me if I
> don't accept his wild claims at face value. If he can't explain them
> (and the burden of proof is on him), why should any of us be bothered?
>
> Dave K8MN

Everything that I have done has been shared on this newsgroup.
The mathematics have been shown. A array in equilibrium has been shown
and over
checked independently on this newsgroup An antenna was sent
to a member of this newsgroup for verification A page has been
supplied with how to make it.
David ,you are just another lemming that has arrived apon the scene

191. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 19:30:13 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <8497be1a-047f-46cb-bfaa-7d6c72fb79e2@34g2000hsf.googlegroups.com>
Source record: 24415

On Jul 6, 1:55 pm, Michael <spamt...@shadowstorm.com> wrote:
> On Jul 5, 12:42 pm, Michael <spamt...@shadowstorm.com> wrote:
>
>
>
> > I've seen the Lazy H mentioned in many antenna books over the years,
> > so I decided to try one on 10 meters. According to the ARRL handbook
> > the Lazy H is two collinear elements stacked on above the other, Each
> > collinear element is made up of two 1/2 wave elements. I chose to
> > use 5/8 wave spacing between the top and bottom elements. I connected
> > the top and bottom elements with 450 ohm 16 gauge stranded ladder line
> > (window line). After building the antenna I verified connectivity
> > between the top and bottom right elements and the top and bottom left
> > elements. I color coded the end insulators on each side so I could
> > easily see which top and bottom elements were connected to each other.
> > The antenna book says to connect the 450 ohm ladder line from the
> > antenna tuner to the middle of the 450 ladder line that connects top
> > and bottom elements. Ok done. Now I put up the antenna and make sure
> > the top and bottom elements are in phase. That is both left connected
> > elements are on the left and both right connected element are on the
> > right. I also make sure there is no twist in the ladder line
> > connecting the top and bottom elements. I also checked the other
> > ends of the 450 ohm ladder line feeding the antenna has connectivity
> > at the antenna, and the left and right sides of the ladder line do not
> > have connectivity. The 450 ohm ladder line feeding the antenna is
> > about 200 feet long.
> > Now I bring the 450 ohm feedline in to the house, hook it to my
> > Dentron MT-2000 antenna tuner with the 4:1 balun inside, tune it up,
> > and it sucks! Both my half wave horizontal dipole and my Solarcon
> > Max-2000 blow it away on incoming skip even in the preferred direction
> > of the lazy H. I rechecked my connections and the lengths of the
> > elements and spacing and they are correct. I did take in to account
> > the velocity factor of the 450 ladder line that connects the top
> > elements to the bottom elements. The antenna book says the length of
> > the 450 ladder lien between the antenna and the antenna tuner can e
> > any lenght.
> > The bottom element is at least 1/2 wave of the ground, and the top
> > element is 5/8ths wave above that. What did I do wrong?
>
> > Michael
>
> I found an article that shows using a 1/4 wave matching stub at the
> bottom of an end fire Lazy H with 1/2 wave spacing. Perhaps even
> ladder line transmission line needs a matching stub.

>
> http://www.ve7zsa.net/technical/advsgtxt/c15antenna_r00.htm

Yep. Looks like that is it. Unfortunately I am out of time for this weekend, so I'll have to try it out next weekend. According to an article I found I need a closed end 1/4 matching stub. I'll update here after I try it out next weekend.

-Michael

192. Re: Has anyone here actually built a Lazy H for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-06 20:01:33 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <f8547ff4-9af5-468a-8459-5582568a40c1@56g2000hsm.googlegroups.com>
Source record: 24416

On 6 jul, 15:34, Michael <spamt...@shadowstorm.com> wrote:
> Has anyone here actually built a Lazy H for 10 meters that worked?
> In my previous post there was alot of references to published material
> on the Internet as well as alot of people using computer modeling
> software to check out the antenna. I've already done all that, but
> when I actually tried to build the antenna on 10 meters it did not
> work. It's performance was awful. When I try to tune it up on the
> antenna tuner (Dentron MT-3000a) the antenna adjustment on my tuner is
> almost all the way over to the right, and the transmitter adjustment
> was tweaked a little over to the right as well. I decided to try a
> different antenna tuner, so I hooked up my Drake MN-75 antenna tuner
> with the 4:1 balun installed and was once again I had to just about
> max out one of the variable capacitors to bring the SWR down. Once
> the SWR was down the receive was still way behind the Solarcon
> Max-2000 and the 10 meter horizontal dipole.
> Has anyone actually built one of these and made it work well on 10
> meters? If so how did you feed it/match it?
>
> Michael

Hello Michael,

The concept can work at any radio frequency. I didn't build them on 10m, but I did on 433 MHz, 868MHz and 2450 MHz (over a reflecting plane to get unidirectional pattern), both with 0.5lambda spacing and more (to get more gain, and some side lobes).

There is one difference with respect to your setup. I designed for 50 Ohm input impedance in the middle so that I have no high VSWR on the feed cable. Depending on the thickness of the radiating elements you may have a VSWR of about 15 on your 450 Ohms feed line.

When the distance from end of radiator to feedpoint is about 0.5lambda, the impedance is real and low (about 30 Ohms, depending in thickness of radiators). This interfaces good with a 50 Ohm coax. 2 years ago a planned to build one for NVIS operation at 80m (pastoral wet soil as reflector). I didn't build it as the HW dipole with 3 reflecting wires did perform more then well.

I concluded from your posting that you simulate also. I think your problem is in the matching and tuning. So try to lower the VSWR in the feed line and or examine your tuner.

Best regards,

Wim
PA3DJS
www.tetech.nl
When your remove abc, the address is valid.

193. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 00:19:56 UTC
From: ltdoc@yahoo.com
Message-ID: <2538084a-400a-4eab-a934-1edc905cdb4c@c58g2000hsc.googlegroups.com>
Source record: 24417

derek,
I would suggest that my post was not a personal attack (unlike yours),
instead, it was an attempt to try to show Art an aspect of his
behavior that he probably doesn't realize is showing up. And as has
already been pointed out, how can anyone prove or disprove 'proof'
that has not been presented? To this point, all I have seen is
opinions, and in some cases, some fairly imaginative opinions.
About the "Doc", it's a user name, and nickname. Doesn't mean that
I'm a doctor of anything. And I have never claimed to be. I didn't
pick it, it was given to me. If I can learn to 'live' with it, you
can too. And if you can't, then that's too bad.
'Nuff of that.
- 'Doc

194. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 00:38:52 UTC
From: nm5k@wt.net
Message-ID: <07c0db7c-2a4a-49ce-b731-c4bb38ed6860@34g2000hsf.googlegroups.com>
Source record: 24418

On Jul 6, 2:24 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> Everything that I have done has been shared on this newsgroup.
=0.0543
Not enough content to be usable.

> The mathematics have been shown.
=0

>A array in equilibrium has been shown
> and over

You won't even define how you apply the term equilibrium, much
less show an example of it.

> checked independently on this newsgroup

I assume you refer to the skewed element antenna.
IE: the one I called the cluster@#$%... :(
You know, the one with six skewed elements that
gave less gain than a well tuned 3 el yagi?

>An antenna was sent
> to a member of this newsgroup for verification

And the report on it's performance has not been received.
Where's the beef?
You are not even supplying a textured vegetable patty
as a substitute.. :/

>A page has been
> supplied with how to make it.

I sure don't see one shown at:
http://unwinantennas.com/

> David ,you are just another lemming that has arrived apon the scene

Kinda like Doktor MIT? I guess he drowned in the last migration..
He seems to have disappeared from the scene.
Chortle... :/ But can't say I blame him really.

195. my yiga 2.ghz antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 01:41:10 UTC
From: nobody <nobody@nobody.com>
Message-ID: <48717430$1@127.0.0.1>
Source record: 24419

http://www.youtube.com/watch?v=9nLE_Tc-mEs

my yiga 2.ghz antenna

web7days

196. Part one of many parts...again, unless I get rude comments which show lack of interest!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 02:43:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3f9291c3-36de-41e6-9b4d-9e0b2ccbadf5@e53g2000hsa.googlegroups.com>
Source record: 24420

There are lots of particles called Neutrinos that wander from the sun
to earth and else where in the Universe.
Scientists say there are billions of them per square metre on earth.
So what are these neutrinos?
They come from the Sun as partialy decayed nuclear particles like
that comes from a fire
only the fire in the Sun is a nuclear reaction and tho there is heat
generated the particles driven off
still have a half life or so of nuclear constituents so they haven't
fully decayed and have miniscule energy.
The Sun is in its own arbitary boundary or gravity field,where all
forces on the outside of the boundary equals the forces inside the
boundary such that the boundary contents are in equilibrium or
balanced.
The Sun has a :"pole" just like earth does but the pole revolves more
than the one on earth, 22 years for a full turn where the earth's pole
turns in terms of once in thousand of years. When the pole turns
within the Sun it puts a strain on its encircling arbitary border such
that the Neutrinos escape in volume until the forces rearrange in
equilibrium, or at least tries to. But the release of particles pretty
much escape all the time untill it reaches a maximum where the pole
has aligned to 180 degrees from where it started. Escaping particles
start then to taper off until the poile gets back to its starting
point 22 years later when it starts its rotation again
Now neutrinos are extremely small and when the escape they lack
direction because the particles have very little spin to them so they
drift in all directions. Now these particles are electrons of little
energy and thus they have to be carefull where they settle otherwise
they will be absorbed by the matter and take up a contained spin
within the particular mass. Fortunately the majority of elements on
earth will allow these particles to rest upon them without
interference but first the neutrons have to enter the earths
atmosphere and tho they have little energy they do become magnetized
by earths polar system before they get to a resting point which is
often a antenna element made of a diamagnetic material such as copper,
gold aluminum etc. Diamagnetic materials are those that have excellent
conductivity without hystereses being formed where energy is being
wasted ., In fact the conductivity is so good that the magnetic field
formed
produces another magnetic field in opposition to the primary field and
this counter magnetic field becomes very apparent when the electrical
and magnetic field exchanges are very fast from a circuit in "tank"
form which is the equivalent electrical circuit of a full wave length

antenna.
So to sum up,
We have a diamagnetic antenna wavelength where the material is of aluminium and where its surface is fully covered with decaying nuclear particles that came from the Sun with very little energy, extremely small and enclosed in a permanent magnetic field that it gained while entering the Earth's system While all around the radiator in the atmosphere there are billions of particles looking for a resting place and the competition is fierce

The next posting will explain the magnetic fields that are formed when a time varing current is applied to the radiator which is in the form of a "tank"circuit which is the electrical equivalent. I will answer questions related to the above as long as they are sensible and obviously in search of clarity

197. Re: Part one of many parts...again, unless I get rude comments which show lack of interest!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 03:23:12 UTC
From: nm5k@wt.net
Message-ID: <0a5c4788-a768-4ae7-a8fb-45f689b01f2c@y38g2000hsy.googlegroups.com>
Source record: 24421

On Jul 6, 9:43 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
much jibber jabber clipped..
>
> The next posting will explain the magnetic fields that are formed when
> a time varing current is applied to the radiator which is in the form
> of a "tank"circuit which is the electrical equivalent. I will answer
> questions related to the above as long as they are sensible and
> obviously in search of clarity

I'm starting to think Art has been fooling us all along.
This surely must be an effort at usenet deep sea fishing.
I think he's fixing to reel us in with these tales of happy neutrinos.
I guess about the only coherent question I could pose to such
an "Article", would be to ask what in the heck do neutrinos, fig or
otherwise, have to do with the radiation characteristics of an
antenna?
Besides, the sun is not supplying the RF to be radiated. We are.
My cat needs new mittens. It seems to old ones were consumed
by a bombardment of neutrinos looking for a resting place, and
the motel was full up for the night.
They went postal, and a rubber room is in their future now.

198. Re: Part one of many parts...again, unless I get rude comments which show lack of interest!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 04:10:30 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <54de38e5-1916-4acb-9d36-af5ac13b3880@b1g2000hsg.googlegroups.com>
Source record: 24422

```
On Jul 6, 10:23 pm, n...@wt.net wrote:
> On Jul 6, 9:43 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> much jibber jabber clipped..
>
>
>
> > The next posting will explain the magnetic fields that are formed when
> > a time varing current is applied to the radiator which is in the form
> > of a "tank"circuit which is the electrical equivalent. I will answer
> > questions related to the above as long as they are sensible and
> > obviously in search of clarity
>
> I'm starting to think Art has been fooling us all along.
> This surely must be an effort at usenet deep sea fishing.
> I think he's fixing to reel us in with these tales of happy neutrinos.
> I guess about the only coherent question I could pose to such
> an "Article", would be to ask what in the heck do neutrinos, fig or
> otherwise, have to do with the radiation characteristics of an
> antenna?
> Besides, the sun is not supplying the RF to be radiated. We are.
> My cat needs new mittens. It seems to old ones were consumed
> by a bombardment of neutrinos looking for a resting place, and
> the motel was full up for the night.
> They went postal, and a rubber room is in their future now.

I understand that your education is limited but in your short time at
high school
before you were expelled as you say that most students paid attention
to the lesson at hand
and took notes because another day education will continue and where
you cannot possibly get every thing done in one day.
If there was any part the student did not understand then it is up to
him to do a little bit of research that will broarden the scope of
notes taken. If a student does not do this then he will rapidly fall
behind as the blanks pile up on their education Now you are at a point
where you realize you already have a lot of blanks so you want to stop
the teacher doing his job by teaching the class as a whole by
demanding personal attention because you were not playing attention or
taking notes which in effect is robbing the other students time and
education. Thus when exams come along you fail and are asked to leave
for the benefit of the remaining students. Ofcourse you can vent off
your feelings to the teacher but the fact is you cannot go back in
time without loss.
```

So ! Before you read the following posts regardless whether you dislike the format you have an opportunity to bone up on what I have written and fill in the blanks left of your notes. When the next writing comes along you will be comfortable knowing that you are prepared to continue with the other students from where you all left off as an equal !. Sounding off does nothing for you, Go to the library and do some research so you can catch up or stay with the other students without any blanks in your notes otherwise you are on a one way street towards the exit with opportunities lost. Do you really want to go back to your high school days and be asked to leave again? Being a comedian will not help you in the final analysis as others will view you with sadness. So pull yourself together and get to work so you will be equal to others when the next challenge comes along.
Art
unwinantennas.com/

199. Re: Part one of many parts...again, unless I get rude comments which show lack of interest!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 04:52:08 UTC
From: nm5k@wt.net
Message-ID: <42c14756-6f3a-4dcb-b61d-ce7ad01b399e@z72g2000hsb.googlegroups.com>
Source record: 24423

On Jul 6, 11:10 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

Whiny horsecrap snipped.
> Art
> unwinantennas.com/

You can't answer a single question posed to you.
All you offer is whiny excuses.
Your constant whining about my education strikes
me as hilarious being as your mechanical engineering field
had little to do with antennas. You don't seem to have any
special mathematics skills that I can notice.
As far as I can tell, you have no real academic advantage
over me whatsoever when pertaining to RF or antenna
systems.
Or if you do, you have obviously forgot it all.
But proceed o' masterful one of the land of air cooled
resistive loads. Enlighten us mere peons of the antenna world
more of the gospel according to Art.
It's not every day we get to ponder the universe with someone
who thinks they are a "master".
You are better than the sci-fi and comedy channel put together.
Proceed o' illustrious one!
With acid reflux breath I await.

200. Ham radio AO-51 satellite antenna by web7days

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 04:54:00 UTC
From: nobody <nobody@nobody.com>
Message-ID: <4871a168$1@127.0.0.1>
Source record: 24424

splite boom , splite element

http://www.youtube.com/watch?v=ysSwt09cau8

Ham radio AO-51 satellite antenna

web7days.com

201. Re: Need help with first HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 05:09:17 UTC
From: S Barreres <steve.meryle@verizon.net>
Message-ID: <1yhck.355$9W.100@trndny04>
Source record: 24425

Keith, congrats on your upgrade!!

The old saying is, any antenna is better that no antenna, so to get going why not build a quick starter-upper that will work on most all the bands. While many might call the "G5RV Dipole" as a poor antenna, it actually works quite well and is easy to make. There are a number of sites on the Internet to guide you, but all that is necessary is 102' end to end dipole fed with 31 feet of balanced line in the center. If you can tune it at that point great, but you can also add 50 coax at the end of the 31 feet into the shack. Make sure you get it up in the air as high as you can and keep it a flat top installation if at all possible. It will also work with drooping ends too, but keep the end high.

On 20 Meters the antenna is a 3/2 wave dipole, and it has gain of 3db and radiates off the end of the wires. Due to the present conditions of the solar cycle, try to install it in a direction that would work well 20 as it will be your first band to work "long haul" contacts. You will find 40 and 80 to work too.

BEST REGARDS,
Steve K2CX

202. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 06:05:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1215410701@panix.com>
Source record: 24426
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

203. Re: my yiga 2.ghz antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 06:09:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4sbus$t2b$1@news.albasani.net>
Source record: 24427

nobody wrote:
> http://www.youtube.com/watch?v=9nLE_Tc-mEs
>
> my yiga 2.ghz antenna
>
> web7days
>
>

Gee, great ...

Some specs/dimensions/lengths/etc. would make it worth our time. But,
the video does demonstrate someone knows how to use a video cam and
create an account on youtube and upload files to it ...

Regards,
JS

204. Re: Loop antenna success story

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 09:16:45 UTC
From: John <jdale@aol.com>
Message-ID: <48726cda$0$5509$6d4158fb@reader.xsnews.nl>
Source record: 24430

"Michael" wrote
> My loop is tied to three trees and an aluminum mast at 35 feet. My noise level on 75 meters went from S8 to
> S0.
>

Could you give the dimensions of the loop, please ? And the size of the materials ?
And maybe a link to a picture ?

205. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 14:10:50 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <86hcb1okd1.fsf@qmc.ph.msstate.edu>
Source record: 24428

> > The bottom element is at least 1/2 wave of the ground, and the top
> > element is 5/8ths wave above that. What did I do wrong?

I suspect with your long feedline length (200 ft you said?), and the
probably very high SWR on the feedline, you have significant feedline loss.

Also, are the elements really horizontal? Or are they closer to inverted V's?

Tor
N4OGW

206. Part two of many posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 16:50:59 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b6b3bc99-641c-4aa1-8e3e-d20473ada8ea@f36g2000hsa.googlegroups.com>
Source record: 24429

On posting part one I finished up with a reference to a full
wavelength antenna and we need to talk about this choice of a
wavelengrh. Equilibrium comes from Newtons laws where force equals
reaction force or upthrust equals down thrust where all forces around
a point equals zero. All the masters such as Faraday,Gauss and others
based all their discoveries around this notion.. In the last century a
frenchman saw this as a period in a occillation of a repetitive nature
as being the point where a cycle of events begin again. In other words
a full cycle was completed and another cycle started. This Frenchman
by the name of Foucault built a large, long pendulum in terms of a
hundred feet to deetermine the time of one sequence of events that
signifies equilibrium.
To his surprise the pendulum not only swung left to right and back it
also moved rotaed about the center a slight degree. This meant that
there was another force, a rotational force must be at work over and
above the two dimensional swing and thus for true equilibrium a period
is many times a single to and fro movement.
Thisw is analagous to our year system of time where every four years
we add a correction to the period of time
by summing all these slight incorrection of time as a full day in what
we term as a leap year.
This is the reason for the choice of a full wavelength radiatorl since
it represents a single oscillation of its harmonics PLUS this small
extra force required to meet equilibrium. Stated another way, this is
the force that is missing when the amplitude of a oscillation does not
quite reach the amplitude of the previous oscillation.
Foucault also went on and discovered "eddy current" which is a
reactionary current to any initial current as
predicted by Newton This is a very important factor in the design of
transformers i.e. laminar flow. What Foucault found that the initial
time varying current in a conducting member produces a magnetic field
and then produced a counter current that produced another magnetic
field in opposition to the intiating field!
This opposing field was very smal in energy content and normally is of
no consequence in our dealing with electro magnetics since it is
easily swamped by the initial magnetic field. But Foucault found that
if the conductor was a diamagnetic material with high conductivity its
effect became more visiable when the current was alternating at a high
frequency and it came to be that this counter field represented the
same energy that was lost from one occilation to another of a
radiator .This force some times called the WEAK force must be added or
included in any oscillation such that equilibrium is achieved. Thus
equilibrium is an important factor in our universe and like leap year
we have to add this force whether it is frictional or otherwise to

acceed to Newtons law. and since a wavelength equals on period or oscillation I also must retain this force for balance or equilibrium reasons
I will stop at this point so one can really get to grips on the term equilibrium or balance which if not present
would hurl our Universe to places unknown because of its loss of stablisation The above is extremely important with respect to radiation because this same secondary current that supplies a secondary field is in direct opposition to the Neutrinos field sitting on the same conductor with a very small magnetic field of an opposite nature and where the battle begins with respect to radiation.
Please. please get a full understanding of the meaning of equilibrium before we get to the next part
Note Most books on this subject ignore this very tiny force as immaterial with respect to the scale of other forces involved
This allows them to basically deduce that an effecient radiator must be at right angles to the earths surface IF and only IF this small force known as the weak force is ommitted from their calculations.
If it is included to meet the laws of Newton and to be in equilibrium the weak force shows its presence by tilting the radiator relative to Earth.(More on this later)
Art Unwin
Unwinantennas.com/ .

207. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 20:22:05 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g4ttvdacv1@news.service.uci.edu>
Source record: 24431

Art Unwin wrote:
> On Jul 3, 5:16 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

> You know John, since America gives the 'right to bear arms' you would
> think that the population would understand
> that a projectile must have rotation to follow a straight line
> trajectory.

Hi Art,

The American Constitution does not "give" rights. It simply attempts
to prevent government from eliminating them.

Under the influence of gravity, sub-orbital ballistic projectiles
generally follow a parabolic trajectory. Isssac Newton's laws of
motion apply without caveat.

ac6xg

208. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 20:41:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g4tv14bnq1@news.albasani.net>
Source record: 24432

Jim Kelley wrote:

>> ...
> Hi Art,
>
> The American Constitution does not "give" rights. It simply attempts to
> prevent government from eliminating them.
>
> Under the influence of gravity, sub-orbital ballistic projectiles
> generally follow a parabolic trajectory. Isssac Newton's laws of motion
> apply without caveat.
>
> ac6xg
>

No constitution or law can EVER give rights ...

You are born with all the rights possible. Unless you are under a constitution or law(s) which remove some (or all) of your rights--you have every damn one of them! And unless there is a clear majority of a govt's citizens which support that constitution/laws, you are witness to an unjust constitution/law(s) ...

As our constitution notes, these are God given rights--no man may ever take them away--you CAN agree to a contract NOT to exercise some of your rights to the betterment of all.

Men get together and form govt's and agree to create laws which limit their rights--FOR THE GOOD OF ALL. When that no longer is happening, it is time to reform, re-elect or even go as far as a revolution to restore just rights ... our constitution makes that a duty for Americans, and requires us to remain ever vigilant in the protection of our rights.

If you believe laws give or protect your rights--you already have lost them to a guy on the street playing craps ...

Regards,
JS

209. HF Tuners on back of 4x4s

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 22:09:12 UTC
From: Lushy <david.lush@bigpond.com>
Message-ID: <cuwck.17949$IK1.7686@news-server.bigpond.net.au>
Source record: 24433

Does any one know what is inside these tuners as I would like to build one for my Jeep here in Australia
Lushy
VK3HDL

210. Re: HF Tuners on back of 4x4s

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 22:50:49 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g4u6k9$b25$1@news.jpl.nasa.gov>
Source record: 24434

Lushy wrote:
> Does any one know what is inside these tuners as I would like to build
> one for my Jeep here in Australia
> Lushy
> VK3HDL

Are they autotuners?
Or are you thinking of the whip with the motorized loading coil (often automatic)...

211. Re: HF Tuners on back of 4x4s

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-07 23:41:02 UTC
From: dplatt@radagast.org
Message-ID: <e5mak5-hlv.ln1@radagast.org>
Source record: 24435

>Does any one know what is inside these tuners as I would like to build
>one for my Jeep here in Australia

SGC is probably the best-known brand of these tuners (although I understand that they did not create the basic design). If you go to http://www.sgcworld.com/PubInfoPage.html you can download the SGC-237 manual, which has a complete schematic.

The impedance-matching network in these tuners is a pi network, with two switchable sets of capacitors making up the input and output shunt legs, and a set of switchable inductors making the series (top) leg of the pi. The capacitive and inductive legs are each composed of a group of components whose values are generally in something akin to a power-of-two relationship (e.g. 25, 50, 100, 200 pF), with individual relays to connect or disconnect each individual component. The relays are controlled by a microprocessor. By switching in/out the individual components, the microcontroller can set each of the three legs of the pi network to a reactance which can be varied over a fairly wide range.

The incoming RF signal from the radio goes through current / voltage / phase detector circuits that then feed into the microcontroller.

During a tuning operation, the microcontroller can use the voltage/current relationship, and the signal phase, to determine whether the (transformed) feedpoint impedance is above or below 50 ohms, and whether its residual reactance is inductive or capacitive. The microcontroller then adjusts one or more of the three legs of the matching network, re-measures, and tries again.

This sort of tuner seems to have several quirks or limitations. Programming the search algorithm to find the right match (or *a* correct match - often, many are possible) apparently isn't easy. The SGC tuner I have seems to be easily "confused" if the radio varies its power during the tuning process (e.g. as part of a high-SWR power foldback).

Frankly, I wouldn't recommend a project like this as a one-off hobbyist project, even for a real enthusiast. I can see it becoming an incredible time-and-effort-sink.

A somewhat similar tuner, which would be much easier to build, would be one which implements a "pi" or "T" tuning network using motor-driven air-variable capacitors and a relay-switched multi-tap inductor (or perhaps a motor-driven roller inductor). You wouldn't get the very rapid bandswitching of an automated ATU, but would

probably have lower losses, much less physical complexity, and a
better chance of getting (and keeping) it working.

A "tuner plus whip" setup for a vehicle is often very electrically
inefficient, at least on the lower-frequency HF bands - you can end up
with most of your transmitter power being lost as heat in the tuner,
due to the very high circulating currents flowing between the pi-match
inductance and the very-capacitive impedance of the whip. My
understanding is that a whip/tuner setup is often a couple of
S-units poorer than a decent screwdriver antenna, and even worse than
that compared to a well-designed-and-built single-band "bugcatcher".

On the "plus" side, though, you do get a lot of physical ruggedness,
since the whip itself is sturdy and easily replaceable if it has a
serious disagreement with a tree branch.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

212. Re: HF Tuners on back of 4x4s

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-08 01:13:44 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g4uf08$u99$1@news.jpl.nasa.gov>
Source record: 24436

Dave Platt wrote:
>> Does any one know what is inside these tuners as I would like to build
>> one for my Jeep here in Australia
>
> SGC is probably the best-known brand of these tuners (although I
> understand that they did not create the basic design). If you go to
> http://www.sgcworld.com/PubInfoPage.html you can download the SGC-237
> manual, which has a complete schematic.
>
There's also the original LDG design, which was featured in a QST article.

> The impedance-matching network in these tuners is a pi network, with
> two switchable sets of capacitors making up the input and output shunt
> legs, and a set of switchable inductors making the series (top) leg of
> the pi.

or as an L network with series L and shunt C, which is switched to
either input or output end. (that's what the LDG tuners do)

> This sort of tuner seems to have several quirks or limitations.
> Programming the search algorithm to find the right match (or *a*
> correct match - often, many are possible) apparently isn't easy. The
> SGC tuner I have seems to be easily "confused" if the radio varies its
> power during the tuning process (e.g. as part of a high-SWR power
> foldback).

This is the heart of the tuner and whether it's "good".. what's the
tuning algorithm.. The mechanics of switchable Ls and Cs (or motor
driven Ls and Cs for that matter.. another QST or QEX article had one of
these) is fairly straightforward, it's the fast tuning.

>
> Frankly, I wouldn't recommend a project like this as a one-off
> hobbyist project, even for a real enthusiast. I can see it becoming
> an incredible time-and-effort-sink.

Especially since you can buy the already built unit for less than it
would cost to buy the parts to build it...

>
> A somewhat similar tuner, which would be much easier to build, would
> be one which implements a "pi" or "T" tuning network using
> motor-driven air-variable capacitors and a relay-switched multi-tap
> inductor (or perhaps a motor-driven roller inductor). You wouldn't
> get the very rapid bandswitching of an automated ATU, but would
> probably have lower losses, much less physical complexity, and a

> better chance of getting (and keeping) it working.

The losses might be about the same. (For example, the SGC tuners use
air core inductors.. same as you'd have with your multitap inductor..
and getting suitably high Q ceramic caps is pretty easy)

>
> A "tuner plus whip" setup for a vehicle is often very electrically
> inefficient, at least on the lower-frequency HF bands - you can end up
> with most of your transmitter power being lost as heat in the tuner,
> due to the very high circulating currents flowing between the pi-match
> inductance and the very-capacitive impedance of the whip.

Well... as long as the wire from tuner to whip isn't something like coax
with the shield grounded, the efficiency isn't all that bad. Of course,
it's possible to configure the tuner for a "bad" configuration (as you
mentioned, there's multiple "solutions" that generate a match, some are
better than others, and that's where the cleverness in the tuning
algorithm comes in)

My
> understanding is that a whip/tuner setup is often a couple of
> S-units poorer than a decent screwdriver antenna, and even worse than
> that compared to a well-designed-and-built single-band "bugcatcher".

I don't think so...

2 S units is about 12 dB..

If that were the case, the tuner would be dissipating more than 90-95%
of the Tx power, and it would melt.

There's a fair number of measurements out there on tuner losses, etc.,
and none of them are credibly at the 90% level... maybe a couple dB,
except in a pathological case.

Your big hit is just from having a short antenna and a crummy ground (in
the vehicle case).. Easily a 6-12dB hit over a dipole over the same
ground, but there's nothing you can do about it, because, especially on
lower bands, you can't drive around with a 60 foot dipole 30 feet up.

The single band bugcatcher has higher efficiency AT A FEW FREQUENCIES
and is appalling once you get very far away, which means it's not really
an apples to apples comparison with a frequency agile system. If you
operate on a few select frequencies (e.g. you have a 40m or 75m net that
you participate in on a regular basis), then the bugcatcher approach is
more attractive (but I might still contemplate using a tuner.. just put
it in bypass mode when you're "in-band")... and the bugcatcher is still
going to be down 6dB from the dipole.

>
> On the "plus" side, though, you do get a lot of physical ruggedness,
> since the whip itself is sturdy and easily replaceable if it has a
> serious disagreement with a tree branch.

>
>

213. Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-08 03:38:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <27717f6c-c5fe-4ec6-849a-4ec7498fb6bd@k30g2000hse.googlegroups.com>
Source record: 24437

Part two I finished up talking about eddy currents that form a
magnetic field in opposition
to the primrary magnetic field. It is this eddy current that is
considered a loss in the building of transformers
and forms as a circulating current which can penetrate quite deeply in
a transformer. To cut down this loss a transformer is made of
laminated steel parts bound together so the depth of the eddy current
is confined to a single laminate to control its penetration or skin
depth. Eddy currents formed on an antenna are also circulartory such
that the current flow is at right angles to the applied current flow.
So the conception of skin depth of a radiator as being some sort of
high resistance or corrosion skin is not quite correct. What we
actually have is a force or current running into the side of another
current flow so that the summation of such is deflected sideways and
upwards in three dimensional terms.
As I mentioned earlier this eddy field or magnetic field comes into
contact with the magnetic field of the particle and where the particle
is ejected together with a spin applied to it so it can maintain a
straight trajectory. Remember, the particle is extremely small so it
takes only a small amount of energy to send it on its way. For those
who are aware of the magnetic elevation experiments the elevation
force is a fraction more than the gravity force in the opposite
direction and as many know to keep an article stable while elevated it
is difficult to preventing the elevated article from turning over
which is particle spin. So when the particle is ejected from the
antenna surface it has spin so that it can maintain a straight line
trajectory as well as the ability to negotiate thru areas affected by
gravitational pull which is nullified by the upthrust of the elevation
force created by the magnetic field of the eddy currents. However
these ejected particles passing from one antenna to another does not
explain the transmission of intelligence so something else has to
occur otherwise we are stymied. Well remember that Newtons laws of
action and reaction means there is a reactionary force on the
radiator from the ejection of the particles is similar to what you
see at the swimming pool with a spring board. A diver jumps on the
spring board which is a downward force and the reactionary force is
that applied by the spring board to the diver so in the case of an
antenna it must move in a reaction to the downwards motion and you
then see a repartition of what you saw with the spring board where
after the diver has left it continues to oscillate for a short time.
But in the case of antenna another particle quickly takes the place of
the ejected particle for a place to rest such that the antenna
oscillation continually takes place over a short length of time. To
fully understand this repartition of ejection and replacement with

respect to the natural frequency and time factors we must now investigate further the electrical circuit that simulates such action .This is called a Tank circuit where the energy supplied sloshes back and forth between a capacitor and a inductor and where the capacitor itself cannot radiate and the inductor can cause radiation in two different ways ie. when the field is being generated and when it is dissapating for each full cycle or period of the tank circuit operation. This represents the full sinosoidal of the applied alternating current when applied not to a fractional WL antenna but a full WL antenna because a period represents the repetitive function of BOTH phases of the applied current.
More on the Tank circuit operation in the next Part four. If you can get ahead of the game and study the operation of a tanks circuit you will see it is not as simple as it appears because it involves time constants,
voltage multiplication as well as phase change each of which is important in terms of sequence to provide
for the ejection of particles . I may have to Google to get the sequence correct ie copy the description or refer to a URL for simplicity
Art Unwin
unwinantennas.com/

214. Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-08 05:12:39 UTC
From: Brandon Christian <brandon_christian@oregon.usa.com>
Message-ID: <373d72d4-90d8-40e8-af03-5643156a6a74@z72g2000hsb.googlegroups.com>
Source record: 24438

www.BrandonsCastle.com

215. ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-08 11:26:33 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <g4viti$l1k$1@aioe.org>
Source record: 24439

Rather than continually posting your beliefs about *why* your Unwin antenna operates, please post some provable evidence about *how* it operates with respect to the fields generated by a standard and well-proven radiator such as 1/2-wave dipole.

A matched, 100% efficient, linear 1/2-wave dipole with 100 watts of applied r-f input power at 3.5 MHz develops a peak field intensity of about 70.14 mV/m at a distance of 1 kilometer, in free space.

> > How does the Unwin antenna compare to this? < <

If you don't know, or you do and it is considerably less than the value above -- then probably there is little point in proceeding with your posts.

RF

216. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-08 12:27:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d0d977f6-910b-416b-a55b-6c96b1142214@l42g2000hsc.googlegroups.com>
Source record: 24440

On Jul 7, 3:22 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Art Unwin wrote:
> > On Jul 3, 5:16 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> > You know John, since America gives the 'right to bear arms' you would
> > think that the population would understand
> > that a projectile must have rotation to follow a straight line
> > trajectory.
>
> Hi Art,
>
> The American Constitution does not "give" rights. It simply attempts
> to prevent government from eliminating them.
>
> Under the influence of gravity, sub-orbital ballistic projectiles
> generally follow a parabolic trajectory. Isssac Newton's laws of
> motion apply without caveat.
>
> ac6xg

It followsa straight line trajectory in two dimensions out of three
The weak force othewise known as the magnetic field of the eddy
current
overcpmes or neutralises gravity while applying spin such gravitation
has little or no
effect on the trajectory as it is projected with spin. This can be
seen with
elevation experiments

217. Re: wireless rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-08 12:38:50 UTC
From: ml <m@di.net>
Message-ID: <m-E284B1.08385008072008@news.optonline.net>
Source record: 24441

In article <fkJ9k.107115$FR.361657@twister1.libero.it>,
"Andrea" <fuffa2k5@gmail.com> wrote:

> Hi guys,
> Does enyone know if exist is a wireless rotator?
> I cannot run the control cable between the control box and the rotator.
> Any advice is very appreciated.
>
> Thanks
>
> Andrea.

hi

this may be an unfair question, but presumably you are running
antenna cable ?? so why can't you attach a small additional
cable? who would notice if you wrapped them ?you'd also have to run a
power cable to to rotor too?

the rotor motor would require power, and i can't see how'd you
supply that wirelessly

so at minimum you'd have an antenna cable and power i would
guess so if your power cable had a few extra conductors who would
know? seems the easiest way

you could buy a wireless relay controlled or build it opening
/closing a relay wireless is pretty easy not sure how your
existing rotor sends position but you could perhaps remote that
or simply add your own position sensors and remote them back
using extra relays or some a/d method

naturally my presumption the rotor is for an antenna if so you'd
have to make your wireless device immune from interference that
your tx/rx antenna might cause as well as interference that
might be caused my your 'wireless controller' device

218. Re: Part two of many posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-08 12:55:16 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g4vo3j$um4$1@f04n12.cac.psu.edu>
Source record: 24442

Art Unwin wrote:
> On posting part one I finished up with a reference to a full
> wavelength antenna and we need to talk about this choice of a
> wavelengrh. Equilibrium comes from Newtons laws where force equals
> reaction force or upthrust equals down thrust where all forces around
> a point equals zero. All the masters such as Faraday,Gauss and others
> based all their discoveries around this notion.. In the last century a
> frenchman saw this as a period in a occillation of a repetitive nature
> as being the point where a cycle of events begin again. In other words
> a full cycle was completed and another cycle started. This Frenchman
> by the name of Foucault built a large, long pendulum in terms of a
> hundred feet to deetermine the time of one sequence of events that
> signifies equilibrium.
> To his surprise the pendulum not only swung left to right and back it
> also moved rotaed about the center a slight degree.

Minor quibble - the pendulum was a proof, not serendipity. His best known pendulum, at the Pantheon, rotated 11 degrees per hour, making a full circle in a bit less than 33 hours.

> This meant that
> there was another force, a rotational force must be at work over and
> above the two dimensional swing and thus for true equilibrium a period
> is many times a single to and fro movement.

The rotation of the earth was the force.

The angular speed could be calculated and proven as:

angular speed = 360 * sin (latitude)

Which is to say that at the poles, the rotation takes one sidereal day, taking progressively longer as one heads to the equator, at which point the oscillation plane stays fixed.

> Thisw is analagous to our year system of time where every four years
> we add a correction to the period of time
> by summing all these slight incorrection of time as a full day in what
> we term as a leap year.

More precisely, it is a way to correct our calendar system without major disruption. As the ability to measure time became more precise, coupled with the obvious shifting of seasons as the error in the calendar added up, it was a way to correlate the calendar system with as little disruption as possible. So it is a time measurement accuracy issue, coupled with change in the rotation of the earth. The former is the most significant error source.

> This is the reason for the choice of a full wavelength radiatorl since
> it represents a single oscillation of its harmonics PLUS this small
> extra force required to meet equilibrium.

Now this is interesting. Does it follow that the radiator therefore
needs to change in relation to it's latitude?

- 73 de Mike N3LI -

219. car antenna cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-08 15:46:32 UTC
From: thomasekeane@gmail.com
Message-ID: <bf6ebc4c-7177-4832-a9ae-635421c865e7@r66g2000hsg.googlegroups.com>
Source record: 24443

In replacing my car antenna I pulled the radio end connector off. It looks like a small gauge wire, plastic sheathing and braided wire. I need to replace the end piece or better yet splice it to the new antenna cable. What type of connector do I need and where can I get it. This is for a 1999 Subaru Legacy. The replacement antenna said OEM but of course it was not The new connector at the mast produced a 12 inch cable that has a single bayonet looking plug and the old one was a round piece the fit over what looked like an rca type plug.

220. Re: wireless rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-08 19:16:03 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g50edjmhh2@news.jpl.nasa.gov>
Source record: 24444

ml wrote:
> In article <fkJ9k.107115$FR.361657@twister1.libero.it>,
> "Andrea" <fuffa2k5@gmail.com> wrote:
>
>> Hi guys,
>> Does enyone know if exist is a wireless rotator?
>> I cannot run the control cable between the control box and the rotator.
>> Any advice is very appreciated.
>>
>> Thanks
>>
>> Andrea.
>
> hi
>
> this may be an unfair question, but presumably you are running
> antenna cable ?? so why can't you attach a small additional
> cable? who would notice if you wrapped them ?you'd also have to run a
> power cable to to rotor too?
>
>
> the rotor motor would require power, and i can't see how'd you
> supply that wirelessly
>
> so at minimum you'd have an antenna cable and power i would
> guess so if your power cable had a few extra conductors who would
> know? seems the easiest way
>
> you could buy a wireless relay controlled or build it opening
> /closing a relay wireless is pretty easy not sure how your
> existing rotor sends position but you could perhaps remote that
> or simply add your own position sensors and remote them back
> using extra relays or some a/d method
>
> naturally my presumption the rotor is for an antenna if so you'd
> have to make your wireless device immune from interference that
> your tx/rx antenna might cause as well as interference that
> might be caused my your 'wireless controller' device

one can easily send power up the coax. One can also easily send rotator
commands.

Whether someone makes this as a buyable thing is another story.

221. Ryhm&#65533;n sfnet.harrastus.autot.tee-itse virallinen kuvaus

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 00:58:26 UTC
From: Juho Huttunen <huttunen@revenue.net>
Message-ID: <sfnet14966@ulrde.se>
Source record: 24445

Nyt on maamme tiedotusmonopoleissa tullut tavaksi ved&#65533;tt&#65533;&#65533; esiin sellaisia tietoja, ett&#65533; riisin- ja viljanhinnan nousu johtuisi siit&#65533;, ett&#65533; niit&#65533; k&#65533;ytet&#65533;&#65533;n el&#65533;inrehuina lihantuotantoon.. .Haloo kuka on n&#65533;hnyt "riisirehua"? Veikkaan ett&#65533; kyseess&#65533; on maailman harvinaisin sbesiaalirehupussukka, jota tuskin kukaan on edes n&#65533;hnyt! Jos toi on jo harvinaista niin metanolibensa riisist&#65533; on varmaan jos mahdollista harvinaisempaa. Eli t&#65533;mm&#65533;iset eiv&#65533;t taatusti ole hinnankorotuksen takana. Vaan USA:n s&#65533;&#65533;nn&#65533;stelyriisitilanne johtuu ydinaavikoitumisen jo kolmena vuona pilaaaman sadon kylm&#65533;st&#65533; faktasta!

Suomen kohdalla esitet&#65533;&#65533;&#65533;n samoja biopolttoainesyit&#65533; my&#65533;s. Mik&#65533; on toki my&#65533;s silkkaa ved&#65533;tyst&#65533;. Jokin aika sitten tosin maahamme suuniteltiin bioetanolitehtaita, joita ei noussut. My&#65533;s esim. viljasta maassamme povattiin varsin kohtalaista biopolttoainetta. Kauraa pidettiin varteenotettavana valmiina biopellettin&#65533;. Ainoa mainittava haitta oli viljan paakkuuntuminen poltinp&#65533;&#65533;h&#65533;n kakkuna, jota piti kuulema puhdistella. Varsin pian v&#65533;hin &#65533;&#65533;nin maahamme tehtiin ehk&#65533; historiamme tarkimmin salattu laki. M&#65533;&#65533;r&#65533;ys joka kielsi KAIKEN viljaenergian polttamisen! Tosiaan koko bioenergiahaaveilut lopetettiin kuin maan nielem&#65533;n&#65533;, vaikkei asian totuutta kerrottu kansalle miss&#65533;&#65533;n. Ydinaavikoitumisen viedess&#65533; -40% sadantakadollaan vuodesta toiseen ruuan p&#65533;yd&#65533;st&#65533;mme ei j&#65533;&#65533;nyt vaihtoehtoa. Mutta reaalia t&#65533;st&#65533; ei maatalouspoliittisesta huijaussyyst&#65533; ikin&#65533; tunnustettu. My&#65533;s ydinvoiman kuivamien ja kasvuhaittojen peltojemme totuus pimitettiin mehil&#65533;iskatojen vastaavan syyn lailla. Mutta sain vaan selville tapani mukaan! Joka tapauksessa h&#65533;mm&#65533;stytt&#65533;v&#65533;&#65533;, ett&#65533; meill&#65533; nyt on lakim&#65533;&#65533;r&#65533;yksi&#65533; joita lis&#65533;kseni tuskin moni on tutusti edes kuullut.(

222. Re: Antenna <- SPAM Virus

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 01:48:20 UTC
From: Bernard Peters <sis@boom.bang>
Message-ID: <luedncbNhd95henVnZ2dnUVZ_obinZ2d@comcast.com>
Source record: 24446

On Mon, 07 Jul 2008 22:12:39 -0700, Brandon Christian wrote:

> www.BrandonsCastle.com

223. Re: HF Tuners on back of 4x4s

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 04:03:20 UTC
From: ltdoc@yahoo.com
Message-ID: <41a128e3-6f1d-4e88-8f5d-3b883d72b94d@8g2000hse.googlegroups.com>
Source record: 24447

Dave,
Building a tuner, depending on the type, can be fairly easy, sort of. The difficulty level jumps by an order of magnitude if it's going to be an 'automatic' type thing. Not impossible, but certainly much more complicated.

Mobile antennas are more efficient as they get longer in relation to wavelength. Typically that means a big ugly thing for the lower HF bands. An itty-bitty thingy at VHF/UHF. A typical HF mobile antenna is very seldom very efficient once you get below something like 10 - 20 meters or so. Any mobile antenna on 80 meters is very, very seldom more than about 5% efficient at best (actually, more like 1 or 2%, if you're lucky). So, depending on the bands you plan to work, and the length of that unloaded whip in relation to the frequency's wavelength, don't expect very much. Efficiency is directly proportional to 'ugly' and impractically tall on a vehicle.

Screw driver vs. bugcatcher antennas. Below something like 20 meters, the bugcatcher, hands down, except in convenience (changing coil taps). Above 20 meters, or so, almost anything that's close to a 1/4 wave length works pretty good except for those street lights and tree limbs, sort of.
- 'Doc

(It isn't efficiency, as such, that you should worry about, but the radiation pattern, which is definitely controlled by antenna length and height.)

224. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 05:55:51 UTC
From: Clark Kent <kentc@daily_planet.com>
Message-ID: <NpYck.7$UM1.0@newsfe12.phx>
Source record: 24448

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:27717f6c-c5fe-4ec6-849a-4ec7498fb6bd@k30g2000hse.googlegroups.com...

[text deleted]

> Art Unwin
> unwinantennas.com/

I went to your website but I didn't see any specific antenna information,
like a ham might want to build a new type of antenna, to try it out.

I saw a write-up of an H-F antenna with elements wound into a spiral and
wondered if that might be yours, as you speak of physically small antennas
(fraction of an expected resonant size).

Pls advise in group. TNX.

225. Re: Test Preparation Software

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 06:15:34 UTC
From: Clark Kent <kentc@daily_planet.com>
Message-ID: <gIYck.8$UM1.3@newsfe12.phx>
Source record: 24449
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc

"Webmaster" <webmaster@oaklanesoftware.com> wrote in message
news:8FXak.12437$rH1.7168@newsfe20.lga...
> >
> Pass your US FCC ham radio license test with ease. Our test preparation
> software
> serves as a training aid to help amateurs and prospective amateurs pass
the
> VEC's administered test.
> Visit our web site at http://www.bogus-filler.net for more information.

Next would be the course called, "Make Your Fortune With Targeted Internet
Marketing Via Email"

226. Re: Part two of many posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 12:33:46 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <75e18137-ee8d-448a-a2d0-c6fd61a89908@w7g2000hsa.googlegroups.com>
Source record: 24304

On Jul 8, 7:55 am, Michael Coslo <m...@psu.edu> wrote:
> Art Unwin wrote:
> > On posting part one I finished up with a reference to a full
> > wavelength antenna and we need to talk about this choice of a
> > wavelengrh. Equilibrium comes from Newtons laws where force equals
> > reaction force or upthrust equals down thrust where all forces around
> > a point equals zero. All the masters such as Faraday,Gauss and others
> > based all their discoveries around this notion.. In the last century a
> > frenchman saw this as a period in a occillation of a repetitive nature
> > as being the point where a cycle of events begin again. In other words
> > a full cycle was completed and another cycle started. This Frenchman
> > by the name of Foucault built a large, long pendulum in terms of a
> > hundred feet to deetermine the time of one sequence of events that
> > signifies equilibrium.
> > To his surprise the pendulum not only swung left to right and back it
> > also moved rotaed about the center a slight degree.
>
> Minor quibble - the pendulum was a proof, not serendipity. His best
> known pendulum, at the Pantheon, rotated 11 degrees per hour, making a
> full circle in a bit less than 33 hours.
>
> > This meant that
> > there was another force, a rotational force must be at work over and
> > above the two dimensional swing and thus for true equilibrium a period
> > is many times a single to and fro movement.
>
> The rotation of the earth was the force.
>
> The angular speed could be calculated and proven as:
>
> angular speed = 360 * sin (latitude)
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> Which is to say that at the poles, the rotation takes one sidereal day,
> taking progressively longer as one heads to the equator, at which point
> the oscillation plane stays fixed.
>
> > Thisw is analagous to our year system of time where every four years
> > we add a correction to the period of time
> > by summing all these slight incorrection of time as a full day in what
> > we term as a leap year.
>
> More precisely, it is a way to correct our calendar system without major
> disruption. As the ability to measure time became more precise, coupled
> with the obvious shifting of seasons as the error in the calendar added

> up, it was a way to correlate the calendar system with as little
> disruption as possible. So it is a time measurement accuracy issue,
> coupled with change in the rotation of the earth. The former is the most
> significant error source.
>
> > This is the reason for the choice of a full wavelength radiatorl since
> > it represents a single oscillation of its harmonics PLUS this small
> > extra force required to meet equilibrium.
>
> Now this is interesting. Does it follow that the radiator therefore
> needs to change in relation to it's latitude?
>
> - 73 de Mike N3LI -
Glad to see you are following with understanding

Eddy current changes

227. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 13:40:18 UTC
From: richardharrison@webtv.net
Message-ID: <3732-4874BFC2-102@storefull-3253.bay.webtv.net>
Source record: 24306

Richard Fry wrote:
"How does the Unwin antenna compare to this?"

Yes. I would suggest an A to B comparison with a side by side standard dipole.

Best regards, Richard Harrison, KB5WZI

228. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 14:12:29 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <62a4191c-5eec-430c-8839-84648d0e20ec@z66g2000hsc.googlegroups.com>
Source record: 24307

On Jul 8, 6:26 am, "Richard Fry" <r...@adams.net> wrote:
> Rather than continually posting your beliefs about *why* your Unwin antenna
> operates, please post some provable evidence about *how* it operates with
> respect to the fields generated by a standard and well-proven radiator such
> as 1/2-wave dipole.
>
> A matched, 100% efficient, linear 1/2-wave dipole with 100 watts of applied
> r-f input power at 3.5 MHz develops a peak field intensity of about 70.14
> mV/m at a distance of 1 kilometer, in free space.
>
> > > How does the Unwin antenna compare to this? < <
>
> If you don't know, or you do and it is considerably less than the value
> above -- then probably there is little point in proceeding with your posts.
>
> RF

I have enougth on my hands explaining antennas in equilibrium and you
want me to change course in the middle
and switch to what. you want to talk about! I'll tell you what, refer
to what happens to a current carrying member
as descibed on my page. Now go to a member that is not in equilibrium
and where the external charges move
to one end to meet Newtons law and thus charges in the center which
formally were equal to zero now have a quantitive value.
This states that when equilibrium breakjs down current flowsw in the
CENTER of the conductor.
Start your own thread on that subject while we continue with antennas
in equilibrium

229. Moonbounce by KB9RQZ

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 14:13:20 UTC
From: kb9rqz <kb9rqz@puncemail.com>
Message-ID: <4874c775@news.x-privat.org>
Source record: 24308
Cross-posted to: rec.radio.amateur.policy,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

kb9rqz prepairs two howl at the moon

http://emekb9rqz.blogspot.com/2006/06/kb9rqz-prepares-to-howl-at-moon.html

230. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 15:33:29 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <138bebfe-8492-463c-8554-a4fd39e86e44@x41g2000hsb.googlegroups.com>
Source record: 24310

On Jul 9, 12:55 am, "Clark Kent" <kentc@daily_planet.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:27717f6c-c5fe-4ec6-849a-4ec7498fb6bd@k30g2000hse.googlegroups.com...
>
> [text deleted]
>
> > Art Unwin
> > unwinantennas.com/
>
> I went to your website but I didn't see any specific antenna information,
> like a ham might want to build a new type of antenna, to try it out.
>
> I saw a write-up of an H-F antenna with elements wound into a spiral and
> wondered if that might be yours, as you speak of physically small antennas
> (fraction of an expected resonant size).
>
> Pls advise in group. TNX.

A helix is an excellent example to talk about to arrive at small full
wave antennas.
When you follow the reasoning of the extension to Gaussian law of
statics which makes
it dynamic it brings to the surface that a radiator can be any size or
shape as long as it is in equilibrium.
So to meet the intent of both laws which are now the same, we must not
impose any lumped circuits
while making our antenna. Now a helix is a fractional wave antenna
with added capacitive and inductive
lumped loads, thus to follow the intent of Maxwell's law we must first
extend the antenna to a full wave form
while at the same time cancelling the added lumped loads. So if we
start with a half wave helix in standard form we have to
continue the element in a down ward direction where we then reach the
starting point. Doing this first completes the circuit to a full wave
and secondly it cancels the pre imposed capacitive and inductive
lumped load that are inherrent with a standard helix antenna PLUS we
have removed the need for a ground plane as the completed antenna is
now a full instead of fractional circuit. Now instead of winding with
a helix angle of some ten degrees plus we can now
push the windings close together and then tip the new antenna to a 10
degree plus angle to put the whole thing in equilibrium by replacing
the angular force represented by the form pitch that we removed by
losing the pitch of the winding. Actually this works out quite well as

you can now laquer the assembly where it has no voids and is quite strong.
By the way my antennas are always of a full wavelength which by virtue of its reduced volume then becomes a small FULL wave antennas to retain the inherrent efficiencies of full wave antennas in equilibrium as well as resonant.
Allow me to continu on this line of thinking. It should now be seen that an array is also shrunken not only by the shortened elements but also by the fact that element spacings conform to the equilibrium of the array as a whole! We then have an array that does not have to have elements at certain distance from each other ad infirnitum but just two elements much closer together where all radiation is accounted for!
Hope the above helps you out but I do expect howls of resistance from others as they wish to protect the notion that "all is known about antennas" thus this posting is sacrelidge and must be negated at all costs. And some others ofcourse will vehemently reject the notion of the WEAK force being revealed by a ham where Einstein could no so for me the end of the World is aproaching or at the least the magnetic pole of our Earth has started a full rotation!
Cheers and beers
Art Unwin KB9MZ....xg
unwinantennas.com/

231. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 15:43:34 UTC
From: richardharrison@webtv.net
Message-ID: <5785-4874DCA6-118@storefull-3251.bay.webtv.net>
Source record: 24311

Art wrote:
"This states that when equilibrium breaks down current flows in the CENTER of the conductor."

Fact is, only direct current flows in the center of the conductor because alternating current makes more counter emf in the center of the conductor than in the exterior. There are more total magnetic flux linkages at the center and voltage is produced by the rate of change of these linkages. So, current drnsity is greater as the external surface of the conductor is approached.

Equilibrium is synonymous with balance or being at rest. An EM wave is never at rest. A "balanced antenna" has equal capacitance to earth from both of its feed terminals. Balanced and unbalanced antennas perform equally well though in application one may be more suitable than the other. A ground plane may be more easily fed by coax than a dipole but both have the same power gain. There is no mystic advantage of equilibrium in an electrical sense, only in contrived nonsense.

Best regards, Richard Harrison, KB5WZI

232. ipod case

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 16:32:21 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <xK5dk.19$Uc.3@newsfe05.lga>
Source record: 24450

Hey, I just found your ipod case on top of the microwave. Shall I stick it in an envelope and mail it to you today?

Love, Mom

233. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 16:59:24 UTC
From: richardharrison@webtv.net
Message-ID: <2138-4874EE6C-114@storefull-3252.bay.webtv.net>
Source record: 24301

Art wrote:
"---thus to follow the intent of Maxwell`s law we must first extend the antenna to a full wave form."

False. All we need is resonance to eliminate reactance which otherwise would limit current in the antenna . First resonance in the thin straight 1/2-wave dipole ia about 5% less than a physical 1/2 wavelength. A full wavelength straight antenna has characteristics completely different from its first-resonance cousin.

A small diameter coil radiates perpendicularly to its axis. As a radiator its effect is related to the coil`s length not the length of wire on the form. Wire length is related to resistance to r-f current and therefore to loss in an antenna containing coils. That is the source of skepticism of the Unwin antenna. Resistance-loaded antennas have proven useful in situations demanding great frequency bandwidth so Art may have something of value after all.

My ARRL Antenna Book (20th ed.) says on page 16-13:
"The general approach has been to use a coil nade from very heavy wire (#14 or larger), with length-to-diameter ratios as high as 21. British experimenters have reported good results with 8-foot overall lengths on the 1.8 and 3.5 MHz bands."

Bill Orr wrote on page 78 of "All About Vertical Antennas":
"In general, a half-wavelength of no,14 Formvar-coated wire is spirally wrapped on the form, with turn spacing approximately eqial to the wire diameter. This amount of wire will approximate a quarter-wave resonance. Orr`s book was first printed in 1986. Unwin has a problem with novelty.

Best regards, Richard harrison, KB5WZI

234. Re: ipod case

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 17:07:54 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <Uf6dk.22$Uc.4@newsfe05.lga>
Source record: 24302

Sorry All, XYL Jean punched the wrong button--didn't intend for this to go to the RRAA.

"Walter Maxwell" <walt@w2du.com> wrote in message news:xK5dk.19$Uc.3@newsfe05.lga...
> Hey, I just found your ipod case on top of the microwave. Shall I stick it in
> an envelope and mail it to you today?
>
> Love, Mom
>
>

235. Re: Part two of many posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 17:36:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2771f5f5-f15a-4fae-9d10-f4a46abdbe30@z66g2000hsc.googlegroups.com>
Source record: 24303

On Jul 8, 7:55 am, Michael Coslo <m...@psu.edu> wrote:
> Art Unwin wrote:
> > On posting part one I finished up with a reference to a full
> > wavelength antenna and we need to talk about this choice of a
> > wavelengrh. Equilibrium comes from Newtons laws where force equals
> > reaction force or upthrust equals down thrust where all forces around
> > a point equals zero. All the masters such as Faraday,Gauss and others
> > based all their discoveries around this notion.. In the last century a
> > frenchman saw this as a period in a occillation of a repetitive nature
> > as being the point where a cycle of events begin again. In other words
> > a full cycle was completed and another cycle started. This Frenchman
> > by the name of Foucault built a large, long pendulum in terms of a
> > hundred feet to deetermine the time of one sequence of events that
> > signifies equilibrium.
> > To his surprise the pendulum not only swung left to right and back it
> > also moved rotaed about the center a slight degree.
>
> Minor quibble - the pendulum was a proof, not serendipity. His best
> known pendulum, at the Pantheon, rotated 11 degrees per hour, making a
> full circle in a bit less than 33 hours.
>
> > This meant that
> > there was another force, a rotational force must be at work over and
> > above the two dimensional swing and thus for true equilibrium a period
> > is many times a single to and fro movement.
>
> The rotation of the earth was the force.
>
> The angular speed could be calculated and proven as:
>
> angular speed = 360 * sin (latitude)
>
> Which is to say that at the poles, the rotation takes one sidereal day,
> taking progressively longer as one heads to the equator, at which point
> the oscillation plane stays fixed.
>
> > Thisw is analagous to our year system of time where every four years
> > we add a correction to the period of time
> > by summing all these slight incorrection of time as a full day in what
> > we term as a leap year.
>
> More precisely, it is a way to correct our calendar system without major
> disruption. As the ability to measure time became more precise, coupled
> with the obvious shifting of seasons as the error in the calendar added

> up, it was a way to correlate the calendar system with as little
> disruption as possible. So it is a time measurement accuracy issue,
> coupled with change in the rotation of the earth. The former is the most
> significant error source.
>
> > This is the reason for the choice of a full wavelength radiatorl since
> > it represents a single oscillation of its harmonics PLUS this small
> > extra force required to meet equilibrium.
>
> Now this is interesting. Does it follow that the radiator therefore
> needs to change in relation to it's latitude?
>
> - 73 de Mike N3LI -

Michael, you are the first to get to the cusp of this discussion by
coming from the other side
relatively speaking by invoking the time difference which when filled
by a force closes the vector circuit reqiered for equilibrium.
Perhaps you can now take over and explain the rest of the story where
instead of lengthening the pendulum the radiator
you instead shorten it to the other resonant point and thus deduce the
shape of the resulting oscillations i.e. less damening. It seams as if
hams are totally enamoured with fractional WL antennas . Such an
escursion is what they want to see first like looking at the last page
of a book to get some commonality to their every day thinking. Will
you do that for me?
Best regards
Art
unwinantennas.com/

236. Re: ipod case

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 18:22:36 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <MI7dk.700$HY.199@trnddc01>
Source record: 24305

Didn't look too unusual to me.....I used to keep a 2mtr mag mount up
there....

"Walter Maxwell" <walt@w2du.com> wrote in message
news:Uf6dk.22$Uc.4@newsfe05.lga...
> Sorry All, XYL Jean punched the wrong button--didn't intend for this to
> go to
> the RRAA.
>
> "Walter Maxwell" <walt@w2du.com> wrote in message
> news:xK5dk.19$Uc.3@newsfe05.lga...
>> Hey, I just found your ipod case on top of the microwave. Shall I stick
>> it in
>> an envelope and mail it to you today?
>>
>> Love, Mom
>>
>>
>

237. Re: Has anyone here actually built a Lazy H for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 18:35:08 UTC
From: Harry7 <cpa599@gmail.com>
Message-ID: <a9a4b7e0-6df0-45d5-86ef-321cb3c01614@m3g2000hsc.googlegroups.com>
Source record: 24309

Yes
I built a 10 meter EDZ Lazy H in 2001 (back when we had sunspots) .
Top wire was 40' up. Measurements were 22' per leg & 22' vertical
spacing. Phasing line (non twisted) was 450 ohm window line. Worked
excellent on 10, 12, 15, 17 & 20. Also used it on 40 where it acted
like a dipole.

It was bi-directional on 10-20. Didn't measure actual gain but always
got excellent reports (5x9+) in favored directions (from Siberia,
Ukraine, etc.) on 10-20 SSB with 100 watts.

238. Re: Moonbounce by KB9RQZ

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 19:43:11 UTC
From: kb9rqz <kb9rqz@puncemail.com>
Message-ID: <487514c4$1@news.x-privat.org>
Source record: 24312
Cross-posted to: rec.radio.amateur.policy,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

"kb9rqz" <kb9rqz@puncemail.com> wrote in message
news:4874c775@news.x-privat.org...
> kb9rqz prepairs two howl at the moon
>
> http://emekb9rqz.blogspot.com/2006/06/kb9rqz-prepares-to-howl-at-moon.html
>
weel it sseems for now you win oh Jammer

having not yet the resources to bypass the jamming I will largely cease
furth Moon bounce work although I have two best of belief acchived it on 4
seperate QSO's and then certain folks deciding that they did not aprove
decide to break FCC and set up a bot that answers my cq calls with false
responses

239. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 20:30:06 UTC
From: jimkelleyamps@gmail.com
Message-ID: <aefd4863-a764-4dc9-a85f-1d2874ab12bf@k13g2000hse.googlegroups.com>
Source record: 24313

On Jul 8, 5:27 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Jul 7, 3:22 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>
> > Art Unwin wrote:
> > > On Jul 3, 5:16 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> > > You know John, since America gives the 'right to bear arms' you would
> > > think that the population would understand
> > > that a projectile must have rotation to follow a straight line
> > > trajectory.
>
> > Hi Art,
>
> > The American Constitution does not "give" rights. It simply attempts
> > to prevent government from eliminating them.
>
> > Under the influence of gravity, sub-orbital ballistic projectiles
> > generally follow a parabolic trajectory. Isssac Newton's laws of
> > motion apply without caveat.
>
> > ac6xg
>
> It followsa straight line trajectory in two dimensions out of three

And it's completely motionless in one dimension out of the three. So
what?

> The weak force othewise known as the magnetic field of the eddy
> current
> overcpmes or neutralises gravity while applying spin such gravitation
> has little or no
> effect on the trajectory as it is projected with spin.

The weak force is NOT otherwise known as a magnetic field. It relates
to radioactive decay and is only relevant at distances less than 10
e-8 nanometers and has nothing to do with electromagnetism.

ac6xg

240. zzzz

241. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 20:37:53 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <19f655b0-a2da-4a91-8687-d32386ab55e8@p25g2000hsf.googlegroups.com>
Source record: 24315

On Jul 9, 10:43 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "This states that when equilibrium breaks down current flows in the
> CENTER of the conductor."
>
> Fact is, only direct current flows in the center of the conductor
> because alternating current makes more counter emf in the center of the
> conductor than in the exterior. There are more total magnetic flux
> linkages at the center and voltage is produced by the rate of change of
> these linkages. So, current drnsity is greater as the external surface
> of the conductor is approached.
>
> Equilibrium is synonymous with balance or being at rest. An EM wave is
> never at rest. A "balanced antenna" has equal capacitance to earth from
> both of its feed terminals. Balanced and unbalanced antennas perform
> equally well though in application one may be more suitable than the
> other. A ground plane may be more easily fed by coax than a dipole but
> both have the same power gain. There is no mystic advantage of
> equilibrium in an electrical sense, only in contrived nonsense.
>
> Best regards, Richard Harrison, KB5WZI

Sooner or later you will have to change your attitude. Terman was in
error by not including the WEAK force such that a radiator was tilted
and you are still clinging to his line of thought. Think about it
Originally I dampened my antenna by using the
pendulum as a equivalent mechanical example and you saw on my page the
resulting change in the oscillations.
Now you can do the opposite if you have a half wave antenna!. So what
has happened? The half wave is still resonant and the circuit has also
changed to a series circuit so we have lost the energy retention
propertes of the TANK circuit ! At the same time we must still retain
the closed system circuit which means the current must also travel
down the center of the radiator! Imagine that As an old ham who can't
change his ways you can create havoc about that.
Now when the charges move down the center of the radiator it cannot
provide eddy currents so the "skin" resistance is absent during that
part of the perioid.
Note by travelling down the center as a half wave it does not need a
counter poise because going down the center makes it a full wave
circuit.
Ofcourse for any other fraction of a wavelength you have to extent the

resistive portion of the center of the radiator in the form of radials so that
the closed circuit is a wavelength or a multiple there of. Instead of the radials in that case you can use instead a variometer so the properties of wave length multiples are retained. Now if you can;'t accept this simple logic ask somebody to use a antenna program to determine the best angle for a vertical to attaim maximum vertical radiation in the same terms that the masters intended with the correct useage of their laws. Krauss did by finding the WEAK force empirically even tho he did not understand why which was why the helix radiating portion is at an angle with respect to the earths surface.Note He also proved that a radiator need not be straight by experimentation without resorting to Gauss when the dynamic extension is applied
Use of any antenna computer program will produce this same angle with straight radiators unless preguided to a planar form! So Richard, saying it is a myth or a fraud is probably O.K. for you because of your age, but for the younger engineers thay cannot afford not to change and be left behind in the search of knoweledge. So no further debate or auguements are necessary between you and I. And I will try to remember to send flowers when the grim reaper appears at your door where your position on antennas will matter no more while the rest move on
and it is only the copper losses or resistance we have to deal with. Richard, you can;'t mess with mother nature or the Universe

242. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 20:51:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1aaec28d-98f6-47af-8f60-157e46b86984@f36g2000hsa.googlegroups.com>
Source record: 24316

```
On Jul 9, 3:30 pm, jimkelleya...@gmail.com wrote:
> On Jul 8, 5:27 am, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > On Jul 7, 3:22 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>
> > > Art Unwin wrote:
> > > > On Jul 3, 5:16 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> > > > You know John, since America gives the 'right to bear arms' you would
> > > > think that the population would understand
> > > > that a projectile must have rotation to follow a straight line
> > > > trajectory.
>
> > > Hi Art,
>
> > > The American Constitution does not "give" rights. It simply attempts
> > > to prevent government from eliminating them.
>
> > > Under the influence of gravity, sub-orbital ballistic projectiles
> > > generally follow a parabolic trajectory. Isssac Newton's laws of
> > > motion apply without caveat.
>
> > > ac6xg
>
> > It followsa straight line trajectory in two dimensions out of three
>
> And it's completely motionless in one dimension out of the three. So
> what?
>
> > The weak force othewise known as the magnetic field of the eddy
> > current
> > overcpmes or neutralises gravity while applying spin such gravitation
> > has little or no
> > effect on the trajectory as it is projected with spin.
>
> The weak force is NOT otherwise known as a magnetic field. It relates
> to radioactive decay and is only relevant at distances less than 10
> e-8 nanometers and has nothing to do with electromagnetism.
>
> ac6xg

Wrong again!
You are following the errors of the past again. Yes, the particle that
```

is
projected away from the radiator is radio active in terms of a
fraction of its life.
And yes the distance that the madnetic field resulting from the eddy
current is limited
as seen with the common elevation style experiments. The distanbce
required for the
velocity of the partical is NOT a determination of distance travelled
according to
Newtons laws of motion. I hope you are not teaching this stuff so
people can get a degree.!

243. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 21:17:51 UTC
From: ltdoc@yahoo.com
Message-ID: <b50f8696-2f71-42b0-b9db-41f268872026@z66g2000hsc.googlegroups.com>
Source record: 24317

Congratulations Art! You've really out done yourself this time.
May the 'weak' force be with you...
- 'Doc

244. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 21:37:52 UTC
From: kb9rqz@yahoo.com
Message-ID: <ctba74l72jgt2i3cquep7komg3lge7vc3m@4ax.com>
Source record: 24346
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

245. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 22:18:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2cbeda4a-609d-4bc4-8441-07ab8db4c571@c58g2000hsc.googlegroups.com>
Source record: 24318

On Jul 9, 4:17 pm, lt...@yahoo.com wrote:
> Congratulations Art! You've really out done yourself this time.
> May the 'weak' force be with you...
> - 'Doc

Thank you Mr Midwife which you have now upgraded to Doctor
Delivering a baby in my Mercedes would be a piece of cake.
But in a mini cooper,well.....

246. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 22:41:55 UTC
From: Jim Kelley <jimkelleyamps@gmail.com>
Message-ID: <17d4b56b-87e7-449b-9f23-a6cdba4e3087@27g2000hsf.googlegroups.com>
Source record: 24319

Art Unwin wrote:
> > > It followsa straight line trajectory in two dimensions out of three
> >
> > And it's completely motionless in one dimension out of the three. So
> > what?
> >
> > > The weak force othewise known as the magnetic field of the eddy
> > > current
> > > overcpmes or neutralises gravity while applying spin such gravitation
> > > has little or no
> > > effect on the trajectory as it is projected with spin.
> >
> > The weak force is NOT otherwise known as a magnetic field. It relates
> > to radioactive decay and is only relevant at distances less than 10
> > e-8 nanometers and has nothing to do with electromagnetism.
> >
> > ac6xg
>
> Wrong again!
> You are following the errors of the past again.

Evidently nobody's gotten around to correcting the physics texts to
better reflect your point of view yet.

> Yes, the particle that
> is
> projected away from the radiator is radio active in terms of a
> fraction of its life.

What particle?

> And yes the distance that the madnetic field resulting from the eddy
> current is limited
> as seen with the common elevation style experiments. The distanbce
> required for the
> velocity of the partical is NOT a determination of distance travelled
> according to
> Newtons laws of motion. I hope you are not teaching this stuff so
> people can get a degree.!

Of course not. No one is teaching this stuff, Art. If someone
mentioned B.S. they weren't referring to a degree.

ac6xg

247. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 22:47:58 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <g53f7c$a68$1@aioe.org>
Source record: 24320

"Art Unwin" wrote:
> I have enougth on my hands explaining antennas in equilibrium and you
> want me to change course in the middle and switch to what. you want
> to talk about!

First things first, Arthur.

Why do you persist in posting and defending your unproven and zany beliefs about equilibrium, particles etc that you suggest apply to your "Unwin" antenna, if you don't even know how the free-space radiation envelope from your Unwin antenna compares to that of a proven reference radiator, for a given applied power?

The RADIATION performance of a transmit antenna should be considered before everything else. Even a 1:1 SWR at the "antenna" input terminals over an infinite bandwidth means ~nothing if very little to none of the r-f power applied there is radiated in the form of an EM wave.

Why should any serious investigator be interested in reading about how you think your Unwin antenna operates, if you can't *first* evaluate, publish, and scientifically defend its free space radiation characteristics as compared to a known standard radiator, such as that of a resonant, center-fed, 1/2-wave dipole?

RF

248. series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 23:02:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <dc9bf3a9-bdc2-4474-bfb1-64157c48f94b@z72g2000hsb.googlegroups.com>
Source record: 24321

I would like to add a caviate to assigning a series circuit which I
did
to follow convention for fractional WL. If I had a lab it would be
easy to prove whether the distributed capacitance
and the distributed inductance are themselves in parallel within the
radiating member instead of in series
such that the energy retention qualities are kept. And possibly this
circulatory arrangement will supply some connection to the swerling
eddy currents upon the surface. However I will keep to convention
until the corresponding evidence comes in. Got to get the DC
resistance of a radiator involved to resolve that one.
Unwinantennas.com/

249. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-09 23:50:34 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <bc3ebb12-b240-4dc2-8288-3ae4a4b63b79@8g2000hse.googlegroups.com>
Source record: 24322

On Jul 9, 5:41 pm, Jim Kelley <jimkelleya...@gmail.com> wrote:
> Art Unwin wrote:
> > > > It followsa straight line trajectory in two dimensions out of three
>
> > > And it's completely motionless in one dimension out of the three. So
> > > what?
>
> > > > The weak force othewise known as the magnetic field of the eddy
> > > > current
> > > > overcpmes or neutralises gravity while applying spin such gravitation
> > > > has little or no
> > > > effect on the trajectory as it is projected with spin.
>
> > > The weak force is NOT otherwise known as a magnetic field. It relates
> > > to radioactive decay and is only relevant at distances less than 10
> > > e-8 nanometers and has nothing to do with electromagnetism.
>
> > > ac6xg
>
> > Wrong again!
> > You are following the errors of the past again.
>
> Evidently nobody's gotten around to correcting the physics texts to
> better reflect your point of view yet.
>
> > Yes, the particle that
> > is
> > projected away from the radiator is radio active in terms of a
> > fraction of its life.
>
> What particle?
>
> > And yes the distance that the madnetic field resulting from the eddy
> > current is limited
> > as seen with the common elevation style experiments. The distanbce
> > required for the
> > velocity of the partical is NOT a determination of distance travelled
> > according to
> > Newtons laws of motion. I hope you are not teaching this stuff so
> > people can get a degree.!
>
> Of course not. No one is teaching this stuff, Art. If someone
> mentioned B.S. they weren't referring to a degree.
>

> ac6xg

Believe me they will. To follow theories as being correct without
your own personal study is to become a lemming
I suspect you are still holding on to the Quark and "W" theory
of Feynman but as yet I don't believe one iota of evidence has been
found
that declares their presence or the actions that he predicted.
Theories really
depend on your academic stature and the power of perswation. Remember
people such as Green had little education but achieved fame without
being a lemming.
Same goes for others in the radio field whose work was purloined by
others.
When the corrected books are published will you leave college in anger
or do what all
instructures do and tell the students to buy new books every year at
high cost
and pretend you knew all along? Not once have you successfully evoked
the laws of the masters
to bring my logic to a halt. Everything you have stated has been
incorrect or faulty us of known laws

250. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 00:06:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <382d00db-ff57-4605-949e-7e56fe8b9cb3@59g2000hsb.googlegroups.com>
Source record: 24323

On Jul 9, 5:47 pm, "Richard Fry" <r...@adams.net> wrote:
> "Art Unwin" wrote:
> > I have enougth on my hands explaining antennas in equilibrium and you
> > want me to change course in the middle and switch to what. you want
> > to talk about!
>
> ------------------
>
> First things first, Arthur.
>
> Why do you persist in posting and defending your unproven and zany beliefs
> about equilibrium, particles etc that you suggest apply to your "Unwin"
> antenna, if you don't even know how the free-space radiation envelope from
> your Unwin antenna compares to that of a proven reference radiator, for a
> given applied power?
>
> The RADIATION performance of a transmit antenna should be considered before
> everything else. Even a 1:1 SWR at the "antenna" input terminals over an
> infinite bandwidth means ~nothing if very little to none of the r-f power
> applied there is radiated in the form of an EM wave.
>
> Why should any serious investigator be interested in reading about how you
> think your Unwin antenna operates, if you can't *first* evaluate, publish,
> and scientifically defend its free space radiation characteristics as
> compared to a known standard radiator, such as that of a resonant,
> center-fed, 1/2-wave dipole?
>
> RF

Yup, it is difficult, But I trust my logic in the face of contrary
statements that have no logic.
How can anybody supply a theory based solely on mathematic
tumbles..... but they do.
How can people who oil tractors and the like on road building and
nothing else and
call themselves engineers,...but they do. Some engineers put a wig on
their heads
and from then call themselves judges.....but they do! Some
people unlock the doors
of a radio station every morning and call themselves broardcast
engineers no less
.............but they do!

251. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 00:51:15 UTC
From: ltdoc@yahoo.com
Message-ID: <d900e785-3819-439c-a90a-b75492072c99@i76g2000hsf.googlegroups.com>
Source record: 24324

Art says,
> Yup, it is difficult, But I trust my logic in the face of contrary
> statements that have no logic.

And that's fine. But what about trusting your logic in the face of contrary statements that do have logic? That's not so fine, is it?

You've heard that old expression, "Put up or shut up."? Now's the time.

And with that, this 'midwife' self-promoted to 'doctor' will retire gracefully from this nonsense.
- 'Doc

(if I could figure a way to bag this whole thing I could make a fortune in the fertilizer 'bid-nez'!)

252. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 00:53:59 UTC
From: Jim Kelley <jimkelleyamps@gmail.com>
Message-ID: <cc6d508a-38db-4fcc-afb2-d50cf61b0474@y21g2000hsf.googlegroups.com>
Source record: 24325

Art Unwin wrote:
> Everything you have stated has been
> incorrect or faulty us of known laws

So basically it's your contention is that everything I say is wrong.
Ok, you're right, Art. :-)

ac6xg

253. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 01:10:28 UTC
From: Clark Kent <kentc@daily-planet.com>
Message-ID: <bkddk.1840$tN1.1105@newsfe14.phx>
Source record: 24326

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:138bebfe-8492-463c-8554-a4fd39e86e44@x41g2000hsb.googlegroups.com...
> On Jul 9, 12:55 am, "Clark Kent" <kentc@daily_planet.com> wrote:
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >
> >
news:27717f6c-c5fe-4ec6-849a-4ec7498fb6bd@k30g2000hse.googlegroups.com...
> >
> > [text deleted]
> >
> > > Art Unwin
> > > unwinantennas.com/
> >
> > I went to your website but I didn't see any specific antenna
information,
> > like a ham might want to build a new type of antenna, to try it out.

[text deleted>

> A helix is an excellent example to talk about to arrive at small full
> wave antennas.
> When you follow the reasoning of the extension to Gaussian law of
> statics which makes
> it dynamic it brings to the surface that a radiator can be any size or
> shape as long as it is in equilibrium.

[text deleted]

> By the way my antennas are always of a full wavelength which by virtue
> of its reduced volume then becomes a small FULL wave antennas to
> retain the inherrent efficiencies of full wave antennas in equilibrium
> as well as resonant.

> Allow me to continu on this line of thinking. It should now be seen
> that an array is also shrunken not only by the shortened elements but
> also by the fact that element spacings conform to the equilibrium of
> the array as a whole! We then have an array that does not have to have
> elements at certain distance from each other ad infirnitum but just
> two elements much closer together where all radiation is accounted
> for!
> Hope the above helps you out.

[text deleted]

> Cheers and beers
> Art Unwin KB9MZ

Well, I'm good with the cheers and beers, but no way am I close
to clipping and snipping (wire) to make an Unwin Antenna.

What do they look like? Photos? Diagrams? Crayola drawings?

Don't get me wrong, OM, theory is important but there's no textbook
that loads up at 7220 KHz. Show me some metal parts.

254. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 01:35:43 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <61bbda9c-8986-4ef5-add0-e464a4675d0a@k37g2000hsf.googlegroups.com>
Source record: 24327

```
On Jul 9, 7:51 pm, lt...@yahoo.com wrote:
> Art says,
>
> > Yup, it is difficult, But I trust my logic in the face of contrary
> > statements that have no logic.
>
> And that's fine. But what about trusting your logic in the face of
> contrary statements that do have logic? That's not so fine, is it?
>
> You've heard that old expression, "Put up or shut up."? Now's the
> time.
>
> And with that, this 'midwife' self-promoted to 'doctor' will retire
> gracefully from this nonsense.
> - 'Doc
>
> (if I could figure a way to bag this whole thing I could make a
> fortune in the fertilizer 'bid-nez'!)

Goof for you
```

255. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 01:53:17 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9b9d2943-ae09-4e24-b48a-6f1544e66b0d@m36g2000hse.googlegroups.com>
Source record: 24328

On Jul 9, 8:10 pm, "Clark Kent" <ke...@daily-planet.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:138bebfe-8492-463c-8554-a4fd39e86e44@x41g2000hsb.googlegroups.com...> On Jul 9,
12:55 am, "Clark Kent" <kentc@daily_planet.com> wrote:
> > > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:27717f6c-c5fe-4ec6-849a-4ec7498fb6bd@k30g2000hse.googlegroups.com...
>
>
>
> > > [text deleted]
>
> > > > Art Unwin
> > > > unwinantennas.com/
>
> > > I went to your website but I didn't see any specific antenna
> information,
> > > like a ham might want to build a new type of antenna, to try it out.
>
> [text deleted>
>
> > A helix is an excellent example to talk about to arrive at small full
> > wave antennas.
> > When you follow the reasoning of the extension to Gaussian law of
> > statics which makes
> > it dynamic it brings to the surface that a radiator can be any size or
> > shape as long as it is in equilibrium.
>
> [text deleted]
>
> > By the way my antennas are always of a full wavelength which by virtue
> > of its reduced volume then becomes a small FULL wave antennas to
> > retain the inherrent efficiencies of full wave antennas in equilibrium
> > as well as resonant.
> > Allow me to continu on this line of thinking. It should now be seen
> > that an array is also shrunken not only by the shortened elements but
> > also by the fact that element spacings conform to the equilibrium of
> > the array as a whole! We then have an array that does not have to have
> > elements at certain distance from each other ad infirnitum but just
> > two elements much closer together where all radiation is accounted
> > for!
> > Hope the above helps you out.
>

> [text deleted]
>
> > Cheers and beers
> > Art Unwin KB9MZ
>
> Well, I'm good with the cheers and beers, but no way am I close
> to clipping and snipping (wire) to make an Unwin Antenna.
>
> What do they look like? Photos? Diagrams? Crayola drawings?
>
> Don't get me wrong, OM, theory is important but there's no textbook
> that loads up at 7220 KHz. Show me some metal parts.

I am sharing information with all so there is nothing to stop you
making one for your own use.
I really want the Britts to use it on their small gardens at the back
and get on the top bands.
They are still into experimenting oiver there where America still is
in the throw away society
preferring the Lazy Boy and a six pack instead of a hobby. All they
want to be is LOUD and talk over the other cb ers
which is why their interest in antennas evolve solely around gain and
a amplifier.
Read some of the postings and eventually you will find where it tells
you how to make one as I am not giving them away
for trial runs on the air. Just follow what is evident, a radiator can
be any shape size or elevation as long as it is in equilibrium.
Put another way if during construction you add lumped loads in any
form then they must be cancelled. Now let your imagination run wild.
I have made one in sheet form so there are plenty of options

256. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 02:11:52 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <72fb93c8-788f-40f0-8931-aa849d8f82d1@m45g2000hsb.googlegroups.com>
Source record: 24329

On Jul 9, 8:10 pm, "Clark Kent" <ke...@daily-planet.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:138bebfe-8492-463c-8554-a4fd39e86e44@x41g2000hsb.googlegroups.com...> On Jul 9,
12:55 am, "Clark Kent" <kentc@daily_planet.com> wrote:
> > > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:27717f6c-c5fe-4ec6-849a-4ec7498fb6bd@k30g2000hse.googlegroups.com...
>
>
>
> > > [text deleted]
>
> > > > Art Unwin
> > > > unwinantennas.com/
>
> > > I went to your website but I didn't see any specific antenna
> information,
> > > like a ham might want to build a new type of antenna, to try it out.
>
> [text deleted>
>
> > A helix is an excellent example to talk about to arrive at small full
> > wave antennas.
> > When you follow the reasoning of the extension to Gaussian law of
> > statics which makes
> > it dynamic it brings to the surface that a radiator can be any size or
> > shape as long as it is in equilibrium.
>
> [text deleted]
>
> > By the way my antennas are always of a full wavelength which by virtue
> > of its reduced volume then becomes a small FULL wave antennas to
> > retain the inherrent efficiencies of full wave antennas in equilibrium
> > as well as resonant.
> > Allow me to continu on this line of thinking. It should now be seen
> > that an array is also shrunken not only by the shortened elements but
> > also by the fact that element spacings conform to the equilibrium of
> > the array as a whole! We then have an array that does not have to have
> > elements at certain distance from each other ad infirnitum but just
> > two elements much closer together where all radiation is accounted
> > for!
> > Hope the above helps you out.
>

> [text deleted]
>
> > Cheers and beers
> > Art Unwin KB9MZ
>
> Well, I'm good with the cheers and beers, but no way am I close
> to clipping and snipping (wire) to make an Unwin Antenna.
>
> What do they look like? Photos? Diagrams? Crayola drawings?
>
> Don't get me wrong, OM, theory is important but there's no textbook
> that loads up at 7220 KHz. Show me some metal parts.

Tell you what, get some wire twice the WL of the frequency you are
interested in.
Wind a close coil any diameter with it until half the wire is used
then change direction and come back
without changing wire winding direction and wind the wire on top of
the first coil where you finish with two wires to feed.
Put a variometer in series with it and then get on the air. Now this
is not exactly in equilibrium because one coil is a larger diameter
than
the other. Nor is the wire pre twisted pair which nullifies near field
noise to my thinking. Now you have a helix style antenna but without
the helix.
Coat the antenna with an alkyd type solution before you slide it off
the tube since the inside coil must be exposed the same way the
outside coil is exposed
'So it is easy to build a common standard form as stated on my page. I
really do not know what the beef is. Alternatively make a zig zag with
your wire two times and connect the wires at the top so you have two
laminations,. Be inventive and don't throw your other antenna away.
Hams in the past have tested their new antennas only to get insulted
over the manner of testing so a ham should never make claims regarding
gain

257. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 02:22:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g53rpo$1ki$1@news.albasani.net>
Source record: 24330

Art Unwin wrote:

>> ...

Art:

Geesh ...

I'd hoped I'd not have to mention this ...

You know that earlier joke I made? The one about the dummy carrying the round HEAVY rock downhill? (They guy my old Elmer made fun of?)

Well, dude, that WAS Jim Kelly ... need I say more? Give it up man--if you argue with complete idiots, "IT" destroys what tattered argument you have ... but them, you could have guessed that ...

Regards,
JS

258. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 02:24:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g53rt9$27r$1@news.albasani.net>
Source record: 24331

John Smith wrote:

>> ...
> have ... but them, you could have guessed that ...
>
> Regards,
> JS

them = then ... but then, you already knew that too! :-)

Regards,
JS

259. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 02:27:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g53s2d$1ki$2@news.albasani.net>
Source record: 24332

John Smith wrote:
> Art Unwin wrote:
>
> >> ...
>
> Art:
>
> Geesh ...
>
> I'd hoped I'd not have to mention this ...
>
> You know that earlier joke I made? The one about the dummy carrying the
> round HEAVY rock downhill? (They guy my old Elmer made fun of?)
>
> Well, dude, that WAS Jim Kelly ... need I say more? Give it up man--if
> you argue with complete idiots, "IT" destroys what tattered argument you
> have ... but them, you could have guessed that ...
>
> Regards,
> JS

Come to think of it, Jim Kelley = "Dummy Load."

But then, you knew that, already, too ... a jerk like him is a rare
find--please, by all means, toy him along like a cat with a mouse! <grin>

Regards,
JS

260. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 02:27:43 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <78e5ea7a-09a8-4e6e-8818-e69c4d62d224@a70g2000hsh.googlegroups.com>
Source record: 24333

On Jul 9, 7:53 pm, Jim Kelley <jimkelleya...@gmail.com> wrote:
> Art Unwin wrote:
> > Everything you have stated has been
> > incorrect or faulty us of known laws
>
> So basically it's your contention is that everything I say is wrong.
> Ok, you're right, Art. :-)
>
> ac6xg

So far I have been right!. You are excercising free speech without
scientific underpinnings.
You like others did not come forward and prove scientifically that
Gauss law CANNOT be extended.
You dont accept the idea of a partical with nuclear life. In fact you
don't even accept eddy currents.
If you are teaching kindegarten then such free speech is in order as
they will not challenge you.
But you must expect challenges from grown ups unless you supply
underlying data for claims made
or refuted. I will now give you a chance to show what expertise you
have.
Professionals in antenna design work mainly in the higher frequencies
where they show circular
eddy currents on the internal wave guide walls. So why on the lower
frequences do amateurs deny
the existance of surface carried eddy currents? This same scientific
fact is used in detecting material flaws without destruction
as fissures in metal alters the eddy current. So where in the hell are
you comming from and where does your main expertise dwell?

261. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 03:08:51 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48757d46$0$60074$8046368a@newsreader.iphouse.net>
Source record: 24334

Art Unwin wrote:

99% of crap cut

> Richard, you can;'t mess with mother nature or the Universe

This is even better than Rosie O'Donnell!

Which isn't saying much, of course.

And no Art, I haven't added a whit of information here. Which precisely matches the sum total of what you have posted here since you showed up.

tom
K0TAR

262. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 03:32:13 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <183c20bb-cd8a-42ab-9277-414777a96296@e53g2000hsa.googlegroups.com>
Source record: 24335

On Jul 9, 10:08 pm, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
>
> 99% of crap cut
>
> > Richard, you can;'t mess with mother nature or the Universe
>
> This is even better than Rosie O'Donnell!
>
> Which isn't saying much, of course.
>
> And no Art, I haven't added a whit of information here. Which precisely
> matches the sum total of what you have posted here since you showed up.
>
> tom
> K0TAR

Well you have made your point ! Now what do you feel I should do?
Copy your words and return them? Say that I see a veiled threat?
All the above is free speech without contention of any sort so what
do we have to talk about now?

263. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 03:37:57 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <Ts6dnQO4M8htHujVnZ2dnUVZ_q7inZ2d@comcast.com>
Source record: 24336

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:183c20bb-cd8a-42ab-9277-414777a96296@e53g2000hsa.googlegroups.com...
> On Jul 9, 10:08 pm, Tom Ring <news0...@taring.org> wrote:
>> Art Unwin wrote:
>>
>> 99% of crap cut
>>
>> > Richard, you can;'t mess with mother nature or the Universe
>>
>> This is even better than Rosie O'Donnell!
>>
>> Which isn't saying much, of course.
>>
>> And no Art, I haven't added a whit of information here. Which precisely
>> matches the sum total of what you have posted here since you showed up.
>>
>> tom
>> K0TAR
>
> Well you have made your point ! Now what do you feel I should do?
> Copy your words and return them? Say that I see a veiled threat?
> All the above is free speech without contention of any sort so what
> do we have to talk about now?

This smells of what went around a couple of years ago about the FRACTAL
antennas

264. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 03:49:12 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <281c5a2e-41cf-42c7-9fd8-919c0a450b4b@34g2000hsf.googlegroups.com>
Source record: 24337

On Jul 9, 9:24 pm, John Smith <assemblywiz...@gmail.com> wrote:
> John Smith wrote:
>
> >> ...
>
> > have ... but them, you could have guessed that ...
>
> > > Regards,
> > > JS
>
> them = then ... but then, you already knew that too! :-)
>
> Regards,
> JS

John, thank you for that. Over the years he has hinted that he was a
assistant professor at a local college
but as of late I have found it hard to fathom things out as he is so
lacking in the field of physics and electrical
engineering but I gave him the benefit of doubt. So it is quite
possible that like Richard he has his moments.
Like going to the bedroom for a clean shirt. forgetting why he came to
the bedroom so puts on his pyjamas and gets into bed
lesving his wife already to go out while he goes to sleep. I think
they call that senior moments. Well the info given clears a lot of
things up
for me and I shall not continue to guess where his expertize is any
more.
Regards
Art

265. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 04:10:42 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <da558cc9-ae12-4750-8ee5-8371932a2e45@z66g2000hsc.googlegroups.com>
Source record: 24338

On Jul 9, 10:37 pm, "W3CQH" <hsgor...@comcast.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:183c20bb-cd8a-42ab-9277-414777a96296@e53g2000hsa.googlegroups.com...
>
>
>
> > On Jul 9, 10:08 pm, Tom Ring <news0...@taring.org> wrote:
> >> Art Unwin wrote:
>
> >> 99% of crap cut
>
> >> > Richard, you can;'t mess with mother nature or the Universe
>
> >> This is even better than Rosie O'Donnell!
>
> >> Which isn't saying much, of course.
>
> >> And no Art, I haven't added a whit of information here. Which precisely
> >> matches the sum total of what you have posted here since you showed up.
>
> >> tom
> >> K0TAR
>
> > Well you have made your point ! Now what do you feel I should do?
> > Copy your words and return them? Say that I see a veiled threat?
> > All the above is free speech without contention of any sort so what
> > do we have to talk about now?
>
> This smells of what went around a couple of years ago about the FRACTAL
> antennas

Yup, I felt sorry for him, especially when he was attacked for being
Jewish
But from what I understand fractals are being used as embedded
antennas
and in other areas of the military so he must be laughing all the way
to the bank
while other hams continued to cry fraud because all they was
interested in was more gain
to become loud mouths.
I wish him well

266. Re: Why does the Lazy H antenna suck in the real world on 11 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 04:33:28 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9AD6DB438397doldridgsprintca@64.59.135.159>
Source record: 24339

Michael <spamtrap@shadowstorm.com> wrote in news:e4ae9836-71d2-4075-9823-fa1a11a90375@34g2000hsh.googlegroups.com:

> I've seen the Lazy H mentioned in many antenna books over the years,
> so I decided to try one on 10 meters. According to the ARRL handbook
> the Lazy H is two collinear elements stacked on above the other, Each
> collinear element is made up of two 1/2 wave elements. I chose to
> use 5/8 wave spacing between the top and bottom elements. I connected
> the top and bottom elements with 450 ohm 16 gauge stranded ladder line
> (window line). After building the antenna I verified connectivity
> between the top and bottom right elements and the top and bottom left
> elements. I color coded the end insulators on each side so I could
> easily see which top and bottom elements were connected to each other.
> The antenna book says to connect the 450 ohm ladder line from the
> antenna tuner to the middle of the 450 ladder line that connects top
> and bottom elements. Ok done. Now I put up the antenna and make sure
> the top and bottom elements are in phase. That is both left connected
> elements are on the left and both right connected element are on the
> right. I also make sure there is no twist in the ladder line
> connecting the top and bottom elements. I also checked the other
> ends of the 450 ohm ladder line feeding the antenna has connectivity
> at the antenna, and the left and right sides of the ladder line do not
> have connectivity. The 450 ohm ladder line feeding the antenna is
> about 200 feet long.
> Now I bring the 450 ohm feedline in to the house, hook it to my
> Dentron MT-2000 antenna tuner with the 4:1 balun inside, tune it up,
> and it sucks! Both my half wave horizontal dipole and my Solarcon
> Max-2000 blow it away on incoming skip even in the preferred direction
> of the lazy H. I rechecked my connections and the lengths of the
> elements and spacing and they are correct. I did take in to account
> the velocity factor of the 450 ladder line that connects the top
> elements to the bottom elements. The antenna book says the length of
> the 450 ladder lien between the antenna and the antenna tuner can e
> any lenght.
> The bottom element is at least 1/2 wave of the ground, and the top
> element is 5/8ths wave above that. What did I do wrong?

Have you tried lengthening or shortening the line by about 4 1/2 feet? It may be simply that the length of the line is resulting in an impedance your tuner cannot match.

I think, given the nature of the antenna and the length of your line, you can probably expect about 3 dB losses on a dry line and close to 10 on a wet one.

--
Dave Oldridge+
ICQ 1800667
VA7CZ

267. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 06:25:23 UTC
From: <>
Message-ID: <snab74t3qifnn3j8i3in2ck34slnfvhe57@4ax.com>
Source record: 24340

On Wed, 9 Jul 2008 16:02:54 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I would like to add a caviate to assigning a series circuit which I
>did
>to follow convention for fractional WL. If I had a lab it would be
>easy to prove whether the distributed capacitance
>and the distributed inductance are themselves in parallel within the
>radiating member instead of in series
>such that the energy retention qualities are kept. And possibly this
>circulatory arrangement will supply some connection to the swerling
>eddy currents upon the surface. However I will keep to convention
>until the corresponding evidence comes in. Got to get the DC
>resistance of a radiator involved to resolve that one.
>Unwinantennas.com/

You are offering DC antennas?
How do you match them?
Are you sure, your cables and connectors don't leak and spill
direct current to the environment?

w.

268. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 07:32:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g54dup$s7a$1@registered.motzarella.org>
Source record: 24341

Art Unwin wrote:

> ...
> John, thank you for that. Over the years he has hinted that he was a
> assistant professor at a local college
> but as of late I have found it hard to fathom things out as he is so
> lacking in the field of physics and electrical
> engineering but I gave him the benefit of doubt. So it is quite
> possible that like Richard he has his moments.
> Like going to the bedroom for a clean shirt. forgetting why he came to
> the bedroom so puts on his pyjamas and gets into bed
> lesving his wife already to go out while he goes to sleep. I think
> they call that senior moments. Well the info given clears a lot of
> things up
> for me and I shall not continue to guess where his expertize is any
> more.
> Regards
> Art

If that "man" (and, I use that term VERY loosely here) has anything to
do with education, whatsoever, one is better off uneducated and ignorant!

Nuff' said ...

Regards,
JS

269. Re: ipod case

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 07:35:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g54e53$s7a$2@registered.motzarella.org>
Source record: 24342

Walter Maxwell wrote:
> Sorry All, XYL Jean punched the wrong button--didn't intend for this to go to
> the RRAA.
>
> "Walter Maxwell" <walt@w2du.com> wrote in message
> news:xK5dk.19$Uc.3@newsfe05.lga...
>> Hey, I just found your ipod case on top of the microwave. Shall I stick it in
>> an envelope and mail it to you today?
>>
>> Love, Mom
>>
>>
>
>

LOL!

Looks normal to me ... my XYL is prone to the same ...

Regards,
JS

270. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 11:16:14 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <5cmdk.98433$c5.73272@fe101.usenetserver.com>
Source record: 24343

Art Unwin wrote:
> I would like to add a caviate to assigning...

caviate

Latin

1. Second-person plural present subjunctive of cavare.

Dave K8MN

271. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 13:01:15 UTC
From: ltdoc@yahoo.com
Message-ID: <e18e5c87-3897-42b4-b5ba-836765e17979@b1g2000hsg.googlegroups.com>
Source record: 24344

A helix wound antenna with a double winding? Really?
- 'Doc

272. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 13:05:56 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <ku6dnXqzQ66SlOvVnZ2dnUVZ_tTinZ2d@comcast.com>
Source record: 24345

<ltdoc@yahoo.com> wrote in message
news:e18e5c87-3897-42b4-b5ba-836765e17979@b1g2000hsg.googlegroups.com...
>A helix wound antenna with a double winding? Really?
> - 'Doc
>
Double winding - in which direction and spaced how far apart in each
direction?

273. Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 15:41:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o3ac74pq5155crhldjo8bald1b94sg46r0@4ax.com>
Source record: 24347

On Thu, 10 Jul 2008 09:05:56 -0400, "W3CQH" <hsgorden@comcast.net>
wrote:

>Double winding - in which direction and spaced how far apart in each
>direction?

>On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin <ArthurUnwin@gmail.com> wrote:
>
>>Wind a close coil any diameter with it until half the wire is used
>>then change direction and come back
>>without changing wire winding direction and wind the wire on top of
>>the first coil where you finish with two wires to feed.
>>Put a variometer in series with it and then get on the air. Now this
>>is not exactly in equilibrium because one coil is a larger diameter
>>than
>>the other. Nor is the wire pre twisted pair which nullifies near field
>>noise to my thinking. Now you have a helix style antenna but without
>>the helix.
>>Coat the antenna with an alkyd type solution before you slide it off
>>the tube since the inside coil must be exposed the same way the
>>outside coil is exposed

Take one wavelength of zip cord. Wrap it around any diameter form, as
distinctly specified above by the authur. Half the wire is used
going, and half the wire is used returning by specification of the zip
cord, as distinctly specified above by the authur.

There is no change in winding direction as zip cord guarantees this by
physical attachment, as specified above by the authur. Both wires are
wrapped without changing direction, as distinctly specified above by
the author.

There is no pre twisting for the same reason (which might nullifie
near field noise to his thinking - an asset to almost anyone else, but
go figure), as specified above by the authur. It is exactly in
equilibrium because both coils are the same diameter, as distinctly
specified above by the authur.

There is no need for coating as there is no inside coil, this is
guaranteed by the physical construction of zip cord. Zip cord also
guarantees equal lengths of going/returning lengths of conductor.

Short one end of the zip cord paired conductors to make the gussian
loop, as distinctly specified above by the authur.

Feed the other end of the zip cord paired conductors to emit the
neutrons' weak force, as distinctly specified above by the authur.

Performance will follow the principal physics of this weak force and provide an intensely weak signal. If your listeners experience received signal levels greater than -40dB compared to a standard (non-gussian) dipole, then you have not followed instructions distinctly quoted above from the authur.

Careful attention to detail can achieve increased performances of up to -60dB below traditional designs (indistinctly specified by the authur).

Take care to note that this design is impossible to model as it violates every software package's capacity to allow closely spaced wires. There are absolutely no software products, nor freely available packages that perform this analysis - you are now in faith based alchemy. Any claims to the contrary (contradicting this faith based illusion) are delusional. This level of delusion can be confirmed by the whole absence of reference, citation, or offering of results of double-blind testing.

73's
Richard Clark, KB7QHC

274. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 15:48:49 UTC
From: kb9rqz@yahoo.com
Message-ID: <tqbc74lcfh1ofn9sgqtbv7tlce6qiicp58@4ax.com>
Source record: 24249
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

275. Amateurs web camchat

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 15:50:18 UTC
From: rubysamathas@gmail.com
Message-ID: <c4e53a7f-39c2-4460-a326-6b697603f3b6@s50g2000hsb.googlegroups.com>
Source record: 24348
Cross-posted to:
rec.puzzles,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx

Amateurs web camchat http://tubepenthouse.servik.com/view_cam.htm

276. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:06:27 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2008.07.10.16.06.42@netins.net>
Source record: 24349

On Thu, 10 Jul 2008 08:41:15 -0700, Richard Clark wrote:

> On Thu, 10 Jul 2008 09:05:56 -0400, "W3CQH" <hsgorden@comcast.net>
> wrote:
>
>>Double winding - in which direction and spaced how far apart in each
>>direction?
>
>>On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin
>><ArthurUnwin@gmail.com> wrote:
>>
>>>Wind a close coil any diameter with it until half the wire is used then
>>>change direction and come back
>>>without changing wire winding direction and wind the wire on top of the
>>>first coil where you finish with two wires to feed. Put a variometer in
>>>series with it and then get on the air. Now this is not exactly in
>>>equilibrium because one coil is a larger diameter than
>>>the other. Nor is the wire pre twisted pair which nullifies near field
>>>noise to my thinking. Now you have a helix style antenna but without
>>>the helix.
>>>Coat the antenna with an alkyd type solution before you slide it off
>>>the tube since the inside coil must be exposed the same way the outside
>>>coil is exposed
>
>
> Take one wavelength of zip cord. Wrap it around any diameter form, as
> distinctly specified above by the authur. Half the wire is used going,
> and half the wire is used returning by specification of the zip cord, as
> distinctly specified above by the authur.
>
> There is no change in winding direction as zip cord guarantees this by
> physical attachment, as specified above by the authur. Both wires are
> wrapped without changing direction, as distinctly specified above by the
> author.

Not that I have any confidence in Art's antenna design. But you wind a
cylinder with zip cord from left to right, with the left end pair being
the feed and the right pair shorted (as if a single 2W wire) then the
'return winding' will essentially be wrapped in the opposite direction.

277. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:17:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g55cmt$140$1@news.albasani.net>
Source record: 24350

W3CQH wrote:
> <ltdoc@yahoo.com> wrote in message
> news:e18e5c87-3897-42b4-b5ba-836765e17979@b1g2000hsg.googlegroups.com...
>> A helix wound antenna with a double winding? Really?
>> - 'Doc
>>
> Double winding - in which direction and spaced how far apart in each
> direction?
>
>

This URL, of a patent of an antenna which is growing in commercial use, describes just such a winding and how it is constructed for real world use. I am almost positive this is the "double helix winding method" which Art is making reference to:

http://www.patentstorm.us/patents/7187335/fulltext.html

In particular, this reference in the patent:

"It has been found that interlacing a false winding into a current enhancing unit (such as the top unit winding shown in FIG. 6) or a radiation resistance unit (such as a helix as shown in FIG. 7) enhances the bandwidth of the top unit as well as improves the current profile along the antenna. The interlaced false winding has little effect on the resonant frequency of the antenna system."

Regards,
JS

278. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:22:43 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <jJ-dnXgB5NWzquvVnZ2dnUVZ_hudnZ2d@comcast.com>
Source record: 24201

"Tehrasha Darkon" <darkon@netins.net> wrote in message
news:pan.2008.07.10.16.06.42@netins.net...
> On Thu, 10 Jul 2008 08:41:15 -0700, Richard Clark wrote:
>
>> On Thu, 10 Jul 2008 09:05:56 -0400, "W3CQH" <hsgorden@comcast.net>
>> wrote:
>>
>>>Double winding - in which direction and spaced how far apart in each
>>>direction?
>>
>>>On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin
>>><ArthurUnwin@gmail.com> wrote:
>>>
>>>>Wind a close coil any diameter with it until half the wire is used then
>>>>change direction and come back
>>>>without changing wire winding direction and wind the wire on top of the
>>>>first coil where you finish with two wires to feed. Put a variometer in
>>>>series with it and then get on the air. Now this is not exactly in
>>>>equilibrium because one coil is a larger diameter than
>>>>the other. Nor is the wire pre twisted pair which nullifies near field
>>>>noise to my thinking. Now you have a helix style antenna but without
>>>>the helix.
>>>>Coat the antenna with an alkyd type solution before you slide it off
>>>>the tube since the inside coil must be exposed the same way the outside
>>>>coil is exposed
>>
>>
>> Take one wavelength of zip cord. Wrap it around any diameter form, as
>> distinctly specified above by the authur. Half the wire is used going,
>> and half the wire is used returning by specification of the zip cord, as
>> distinctly specified above by the authur.
>>
>> There is no change in winding direction as zip cord guarantees this by
>> physical attachment, as specified above by the authur. Both wires are
>> wrapped without changing direction, as distinctly specified above by the
>> author.
>
> Not that I have any confidence in Art's antenna design. But you wind a
> cylinder with zip cord from left to right, with the left end pair being
> the feed and the right pair shorted (as if a single 2W wire) then the
> 'return winding' will essentially be wrapped in the opposite direction.
>
Well if you do wrap in one direction and then immediately wrap in the
opposite direction upon each other, I wonder what the cancellation db

figures are. On the other hand if you should wrap in the reverse direction with some substantial spacing, I could imagine that there might be some gain although very small??

279. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:23:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g55d2b$140$2@news.albasani.net>
Source record: 24202

Dave Heil wrote:
> Art Unwin wrote:
>> I would like to add a caviate to assigning...
>
> caviate
>
> Latin
>
> 1. Second-person plural present subjunctive of cavare.
>
>
> Dave K8MN

Here are a few definitions for you of "caveat", from this URL
"http://www.google.com/search?hl=en&q=define%3Acaveat&btnG=Search"

caution: a warning against certain acts; "a caveat against unfair
practices"

(law) a formal notice filed with a court or officer to suspend a
proceeding until filer is given a hearing; "a caveat filed against the
probate of a will"
wordnet.princeton.edu/perl/webwn

Caveat (foaled 1980 in Maryland) was an American thoroughbred stallion
racehorse. Bred by Ryehill Farm, he was sired by Kentucky Derby winner
Cannonade out of the The Axe mare, Cold Hearted.
en.wikipedia.org/wiki/Caveat (horse)

a warning; a qualification or exemption; a notice requesting a
postponement of a court proceedings
en.wiktionary.org/wiki/caveat

If a caveat is lodged upon a title to land it indicates that another
party other than the owner claims some right over or interest in the
property.
www.aussie.com.au/Glossary.htm

Is a document any person with a legal interest in a property can lodge
with the Titles Office to ensure the property is not sold without their
knowledge
www.malenyrealty.com.au/resources/technical_terms.html

A note placed on the register in the Land Titles Office at the
instigation of a person who claims a certain interest in the land. In
BC, a caveat remains in force for only 2 months, then lapses.
www.propertytours.ca/realty/glossary.htm

A warning; a note of caution.
www.id.uscourts.gov/terms-cd.htm

"Beware" ï¿½ if a caveat is lodged on a title to land, it warns a person buying the property that a third party (party which lodged the caveat) has some right or interest in the property.
www.efame.com.au/glossary.htm

A warning on a title to a purchaser that a third party might have some interest or right in the property.
www.reinz.org.nz/reinz/public/buyers-sellers/terminology.cfm

A formal notice, that asks a court to suspend action until the party which filed the challenge can be heard.
www.boise-idahos-real-estate.com/real-estate-definitions-c-158.html

a formal notice given by someone to prevent the proving of a Will or the grant of administration of an Estate.
www.oceancountygov.com/surrogat/glossary.htm

means a document lodged with the Recorder of Titles by a person authorised to do so forbidding the recording of any dealing on the title subject to the caveat Literally means beware. In real estate, it warns persons (prospective purchasers, mortgagees, etc. ...
www.cromer-partners.com.au/pages/glossaryalpha.php

A notice of warning given to a public authority, eg Titles Office, claiming entitlement to an interest in certain land. The caveat is registered and remains on the books as a warning to anyone who contemplates dealing with the property. ...
www.redearthfinance.com.au/bwWebsite/followon.asp

A notice on title proclaiming a possible interest other than that of an owner.
www.talkproperty.net.au/index.php

A notice given to a legal authority not to do something until the person giving notice can be heard.
www.recalgary.com/information/glossary_c.htm

A legal notice by a person having a (caveatable) interest in the property which will prevent transfer in title until the claim has been determined.
www.eastcoastconveyancing.com.au/glossary.htm

Latin for "beware". Usually it is in the form of a contract clause that stipulates a particular requirement.
www.yourfinancechoice.com/index.php

If an creditor of the estate of a decedent is apprehensive that an estate, wither testate or intestate, will be administered without the creditor's knowledge, or if any person other than a creditor is apprehensive that an estate may be administered, or that a will may be admitted to probate ...
pages.jbiproperties.com/ezrealestateoptions/glossaryofterms.html

a formal notice or warning against certain actions being taken by a court; most often seen in regard to the granting of probate of a will by the court; most common usage as a document that is filed in the Land Titles Office to warn of possible title defects;
www.manitobacourts.mb.ca/definitions.html

A notice not to do something until the person caveating has been heard. It is often seen in the case of land claims, where a caveator might object to a claim overlapping his own. ...
www.genfiles.com/legal/legalterms.htm

Latin for ï¿½bewareï¿½. This often applies to a contract clause
www.interestrate.com.au/glossary.asp

This indicates the rights or interests of a third party in the property. A caveat is a legal document which, when lodged in the Land Registry Office, gives the caveator the opportunity of protecting an existing right or of establishing an existing claim in property. ...
www.virtualrealty.co.nz/reterms.html

If you don't pay your fees, you may find one of these registered against your title. This ensures the corporation gets its money before you dispose of the asset and may be the basis for collection procedures.
www.calgaryselect.com/Housing/Condominiums/Glossary/tabid/100/Default.aspx

Quite interesting, the fact you were being "fooled" into thinking there was but one! <grin>

Regards,
JS

280. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:25:30 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <mrKdnY4cX75FquvVnZ2dnUVZ_hadnZ2d@comcast.com>
Source record: 24203

"Tehrasha Darkon" <darkon@netins.net> wrote in message
news:pan.2008.07.10.16.06.42@netins.net...
> On Thu, 10 Jul 2008 08:41:15 -0700, Richard Clark wrote:
>
>> On Thu, 10 Jul 2008 09:05:56 -0400, "W3CQH" <hsgorden@comcast.net>
>> wrote:
>>
>>>Double winding - in which direction and spaced how far apart in each
>>>direction?
>>
>>>On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin
>>><ArthurUnwin@gmail.com> wrote:
>>>
>>>>Wind a close coil any diameter with it until half the wire is used then
>>>>change direction and come back
>>>>without changing wire winding direction and wind the wire on top of the
>>>>first coil where you finish with two wires to feed. Put a variometer in
>>>>series with it and then get on the air. Now this is not exactly in
>>>>equilibrium because one coil is a larger diameter than
>>>>the other. Nor is the wire pre twisted pair which nullifies near field
>>>>noise to my thinking. Now you have a helix style antenna but without
>>>>the helix.
>>>>Coat the antenna with an alkyd type solution before you slide it off
>>>>the tube since the inside coil must be exposed the same way the outside
>>>>coil is exposed
>>
>>
>> Take one wavelength of zip cord. Wrap it around any diameter form, as
>> distinctly specified above by the authur. Half the wire is used going,
>> and half the wire is used returning by specification of the zip cord, as
>> distinctly specified above by the authur.
>>
>> There is no change in winding direction as zip cord guarantees this by
>> physical attachment, as specified above by the authur. Both wires are
>> wrapped without changing direction, as distinctly specified above by the
>> author.
>
> Not that I have any confidence in Art's antenna design. But you wind a
> cylinder with zip cord from left to right, with the left end pair being
> the feed and the right pair shorted (as if a single 2W wire) then the
> 'return winding' will essentially be wrapped in the opposite direction.
>
BTW if you split the 2 zip cord wires apart you could construct a loop
antenna, in just about any configuration you wished.

281. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:32:58 UTC
From: Jim Kelley <jimkelleyamps@gmail.com>
Message-ID: <582fa577-f50c-4af4-a476-c43b40a1b018@r66g2000hsg.googlegroups.com>
Source record: 24204

On Jul 9, 7:27 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> So where in the hell are
> you comming from and where does your main expertise dwell?

Hi Art -

Where am I coming from...well, a cab driver in London sent me a note a year or two ago after I came to your defense in this newsgroup. He confided to me about something that I had already suspected regarding your condition. Since then, I have advised some of your antagonists in the group by email that it might be the better part of valor to take it easy on you and just let you have your say. Mostly, I just wished for you pursue your interest and to avoid embarassing yourself.

Not that it matters, but my main expertise as it pertains to this discussion is in the design and construction of electronic equipment and scientific apparatus used for the measurement of various physical phenomena. e.g. US Pats 5,018,382 and 7,119,588. In the '70's and 80's I was in the business manufacturing guitar amplifiers. Among other things, I am an amateur radio operator and a musician.

For the record, although I have disagreed with you, I have never been personally disrespectful to you. I believe gentleman should be able to disagree without being disagreeable (or insulting).

ac6xg

282. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:36:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <59ec74pu55pp9ipspnk9otikfjkd9k2ava@4ax.com>
Source record: 24205

On Thu, 10 Jul 2008 16:06:27 +0000 (UTC), Tehrasha Darkon
<darkon@netins.net> wrote:

>>>On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin
>>><ArthurUnwin@gmail.com> wrote:
>>>
>>>>Wind a close coil any diameter with it until half the wire is used then
>>>>change direction and come back
>>>>without changing wire winding direction

> then the
>'return winding' will essentially be wrapped in the opposite direction.

The authur is quite distinct. Zip cord perfectly enforces the
original specification of winding direction. Any confusion that
results is not expressed by the explicit statement from that authur
above.

Further, results of supremely weak performance confirms this and has
been experienced by many (including Guss himself) for more than 3
centuries now.

73's
Richard Clark, KB7QHC

283. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:38:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8mec74pt602sf5h5nss2289nq2gr3lru6k@4ax.com>
Source record: 24206

On Thu, 10 Jul 2008 12:22:43 -0400, "W3CQH" <hsgorden@comcast.net>
wrote:

>I could imagine that there might be some gain
>although very small??

-60dB gain is quite substantial - even if small. All antennas have
gain.

73's
Richard Clark, KB7QHC

284. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:40:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <apec74t82k7bqevfdjthavki4lhm3lu77g@4ax.com>
Source record: 24207

On Thu, 10 Jul 2008 12:25:30 -0400, "W3CQH" <hsgorden@comcast.net>
wrote:

>BTW if you split the 2 zip cord wires apart you could construct a loop
>antenna, in just about any configuration you wished.

We aren't talking about "any" antenna, just those with superior weak
force performance due to neutron emission. It's all there on the
page, just read it!

73's
Richard Clark, KB7QHC

285. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 16:45:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g55eca$140$3@news.albasani.net>
Source record: 24208

Jim Kelley wrote:

> ...
> Hi Art -
>
> Where am I coming from...well, a cab driver in London sent me a note a
> year or two ago after I came to your defense in this newsgroup. He
> confided to me about something that I had already suspected regarding
> your condition. Since then, I have advised some of your antagonists
> in the group by email that it might be the better part of valor to
> take it easy on you and just let you have your say. Mostly, I just
> wished for you pursue your interest and to avoid embarassing yourself.
>
> Not that it matters, but my main expertise as it pertains to this
> discussion is in the design and construction of electronic equipment
> and scientific apparatus used for the measurement of various physical
> phenomena. e.g. US Pats 5,018,382 and 7,119,588. In the '70's and
> 80's I was in the business manufacturing guitar amplifiers. Among
> other things, I am an amateur radio operator and a musician.
>
> For the record, although I have disagreed with you, I have never been
> personally disrespectful to you. I believe gentleman should be able
> to disagree without being disagreeable (or insulting).
>
> ac6xg

You are disgusting.

Your manner(s) and depths you would stoop to are below a minimum level
to engage in human dialog/relations.

I find it a shame you would even be granted a license to engage in
communications with decent human beings--it certainly is to the
detriment of amateurs worldwide ... you sir are a NUT of the most
despicable kind--and, clear proof the bar should be raised!

However, I can only wish that you remain within the ignorant confines of
the prison of your mind; to awake to the reality of what you really are
could prove fatal and the undoing of your insane ego ...

PLONK!

JS

286. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 17:21:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6ca73771-a357-454f-9676-5b1f78b57633@j22g2000hsf.googlegroups.com>
Source record: 24209

On Jul 10, 11:06 am, Tehrasha Darkon <dar...@netins.net> wrote:
> On Thu, 10 Jul 2008 08:41:15 -0700, Richard Clark wrote:
> > On Thu, 10 Jul 2008 09:05:56 -0400, "W3CQH" <hsgor...@comcast.net>
> > wrote:
>
> >>Double winding - in which direction and spaced how far apart in each
> >>direction?
>
> >>On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin
> >><ArthurUn...@gmail.com> wrote:
>
> >>>Wind a close coil any diameter with it until half the wire is used then
> >>>change direction and come back
> >>>without changing wire winding direction and wind the wire on top of the
> >>>first coil where you finish with two wires to feed. Put a variometer in
> >>>series with it and then get on the air. Now this is not exactly in
> >>>equilibrium because one coil is a larger diameter than
> >>>the other. Nor is the wire pre twisted pair which nullifies near field
> >>>noise to my thinking. Now you have a helix style antenna but without
> >>>the helix.
> >>>Coat the antenna with an alkyd type solution before you slide it off
> >>>the tube since the inside coil must be exposed the same way the outside
> >>>coil is exposed
>
> > Take one wavelength of zip cord. Wrap it around any diameter form, as
> > distinctly specified above by the authur. Half the wire is used going,
> > and half the wire is used returning by specification of the zip cord, as
> > distinctly specified above by the authur.
>
> > There is no change in winding direction as zip cord guarantees this by
> > physical attachment, as specified above by the authur. Both wires are
> > wrapped without changing direction, as distinctly specified above by the
> > author.
>
> Not that I have any confidence in Art's antenna design. But you wind a
> cylinder with zip cord from left to right, with the left end pair being
> the feed and the right pair shorted (as if a single 2W wire) then the
> 'return winding' will essentially be wrapped in the opposite direction.

Correct. And if zip wire is used then you are adding a lumped load
which is a violation with respect to equilibriu,

287. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 17:23:31 UTC
From: richardharrison@webtv.net
Message-ID: <3732-48764593-446@storefull-3253.bay.webtv.net>
Source record: 24210

Art wrote:
"If I had a lab it would be easy to prove whether the distributed capacitance and distributed inductance are themselves in parallel within the radiating member instead of in series such that the energy retention qualies are kept."

J.C. Maxwell, also an Englishman, had no lab.

Radiation is the function of a radio antenna. Kept energy is not so important.

Recall that Maxwell`s great speculation was that displacement currents generated a magnetic field the same as conductive currents. Later, this was proved beyond doubt. It is a radiation requirement as no conductors inhabit empty space.

My edition of the "ARRL Antenna Book" is the 20th, which means its contents have been refined and tested over many years. It says on page 2-6:
"Now we just compared the antenna to a series-tuned circuit. Near its half-wave resonant frequency, a center-fed lambda/2 dipole exhibits much the same characteristics as a series-resonant circuit."

J.C. Maxwell died in 1879 at an age of 48 years, 8 years before Heinrich Hertz generated the first man-made intentional electromagnetic waves. These proved Maxwell correct. Oliver Heaviside, a Scot, born in 1850, decided to teach himself the contents of Maxwell`s "Electromagnetic Theory" and in 1887 started "dumbing down" Maxwell in a series of articles published in an English magazine, "The Electrician". That was the beginning of modern communication engineering.

Oliver Heaviside once said, "Let mathematics be humanized if possible. The best of proofs is to set out a fact descriptively so that it can be seen to be a fact."

Heaviside proves that all who are born in Edinburgh or London are not fools.

Best regards, Richard Harrison, KB5WZI

288. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 18:07:48 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <44f6754a-6f9c-4c19-8e71-cb753d926c46@c65g2000hsa.googlegroups.com>
Source record: 24211

On Jul 10, 11:17 am, John Smith <assemblywiz...@gmail.com> wrote:
> W3CQH wrote:
> > <lt...@yahoo.com> wrote in message
> >news:e18e5c87-3897-42b4-b5ba-836765e17979@b1g2000hsg.googlegroups.com...
> >> A helix wound antenna with a double winding? Really?
> >> - 'Doc
>
> > Double winding - in which direction and spaced how far apart in each
> > direction?
>
> This URL, of a patent of an antenna which is growing in commercial use,
> describes just such a winding and how it is constructed for real world
> use. I am almost positive this is the "double helix winding method"
> which Art is making reference to:
>
> http://www.patentstorm.us/patents/7187335/fulltext.html
>
> In particular, this reference in the patent:
>
> "It has been found that interlacing a false winding into a current
> enhancing unit (such as the top unit winding shown in FIG. 6) or a
> radiation resistance unit (such as a helix as shown in FIG. 7) enhances
> the bandwidth of the top unit as well as improves the current profile
> along the antenna. The interlaced false winding has little effect on the
> resonant frequency of the antenna system."
>
> Regards,
> JS

What you are refering to i believe is the Rhode Island antenna that
has been attacked
by all of ham radio but again it could be another follow up new
antenna tho it seems a bit soon
since they had to resubmit the first patent to get it accepted.
John, imagine the following
1 a rcp and a lcp helix driven in parallel with counterpoise. What
would the ensueing gain consist of?
2 a rcp and a lcp helix driven antenna connected at the top and fed
with out a counterpoise (assumption is that windings do not come in
contact with each other)
What would the ensuing gain, if any, consist of ?
Would either 1 or 2 produce a negative total gain?
I am really having a difficult time understanding why hams THINK so
bad of this type of antenna, with close windings or in pitched form

You just can't stop wire radiating so where are they coming from?
Regards
Art

Regards Art
Nobody has supplied any reasoning of what radiation a ham could expect
from such an arrangement. Yet anybody can check it out forthemselves
without unsubstantiated off the cuff comments meant to inflict pain

289. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 18:12:02 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <620760fe-8c53-44a4-b7da-cb29e4f865ed@c58g2000hsc.googlegroups.com>
Source record: 24212

On Jul 10, 11:45 am, John Smith <assemblywiz...@gmail.com> wrote:
> Jim Kelley wrote:
> > ...
> > Hi Art -
>
> > Where am I coming from...well, a cab driver in London sent me a note a
> > year or two ago after I came to your defense in this newsgroup. He
> > confided to me about something that I had already suspected regarding
> > your condition. Since then, I have advised some of your antagonists
> > in the group by email that it might be the better part of valor to
> > take it easy on you and just let you have your say. Mostly, I just
> > wished for you pursue your interest and to avoid embarassing yourself.
>
> > Not that it matters, but my main expertise as it pertains to this
> > discussion is in the design and construction of electronic equipment
> > and scientific apparatus used for the measurement of various physical
> > phenomena. e.g. US Pats 5,018,382 and 7,119,588. In the '70's and
> > 80's I was in the business manufacturing guitar amplifiers. Among
> > other things, I am an amateur radio operator and a musician.
>
> > For the record, although I have disagreed with you, I have never been
> > personally disrespectful to you. I believe gentleman should be able
> > to disagree without being disagreeable (or insulting).
>
> > ac6xg
>
> You are disgusting.
>
> Your manner(s) and depths you would stoop to are below a minimum level
> to engage in human dialog/relations.
>
> I find it a shame you would even be granted a license to engage in
> communications with decent human beings--it certainly is to the
> detriment of amateurs worldwide ... you sir are a NUT of the most
> despicable kind--and, clear proof the bar should be raised!
>
> However, I can only wish that you remain within the ignorant confines of
> the prison of your mind; to awake to the reality of what you really are
> could prove fatal and the undoing of your insane ego ...
>
> PLONK!
>
> JS

No John. you are misreading the situation.
His response was very tactful and for which I thank him
Art

290. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 18:27:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g55ka0$140$6@news.albasani.net>
Source record: 24213

Art Unwin wrote:

> ...
> What you are refering to i believe is the Rhode Island antenna that
> has been attacked
...
> Art
>
> Regards Art
> Nobody has supplied any reasoning of what radiation a ham could expect
> from such an arrangement. Yet anybody can check it out forthemselves
> without unsubstantiated off the cuff comments meant to inflict pain

It is the "Distributed Load Monopole" (DLM) antenna by Robert Vincent ...

I have a 50 ft. one in my front yard and disquised as a flagpole, for 80m.

At the back of the house, and hidden from view, is a 1/2 version for 10m.

For me, it is a perfect design ... I have not incorporated the
"interlaced winding(s)", yet ...

Regards,
JS

291. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 18:29:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g55ken$140$7@news.albasani.net>
Source record: 24214

Art Unwin wrote:

> ...
> No John. you are misreading the situation.
> His response was very tactful and for which I thank him
> Art

Hmmm ... if that is the case, I hope my apology(s) will be accepted ...
it shall not be the first time I have misunderstood words/intents ...
regretfully.

Regards,
JS

292. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 18:55:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d1a73197-0eab-468b-a8e2-373b07952687@26g2000hsk.googlegroups.com>
Source record: 24215

On Jul 10, 11:32 am, Jim Kelley <jimkelleya...@gmail.com> wrote:
> On Jul 9, 7:27 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > So where in the hell are
> > you comming from and where does your main expertise dwell?
>
> Hi Art -
>
> Where am I coming from...well, a cab driver in London sent me a note a
> year or two ago after I came to your defense in this newsgroup. He
> confided to me about something that I had already suspected regarding
> your condition. Since then, I have advised some of your antagonists
> in the group by email that it might be the better part of valor to
> take it easy on you and just let you have your say. Mostly, I just
> wished for you pursue your interest and to avoid embarassing yourself.
>
> Not that it matters, but my main expertise as it pertains to this
> discussion is in the design and construction of electronic equipment
> and scientific apparatus used for the measurement of various physical
> phenomena. e.g. US Pats 5,018,382 and 7,119,588. In the '70's and
> 80's I was in the business manufacturing guitar amplifiers. Among
> other things, I am an amateur radio operator and a musician.
>
> For the record, although I have disagreed with you, I have never been
> personally disrespectful to you. I believe gentleman should be able
> to disagree without being disagreeable (or insulting).
>
> ac6xg

Please accept my apologies because I have disrespected you
Regarding my findings they have been partially checked over by
qualified people
and it has taken a long while to get to this point.
If you will accept it I would like to send you an antenna as a gift
but I do not want personal favors of any kind.
Frankly it is the responders that need thought as they do not present
any scientific underpinnings for their statements
that I can respond to in kind Unfortunately I do sometime get caught
up in the hate and respond in kind which I should not do
Believe me Jim all those that poo hoo what I am sharing will rethink
their motives when it is recognised by academia which is really the
only road for acceptance available to any lay person with respect to
ham radio. As the numbers of silent keys mount the majority in ham
radio will not be comprised of people with open minds and curiousity

and changes will reflect the change in demeanor as has already
happened on this newsgroup. I don't think the days will ever come back
where antenna science can be discussed civilly and logically anymore
per the intentions of the formation of this newsgroup founders since
lack of civility is truly a virus that can over take us all
Regards
Art

293. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 19:47:21 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g55p2hbhf1@news.service.uci.edu>
Source record: 24216

Art Unwin wrote:
> On Jul 10, 11:32 am, Jim Kelley <jimkelleya...@gmail.com> wrote:
>
>>On Jul 9, 7:27 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>>
>>
>>>So where in the hell are
>>>you comming from and where does your main expertise dwell?
>>
>>Hi Art -
>>
>>Where am I coming from...well, a cab driver in London sent me a note a
>>year or two ago after I came to your defense in this newsgroup. He
>>confided to me about something that I had already suspected regarding
>>your condition. Since then, I have advised some of your antagonists
>>in the group by email that it might be the better part of valor to
>>take it easy on you and just let you have your say. Mostly, I just
>>wished for you pursue your interest and to avoid embarassing yourself.
>>
>>Not that it matters, but my main expertise as it pertains to this
>>discussion is in the design and construction of electronic equipment
>>and scientific apparatus used for the measurement of various physical
>>phenomena. e.g. US Pats 5,018,382 and 7,119,588. In the '70's and
>>80's I was in the business manufacturing guitar amplifiers. Among
>>other things, I am an amateur radio operator and a musician.
>>
>>For the record, although I have disagreed with you, I have never been
>>personally disrespectful to you. I believe gentleman should be able
>>to disagree without being disagreeable (or insulting).
>>
>>ac6xg
>
>
> Please accept my apologies because I have disrespected you
> Regarding my findings they have been partially checked over by
> qualified people
> and it has taken a long while to get to this point.
> If you will accept it I would like to send you an antenna as a gift
> but I do not want personal favors of any kind.
> Frankly it is the responders that need thought as they do not present
> any scientific underpinnings for their statements
> that I can respond to in kind Unfortunately I do sometime get caught
> up in the hate and respond in kind which I should not do
> Believe me Jim all those that poo hoo what I am sharing will rethink

> their motives when it is recognised by academia which is really the
> only road for acceptance available to any lay person with respect to
> ham radio. As the numbers of silent keys mount the majority in ham
> radio will not be comprised of people with open minds and curiousity
> and changes will reflect the change in demeanor as has already
> happened on this newsgroup. I don't think the days will ever come back
> where antenna science can be discussed civilly and logically anymore
> per the intentions of the formation of this newsgroup founders since
> lack of civility is truly a virus that can over take us all
> Regards
> Art

There's a profound old saying that I'm occasionally reminded of:

There, but by the grace of god, go I.

It has a sobering effect. And I hope there will be a kinder and more patient soul than I to help me stay on track someday when I need it.

I would be honored to have one of your antennas, Art. I promise I'll try to figure it out.

ac6xg

294. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 21:19:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <44vc749k0sn3j02hvmt7v1ue8uh6b2p6m0@4ax.com>
Source record: 24217

On Thu, 10 Jul 2008 10:21:56 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>> Not that I have any confidence in Art's antenna design. But you wind a
>> cylinder with zip cord from left to right, with the left end pair being
>> the feed and the right pair shorted (as if a single 2W wire) then the
>> 'return winding' will essentially be wrapped in the opposite direction.
>
>Correct. And if zip wire is used then you are adding a lumped load
>which is a violation with respect to equilibriu,

The zip cord is in true equilibrium for any winding. What you
describe is twisting and this violates equilibrium. That won't work,
and Guss has demonstrated this three centuries ago.

73's
Richard Clark, KB7QHC

295. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 21:29:27 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <xU0KZTG38ndIFA0L@ifwtech.co.uk>
Source record: 24218

Richard Harrison wrote:
>
>J.C. Maxwell, also an Englishman,
>
Ahem!

[...]
>J.C. Maxwell died in 1879 at an age of 48 years, 8 years before
>Heinrich Hertz generated the first man-made intentional electromagnetic
>waves. These proved Maxwell correct. Oliver Heaviside, a Scot, born in
>1850, decided to teach himself the contents of Maxwell`s
>"Electromagnetic Theory" and in 1887 started "dumbing down" Maxwell in
>a series of articles published in an English magazine, "The
>Electrician". That was the beginning of modern communication engineering.
>
>Oliver Heaviside once said, "Let mathematics be humanized if possible.
>The best of proofs is to set out a fact descriptively so that it can be
>seen to be a fact."
>
>Heaviside proves that all who are born in Edinburgh or London are not
>fools.

James Clerk Maxwell was a Scot, born in Edinburgh and buried at his
family home in south-west Scotland, less than 50 miles from here.

Now can we please shut this discussion down? The sound of Maxwell
turning in his grave is keeping this whole county awake.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

296. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 21:50:10 UTC
From: derek <derekbluey@gmail.com>
Message-ID: <6da07000-96a4-4576-a6be-aaa0dc06686b@26g2000hsk.googlegroups.com>
Source record: 24219

On Jul 11, 12:32 am, Jim Kelley <jimkelleya...@gmail.com> wrote:
> On Jul 9, 7:27 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > So where in the hell are
> > you comming from and where does your main expertise dwell?
>
> Hi Art -
>
> Where am I coming from...well, a cab driver in London sent me a note a
> year or two ago after I came to your defense in this newsgroup. He
> confided to me about something that I had already suspected regarding
> your condition.

Hi Jim

Sir
You are a gentleman toff and a scholar.
This was a compliment paid by east enders of london in years past to
a person who stooped to give a helping hand to some one of a lower
class.
Thank you.

That is as I remember the above is verbatim the email that was sent
to you, I think it is despicable of you to use something sent in
confidence and twist what was written and use to attack.
An enquiry was made as to the meaning of a post you had made and the
above was the reply in totality.

297. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 22:05:44 UTC
From: Frank <ve6cb@spamfree.telus.net>
Message-ID: <YIvdk.3655$7%6.3452@edtnps82>
Source record: 24220

> Take care to note that this design is impossible to model as it
> violates every software package's capacity to allow closely spaced
> wires. There are absolutely no software products, nor freely
> available packages that perform this analysis - you are now in faith
> based alchemy. Any claims to the contrary (contradicting this faith
> based illusion) are delusional. This level of delusion can be
> confirmed by the whole absence of reference, citation, or offering of
> results of double-blind testing.
>
> 73's
> Richard Clark, KB7QHC

You could always use a lumped element model, but be sure a balun
is not included, in order to maximize radiation from the coaxial feedline
shield.

Frank

298. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 22:27:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b88589fa-ef93-42d9-b247-beee03a2dd1d@b1g2000hsg.googlegroups.com>
Source record: 24221

On Jul 10, 4:50 pm, derek <derekbl...@gmail.com> wrote:
> On Jul 11, 12:32 am, Jim Kelley <jimkelleya...@gmail.com> wrote:
>
> > On Jul 9, 7:27 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > > So where in the hell are
> > > you comming from and where does your main expertise dwell?
>
> > Hi Art -
>
> > Where am I coming from...well, a cab driver in London sent me a note a
> > year or two ago after I came to your defense in this newsgroup. He
> > confided to me about something that I had already suspected regarding
> > your condition.
>
> Hi Jim
>
> Sir
> You are a gentleman toff and a scholar.
> This was a compliment paid by east enders of london in years past to
> a person who stooped to give a helping hand to some one of a lower
> class.
> Thank you.
>
> That is as I remember the above is verbatim the email that was sent
> to you, I think it is despicable of you to use something sent in
> confidence and twist what was written and use to attack.
> An enquiry was made as to the meaning of a post you had made and the
> above was the reply in totality.

Bluey and John Put a stop to this and put the whole thing behind you
Tomorrow is a new day where I am going to make a new antenna the
receipient
of which will be free to discuss at his leasure when listerners can
determine for
them selves whether I should be put away for suggesting that I had a
real antenna.
Going out of town with my wife for a couple of days so don't
misinterprete my absence.
I am in good shape hiccup,hiccup burp so there are no problems of any
sort at this QTH
Have a great weak end or weak force
Art

299. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 22:51:09 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <670d8ed3-201e-4e4f-8c31-2f4246d6eaa0@34g2000hsh.googlegroups.com>
Source record: 24222

Richard Clark wrote:
> On Thu, 10 Jul 2008 09:05:56 -0400, "W3CQH" <hsgorden@comcast.net>
> wrote:
>
> >Double winding - in which direction and spaced how far apart in each
> >direction?
>
> >On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin <ArthurUnwin@gmail.com> wrote:
> >
> >>Wind a close coil any diameter with it until half the wire is used
> >>then change direction and come back
> >>without changing wire winding direction and wind the wire on top of
> >>the first coil where you finish with two wires to feed.
> >>Put a variometer in series with it and then get on the air. Now this
> >>is not exactly in equilibrium because one coil is a larger diameter
> >>than
> >>the other. Nor is the wire pre twisted pair which nullifies near field
> >>noise to my thinking. Now you have a helix style antenna but without
> >>the helix.
> >>Coat the antenna with an alkyd type solution before you slide it off
> >>the tube since the inside coil must be exposed the same way the
> >>outside coil is exposed
>
>
> Take one wavelength of zip cord. Wrap it around any diameter form, as
> distinctly specified above by the authur. Half the wire is used
> going, and half the wire is used returning by specification of the zip
> cord, as distinctly specified above by the authur.
>
> There is no change in winding direction as zip cord guarantees this by
> physical attachment, as specified above by the authur. Both wires are
> wrapped without changing direction, as distinctly specified above by
> the author.
>
> There is no pre twisting for the same reason (which might nullifie
> near field noise to his thinking - an asset to almost anyone else, but
> go figure), as specified above by the authur. It is exactly in
> equilibrium because both coils are the same diameter, as distinctly
> specified above by the authur.
>
> There is no need for coating as there is no inside coil, this is
> guaranteed by the physical construction of zip cord. Zip cord also
> guarantees equal lengths of going/returning lengths of conductor.
>

> Short one end of the zip cord paired conductors to make the gussian
> loop, as distinctly specified above by the authur.
>
> Feed the other end of the zip cord paired conductors to emit the
> neutrons' weak force, as distinctly specified above by the authur.
>
> Performance will follow the principal physics of this weak force and
> provide an intensely weak signal. If your listeners experience
> received signal levels greater than -40dB compared to a standard
> (non-gussian) dipole, then you have not followed instructions
> distinctly quoted above from the authur.
>
> Careful attention to detail can achieve increased performances of up
> to -60dB below traditional designs (indistinctly specified by the
> authur).
>
> Take care to note that this design is impossible to model as it
> violates every software package's capacity to allow closely spaced
> wires. There are absolutely no software products, nor freely
> available packages that perform this analysis - you are now in faith
> based alchemy. Any claims to the contrary (contradicting this faith
> based illusion) are delusional. This level of delusion can be
> confirmed by the whole absence of reference, citation, or offering of
> results of double-blind testing.
>
> 73's
> Richard Clark, KB7QHC

All other faults about Arts antenna ignored it is obvious he has not considered the losses of the cable he is using to fabricate his antenna. Zipcord is far from being a very good transmission line. I have melted it while tuning a 75 watt transmitter into a light bulb. The graphs on his website show pretty much what one would expect feeding power into a very lossy cable. Yep it looks like he built himself a very poor dummy load.

As a matter of fact I believe his discription of his wonder antenna very closly describes a method of jury rigging an emergency dummy load. The only thing else needed is a bucket of water.

Jimmie

300. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 23:36:29 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48769d01$0$60064$8046368a@newsreader.iphouse.net>
Source record: 24223

Richard Clark wrote:
> On Thu, 10 Jul 2008 10:21:56 -0700 (PDT), Art Unwin
> <ArthurUnwin@gmail.com> wrote:
>
>>> Not that I have any confidence in Art's antenna design. But you wind a
>>> cylinder with zip cord from left to right, with the left end pair being
>>> the feed and the right pair shorted (as if a single 2W wire) then the
>>> 'return winding' will essentially be wrapped in the opposite direction.
>> Correct. And if zip wire is used then you are adding a lumped load
>> which is a violation with respect to equilibriu,
>
> The zip cord is in true equilibrium for any winding. What you
> describe is twisting and this violates equilibrium. That won't work,
> and Guss has demonstrated this three centuries ago.
>
> 73's
> Richard Clark, KB7QHC

Now wait just a minute, Richard. I think it may depend on the zip cord
you use. Some of the zip cord, when close wound, will have more
dielectric between the interturn wires than between the 2 wires of the
zip cord itself. Of course it _can_ be rebalanced if the air gap
impressed into the plastic during manufacturing is the correct depth.

tom
K0TAR

301. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-10 23:56:24 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7ca51c52-8525-44e9-833f-3a4f39cb43ac@34g2000hsf.googlegroups.com>
Source record: 24224

On Jul 10, 5:51 pm, JIMMIE <JIMMIEDEE...@yahoo.com> wrote:
> Richard Clark wrote:
> > On Thu, 10 Jul 2008 09:05:56 -0400, "W3CQH" <hsgor...@comcast.net>
> > wrote:
>
> > >Double winding - in which direction and spaced how far apart in each
> > >direction?
>
> > >On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > >>Wind a close coil any diameter with it until half the wire is used
> > >>then change direction and come back
> > >>without changing wire winding direction and wind the wire on top of
> > >>the first coil where you finish with two wires to feed.
> > >>Put a variometer in series with it and then get on the air. Now this
> > >>is not exactly in equilibrium because one coil is a larger diameter
> > >>than
> > >>the other. Nor is the wire pre twisted pair which nullifies near field
> > >>noise to my thinking. Now you have a helix style antenna but without
> > >>the helix.
> > >>Coat the antenna with an alkyd type solution before you slide it off
> > >>the tube since the inside coil must be exposed the same way the
> > >>outside coil is exposed
>
> > Take one wavelength of zip cord. Wrap it around any diameter form, as
> > distinctly specified above by the authur. Half the wire is used
> > going, and half the wire is used returning by specification of the zip
> > cord, as distinctly specified above by the authur.
>
> > There is no change in winding direction as zip cord guarantees this by
> > physical attachment, as specified above by the authur. Both wires are
> > wrapped without changing direction, as distinctly specified above by
> > the author.
>
> > There is no pre twisting for the same reason (which might nullifie
> > near field noise to his thinking - an asset to almost anyone else, but
> > go figure), as specified above by the authur. It is exactly in
> > equilibrium because both coils are the same diameter, as distinctly
> > specified above by the authur.
>
> > There is no need for coating as there is no inside coil, this is
> > guaranteed by the physical construction of zip cord. Zip cord also
> > guarantees equal lengths of going/returning lengths of conductor.
>

> > Short one end of the zip cord paired conductors to make the gussian
> > loop, as distinctly specified above by the authur.
>
> > Feed the other end of the zip cord paired conductors to emit the
> > neutrons' weak force, as distinctly specified above by the authur.
>
> > Performance will follow the principal physics of this weak force and
> > provide an intensely weak signal. If your listeners experience
> > received signal levels greater than -40dB compared to a standard
> > (non-gussian) dipole, then you have not followed instructions
> > distinctly quoted above from the authur.
>
> > Careful attention to detail can achieve increased performances of up
> > to -60dB below traditional designs (indistinctly specified by the
> > authur).
>
> > Take care to note that this design is impossible to model as it
> > violates every software package's capacity to allow closely spaced
> > wires. There are absolutely no software products, nor freely
> > available packages that perform this analysis - you are now in faith
> > based alchemy. Any claims to the contrary (contradicting this faith
> > based illusion) are delusional. This level of delusion can be
> > confirmed by the whole absence of reference, citation, or offering of
> > results of double-blind testing.
>
> > 73's
> > Richard Clark, KB7QHC
>
> All other faults about Arts antenna ignored it is obvious he has not
> considered the losses of the cable he is using to fabricate his
> antenna. Zipcord is far from being a very good transmission line. I
> have melted it while tuning a 75 watt transmitter into a light bulb.
> The graphs on his website show pretty much what one would expect
> feeding power into a very lossy cable. Yep it looks like he built
> himself a very poor dummy load.
>
> As a matter of fact I believe his discription of his wonder antenna
> very closly describes a method of jury rigging an emergency dummy
> load. The only thing else needed is a bucket of water.
>
> Jimmie

My transmission line is Andrews..7/8 'dia. I dont use zip cord
You say the graphs depict a very lossy cable, can you give me a
reference that points to that?
Always willing to learn
And another point, where does this notion come from that a closed
circuit of one WL will always creat feed line radiation?
I have been of the opinion that with a balance to unbalanced jobby at
the antenna there is no radiation at all from the feed line and if you

use
open wire the jobby is not required. Another point where can a dummy load be found with several resonant points and anti resonant points with poor SWR in between? Another point what is the real capacitance of zip cord per foot? Seems like somebody is not seeing that as a lumped load ....curious.
Another point I can model two helix antennas, one LCP and one RCP connected at one end and so could Kraus and so can the space engineers!
The idea you cannot model close spaced lines when unlimited segments are available seems to be inaccurate to me.
The idea thatr two helix antennas provide negative gain means somebody is drinking.
Note the idea that radiation can some how be cancelled seems wrong to me. I just can't see two particles with like magnetic fields cancelling each other
Seem like a lot of wierd speculation is going on with nothing to suggest that they are reasonable.

302. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 00:15:36 UTC
From: nm5k@wt.net
Message-ID: <a44cf8c4-42ea-4ed6-ba08-329c9a7e3902@t54g2000hsg.googlegroups.com>
Source record: 24225

On Jul 10, 6:56 pm, Article Unwin <ArthurUn...@gmail.com> wrote:

> The idea thatr two helix antennas provide negative gain means somebody
> is drinking.

The idea that anyone would confuse your design with that of the
helix used in a conventional manner, would mean someone is
drunk. *hic*

> Note the idea that radiation can some how be cancelled seems wrong to
> me. I just can't see two particles with like magnetic fields
> cancelling each other

Who cares about all that irrelevant jibber jabber. It means nada
in the overall big picture of the universe in the land of Obama.
Your loading losses are what's going to ruin your day at the test
track.
Your antenna is pretty much nothing but a perverted, *very*
inefficient thin 22 gauge wire loading coil fed on the low frequency
of 1.8-2.0 mhz in your recent case.
Any delusions of performance grandeur would tend to imply that
the designer must be drunk. *hic*

> Seem like a lot of wierd speculation is going on with nothing to
> suggest that they are reasonable.

Yep, that's your "Articles" alright... Weird speculation backed
by nothing to suggest the speculation is reasonable.
Onward through the fog. :/

303. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 00:33:19 UTC
From: nm5k@wt.net
Message-ID: <c7ce2e32-2e02-4a88-954e-b1247ce6eb42@56g2000hsm.googlegroups.com>
Source record: 24226

On Jul 10, 1:55 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

> Believe me Jim all those that poo hoo what I am sharing will rethink
> their motives when it is recognised by academia which is really the
> only road for acceptance available to any lay person with respect to
> ham radio.

Negative contact on that Artmobile... Breaker 19
for a radio check!
Academia means little to me in the case of "new science".
Real world tests with real word results of the tests are the
only thing I care to see when concerning "new science" antenna
schemes.
You can't brown the food if you refuse to stick it in the oven.

304. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 00:59:27 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <dddf5c35-44a4-46d9-bf14-cd6fa0a07a45@k30g2000hse.googlegroups.com>
Source record: 24227

Art Unwin wrote:
> On Jul 10, 5:51 pm, JIMMIE <JIMMIEDEE...@yahoo.com> wrote:
> > Richard Clark wrote:
> > > On Thu, 10 Jul 2008 09:05:56 -0400, "W3CQH" <hsgor...@comcast.net>
> > > wrote:
> >
> > > >Double winding - in which direction and spaced how far apart in each
> > > >direction?
> >
> > > >On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin <ArthurUn...@gmail.com> wrote:
> >
> > > >>Wind a close coil any diameter with it until half the wire is used
> > > >>then change direction and come back
> > > >>without changing wire winding direction and wind the wire on top of
> > > >>the first coil where you finish with two wires to feed.
> > > >>Put a variometer in series with it and then get on the air. Now this
> > > >>is not exactly in equilibrium because one coil is a larger diameter
> > > >>than
> > > >>the other. Nor is the wire pre twisted pair which nullifies near field
> > > >>noise to my thinking. Now you have a helix style antenna but without
> > > >>the helix.
> > > >>Coat the antenna with an alkyd type solution before you slide it off
> > > >>the tube since the inside coil must be exposed the same way the
> > > >>outside coil is exposed
> >
> > > Take one wavelength of zip cord. Wrap it around any diameter form, as
> > > distinctly specified above by the authur. Half the wire is used
> > > going, and half the wire is used returning by specification of the zip
> > > cord, as distinctly specified above by the authur.
> >
> > > There is no change in winding direction as zip cord guarantees this by
> > > physical attachment, as specified above by the authur. Both wires are
> > > wrapped without changing direction, as distinctly specified above by
> > > the author.
> >
> > > There is no pre twisting for the same reason (which might nullifie
> > > near field noise to his thinking - an asset to almost anyone else, but
> > > go figure), as specified above by the authur. It is exactly in
> > > equilibrium because both coils are the same diameter, as distinctly
> > > specified above by the authur.
> >
> > > There is no need for coating as there is no inside coil, this is
> > > guaranteed by the physical construction of zip cord. Zip cord also
> > > guarantees equal lengths of going/returning lengths of conductor.

> >
> > > Short one end of the zip cord paired conductors to make the gussian
> > > loop, as distinctly specified above by the authur.
> >
> > > Feed the other end of the zip cord paired conductors to emit the
> > > neutrons' weak force, as distinctly specified above by the authur.
> >
> > > Performance will follow the principal physics of this weak force and
> > > provide an intensely weak signal. If your listeners experience
> > > received signal levels greater than -40dB compared to a standard
> > > (non-gussian) dipole, then you have not followed instructions
> > > distinctly quoted above from the authur.
> >
> > > Careful attention to detail can achieve increased performances of up
> > > to -60dB below traditional designs (indistinctly specified by the
> > > authur).
> >
> > > Take care to note that this design is impossible to model as it
> > > violates every software package's capacity to allow closely spaced
> > > wires. There are absolutely no software products, nor freely
> > > available packages that perform this analysis - you are now in faith
> > > based alchemy. Any claims to the contrary (contradicting this faith
> > > based illusion) are delusional. This level of delusion can be
> > > confirmed by the whole absence of reference, citation, or offering of
> > > results of double-blind testing.
> >
> > > 73's
> > > Richard Clark, KB7QHC
> >
> > All other faults about Arts antenna ignored it is obvious he has not
> > considered the losses of the cable he is using to fabricate his
> > antenna. Zipcord is far from being a very good transmission line. I
> > have melted it while tuning a 75 watt transmitter into a light bulb.
> > The graphs on his website show pretty much what one would expect
> > feeding power into a very lossy cable. Yep it looks like he built
> > himself a very poor dummy load.
> >
> > As a matter of fact I believe his discription of his wonder antenna
> > very closly describes a method of jury rigging an emergency dummy
> > load. The only thing else needed is a bucket of water.
> >
> > Jimmie
>
> My transmission line is Andrews..7/8 'dia. I dont use zip cord

No but the antenna is made of zip cord.
> You say the graphs depict a very lossy cable, can you give me a
> reference that points to that?

The fact that the VSWR keeps decreasing with an increase in frequency
is characteristic of a lossy transmission line, In this case a lossy

antenna.

> Always willing to learn
> And another point, where does this notion come from that a closed
> circuit of one WL will always creat feed line radiation?

Where do you get the notion I had that notion

> I have been of the opinion that with a balance to unbalanced jobby at
> the antenna there is no radiation at all from the feed line and if you
> use
> open wire the jobby is not required

. Another point where can a dummy
> load be found with several resonant points and anti resonant points
> with poor SWR in between?

Yes but the anti resonant points are not very pronounced. Like I said
its a poor dummy load. A poor dummy load because it still has
reactive components. Its still a better dummy load than an antenna.

> The idea you cannot model close spaced lines when unlimited segments
> are available seems to be inaccurate to me.
> The idea thatr two helix antennas provide negative gain means somebody
> is drinking.

Who said you have two helix antennas, They certainly are not as
defined by Kraus or anyone else. A helix antenna is more than wire
wrapped on a stick.

> Note the idea that radiation can some how be cancelled seems wrong to
> me. I just can't see two particles with like magnetic fields
> cancelling each other.

The fields created by a moving charged particle can easily cancel that
of a like particle, they just have to be moving in opposite
directions. Wire wound reduced inductance resistors have been made
wind the wire and connecting it much as you have in your antenna.
Again you discribe a dummy load

> Seem like a lot of wierd speculation is going on with nothing to
> suggest that they are reasonable.

Perhaps you forget I actually made your antenna. All it did was get
warm. It worked best when the input to the transmission line was
shorted and fed as a random length of wire.

Since you claimed it worked on VHF I actually attemted to make a
contact using it. I live less than 5 miles from a repeater and can
usually get into it with milli watts on a hand held. I couldnt get
into it with your antenna with 10 watts. I was afraid to use more
power as i may put my radio at risk.

The fact that I could place it in a metal locker and operate it with little change in VSWR indicates most of the power is being consumed by a resistive load. The signal is being radiated but most of it is being changed to infra-red radiation first.

If you dont believe me just build the thing and test it for yourself comparing it to a simple dipole.

I also tested it on an Anritsu antenna analyzer. The results were very similar to what you posted on your website so I am assuming you did something similar to get your waveforms.

These waveforms are also very similar to the waveforms of the improvised dummy load I mentioned so I could equally assume you are a troll and practical joker.

Jimmie

305. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 01:25:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6f9772dd-b564-47a2-8b45-a2a55e60e18e@m3g2000hsc.googlegroups.com>
Source record: 24228

On Jul 10, 7:15 pm, n...@wt.net wrote:
> On Jul 10, 6:56 pm, Article Unwin <ArthurUn...@gmail.com> wrote:
>
> > The idea thatr two helix antennas provide negative gain means somebody
> > is drinking.
>
> The idea that anyone would confuse your design with that of the
> helix used in a conventional manner, would mean someone is
> drunk. *hic*
>
> > Note the idea that radiation can some how be cancelled seems wrong to
> > me. I just can't see two particles with like magnetic fields
> > cancelling each other
>
> Who cares about all that irrelevant jibber jabber. It means nada
> in the overall big picture of the universe in the land of Obama.
> Your loading losses are what's going to ruin your day at the test
> track.
> Your antenna is pretty much nothing but a perverted, *very*
> inefficient thin 22 gauge wire loading coil fed on the low frequency
> of 1.8-2.0 mhz in your recent case.
> Any delusions of performance grandeur would tend to imply that
> the designer must be drunk. *hic*
>
> > Seem like a lot of wierd speculation is going on with nothing to
> > suggest that they are reasonable.
>
> Yep, that's your "Articles" alright... Weird speculation backed
> by nothing to suggest the speculation is reasonable.
> Onward through the fog. :/

There has got to be a reason for Richard and you doing all this. I
know Richard wants me dead
but how does that satisfy you?

306. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 01:34:25 UTC
From: nm5k@wt.net
Message-ID: <aaec2896-13e4-49bd-9e15-1c5fa255b7a2@m3g2000hsc.googlegroups.com>
Source record: 24229

On Jul 10, 8:25 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> There has got to be a reason for Richard and you doing all this.

Doing all what?
I'm just commenting on your various jibber jabber.

> I know Richard wants me dead
> but how does that satisfy you?

I could tell you, but then I'd have to kill you.
Classified you know...

307. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 07:42:11 UTC
From: Clark Kent <kentc@daily-planet.com>
Message-ID: <n9Edk.7962$1L1.4612@newsfe15.phx>
Source record: 24230

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:72fb93c8-788f-40f0-8931-aa849d8f82d1@m45g2000hsb.googlegroups.com...

> Tell you what, get some wire twice the WL of the frequency you are
> interested in.
> Wind a close coil any diameter with it until half the wire is used
> then change direction and come back
> without changing wire winding direction and wind the wire on top of
> the first coil where you finish with two wires to feed.
> Put a variometer in series with it and then get on the air. Now this
> is not exactly in equilibrium because one coil is a larger diameter
> than
> the other. Nor is the wire pre twisted pair which nullifies near field
> noise to my thinking. Now you have a helix style antenna but without
> the helix.
> Coat the antenna with an alkyd type solution before you slide it off
> the tube since the inside coil must be exposed the same way the
> outside coil is exposed

OK, I can do most of that. However, I went to your page for some variometer details, as I don't have one. No luck. From other reading it appears to be a loosely couple balun or un-un. But near there on your page, I discovered some verbiage about building an antenna and saw the reference to a 12-inch diameter. Good find, as I was going to go smaller.

If I wound the thing on cardboard (like a big empty ice cream tub from the ice cream store), could I avoid having to take the coil(s) off the form? What about a paint bucket or an empty pool chlorine tub? I'd sorta like to skip that alkyd step. Messy.

Need more variometer data, but I'll dig for that

308. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 12:15:50 UTC
From: John KD5YI <groups2_dot_jocjo@xoxy.net>
Message-ID: <W9Idk.1302$bn3.792@trnddc07>
Source record: 24231

"Clark Kent" <kentc@daily-planet.com> wrote in message
news:n9Edk.7962$1L1.4612@newsfe15.phx...

(Big snip)

> Need more variometer data, but I'll dig for that
>

Variometer design here:

http://www.qsl.net/in3otd/variodes.html

Cheers,
John

309. Re: Radiation and dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 13:41:08 UTC
From: ltdoc@yahoo.com
Message-ID: <781d7ecd-d4d0-45fd-93eb-7238f1137d13@34g2000hsh.googlegroups.com>
Source record: 24232

> > Believe me Jim all those that poo hoo what I am sharing will rethink
> > their motives when it is recognised by academia which is really the
> > only road for acceptance available to any lay person with respect to
> > ham radio.

Art,
I can say that you've finally gotten something right. If academia does recognize and second your theory, I know that I would be more apt to consider it. Why? Because 'academia' is going to include those who know what the @#$$ you're trying to say. They are not likely to 'condone' something that's not 'right'. And providing the usual proofs to academia would seem like the smart thing to do (like it or not). Is that the most absolutely bestest way of doing things? Toss-up on that, but certainly better than what you are doing now.
- 'Doc

310. www.phornixx.com - Porn forum!! XXX Movies, pictures, vintage action, full movies, split scenes from the best porn sites around!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 14:03:23 UTC
From: phornix@gmail.com
Message-ID: <d37fd0d3-f08b-481b-ad52-130ce5a8fb0f@x41g2000hsb.googlegroups.com>
Source record: 24233

Visit www.phornixx.com We have more than 30000 movies and 3 thosusand
users!

http://www.phornixx.com
http://www.phornixx.com
http://www.phornixx.com

We have all the forum oranized in 6 simple categories and have other
non adult discusion forums and features!

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Vintage
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Amy Reid
Ariel Rebel
Aria Giovanni
Ashlynn Brooke
Aurora Jolie
Aurora Snow
Avena Lee
Belladonna
Bobbi Starr
Brandi Belle
Bree Olsen
Brianna Banks
Brianna Love
Carmella Bing
Carmen Luvana
Catalina Cruz
Claire Dames
Cody Lane
Cytherea
Devon
Delta White

Erica Campbell
Eva Angelina
Gauge
Gianna Michaels
Hannah Hilton
Jayden James
Jenna Haze
Jennifer Dark
Julia Bond
Karma Rossenberg
Krystal Steal
Lanny Barbie
Lela Star
Lexi Belle
LilLaura
Little Lupe
Liz Vicious
Lucy Thai
Mandingo
Marc Dorcel
Melissa Lauren
Mindy Main
Monica Sweetheart
Natasha Nice
Nautica Thorn
Nikki Benz
Patty Cake
Paulina James
Penny Flame
Peter North
Phoenix Marie
Rachel Roxxx
Raven Riley
Rebecca Linares
Riley Mason
Rita Faltoyano
Rocco
Sasha Grey
Sativa Rose
Selina 18
Silvia Saint
Shyla Styles
Shelby Belle
Shay Laren
Sugar Baby
Stoya
Sunny Lane
Taylor Rain
Teagan Presley
Tera Patrick

Tory Lane
Velicity Von
Veronika Zemanova
Vixen

And many more! Our users upload in rapidshare.com/files megaupload.com filefactory.com depostifiles,com and streamed content is pornotube, youporn, tube8, etc...

Remember visit http://www.phornixx.com

311. Ryhm�n sfnet.tiede virallinen kuvaus

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 14:57:54 UTC
From: Eino Konig <eino@luxure.org>
Message-ID: <sfnet15015@n102-101-10-13.getenicnev.catrv.net>
Source record: 24234

Kun katsoo n�it�keskeisimpi� nettilinjo, niin alkuun n�ytt�� silt�, ett� t��ll� palloilee l�hinn� "ruinruinit, muiden mollaajat, ja ostetut ydinlobbarit". Eli suoraan sanottuna yht� tyhj�n kansa pelailevia palloilijoita. Mutta siten huomaa miksi ihmiset t�nne niin mielell��n tulee viisaukasia silti lukemaan?

Jos osut talous-, yhteiskunta- ja poliittiselle sektorille huomaat, miten siel� toimii my�s porukoissa suoranaisia "kassamangneetteja". Olen avoimesti kiitellyt mm Rauno Kankaan miten kristalloisin. ..no hei vaikka "eettist� asennekoulutustyyli��n". Kaveri jos kuka on ollut oiva esimerkki siit� miten nettiammattilaisen tulisi k�ytt�yty�. Aina asiallisena, kaikesta "oskukarstasta" huolimatta tied�t saavasi tukun paikoin jopa el�m�� suurempaa osviittaa ja paikoin jopa nerokasta osviittaa siit� miten maailma makaa kritiikkiin asti. Oivan ja loisteliaan materiaalin saat t��lt� ilmaiseksi, neuvoja on tuohtumaton j�m�k�n asiallinen. Hienoa, juuri t�t� tuhannet t��lt� haluaa.

No tottakai ei finetti tyyli ole j�tt�nyt kylm�ksi, vaan h�nen vision��risyytt��n sitten kopioidaan my�s muutamissa muissa osastoissa, ja hyv� niin. Tietysti kopio on kopio, mutta tusinan verran t��lt� l�ytyy sellaisia kirjoittelijoita, joista heijastuu Raunon oivallinen esimerkkijatkumo. Ja jopa kyky kampittaa my�s Raunoon liittyv�t pakolliset h�irik�ainekset. Joita voidaan mainita yhteisnimill��n, "Oskut, ydinklingonit ja vastaavat". Er�s henkil� jonka sattuneesti haluan ilmoittaa t�ss� on nimimerkki NEO. H�n ei toki ole talous-, poliittis-, yhteiskuntasektoreilla tietysti esikuvansa luokkaa, ei toki. Mutta kampittaa kyll� muutamilla sektoreillaan my�s suvereeneill� erikoisaloillaan. Ja totta kai taitojensa h�ikimi� ns. "ydinklingoneita ja SUPO-sotkijoita on toisinaan niin suuret parvet kintereill��n, ettei rahanjaolla tunnu TVO/Posivalla olevan rajoja h�irikk�sahureittensa palkkaamisiin. Mutta siin� NEO on kyll� kykyis� Raunon rinnalla toki, ett� ammattiviisautta, viile�� asiallisuutta ja ennenkaikkea loputtoman ammattitaitoista materiaalia saamme saavikaupalla k�ytt��mme!

Suuri yleis� nauttii ja nettioperaattorit kiitt�� valtaisien hittim��rien aina vaan jaksaessa yll�tt��. Netti el�� kiistatta vain muutaman t�llaisen "gurun" �lyn neuvokkuudella. Kansanmassat saa mit� haluaa. Ja operaattorien maireat ilmeet kertovat valtaisien suosikkim��rien alati pit�v�n systremit hengiss�. Ennenkaikkea koko t�m� kaikki yhdess� n�kyy aivan k�sitt�m�tt�m�sti kumuloituvine kansan ymm�rryskykykasvuina. Nyt on massoilla kanava k�yt�ss�, jossa ei iso raha pyki. Ei valtiomoinoliitit kuki seinill�. Vaan asiafaktan kiinisaanti on huomattu iloisesti jopa laajasti rajojemme ulkopuolelle asti. Kuten hyvin tied�mme asiallista kritiiki� ei valtiomonopolit salli. Ei SUPO/TVO/kuin edes hallitusmokailijat eduskunnan

helsinkil�is�kyj� my�ten. Nettien palstat pursuaa JUURI t�st�, ett� on maamme ehdottomasti viimeinen vapaamman tiedon periferia sitke�sti. Jopa niin sitke�sti, ett� SUPO/NSA/STUK/ TVO/Posiva/Fortum /GTK ja monet , monet muut uhkailevat aivan h�rskisti tappaa koko kanavan! Heid�n edustamansa valtiorappiollinen m�d�nn�isyys kun ei kansan viisastuessa ja tietoa saadessa en�� totuuksia sied�. Sis�ministeri�n tuhatp�isen poliisisikailukulttuurin uhka on jo pitk��n ollut nettituhoa hautomassa. Saa vaan n�hd� kest��k� systeemimme nimenomaan Suomessa totuuden puhujia?

312. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 16:12:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tl0f749sntqf7j38jf0oq4dvani7h6t4gv@4ax.com>
Source record: 24235

On Thu, 10 Jul 2008 16:56:24 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Seem like a lot of wierd speculation is going on with nothing to
>suggest that they are reasonable.

Speculation is, what speculations "seems." Your appeal here for
validation suffers from its thin content and over elaborate
speculation. Ultimately, this speculation of yours collapses from
many faults, two of which are enough to describe:

1. This is due to the lack of equilibrium by your own admission of
twisting the line in flagrant contradiction to how you described its
construction.

2, You cannot defend against the poor performance of Weak Forces that
dominate your own design; by your own stated purpose and admission.
This is obvious on the face of it.

These demonstrate the superiority of conventional dipoles and the
experience of millions of users for three centuries confirms this.
This last observation is NOT speculative, but clear proof supported by
a reservoir of data.

73's
Richard Clark, KB7QHC

313. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 16:14:20 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <EFLdk.15906$Oq1.2302@fe95>
Source record: 24236

John Smith wrote:
> Dave Heil wrote:
>> Art Unwin wrote:
>>> I would like to add a caviate to assigning...
>>
>> caviate
>>
>> Latin
>>
>> 1. Second-person plural present subjunctive of cavare.
>>
>>
>> Dave K8MN
>
> Here are a few definitions for you of "caveat", from this URL
> "http://www.google.com/search?hl=en&q=define%3Acaveat&btnG=Search"
>
> # caution: a warning against certain acts; "a caveat against unfair
> practices"
>
> # (law) a formal notice filed with a court or officer to suspend a
> proceeding until filer is given a hearing; "a caveat filed against the
> probate of a will"
> wordnet.princeton.edu/perl/webwn
>
> # Caveat (foaled 1980 in Maryland) was an American thoroughbred stallion
> racehorse. Bred by Ryehill Farm, he was sired by Kentucky Derby winner
> Cannonade out of the The Axe mare, Cold Hearted.
> en.wikipedia.org/wiki/Caveat (horse)
>
> # a warning; a qualification or exemption; a notice requesting a
> postponement of a court proceedings
> en.wiktionary.org/wiki/caveat
>
> # If a caveat is lodged upon a title to land it indicates that another
> party other than the owner claims some right over or interest in the
> property.
> www.aussie.com.au/Glossary.htm
>
> # Is a document any person with a legal interest in a property can lodge
> with the Titles Office to ensure the property is not sold without their
> knowledge
> www.malenyrealty.com.au/resources/technical_terms.html
>

> # A note placed on the register in the Land Titles Office at the
> instigation of a person who claims a certain interest in the land. In
> BC, a caveat remains in force for only 2 months, then lapses.
> www.propertytours.ca/realty/glossary.htm
>
> # A warning; a note of caution.
> www.id.uscourts.gov/terms-cd.htm
>
> # "Beware" ï¿½ if a caveat is lodged on a title to land, it warns a person
> buying the property that a third party (party which lodged the caveat)
> has some right or interest in the property.
> www.efame.com.au/glossary.htm
>
> # A warning on a title to a purchaser that a third party might have some
> interest or right in the property.
> www.reinz.org.nz/reinz/public/buyers-sellers/terminology.cfm
>
> # A formal notice, that asks a court to suspend action until the party
> which filed the challenge can be heard.
> www.boise-idahos-real-estate.com/real-estate-definitions-c-158.html
>
> # a formal notice given by someone to prevent the proving of a Will or
> the grant of administration of an Estate.
> www.oceancountygov.com/surrogat/glossary.htm
>
> # means a document lodged with the Recorder of Titles by a person
> authorised to do so forbidding the recording of any dealing on the title
> subject to the caveat Literally means beware. In real estate, it warns
> persons (prospective purchasers, mortgagees, etc. ...
> www.cromer-partners.com.au/pages/glossaryalpha.php
>
> # A notice of warning given to a public authority, eg Titles Office,
> claiming entitlement to an interest in certain land. The caveat is
> registered and remains on the books as a warning to anyone who
> contemplates dealing with the property. ...
> www.redearthfinance.com.au/bwWebsite/followon.asp
>
> # A notice on title proclaiming a possible interest other than that of
> an owner.
> www.talkproperty.net.au/index.php
>
> # A notice given to a legal authority not to do something until the
> person giving notice can be heard.
> www.recalgary.com/information/glossary_c.htm
>
> # A legal notice by a person having a (caveatable) interest in the
> property which will prevent transfer in title until the claim has been
> determined.
> www.eastcoastconveyancing.com.au/glossary.htm
>

> # Latin for "beware". Usually it is in the form of a contract clause
> that stipulates a particular requirement.
> www.yourfinancechoice.com/index.php
>
> # If an creditor of the estate of a decedent is apprehensive that an
> estate, wither testate or intestate, will be administered without the
> creditor's knowledge, or if any person other than a creditor is
> apprehensive that an estate may be administered, or that a will may be
> admitted to probate ...
> pages.jbiproperties.com/ezrealestateoptions/glossaryofterms.html
>
> # a formal notice or warning against certain actions being taken by a
> court; most often seen in regard to the granting of probate of a will by
> the court; most common usage as a document that is filed in the Land
> Titles Office to warn of possible title defects;
> www.manitobacourts.mb.ca/definitions.html
>
> # A notice not to do something until the person caveating has been
> heard. It is often seen in the case of land claims, where a caveator
> might object to a claim overlapping his own. ...
> www.genfiles.com/legal/legalterms.htm
>
> # Latin for ï¿½bewareï¿½. This often applies to a contract clause
> www.interestrate.com.au/glossary.asp
>
> # This indicates the rights or interests of a third party in the
> property. A caveat is a legal document which, when lodged in the Land
> Registry Office, gives the caveator the opportunity of protecting an
> existing right or of establishing an existing claim in property. ...
> www.virtualrealty.co.nz/reterms.html
>
> # If you don't pay your fees, you may find one of these registered
> against your title. This ensures the corporation gets its money before
> you dispose of the asset and may be the basis for collection procedures.
> www.calgaryselect.com/Housing/Condominiums/Glossary/tabid/100/Default.aspx
>
> Quite interesting, the fact you were being "fooled" into thinking there
> was but one! <grin>
>
> Regards,
> JS

I didn't get fooled by anything, "John". Art didn't use the word "caveat". He used the word "caviate". It means what the definition I provided says that it means. You may go back to sleep now.

Dave K8MN

314. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 16:23:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8o1f74hsbii9ibvu25mpp14lueab3ttmgc@4ax.com>
Source record: 24237

On Thu, 10 Jul 2008 17:59:27 -0700 (PDT), JIMMIE
<JIMMIEDEE123@yahoo.com> wrote:

>Since you claimed it worked on VHF I actually attemted to make a
>contact using it. I live less than 5 miles from a repeater and can
>usually get into it with milli watts on a hand held. I couldnt get
>into it with your antenna with 10 watts. I was afraid to use more
>power as i may put my radio at risk.

This confirms at best -40dB of gain attributable to the authur's
design in comparison to a conventional design.

If Jimmie failed at anything approaching the perfection of the
authur's design, is that it does not exhibit an even greater figure of
-60dB - however, it is implied in Jimmie's hesitation to raise power
lest the authur's design burst into flames due to the Weak Forces
dominating the lack of conventional radiation.

Seeing that the authur has admittedly and expressly designed this
antenna to optimize the Weak Force, it would be surprising that any
other outcome would be expected. For these past few months he has
offered no other results of measurement, again admitting that he has
no "laboratory" (equal even to Jimmie's resources). Hence it follows,
that only speculation is available in the authur's defense.

73's
Richard Clark, KB7QHC

315. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 16:33:52 UTC
From: richardharrison@webtv.net
Message-ID: <5785-48778B70-721@storefull-3251.bay.webtv.net>
Source record: 24238

Art wrote:
"Another point I can model two helix antennas one LCP and one RCP
connected at one and and so could Kraus and so can space engineers."

Art should look at page 66 of the 3rd edition of Kraus` "Antennas". Fig. 3-8(c) is the axial-mode helix, an end-fire or traveling-wave antenna. Here the diameter of the coil is a significant portion of a wavelength and the distance between turns (6 are shown) ia 1/4 WL. Large loops (turns) are required to make radiation broadside to the loop instead of having a null there as in small loops. One would usually not characterize the axial mode helix as small, though two of them wound in opposite directions will indeed peoduce both both circular polarizations. Such an HF structure wouldn`t fit in two ordinary shoe boxes. Small-diameter coils produce linear polarizations in parallel with the coil axis.

Best regards, Richard Harrison, KB5WZI

316. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 16:56:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <928ba9bf-4783-4c74-a250-c2e7db677fa2@2g2000hsn.googlegroups.com>
Source record: 24239

On Jul 11, 11:33 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "Another point I can model two helix antennas one LCP and one RCP
> connected at one and and so could Kraus and so can space engineers."
>
> Art should look at page 66 of the 3rd edition of Kraus` "Antennas". Fig.
> 3-8(c) is the axial-mode helix, an end-fire or traveling-wave antenna.
> Here the diameter of the coil is a significant portion of a wavelength
> and the distance between turns (6 are shown) ia 1/4 WL. Large loops
> (turns) are required to make radiation broadside to the loop instead of
> having a null there as in small loops. One would usually not
> characterize the axial mode helix as small, though two of them wound in
> opposite directions will indeed peoduce both both circular
> polarizations. Such an HF structure wouldn`t fit in two ordinary shoe
> boxes. Small-diameter coils produce linear polarizations in parallel
> with the coil axis.
>
> Best regards, Richard Harrison, KB5WZI

That ius correct but I am interested in small antennas so I wound both
helixes on the same former and at the same time.
Since like magnetic particles cannot collide I must assume that no
radiation is being lost.
The largest diameter I have used so far ius about a foot. The smallest
diameter I have wound was on a hoola hoop and the flatest one that I
have made was
8'" by 12" by a wire thickness which can be wound up in a roll and put
in a sock no less.
I am not a lier!

317. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 16:57:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g583ed$j3q$1@news.albasani.net>
Source record: 24240

Dave Heil wrote:

> ...
> I didn't get fooled by anything, "John". Art didn't use the word
> "caveat". He used the word "caviate". It means what the definition I
> provided says that it means. You may go back to sleep now.
>
> Dave K8MN

Yes Dave. But, I realized you would have missed the fact that it is obvious, to all really, that Art does-not/and-has-not made good use of a spell checker in all/or-most of his past posts ...

I just realized this would be yet another trivial thing which would "fool you" once again ...

Don't worry brother, we all see the limitations here, and make allowances for those missing the obvious ... hey, from time-to-time we all need a little help. :-)

Regards,
JS

318. Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 17:10:10 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <d875fd2f-1f18-43e1-b42f-3baf718a0cc1@c65g2000hsa.googlegroups.com>
Source record: 24241

There have been some suggestions that the sun is not behaving normally with respect to the sunspot cycle. There was a thread in this group a month ago with the title, "Sunspot cycle more dud than radiation flood." If you're worried about that, you might want to have a look at http://science.nasa.gov/headlines/y2008/11jul_solarcycleupdate.htm?list174385.

319. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 17:27:19 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <73d06c44-4a3c-41c8-9363-9507fd2945ec@s50g2000hsb.googlegroups.com>
Source record: 24242

On Jul 11, 12:10 pm, K7ITM <k7...@msn.com> wrote:
> There have been some suggestions that the sun is not behaving normally
> with respect to the sunspot cycle. There was a thread in this group a
> month ago with the title, "Sunspot cycle more dud than radiation
> flood." If you're worried about that, you might want to have a look
> athttp://science.nasa.gov/headlines/y2008/11jul_solarcycleupdate.htm?li....

When the Earths pole stop traversing the plains of Siberier instead of
continueing its present path
I will be more comfortable

320. Software for measuring S/N and signal strength through soundcard?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 18:04:26 UTC
From: TF3KX <kristinn1@gmail.com>
Message-ID: <d5179c14-5fa8-4ca4-aaf3-d28726f0c981@27g2000hsf.googlegroups.com>
Source record: 24243

Is there any software available for measuring S/N and signal strength, through the soundcard? My idea is to analyze signals arriving from my antenna, through the receiver and the soundcard, and thus compare antennas numerically in terms of signal strength and noise.

This capability is already present for the most part in the Faros beacon monitoring software, but it is tailored to monitoring only the IARU/NCDXF beacon signals.

73 - Kristinn, TF3KX

321. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 18:18:14 UTC
From: richardharrison@webtv.net
Message-ID: <2138-4877A3E6-734@storefull-3252.bay.webtv.net>
Source record: 24244

Ian White, GM3SEK wrote:
"James Clerk Maxwell was a Scot, born in Edinburgh and buried at his family home in south-west Scotland, less than 50 miles from here. "

Wikipedia agrees. I should have consulted and I stand corrected.
According to Wiki the home is now an interesting museum.

Best regards, Richard Harrison, KB5WZI

322. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 18:25:30 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <25ad5943-4398-444a-bad1-e74c92fe2273@t54g2000hsg.googlegroups.com>
Source record: 24245

On Jul 11, 11:57 am, John Smith <assemblywiz...@gmail.com> wrote:
> Dave Heil wrote:
> > ...
> > I didn't get fooled by anything, "John". Art didn't use the word
> > "caveat". He used the word "caviate". It means what the definition I
> > provided says that it means. You may go back to sleep now.
>
> > Dave K8MN
>
> Yes Dave. But, I realized you would have missed the fact that it is
> obvious, to all really, that Art does-not/and-has-not made good use of a
> spell checker in all/or-most of his past posts ...
>
> I just realized this would be yet another trivial thing which would
> "fool you" once again ...
>
> Don't worry brother, we all see the limitations here, and make
> allowances for those missing the obvious ... hey, from time-to-time we
> all need a little help. :-)
>
> Regards,
> JS

John I know who and what you are, but I also am a man and on the
inside I am an equal
If I am allowed time the ruined paths of communication of my body will
be rebuilt such
that I become an equal also on the outside.And possibly, I hope, the
new system will be to my advantage
When the virus of hate gets near just hold your nose and allow me to
handle the rest, please!
Nothing personal intended
Very best regardsArt
unwinantennas.com/

323. copper transmission lines with polumer insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 18:31:36 UTC
From: me.merritt@gmail.com
Message-ID: <75645cce-ec2a-4652-a15d-a808ed30078f@z72g2000hsb.googlegroups.com>
Source record: 24246

Hi all,

I am working on an application of transmission lines for use in magnetic resonance. I know I have seen in the past pre-made transmission line that has an inner conductor surrounded by a white insulator (I think it is Kel-F, it may be teflon) and a copper layer on the outside. It is quite stiff, and comes in long pieces that can be bent with a little effort. Does anyone know where I can pick some of this up? I have been through about 200 google pages with no luck.

Thanks

324. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 18:40:23 UTC
From: richardharrison@webtv.net
Message-ID: <2138-4877A917-737@storefull-3252.bay.webtv.net>
Source record: 24248

Art wrote:
"The smallest diameter I have wound was on a hoola hoop and the flatest one I have made was 8" by 12" by a wire size which can be wound up in a roll and put in a sock no less."

From its size, I would expect its performance to be less than that of a dipole made from two "hamsticks". But, that may be enough.

Best regards, Richard Harrison, KB5WZI

325. Re: Software for measuring S/N and signal strength through soundcard?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 18:45:50 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <iYpK4Njep6dIFAG1@ifwtech.co.uk>
Source record: 24247

TF3KX wrote:
>Is there any software available for measuring S/N and signal strength,
>through the soundcard? My idea is to analyze signals arriving from my
>antenna, through the receiver and the soundcard, and thus compare
>antennas numerically in terms of signal strength and noise.
>
>This capability is already present for the most part in the Faros
>beacon monitoring software, but it is tailored to monitoring only the
>IARU/NCDXF beacon signals.
>

This program is designed to do exactly what you want:

http://g8kbb.roberts-family-home.co.uk/html/noise_meter.html

The files also describe a suitable downconverter and audio preamplifier.

--

73 from Ian GM3SEK
http://www.ifwtech.co.uk/g3sek

326. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 19:32:18 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <6zOdk.19$6O4.17@trnddc06>
Source record: 24250

"Clark Kent" <kentc@daily-planet.com> wrote in message
news:n9Edk.7962$1L1.4612@newsfe15.phx...
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:72fb93c8-788f-40f0-8931-aa849d8f82d1@m45g2000hsb.googlegroups.com...
>
>> Tell you what, get some wire twice the WL of the frequency you are
>> interested in.
>> Wind a close coil any diameter with it until half the wire is used
>> then change direction and come back
>> without changing wire winding direction and wind the wire on top of
>> the first coil where you finish with two wires to feed.
>> Put a variometer in series with it and then get on the air. Now this
>> is not exactly in equilibrium because one coil is a larger diameter
>> than
>> the other. Nor is the wire pre twisted pair which nullifies near field
>> noise to my thinking. Now you have a helix style antenna but without
>> the helix.
>> Coat the antenna with an alkyd type solution before you slide it off
>> the tube since the inside coil must be exposed the same way the
>> outside coil is exposed
>
>
> OK, I can do most of that. However, I went to your page for some
> variometer
> details, as I don't have one. No luck. From other reading it appears to
> be
> a loosely couple balun or un-un. But near there on your page, I
> discovered
> some verbiage about building an antenna and saw the reference to a 12-inch
> diameter. Good find, as I was going to go smaller.
>
> If I wound the thing on cardboard (like a big empty ice cream tub from the
> ice cream store), could I avoid having to take the coil(s) off the form?
> What about a paint bucket or an empty pool chlorine tub? I'd sorta like
> to
> skip that alkyd step. Messy.
>
> Need more variometer data, but I'll dig for that
>
I thought I might try and experiment with building one, since it seems
simple. The variometer is a deal killer however. Is there any reason a
transmatch/balun couldn't be used?

327. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 19:55:17 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a951b54f-7d2e-4c49-ac12-b76541cffad5@2g2000hsn.googlegroups.com>
Source record: 24251

On Jul 11, 2:32 pm, "Wayne" <mygarbage...@verizon.net> wrote:
> "Clark Kent" <ke...@daily-planet.com> wrote in message
>
> news:n9Edk.7962$1L1.4612@newsfe15.phx...
>
>
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >news:72fb93c8-788f-40f0-8931-aa849d8f82d1@m45g2000hsb.googlegroups.com...
>
> >> Tell you what, get some wire twice the WL of the frequency you are
> >> interested in.
> >> Wind a close coil any diameter with it until half the wire is used
> >> then change direction and come back
> >> without changing wire winding direction and wind the wire on top of
> >> the first coil where you finish with two wires to feed.
> >> Put a variometer in series with it and then get on the air. Now this
> >> is not exactly in equilibrium because one coil is a larger diameter
> >> than
> >> the other. Nor is the wire pre twisted pair which nullifies near field
> >> noise to my thinking. Now you have a helix style antenna but without
> >> the helix.
> >> Coat the antenna with an alkyd type solution before you slide it off
> >> the tube since the inside coil must be exposed the same way the
> >> outside coil is exposed
>
> > OK, I can do most of that. However, I went to your page for some
> > variometer
> > details, as I don't have one. No luck. From other reading it appears to
> > be
> > a loosely couple balun or un-un. But near there on your page, I
> > discovered
> > some verbiage about building an antenna and saw the reference to a 12-inch
> > diameter. Good find, as I was going to go smaller.
>
> > If I wound the thing on cardboard (like a big empty ice cream tub from the
> > ice cream store), could I avoid having to take the coil(s) off the form?
> > What about a paint bucket or an empty pool chlorine tub? I'd sorta like
> > to
> > skip that alkyd step. Messy.
>
> > Need more variometer data, but I'll dig for that
>
> I thought I might try and experiment with building one, since it seems

> simple. The variometer is a deal killer however. Is there any reason a
> transmatch/balun couldn't be used?

The variometer allows the frequency to be moved as a multiple of a
wavelength.
Thus allows your antenna to vary as you turn the knob on the radio.
If you do not use a variometer then you just have to hope that one of
the many suitable swr points rest
upon your frequency of choice. This can also be simulated by a series
of jumpers or a slider method
over the surface of the windings. For me I prefer a variometer since
the motor drive can be that which is dismantled from the radio's tuner
such that you have an automatic set up the same as the new variable
antenna that hit the market a few years ago except this design
is less than $100.....big difference.......and much much
smaller....... and yes the variometer is placed on the top of the
tower with your 160M
rotatable antenna. Don't know where I will go next! Sweaty...need a
shower
Unwinantennas.com/

328. Re: copper transmission lines with polumer insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 20:06:13 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <V2Pdk.20$kf4.8@trnddc03>
Source record: 24252

<me.merritt@gmail.com> wrote in message
news:75645cce-ec2a-4652-a15d-a808ed30078f@z72g2000hsb.googlegroups.com...
> Hi all,
>
> I am working on an application of transmission lines for use in
> magnetic resonance. I know I have seen in the past pre-made
> transmission line that has an inner conductor surrounded by a white
> insulator (I think it is Kel-F, it may be teflon) and a copper layer
> on the outside. It is quite stiff, and comes in long pieces that can
> be bent with a little effort. Does anyone know where I can pick some
> of this up? I have been through about 200 google pages with no luck.
>
> Thanks

Try googling Rigid Coax

329. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 20:27:07 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <vmPdk.194107$TT4.150992@attbi_s22>
Source record: 24253

"K7ITM" <k7itm@msn.com> wrote in message
news:d875fd2f-1f18-43e1-b42f-3baf718a0cc1@c65g2000hsa.googlegroups.com...
> There have been some suggestions that the sun is not behaving normally
> with respect to the sunspot cycle. There was a thread in this group a
> month ago with the title, "Sunspot cycle more dud than radiation
> flood." If you're worried about that, you might want to have a look
> at
> http://science.nasa.gov/headlines/y2008/11jul_solarcycleupdate.htm?list174385.

Tnx Tom, why are there a number of folks totally occupied with trying to keep the rest of us worried? If it's not the tree huggers and their carbon footprint, it's some other condition that implies the end of life as we know it. Could it be that they are intent on keeping us from noticing the guy behind the curtain?

Regards
W4ZCB

330. Re: Software for measuring S/N and signal strength through soundcard?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 20:38:12 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AD9437DF88CEnonenowhere@61.9.191.5>
Source record: 24254

TF3KX <kristinn1@gmail.com> wrote in news:d5179c14-5fa8-4ca4-aaf3-d28726f0c981@27g2000hsf.googlegroups.com:

> Is there any software available for measuring S/N and signal strength,
> through the soundcard? My idea is to analyze signals arriving from my
> antenna, through the receiver and the soundcard, and thus compare
> antennas numerically in terms of signal strength and noise.
>
> This capability is already present for the most part in the Faros
> beacon monitoring software, but it is tailored to monitoring only the
> IARU/NCDXF beacon signals.
>
> 73 - Kristinn, TF3KX

You haven't mentioned the frequency at which you want to make the measurements. Techniques vary with frequency, and the significance / nature of some noise sources is also frequency dependent.

Measuring S/N ratio is somewhat easier than measuring signal strength.

Nevertheless, there are ways to measure absolute field strength. FSM (http://www.vk1od.net/fsm/) provides a method that uses a known antenna and known receiver to measure field strength in absolute units. Along the way, it calculates receiver input power which might be of interest.

NFM (http://www.vk1od.net/nfm/) was specifically written for noise figure measurement using the Y factor method.

Spectran might well provide a first up simple solution to your needs, here is a note on using Spectran for assessment of weak signals: http://www.vk1od.net/gt/nfisa.htm . Keep in mind that S/N ratio is key to copying another station, but the N term includes your noise environment which may vary from one antenna to another. Improving the N term does not often significantly improve your EIRP which contributes to the S term at the other end of the link (assuming two way communications).

Here is an application of NFM to plot the pattern of a 1296MHz dish using sun noise:
http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm .

Owen

331. Re: Software for measuring S/N and signal strength through soundcard?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 20:39:24 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g58gds$8ls$1@news.jpl.nasa.gov>
Source record: 24256

TF3KX wrote:
> Is there any software available for measuring S/N and signal strength,
> through the soundcard? My idea is to analyze signals arriving from my
> antenna, through the receiver and the soundcard, and thus compare
> antennas numerically in terms of signal strength and noise.
>
> This capability is already present for the most part in the Faros
> beacon monitoring software, but it is tailored to monitoring only the
> IARU/NCDXF beacon signals.
>
> 73 - Kristinn, TF3KX

Presumably, you'll need some sort of RF front end to translate your
desired RF band of interest down, but after that, there's a fair number
of spectroscope/spectrogram programs out there..

I like DL4YHF's spectrum lab:

http://freenet-homepage.de/dl4yhf/spectra1.html

He's got a beacon logger setup for it, that you could probably modify.

332. Re: copper transmission lines with polumer insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 20:45:27 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g58gp7$c2o$1@news.jpl.nasa.gov>
Source record: 24255

me.merritt@gmail.com wrote:
> Hi all,
>
> I am working on an application of transmission lines for use in
> magnetic resonance. I know I have seen in the past pre-made
> transmission line that has an inner conductor surrounded by a white
> insulator (I think it is Kel-F, it may be teflon) and a copper layer
> on the outside. It is quite stiff, and comes in long pieces that can
> be bent with a little effort. Does anyone know where I can pick some
> of this up? I have been through about 200 google pages with no luck.
>
> Thanks

What you are looking for is generally called semi-rigid coax. There are 3 relatively common sizes (outside diameter): 0.141", 0.085" or 0.086", and 0.047", as well as other sizes.

There's a lot of different dielectrics and metals available, other than the usual PTFE and copper. For instance, foamed PTFE for low loss, a sort of sintered silica, etc. Silver plated stainless steel is used in cryogenic applications. Aluminum is used in weight sensitive applications.

Vendors are companies like MicroCoax, Haverhill, UniformTube, etc.

googling semirigid coax turns up a lot of hits.

333. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 21:05:39 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <Pine.OSF.4.33.0807111601001.10822-100000@worf.netins.net>
Source record: 24257

On Fri, 11 Jul 2008, K7ITM wrote:

> There have been some suggestions that the sun is not behaving normally
> with respect to the sunspot cycle.

Can the sun really do anything that isnt 'normal' ?
It is man-kinds stunted view of what normal should be that is abnormal.

The sun is not adhering to our predictions based on previous observations.
Bad, bad sun. No cookie for you.

--
My mailbox is NOT an advertisement medium. Tehrasha Darkon
My address is NOT for sale, lease or rent. darkon@netins.net
Send me spam, lose your account. Get it? TINLC-1372
http://tehrasha.mamehost.com/bastard B.A.S.T.A.R.D

334. Re: copper transmission lines with polumer insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 21:09:04 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AD948B9CBACCnonenowhere@61.9.191.5>
Source record: 24258

me.merritt@gmail.com wrote in news:75645cce-ec2a-4652-a15d-a808ed30078f@z72g2000hsb.googlegroups.com:

In the smaller sizes try Googling for UT-141, UT-085, RG-402, RG-405.

Owen

335. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 21:16:43 UTC
From: Christopher Mills Wolfe <caveman@commspeed.net>
Message-ID: <jM6dnfyww4wmUOrVnZ2dnUVZ_qninZ2d@posted.commspeed>
Source record: 24259
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Thu, 10 Jul 2008 11:48:49 -0400, kb9rqz wrote:

> On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>K4YZ wrote:
>>> Nope.
>>>
>>> The IP Address and servers are complete proof that I do NOT share
>>> any annonymous character's "address".
>>>
>>> Sounds like Lennie, to me....
>>>
>>> Steve, K4YZ
>>>
>>>
>>To anyone with even an elementary understanding of anonymous proxies,
>>anonymous remailers, zombie backdoors, etc., the ability to change ones
>>IP address and header details is simplistic, indeed, with little time
>>spent anyone can appear to be "coming" from anywhere in the world.
>>
>>You waste my time. Worse, you think us all idiots here. You remind me
>>of the "street smart" prosecutors and defense attorneys who stack jurys
>>with members of little or no technical knowledge and then call in
>>"expert witnesses" and propose arguments of technical details to boggle
>>their minds.
>>
>>You have only proven that you, yourself are either ignorant to such
>>technical details, or else you are indeed street smart, I favor the
>>latter in this case (however, if you in the dark about such things, 15
>>minutes on google will enlighten you.)
>>
>>JS
>
> "one useless man is disgrace 2 become a law firm 3 or more become a
> congress" adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
> altopia is never used by KB9RQZ
> nor is Konstans@hotmail.com ever
> btw i can be found at

> 17366 N River Rd
> Chassel Mi
>
> but the cowards asking lack the gut to act ** Posted from
> http://www.teranews.com **

Seems to me you would know the proper spelling of the town you claim to live in.

336. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 21:20:43 UTC
From: larry d clark <kd5foy@att.net>
Message-ID: <S8Qdk.32139$ZE5.7171@nlpi061.nbdc.sbc.com>
Source record: 24260

W3CQH wrote:
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:183c20bb-cd8a-42ab-9277-414777a96296@e53g2000hsa.googlegroups.com...
>> On Jul 9, 10:08 pm, Tom Ring <news0...@taring.org> wrote:
>>> Art Unwin wrote:
>>>
>>> 99% of crap cut
>>>
>>>> Richard, you can;'t mess with mother nature or the Universe
>>> This is even better than Rosie O'Donnell!
>>>
>>> Which isn't saying much, of course.
>>>
>>> And no Art, I haven't added a whit of information here. Which precisely
>>> matches the sum total of what you have posted here since you showed up.
>>>
>>> tom
>>> K0TAR
>> Well you have made your point ! Now what do you feel I should do?
>> Copy your words and return them? Say that I see a veiled threat?
>> All the above is free speech without contention of any sort so what
>> do we have to talk about now?
>
> This smells of what went around a couple of years ago about the FRACTAL
> antennas
>
>

crossfield antenna & fractal antenna and this crap from art unwin are
just ravings. they simply don't hold up under scrutiny. all the claims
are just so much bs, read kraus, end of subject

kd5foy

337. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 21:28:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g58j9j$a2e$1@news.albasani.net>
Source record: 24261

K7ITM wrote:
> There have been some suggestions that the sun is not behaving normally
> with respect to the sunspot cycle. There was a thread in this group a
> month ago with the title, "Sunspot cycle more dud than radiation
> flood." If you're worried about that, you might want to have a look
> at http://science.nasa.gov/headlines/y2008/11jul_solarcycleupdate.htm?list174385.

I don't believe anyone will do a thing, until:

1) We can no longer breath the air with out pain and all the birds are gone.

2) The coral reefs, and there for the fish, are dead (salmon are already
going that way.)

3) Ocean acidification has destroyed all oyster, clams, crabs, shrimp,
abalone, lobster, etc... (it is beginning now.)

4) Etc., etc., etc. ...

I would like to think different, but nothing has changed ... Rome burns
while Nero fiddles ... no, greed, corruption and lack of vision will
lead us where it always has ...

Regards,
JS

338. Re: Software for measuring S/N and signal strength through soundcard?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 22:03:21 UTC
From: TF3KX <kristinn1@gmail.com>
Message-ID: <3d524927-3f12-4a42-8ee6-ecdbcc22fa15@d77g2000hsb.googlegroups.com>
Source record: 24262

On Jul 11, 6:04 pm, TF3KX <kristi...@gmail.com> wrote:
> Is there any software available for measuring S/N and signal strength,
> through the soundcard? My idea is to analyze signals arriving from my
> antenna, through the receiver and the soundcard, and thus compare
> antennas numerically in terms of signal strength and noise.
>
> This capability is already present for the most part in the Faros
> beacon monitoring software, but it is tailored to monitoring only the
> IARU/NCDXF beacon signals.
>
> 73 - Kristinn, TF3KX

Just to clarify, I would use the HF receiver I already have, turn off
the AGC and then process the audio signal. The strength of the audio
signal would be proportional to the strength of the RF signal, and if
I can subract the noise level from the signal+noise level, I would
believe I should have a fair indication of the RF signal strength, at
least for comparison purposes.

339. Re: Software for measuring S/N and signal strength through soundcard?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 22:37:27 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g58nb7$d6k$1@news.jpl.nasa.gov>
Source record: 24266

TF3KX wrote:
> On Jul 11, 6:04 pm, TF3KX <kristi...@gmail.com> wrote:
>> Is there any software available for measuring S/N and signal strength,
>> through the soundcard? My idea is to analyze signals arriving from my
>> antenna, through the receiver and the soundcard, and thus compare
>> antennas numerically in terms of signal strength and noise.
>>
>> This capability is already present for the most part in the Faros
>> beacon monitoring software, but it is tailored to monitoring only the
>> IARU/NCDXF beacon signals.
>>
>> 73 - Kristinn, TF3KX
>
> Just to clarify, I would use the HF receiver I already have, turn off
> the AGC and then process the audio signal. The strength of the audio
> signal would be proportional to the strength of the RF signal, and if
> I can subract the noise level from the signal+noise level, I would
> believe I should have a fair indication of the RF signal strength, at
> least for comparison purposes.

Any of the programs suggested so far would work very nicely.

340. Re: Software for measuring S/N and signal strength through soundcard?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 22:38:16 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AD957D8F588Dnonenowhere@61.9.191.5>
Source record: 24263

Owen Duffy <none@no.where> wrote in
news:Xns9AD9437DF88CEnonenowhere@61.9.191.5:

> Here is an application of NFM to plot the pattern of a 1296MHz dish
> using sun noise:
> http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm .

Correction, it is actually a plot of the pattern at 2304MHz.

Owen

341. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 22:41:19 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <vkRdk.24$li3.20@newsfe05.lga>
Source record: 24264

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:2138-4877A917-737@storefull-3252.bay.webtv.net...
> Art wrote:
> "The smallest diameter I have wound was on a hoola hoop and the flatest
> one I have made was 8" by 12" by a wire size which can be wound up in a
> roll and put in a sock no less."
>
> From its size, I would expect its performance to be less than that of a
> dipole made from two "hamsticks". But, that may be enough.
>
> Best regards, Richard Harrison, KB5WZI
>
Except for Richard H's academic approach this thread has been hilarious--even
beats Leno. LOL.

Walt, W2DU

342. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 22:49:32 UTC
From: an Old friend <kb9rqz@amsat.org>
Message-ID: <323ec3c2-cac4-4d79-b3cb-84c16516ff2d@34g2000hsf.googlegroups.com>
Source record: 24265
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

```
On Jul 11, 5:16 pm, Christopher Mills Wolfe <cave...@commspeed.net>
wrote:
> On Thu, 10 Jul 2008 11:48:49 -0400, kb9rqz wrote:
> > On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
> > <assemblywiz...@gmail.com> wrote:
>
> >>K4YZ wrote:
> >>>      Nope.
>
> >>>      The IP Address and servers are complete proof that I do NOT share
> >>> any annonymous character's "address".
>
> >>>      Sounds like Lennie, to me....
>
> >>> Steve, K4YZ
>
> >>To anyone with even an elementary understanding of anonymous proxies,
> >>anonymous remailers, zombie backdoors, etc., the ability to change ones
> >>IP address and header details is simplistic, indeed, with little time
> >>spent anyone can appear to be "coming" from anywhere in the world.
>
> >>You waste my time.  Worse, you think us all idiots here.  You remind me
> >>of the "street smart" prosecutors and defense attorneys who stack jurys
> >>with members of little or no technical knowledge and then call in
> >>"expert witnesses" and propose arguments of technical details to boggle
> >>their minds.
>
> >>You have only proven that you, yourself are either ignorant to such
> >>technical details, or else you are indeed street smart, I favor the
> >>latter in this case (however, if you in the dark about such things, 15
> >>minutes on google will enlighten you.)
>
> >>JS
>
> > "one useless man is disgrace 2 become a law firm 3 or more become a
> > congress" adams
>
> > woger you are a Congress all in your own head
>
> >http://kb9rqz.bravejournal.com/
> > altopia is never used by KB9RQZ
> > nor is Konst...@hotmail.com ever
> > btw i can be found at
```

> > 17366 N River Rd
> > Chassel Mi
>
> > but the cowards asking lack the gut to act ** Posted from
> >http://www.teranews.com**
>
> Seems to me you would know the proper spelling of the town you claim to
> live in
I don't live in any town

343. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 23:06:36 UTC
From: " The God of Odd Statements, Henry homo Schmidt" <henryschmidt@rainbowqueer.net>
Message-ID: <g58pb0$a2g$1@news.tornevall.net>
Source record: 24267
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.usenet.kooks

"an Old friend" <kb9rqz@amsat.org> wrote in message
news:323ec3c2-cac4-4d79-b3cb-84c16516ff2d@34g2000hsf.googlegroups.com...
On Jul 11, 5:16 pm, Christopher Mills Wolfe <cave...@commspeed.net>
wrote:
> On Thu, 10 Jul 2008 11:48:49 -0400, kb9rqz wrote:
> > On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
> > <assemblywiz...@gmail.com> wrote:
>
> >>K4YZ wrote:
> >>> Nope.
>
> >>> The IP Address and servers are complete proof that I do NOT share
> >>> any annonymous character's "address".
>
> >>> Sounds like Lennie, to me....
>
> >>> Steve, K4YZ
>
> >>To anyone with even an elementary understanding of anonymous proxies,
> >>anonymous remailers, zombie backdoors, etc., the ability to change ones
> >>IP address and header details is simplistic, indeed, with little time
> >>spent anyone can appear to be "coming" from anywhere in the world.
>
> >>You waste my time. Worse, you think us all idiots here. You remind me
> >>of the "street smart" prosecutors and defense attorneys who stack jurys
> >>with members of little or no technical knowledge and then call in
> >>"expert witnesses" and propose arguments of technical details to boggle
> >>their minds.
>
> >>You have only proven that you, yourself are either ignorant to such
> >>technical details, or else you are indeed street smart, I favor the
> >>latter in this case (however, if you in the dark about such things, 15
> >>minutes on google will enlighten you.)
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> >>JS
>
> > "one useless man is disgrace 2 become a law firm 3 or more become a
> > congress" adams
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> > woger you are a Congress all in your own head
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> >http://kb9rqz.bravejournal.com/
> > altopia is never used by KB9RQZ

> > nor is Konst...@hotmail.com ever
> > btw i can be found at
> > 17366 N River Rd
> > Chassel Mi
>
> > but the cowards asking lack the gut to act ** Posted from
> >http://www.teranews.com**
>
> Seems to me you would know the proper spelling of the town you claim to
> live in
>
> I don't live in any town
>
Right, more like a toxic dump!!!

http://i10.tinypic.com/4fzaadx.jpg

344. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 23:14:30 UTC
From: kb9rqz@yahoo.com
Message-ID: <caqf74ldh448diuicthtg6ggcg0rbs3ab0@4ax.com>
Source record: 24268
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.usenet.kooks

On Fri, 11 Jul 2008 19:06:36 -0400, " The God of Odd Statements, Henry
homo Schmidt" <henryschmidt@rainbowqueer.net> wrote:

>

fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

345. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-11 23:17:39 UTC
From: kb9rqz@yahoo.com
Message-ID: <uaqf74dluo84u7gq9v6nh1ma86bqimk5pc@4ax.com>
Source record: 24269
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
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"one useless man is disgrace 2 become a law firm 3 or more become a congress"
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http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

346. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 00:00:11 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6e8a67cf-5812-401c-8298-edb18054a66e@d45g2000hsc.googlegroups.com>
Source record: 24270

On Jul 11, 5:41 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> "Richard Harrison" <richardharri...@webtv.net> wrote in message
>
> news:2138-4877A917-737@storefull-3252.bay.webtv.net...> Art wrote:
> > "The smallest diameter I have wound was on a hoola hoop and the flatest
> > one I have made was 8" by 12" by a wire size which can be wound up in a
> > roll and put in a sock no less."
>
> > From its size, I would expect its performance to be less than that of a
> > dipole made from two "hamsticks". But, that may be enough.
>
> > Best regards, Richard Harrison, KB5WZI
>
> Except for Richard H's academic approach this thread has been hilarious--even
> beats Leno. LOL.
>
> Walt, W2DU

Fine Walter. Urge people not to make one based on your professional
experience.
With Richards pile of books on which to stand you can make a mighty
strong case
based on the antennas you have personally built. Experts said the
same about the
Rhode Island antenna but the ham in the street seems to be happy with
it.!
Ofcourse you can show your academic ability in telling the group WHY
it "cannot possibly work:"
or wait for another expert to state ":why" to save face. Both of you
state it can't work, won't work
or the whole thing is a myth. Don't you feel you owe the group a
professional explanation on which you are basing your findings?
And I don't mean because YOU said it but on the basis of mathematics
or something of similar kind. After all this time I have
been studying this thing I could still be in error and I would welcome
a professional expose if it would save trouble for the posters
and where I can sincerely apologise for my aproach to this antenna
which nobody has faulted with explanation as yet.
Is this "don't make it guys" a pure professional aproach designed to
save your fellow friends from harm
or is it an emotional thing that you are pushing in response to you
book writings being dissed? I presented a series of graphs that I
measured with this antenna on
unwinantennas.com

so you could comment about that even tho you may have been looking for other information that was not there.You could also state to the many naysayers
why you ,as a professional and a judge ,why it reflect a dummy load and the implication of the oscillations. All these would earn you respect that could overcome your anger at somebody daring to question your writings in public and certainly would do something to negate your present passion for hate.
Can you do that for your fellow hams or is there some delight in seeing them struggle and spend while you are laughing at alll. Be a real ham and help your fellow hams after all the hobby is more than making money from them. As far as only Richard being academic I would remind you he is only quoting from books all of which do not address this design so his comments are speculative to say the least where he does not share the professional underpinnings of his speculations given with a sneer.

347. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 01:20:07 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <nFTdk.50$qW4.44@newsfe07.lga>
Source record: 24271

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:6e8a67cf-5812-401c-8298-edb18054a66e@d45g2000hsc.googlegroups.com...
> On Jul 11, 5:41 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> > "Richard Harrison" <richardharri...@webtv.net> wrote in message
> >
> > news:2138-4877A917-737@storefull-3252.bay.webtv.net...> Art wrote:
> > > "The smallest diameter I have wound was on a hoola hoop and the flatest
> > > one I have made was 8" by 12" by a wire size which can be wound up in a
> > > roll and put in a sock no less."
> >
> > > From its size, I would expect its performance to be less than that of a
> > > dipole made from two "hamsticks". But, that may be enough.
> >
> > > Best regards, Richard Harrison, KB5WZI
> >
> > Except for Richard H's academic approach this thread has been
hilarious--even
> > beats Leno. LOL.
> >
> > Walt, W2DU
>
> Fine Walter. Urge people not to make one based on your professional
> experience.
> With Richards pile of books on which to stand you can make a mighty
> strong case
> based on the antennas you have personally built. Experts said the
> same about the
> Rhode Island antenna but the ham in the street seems to be happy with
> it.!
> Ofcourse you can show your academic ability in telling the group WHY
> it "cannot possibly work:"
> or wait for another expert to state ":why" to save face. Both of you
> state it can't work, won't work
> or the whole thing is a myth. Don't you feel you owe the group a
> professional explanation on which you are basing your findings?
> And I don't mean because YOU said it but on the basis of mathematics
> or something of similar kind. After all this time I have
> been studying this thing I could still be in error and I would welcome
> a professional expose if it would save trouble for the posters
> and where I can sincerely apologise for my aproach to this antenna
> which nobody has faulted with explanation as yet.
> Is this "don't make it guys" a pure professional aproach designed to
> save your fellow friends from harm
> or is it an emotional thing that you are pushing in response to you

> book writings being dissed? I presented a series of graphs that I
> measured with this antenna on
> unwinantennas.com
> so you could comment about that even tho you may have been looking for
> other information that was not there.You could also state to the many
> naysayers
> why you ,as a professional and a judge ,why it reflect a dummy load
> and the implication of the oscillations. All these would earn you
> respect that could overcome your anger at somebody daring to question
> your writings in public and certainly would do something to negate
> your present passion for hate.
> Can you do that for your fellow hams or is there some delight in
> seeing them struggle and spend while you are laughing at alll. Be a
> real ham and help your fellow hams after all the hobby is more than
> making money from them. As far as only Richard being academic I would
> remind you he is only quoting from books all of which do not address
> this design so his comments are speculative to say the least where he
> does not share the professional underpinnings of his speculations
> given with a sneer.

Art, I have never said your antennas don't work, and I have not seen your graphs. In fact I've never commented one way of the other concerning your antennas. I did make one negative comment concerning your dialogs with the others, but I have not commented on the content of your rhetoric. Furthermore, I was not privy to any of the Dr. Davis posts, even though you have accused me of siding against him. If you doubt this just go back and check the various posts around the era when Dr. Davis is said to have posted and you'll not find any of my posts concerning him or the discussions concerning him.

And you have mistaken one Richard for the other. Richard C is the one who began the comedy in this thread, while Richard H is the one who posted academically. Are you aware of these two distinguished posters on this thread?

Walt, W2DU

348. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 02:16:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <fc0f5bbe-fcfd-4faa-ac09-de174a72e868@79g2000hsk.googlegroups.com>
Source record: 24272

On Jul 11, 8:20 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:6e8a67cf-5812-401c-8298-edb18054a66e@d45g2000hsc.googlegroups.com...
>
>
>
> > On Jul 11, 5:41 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> > > "Richard Harrison" <richardharri...@webtv.net> wrote in message
>
> > >news:2138-4877A917-737@storefull-3252.bay.webtv.net...> Art wrote:
> > > > "The smallest diameter I have wound was on a hoola hoop and the flatest
> > > > one I have made was 8" by 12" by a wire size which can be wound up in a
> > > > roll and put in a sock no less."
>
> > > > From its size, I would expect its performance to be less than that of a
> > > > dipole made from two "hamsticks". But, that may be enough.
>
> > > > Best regards, Richard Harrison, KB5WZI
>
> > > Except for Richard H's academic approach this thread has been
> hilarious--even
> > > beats Leno. LOL.
>
> > > Walt, W2DU
>
> > Fine Walter. Urge people not to make one based on your professional
> > experience.
> > With Richards pile of books on which to stand you can make a mighty
> > strong case
> > based on the antennas you have personally built. Experts said the
> > same about the
> > Rhode Island antenna but the ham in the street seems to be happy with
> > it.!
> > Ofcourse you can show your academic ability in telling the group WHY
> > it "cannot possibly work:"
> > or wait for another expert to state ":why" to save face. Both of you
> > state it can't work, won't work
> > or the whole thing is a myth. Don't you feel you owe the group a
> > professional explanation on which you are basing your findings?
> > And I don't mean because YOU said it but on the basis of mathematics
> > or something of similar kind. After all this time I have
> > been studying this thing I could still be in error and I would welcome
> > a professional expose if it would save trouble for the posters

> > and where I can sincerely apologise for my aproach to this antenna
> > which nobody has faulted with explanation as yet.
> > Is this "don't make it guys" a pure professional aproach designed to
> > save your fellow friends from harm
> > or is it an emotional thing that you are pushing in response to you
> > book writings being dissed? I presented a series of graphs that I
> > measured with this antenna on
> > unwinantennas.com
> > so you could comment about that even tho you may have been looking for
> > other information that was not there.You could also state to the many
> > naysayers
> > why you ,as a professional and a judge ,why it reflect a dummy load
> > and the implication of the oscillations. All these would earn you
> > respect that could overcome your anger at somebody daring to question
> > your writings in public and certainly would do something to negate
> > your present passion for hate.
> > Can you do that for your fellow hams or is there some delight in
> > seeing them struggle and spend while you are laughing at alll. Be a
> > real ham and help your fellow hams after all the hobby is more than
> > making money from them. As far as only Richard being academic I would
> > remind you he is only quoting from books all of which do not address
> > this design so his comments are speculative to say the least where he
> > does not share the professional underpinnings of his speculations
> > given with a sneer.
>
> Art, I have never said your antennas don't work, and I have not seen your
> graphs. In fact I've never commented one way of the other concerning your
> antennas. I did make one negative comment concerning your dialogs with the
> others, but I have not commented on the content of your rhetoric. Furthermore,
> I was not privy to any of the Dr. Davis posts, even though you have accused me
> of siding against him. If you doubt this just go back and check the various
> posts around the era when Dr. Davis is said to have posted and you'll not find
> any of my posts concerning him or the discussions concerning him.
>
> And you have mistaken one Richard for the other. Richard C is the one who began
> the comedy in this thread, while Richard H is the one who posted academically.
> Are you aware of these two distinguished posters on this thread?
>
> Walt, W2DU

Are you saying that one of the Richards is responsible for the '
comedy that you are enjoying and not me? Then you should have the
courage to say so.
Richard C I know can stand on his own feet and respond rather than you
hiding behind ambiguety.
At the same time I do not remember the two Richards having a discourse
with each other on my antenna which if
so you could have made your statement more deffinitive.! Frankly your
response does not ring true and I certainly would not wish you to
continue with your anger against him. But again you are intent on

letting somebody know of your contempt because you haven't fully
vented your anger.
I suggest you put this sort of verbage to one side and view tomorrow
as a new day

349. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 02:17:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i74g74h9cjeo6u195ocp84ka0ba8ts8m91@4ax.com>
Source record: 24273

On Fri, 11 Jul 2008 21:20:07 -0400, "Walter Maxwell" <walt@w2du.com>
wrote:

> Richard C is the one who began the comedy in this thread

Hmmm,

If all would peruse the original post for this thread, its contents are solely derived from the original descriptions made by the authur. The analysis of Weak Force conforms to the original descriptions of the authur. The outcome of Weak Force is confirmed in ALL signal strength reports of at least -40dB. All-in-all, nothing has been denied, negated, nor diminished (except signal strength in comparison to a standard dipole); and all accounts conform to every original postulate offered by the authur. Any consequences of optimizing for neutron emission and maximization for Weak Force are perhaps not notably useful, but might interest those who demand QRP operation from their investments in linears and exotic antennas in the examination of sub-atomic particle physics.

If any comedy has been observed, inferred, suggested, or implied; then its source lies wholly with the readers' misinterpretations with the authur of this new antenna as this thread has been solely devoted to affirming every proposition of this novel antenna degrading signal to observe these nuclear forces.

73's
Richard Clark, KB7QHC

350. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 02:37:44 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <YNUdk.3909$7%6.2631@edtnps82>
Source record: 24274

>>Since you claimed it worked on VHF I actually attemted to make a
>>contact using it. I live less than 5 miles from a repeater and can
>>usually get into it with milli watts on a hand held. I couldnt get
>>into it with your antenna with 10 watts. I was afraid to use more
>>power as i may put my radio at risk.
>
> This confirms at best -40dB of gain attributable to the authur's
> design in comparison to a conventional design.
>
> If Jimmie failed at anything approaching the perfection of the
> authur's design, is that it does not exhibit an even greater figure of
> -60dB - however, it is implied in Jimmie's hesitation to raise power
> lest the authur's design burst into flames due to the Weak Forces
> dominating the lack of conventional radiation.
>
> Seeing that the authur has admittedly and expressly designed this
> antenna to optimize the Weak Force, it would be surprising that any
> other outcome would be expected. For these past few months he has
> offered no other results of measurement, again admitting that he has
> no "laboratory" (equal even to Jimmie's resources). Hence it follows,
> that only speculation is available in the authur's defense.
>
> 73's
> Richard Clark, KB7QHC

The following code:

```
CM Close spaced helix
CE
GH 1 1100 22 13.2 6 6 0.03205 0.03205 0
GH 2 1100 22 13.2 6 6 0.03205 0.03205 0
GM 0 0 0 0 0 0 0 0.3 2 1 2 1100
GW 3 1 6 0 13.5 6 0 13.2 0.03205
GW 4 1 6 0 0.3 6 0 0 0.03205
GS 0 0 0.025400
GE 0 -1 0
GN -1 !free space
FR 0 1 0 0 7 0.25
EX 0 4 1 0 1 0
LD 5 0 0 0 5.8001E7 !copper
RP 0 19 1 1000 0 90 5.00000 1.00000
EN
```

Produces:

Input Impedance and VSWR
Frequency Tag Seg. Real(Z) Imag(Z)

7.000000 4 2202 3.196 -1.896;

**** Power Gains: Theta Pattern ****
Phi=90, Freq=7, File= Helix.NOU
Theta Horizontal Vertical Total
Degrees dB dB dB
0.00 -76.32 -76.89 -73.59
5.00 -64.76 -57.41 -56.68
10.00 -60.01 -51.90 -51.28
15.00 -57.00 -48.60 -48.02
20.00 -54.82 -46.27 -45.70
25.00 -53.14 -44.48 -43.93
30.00 -51.78 -43.06 -42.51
35.00 -50.67 -41.89 -41.35
40.00 -49.74 -40.92 -40.39
45.00 -48.97 -40.11 -39.58
50.00 -48.31 -39.43 -38.90
55.00 -47.77 -38.86 -38.34
60.00 -47.32 -38.39 -37.87
65.00 -46.95 -38.00 -37.48
70.00 -46.67 -37.70 -37.18
75.00 -46.45 -37.47 -36.95
80.00 -46.31 -37.31 -36.79
85.00 -46.23 -37.22 -36.70
90.00 -46.22 -37.19 -36.68

73, Frank

351. Antenna progress

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 02:40:11 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <df3b406a-254a-46cb-9538-721b07991b35@y21g2000hsf.googlegroups.com>
Source record: 24275

The variometer is complete and I made a mat form of antenna 24" by 6"
by 1/8
When testing the two at 2MHz the resonant point was passed to quickly
for me to stop the variometer turning.!
This suggests I have too many windings so some will have to be shorted
by the user as he feels necessary.since he probably has more expertise
in that area
Monday I will complete a whip form of same so it can be tried in a
mobile so everything will be shipped by Tuesday
and we can all sit and wait for comformation of all your dire
predictions to see which person hit it on the nose
and I have to crawl on my knees and apologize for my stubborness for
disregarding the plentiful advise given over the years by the experts.
While you are waiting I suggest that you review the law of statics and
instead of looking at
just Maxwell look at what the other constituent providers had to say
and how it compares to Gauss's law of statics.
Googling allowed.
Unwinantennas.com/

352. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 02:44:47 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <LUUdk.1261$qW4.283@newsfe07.lga>
Source record: 24276

```
"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:fc0f5bbe-fcfd-4faa-ac09-de174a72e868@79g2000hsk.googlegroups.com...
> On Jul 11, 8:20 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >
> > news:6e8a67cf-5812-401c-8298-edb18054a66e@d45g2000hsc.googlegroups.com...
> >
> >
> >
> > > On Jul 11, 5:41 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> > > > "Richard Harrison" <richardharri...@webtv.net> wrote in message
> > >
> > > >news:2138-4877A917-737@storefull-3252.bay.webtv.net...> Art wrote:
> > > > > "The smallest diameter I have wound was on a hoola hoop and the
flatest
> > > > > one I have made was 8" by 12" by a wire size which can be wound up in
a
> > > > > roll and put in a sock no less."
> > >
> > > > > From its size, I would expect its performance to be less than that of
a
> > > > > dipole made from two "hamsticks". But, that may be enough.
> > >
> > > > > Best regards, Richard Harrison, KB5WZI
> > >
> > > > Except for Richard H's academic approach this thread has been
> > hilarious--even
> > > > beats Leno. LOL.
> > >
> > > > Walt, W2DU
> >
> > > Fine Walter. Urge people not to make one based on your professional
> > > experience.
> > > With Richards pile of books on which to stand you can make a mighty
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> > > or is it an emotional thing that you are pushing in response to you
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> > > other information that was not there.You could also state to the many
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> > > and the implication of the oscillations. All these would earn you
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> > > your writings in public and certainly would do something to negate
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> > And you have mistaken one Richard for the other. Richard C is the one who
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> > the comedy in this thread, while Richard H is the one who posted
academically.
> > Are you aware of these two distinguished posters on this thread?
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> > Walt, W2DU
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> Are you saying that one of the Richards is responsible for the '
> comedy that you are enjoying and not me? Then you should have the
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> continue with your anger against him. But again you are intent on
> letting somebody know of your contempt because you haven't fully
> vented your anger.
> I suggest you put this sort of verbage to one side and view tomorrow
> as a new day

Art, I'm not angry with anyone. What gave you that notion? I have not indicated an anger, nor have I had any intent of letting anyone know of any contempt (because I have none) or that I haven't fully vented my anger. What anger? Where is this coming from? Certainly not from me. If you're addressing me with such outrageous concerns you are either mistaking me for someone else, or else you must have too many Gaussians between your ears that have addalpated your brain cells.

Concerning the two Richards, check the recent posts on this thread.

Walt, W2DU

353. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 04:13:26 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <27030849-f99d-4d21-b882-d351eb141ec9@a70g2000hsh.googlegroups.com>
Source record: 24277

On Jul 11, 9:44 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:fc0f5bbe-fcfd-4faa-ac09-de174a72e868@79g2000hsk.googlegroups.com...
>
>
>
> > On Jul 11, 8:20 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> > > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> > >news:6e8a67cf-5812-401c-8298-edb18054a66e@d45g2000hsc.googlegroups.com...
>
> > > > On Jul 11, 5:41 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> > > > > "Richard Harrison" <richardharri...@webtv.net> wrote in message
>
> > > > >news:2138-4877A917-737@storefull-3252.bay.webtv.net...> Art wrote:
> > > > > > "The smallest diameter I have wound was on a hoola hoop and the
> flatest
> > > > > > one I have made was 8" by 12" by a wire size which can be wound up in
> a
> > > > > > roll and put in a sock no less."
>
> > > > > > From its size, I would expect its performance to be less than that of
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> > > > > > dipole made from two "hamsticks". But, that may be enough.
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> > > > > > Best regards, Richard Harrison, KB5WZI
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> > > > > Except for Richard H's academic approach this thread has been
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> > > > Fine Walter. Urge people not to make one based on your professional
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> must have too many Gaussians between your ears that have addalpated your brain
> cells.
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> Concerning the two Richards, check the recent posts on this thread.
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As I said I assumed that your hillarity was over my antenna. You
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it was the other Richard. Maybe I am getting to sensitive to attacks
and thus showing I still have possesion of some testerone.
Apparently this time I can relax as I am not the one in the barrel tho
that is not a good thing to say.
Have a good week end
Art

354. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 04:40:21 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0eb8dfe6-e372-480f-ae95-86dead1b921f@p25g2000hsf.googlegroups.com>
Source record: 24278

On Jul 11, 11:13 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Jul 11, 9:44 pm, "Walter Maxwell" <w...@w2du.com> wrote:
>
>
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
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> and thus showing I still have possesion of some testerone.
> Apparently this time I can relax as I am not the one in the barrel tho
> that is not a good thing to say.
> Have a good week end
> Art

Ok Walter I have now read RCs post, I don't normally read his posts
But I don't find his comment hillarious. I never mentioned Neutrons
or zip cord
and his use of zip cord does not show any evidence of the wires
crossing each other from one coil to another
so he is imposing a lumped load which is opposite to the intent of the
design! Then he stated he had achieved equilibriumwhat ever that word
means to him
All in all it just doesn't make sense to me as always. I rarely can

figure out what RC is trying to say
since he mixes truth with lies as with a Shakesperien play, which is
why I do not read him and thus hillarity has escaped me.
I certainly have no idea what Franks response to RCs post signifies
either
What a mess occurs when one solely tries to deceive!
I am ready for a couple of quiet days out of town despite the cost of
Gauss

355. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 04:57:45 UTC
From: richardharrison@webtv.net
Message-ID: <2138-487839C9-942@storefull-3252.bay.webtv.net>
Source record: 24280

Art wrote:
"Of course you can show your academic ability in telling the group WHY it "cannot possibly work" or wait for another expert to state "why" to save face."

No one is saving face or conspiring against a new idea. You can`t break the laws of physics no matter how hard you try.

Antenna performance is based on lengths of wire in the air and the currents in them. Take a broadside array for example. It is usual to drive current through all the elements of a plane in the same phase so that the fields at a distant point perpendicular to the plane of the array are additive to make a large signal. It is a matter of radiator lengths and currents.

Now consider a small diameter coil as a radiator. It is called an radial mode helix because radiation is radial (perpendicular to the axis of the coil). It has two extremes. If collapsed, the coil becomes a single loop. If stretched to its maximum, the coil becomes a straight wire. If controlled so that the same magnitude and direction of current flows in all configurations, the straight-wire version of this coil should produce the greatest radiated field strength perpendicular to the coil axis in the far field.

Best regards, Richard Harrison, KB5WZI

356. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 05:03:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g59dv0$bv7$1@news.albasani.net>
Source record: 24279

Art Unwin wrote:

>> ...
> Art

Yanno, I just don't get it ...

In looking back, over decades, I see that I, most likely, learned more from antennas I have built which didn't work, than the ones I built which worked extremely well ... sounds stupid on the surface, I know--but, none the less, true.

There is a thread running now on the lazy h antenna--never one of my favorites. But hey, look what the guy is learning that started that thread! And, he seems determined, if it is a great antenna--he'll know by the time he is done!

Many of my mistakes were in my own construction(s.) A wire crossed to the wrong point--miscalculation of lengths/inductances/capacitances/etc. Sometimes I had built and written off an antenna, only to look, at some later date, at one someone else had built (and which functioned well) to see my mistake(s.) Sometimes the antennas just didn't work as expected, and they never were going to; and, even if I came across someone claiming they had one "working", and I examined it closely, while under use--I might see they only wished it to work well. Were they "wrong?", well, yes and no ... obviously they were chatting someone up!

Remove all the fun from amateur radio and you are just left with a bunch of angry "Brass Bangers!" Or, forever boy scouts at a contest ... :-)

Regards,
JS

357. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 06:20:34 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <d%Xdk.22768$CC.22449@bignews9.bellsouth.net>
Source record: 24281

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g58j9j$a2e$1@news.albasani.net...
> K7ITM wrote:
>> There have been some suggestions that the sun is not behaving normally
>> with respect to the sunspot cycle. There was a thread in this group a
>> month ago with the title, "Sunspot cycle more dud than radiation
>> flood." If you're worried about that, you might want to have a look
>> at
>> http://science.nasa.gov/headlines/y2008/11jul_solarcycleupdate.htm?list174385.
>
> I don't believe anyone will do a thing, until:
>
> 1) We can no longer breath the air with out pain and all the birds are
> gone.
>
> 2) The coral reefs, and there for the fish, are dead (salmon are already
> going that way.)
>
> 3) Ocean acidification has destroyed all oyster, clams, crabs, shrimp,
> abalone, lobster, etc... (it is beginning now.)
>
> 4) Etc., etc., etc. ...
>
> I would like to think different, but nothing has changed ... Rome burns
> while Nero fiddles ... no, greed, corruption and lack of vision will lead
> us where it always has ...
>
> Regards,
> JS

We do not possess an all powerful one world government, John. How else could
anything be done?

If we continue on our present path, there is a chance that billions of
people and other species could die as a consequence.

The sad truth is that if there was one world government that was all
powerful, the only way it could reduce the strain on the world's ecosystem
is to kill billions of people. Gee, that sounds familiar, doesn't it?

It is easy to say "do something". But when asked precisely what and by whom,
things fall apart in a hurry.

Anything that could be done, will affect people, their economies, their futures, their children, etc. Who is going to voluntarily put a gun to their head and eliminate themselves from the true problem being experienced by the Earth?

Ed Cregger

358. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 06:25:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hdig7490kho5t8a471g95j9ogabu0quocf@4ax.com>
Source record: 24282

On Fri, 11 Jul 2008 21:40:21 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I never mentioned Neutrons

You can't spell is why (neutrino).

It still amounts to the same thing: an antenna designed to suppress
the signal to optimize sub-atomic particles with their weak force.

Further modeling has borne out how weak: varying between the -30s dB
and -40s dB.

No other data has been submitted to contradict what has been witnessed
for three centuries by millions of operators. As I have offered
throughout this thread: proof positive that an antenna optimized for
the equilibrium of the Weak Force must suppress signal to qualify.

By the authur's intent, design, construction details, expressed logic,
and demonstration through models and in dependant testing, that
suppression has left only a Weak Force. Further improvement in
modeling and construction may yet achieve -60dB levels of signal
degradation to achieve a superior Weak Force antenna example.

This is truly deserving of a patent - except that the PTO mandates it
must have some commercial gain. Can one express it as -60dB$?

Would you be able to find a coin that small struck at the Denver Mint?
The tax mil would only be -30dB$. Would one need a 1000 bay
unwinantenna to equal on mil of monetary gain? What would its carbon
footprint be when a Henry fed it?

Ah, the infinite intrigue of Weak Force Antennas (hope the authur
realizes this may lead to a trademark infringement).

73's
Richard Clark, KB7QHC

359. Re: copper transmission lines with polumer insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 06:52:09 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <zfSdnSgFVL40yeXVnZ2dnUVZ_qjinZ2d@giganews.com>
Source record: 24283

me.merritt wrote:
> Hi all,
>
> I am working on an application of transmission lines for use in
> magnetic resonance. I know I have seen in the past pre-made
> transmission line that has an inner conductor surrounded by a white
> insulator (I think it is Kel-F, it may be teflon) and a copper layer
> on the outside. It is quite stiff, and comes in long pieces that can
> be bent with a little effort. Does anyone know where I can pick some
> of this up? I have been through about 200 google pages with no luck.
>
> Thanks

Micro Coax (http://www.micro-coax.com/) is one source for semi-rigid coaxial cable, and comes in (IIRC) up to 8' lengths. The stuff isn't cheap, though... be prepared to empty your wallet!

Regards,
Bryan WA7PRC

360. Re: Question about Measuring and cutting coax length

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 08:36:20 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <AMZdk.205043$P83.101735@newsfe20.ams2>
Source record: 24284

Sorry for the delay in answering back. Trouble with the computer. All fixed
now.

Ok on the length of coax. I have left it at 100 feet for now, so if I do
decide to higher the antenna in the future I can do.

I have a trapped centre feed dipole up for 80 and 40 meters.
The centre of the coax is connected to the half that points to north and the
braid is connected to the one that is pointing south.

I feel a bit daft asking this, but how can I tell if the antenna is running
north to south or south to north?

73 Andy

"H. Adam Stevens" <mayatwo@earthlink.net> wrote in message
news:mqOdnQGmPbhM0fPVnZ2dnUVZ_hWdnZ2d@earthlink.com...
> "How crucial is the length of coax in the first place?"
> As long as all the impedances are matched, and they are with RG-213 and a
> MA5B, length is irrelevant except that as-short-as-possible minimizes
> resistive losses.
>
> 73, H.
> NQ5H
>
> "Andy" <dx90@blueyounder.co.uk> wrote in message
> news:Shnbk.178582$NN3.81944@newsfe08.ams2...
>>I want to measure and cut some coax for 14.200 MHz. It is to be connected
>>to my Cushcraft MA5B
>> I have cut off a 100 feet of RG-213 coax and have put a PL-259 on one
>> end.
>> I have a T connector connected to the analyse with a 50 Ohm dummy load on
>> one side of the T and the 100 feet of coax on the other side of the T.
>> I then go into SWR mode on the Analyser and sweep, the nearest dip it
>> gives is at 13.105 MHz. I expected it to be nearer to 14 MHz. Would this
>> be about right?
>>
>> Before I start cutting bits off the coax I wanted to make sure that this
>> is correct or is there is a better way?
>>
>> How crucial is the length of coax in the first place?
>>
>> 73 Andy
>>
>
>

361. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 09:00:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g59rr2$6j1$1@news.albasani.net>
Source record: 24285

Ed Cregger wrote:

> ...
> ----------------
>
> We do not possess an all powerful one world government, John. How else could
> anything be done?
>
> If we continue on our present path, there is a chance that billions of
> people and other species could die as a consequence.
>
> The sad truth is that if there was one world government that was all
> powerful, the only way it could reduce the strain on the world's ecosystem
> is to kill billions of people. Gee, that sounds familiar, doesn't it?
>
> It is easy to say "do something". But when asked precisely what and by whom,
> things fall apart in a hurry.
>
> Anything that could be done, will affect people, their economies, their
> futures, their children, etc. Who is going to voluntarily put a gun to their
> head and eliminate themselves from the true problem being experienced by the
> Earth?
>
> Ed Cregger
>
>

Absolutely not ...

"They" have simply designed the world wrong. We need our jobs closer to
our homes. We need small manufacturing plants close to cities, and of
varying products so as supply the most needs of the city as possible.
Mass transportation in place of single cars ... etc, etc ...

We need to manufacture "things" to last a lifetime or two, and out of
metal, wood and glass--instead of cheap plastic poisons to fill our
dumps, streams and oceans with ...

Etc, etc, etc ...

Oh no, it is all easily "fixable", it just won't be done--greed and
corruption take a far different path--one which always ends in the end
of the particular civilization in question ... look at the cheap plastic
"toy" radios we have today--a sharp contrast to the sturdy metal/glass
cases of yesteryear ...

Those who know NOT their history are doomed to repeat that history ...
today they "rewrite history" in the image "they" wish ...

Regards,
JS

362. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 11:30:38 UTC
From: Peter <colleenpeter@westnet.com.au>
Message-ID: <U-udnVOIVItECOXVnZ2dnUVZ8hidnZ2d@westnet.com.au>
Source record: 24286

"K7ITM" <k7itm@msn.com> wrote in message
news:d875fd2f-1f18-43e1-b42f-3baf718a0cc1@c65g2000hsa.googlegroups.com...
> There have been some suggestions that the sun is not behaving normally
> with respect to the sunspot cycle. There was a thread in this group a
> month ago with the title, "Sunspot cycle more dud than radiation
> flood." If you're worried about that, you might want to have a look
> at
> http://science.nasa.gov/headlines/y2008/11jul_solarcycleupdate.htm?list174385.

The sun may have been behaving abnormally and is now be returning to normal!

Have a look at http://members.optushome.com.au/vk6ysf/vk6ysf/solarcycles.htm

363. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 11:44:51 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <ZO0ek.129$sd1.57@fe119.usenetserver.com>
Source record: 24287

Art Unwin wrote:

> I am ready for a couple of quiet days out of town despite the cost of
> Gauss

Simply priceless.

Dave K8MN

364. Re: series circuit for fractional WL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 11:54:21 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <UX0ek.71320$8k7.43943@fe111.usenetserver.com>
Source record: 24288

John Smith wrote:
> Dave Heil wrote:
>
>> ...
>> I didn't get fooled by anything, "John". Art didn't use the word
>> "caveat". He used the word "caviate". It means what the definition I
>> provided says that it means. You may go back to sleep now.
>>
>> Dave K8MN
>
> Yes Dave.

'Nuf said. Thanks.

> But, I realized you would have missed the fact that it is
> obvious, to all really, that Art does-not/and-has-not made good use of a
> spell checker in all/or-most of his past posts ...

Good use? There is every indication that Arthur has never made use of a spell checker in any post he has made. Couple that fact with his peculiar antenna theory and you end up with mostly gibberish. Arthur has, on a number of occasions, tried to lambaste the American educational system. At the same time, he provides ample evidence that he was short-sheeted during his education abroad.

> I just realized this would be yet another trivial thing which would
> "fool you" once again ...

I wasn't fooled in the least, "John". I recognized an incorrect word at once. I even provided a definition of the word used by Art. The fellow who was fooled provided numerous definitions of a word not used. That'd be the anonymous "John Smith".

> Don't worry brother, we all see the limitations here, and make
> allowances for those missing the obvious ...

I'm not worrying, "John". I've made allowances for you and Arthur.

> hey, from time-to-time we
> all need a little help. :-)

Lemme know if I can provide you that help, "John".

Dave K8MN

365. Re: why can't Dloyd face the facts.. that being crow or not I am convinced he abused a 7 yo kid

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 12:07:23 UTC
From: kb9rqz@yahoo.com
Message-ID: <bj7h74hje09v1r4r9cguvb32j4j424v882@4ax.com>
Source record: 24289
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.equipment

On Wed, 05 Dec 2007 15:28:08 -0500, kb9rqz@hotmail.com wrote:

>On Wed, 21 Nov 2007 23:20:49 -0500, kb9rqz@hotmail.com wrote:
>
>>On Wed, 21 Nov 2007 22:58:22 -0500, kb9rqz@hotmail.com wrote:
>>
>>>On Wed, 21 Nov 2007 19:27:37 -0800 (PST), Dloyd Lavies
>>><DloydLavies@gmail.com> wrote:
>>>
>>>>
>>>
>>>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
>>>adams
>>>
>>>woger you are a Congress all in your own head
>>>
>>>http://kb9rqz.bravejournal.com/
>>>altopia is never used by KB9RQZ
>>>nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google and noow motezrella
>>>
>>>posts from these sorucees are fakes
>>>
>>>and get ou the newly recovered KB9RQZ.blogspot.com as well
>>>
>>>G
>>
>>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
>>adams
>>
>>woger you are a Congress all in your own head
>>
>>http://kb9rqz.bravejournal.com/
>>altopia is never used by KB9RQZ
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>
>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
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>altopia is never used by KB9RQZ
>nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google and noow
motezrella
>
>posts from these sorucees are fakes
>
>and get ou the newly recovered KB9RQZ.blogspot.com as well
>
>G

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

366. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 12:07:23 UTC
From: kb9rqz@yahoo.com
Message-ID: <0h7h74lnuvcndorbmfcr1gciiovddmof9u@4ax.com>
Source record: 24290
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

367. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 14:01:35 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <72460c62-e635-47ee-acfb-44071dd6e34d@27g2000hsf.googlegroups.com>
Source record: 24291

On Jul 11, 11:57 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "Of course you can show your academic ability in telling the group WHY
> it "cannot possibly work" or wait for another expert to state "why" to
> save face."
>
> No one is saving face or conspiring against a new idea. You can`t break
> the laws of physics no matter how hard you try.
>
> Antenna performance is based on lengths of wire in the air and the
> currents in them. Take a broadside array for example. It is usual to
> drive current through all the elements of a plane in the same phase so
> that the fields at a distant point perpendicular to the plane of the
> array are additive to make a large signal. It is a matter of radiator
> lengths and currents.
>
> Now consider a small diameter coil as a radiator. It is called an radial
> mode helix because radiation is radial (perpendicular to the axis of the
> coil). It has two extremes. If collapsed, the coil becomes a single
> loop. If stretched to its maximum, the coil becomes a straight wire. If
> controlled so that the same magnitude and direction of current flows in
> all configurations, the straight-wire version of this coil should
> produce the greatest radiated field strength perpendicular to the coil
> axis in the far field.
>
> Best regards, Richard Harrison, KB5WZI

I don't know where you get this straight busines from. the wire will
radiate
no matter what shape as long as it is in equilibrium which means
straight or otherwise.
No law says it must be straight or else unless you can show it to me.
The helix is not straight! Making a helix a full wave circuit gets rid
of the counterpoise,
it does not stop radiation. Kraus suggests that a helix can supply a
16 db gain which is very high
but tnever the less gain can be achieved. So I do not see the point
that you are silently dwelling aponto justufy that it can,t work as
well as
radiators MUSt be at right angles to the earths surface for maximum
vertical gain. You have never explained the u nderpinnings of your
statements in academic form without which there is nothing I can

debate with you

368. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 17:15:37 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <ZE5ek.4004$7%6.642@edtnps82>
Source record: 24292

> I certainly have no idea what Franks response to RCs post signifies
> either
> What a mess occurs when one solely tries to deceive!
> I am ready for a couple of quiet days out of town despite the cost of
> Gauss

The idea was to model your antenna. The code is there for anyone to
verify in case I have made an error. The model results, including
input impedance, and gain, are shown below the code listing.
The GH card is in NEC 4 format. All other cards conform to
NEC 2.

73,

Frank

369. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 17:38:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7d7447e6-dbdb-4e46-b451-d306e9065723@j22g2000hsf.googlegroups.com>
Source record: 24293

On Jul 12, 12:15 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > I certainly have no idea what Franks response to RCs post signifies
> > either
> > What a mess occurs when one solely tries to deceive!
> > I am ready for a couple of quiet days out of town despite the cost of
> > Gauss
>
> The idea was to model your antenna. The code is there for anyone to
> verify in case I have made an error. The model results, including
> input impedance, and gain, are shown below the code listing.
> The GH card is in NEC 4 format. All other cards conform to
> NEC 2.
>
> 73,
>
> Frank

My program is not Nec based so I am not familiar with that routine.,
I cant model my antenna because of the pre twisted wires. I can
however
model a combination of two helix antennas without interweaving into
one circuit.
where one helix antenna is slightly larger diameter than the other
My program shows instances of gain! So the question becomes is your
model
based on zip cord which is suggested by one and secondly what was the
reason for the combimation of two antennas
to shrivle away into dust or the equivalent of a dummy load. It is
also suggested that antennas such as this
are breaking the laws of nature so does your program show the arrival
of doom ?.
I am making this antenna very frequently and all these things
predicted are just not happening. But then I would never use
zip cord or violate the rules of nature if I was advised which one I
was violating but apparently that is a secret.
So Frank what is the antenna configuration etc that your program
represents so that I can understand the particulars that you have so
genouresly probided so all may share

370. Re: RoomCap Antenna - last results

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 18:48:04 UTC
From: hb9abx <hb9abx@freesurf.ch>
Message-ID: <86ffeff4-191d-432f-9e5c-c1caf5f74263@m73g2000hsh.googlegroups.com>
Source record: 24294

On 4 Jul., 19:56, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Jun 28, 10:53 pm, Buck <usene...@lumpuckeroo.com> wrote:
>
> > On Sat, 28 Jun 2008 14:34:31 -0700 (PDT), Art Unwin<ArthurUn...@gmail.com> wrote:
>
> > Not one person has given good reason why the quoted antenna
>
> > >cannot work as stated, not one. By mathematics or actually making one
> > >since heckling is regarded as a suitable replacement for true
> > >knowledge now in the present hobby of ham radio.
>
> > First of all Felix has placed his project into such a 'top secret'
> > status that even the contract to which one agrees is secret until
> > after it is agreed to. When I told Felix I might buy his plans (IIRC
> > they were only $35.00 at the time) but, I would need to first see the
> > agreement, he cut off communications with me.
>
> > I'll ask Felix again, what are the terms of agreement, or why are they
> > secret until we paid for the plans?
>
> > Because of his secrecy of his agreement, I can only speculate that he
> > is looking for marks, suckers, or fools to buy his antenna plans.
> > Only a fool would sign a check and turn it over to a stranger to fill
> > in as he desires.
>
> > Personally, I would love for Felix's antenna design to perform
> > according to his claims. I would be proud to have his ugly pole on
> > top of my car as I drive down the road working DX if it works as
> > claimed. ("ugly pole" is not meant to be derogatory, see my car to
> > understand.)
>
> > And Art, the fact is that only Felix has the obligation of proof. As
> > I see it, this is the issue:
> > Felix has made certain claims to a product which he is selling. The
> > evidence he is using to back up his claims doesn't hold up to the
> > standards set to establish such claims. He may have tried, as in he
> > tested his antenna against a loop, but there were discrepancies in his
> > test that would skew the results.
>
> > I think everyone knows that at one time, according to the laws of
> > aerodynamics, a bumble bee could not fly. The laws have been changed
> > so the Bumble-bee can now fly. Currently, I believe the general rules
> > of antenna theory say that a properly made 1/4 wave ground plane will
> > outperform a ground plane less than 1/10th wavelength in size. (I am

> > sure some of the EEs here can prove this mathematically or offer some
> > specific scientific law, but I am not trying to go there.) Felix
> > claims to have an antenna that can defy this rule, therefore, the
> > burden of proof lies on him, not the EEs in the group.
>
> > I will not say that there is not a design that can break the general
> > rule I stated above, but the evidence Felix is offering is sketchy at
> > best.
>
> Buck
> You are misunderstanding the situation with his antenna. What he is
> doing is putting as much wire into the air which old timers still talk
> about and then taking on the problem of feeding it. Since an antenna
> can be any shape or size when in equilibrium he is following the first
> part and getting around the need for equilibrium to get a smaller
> antenna. This is somewhat like the Rhode Island antenna where winding
> or distortion of a antenna was accepted first and the effort to place
> it in equilibrium was taken on later .This was done by including the
> transmission line in the antenna system which made a "smaller" antenna
> Regards
> Art
>
> > --
> > 73 for now
> > Buck, N4PGW
>
> >www.lumpuckeroo.com
>
> > "Small - broadband - efficient: pick any two."

It is incredible , how silly and wrong the comments here are.
- All facts are disregarded and so many wrong things are
told, that I think, you all better remain with your wire antennas
as has been since 100 years ... and you better believe
that the world is flat and that an airplane never can fly,
as scientists teached some time ago ...
Maybe you will understand when the time is ready for that ...
-
I just tell you, that you can read the real facts here:
http://home.datacomm.ch/hb9abx/ant--abx-e.htm
and
if someone wants to know the contract, he has to sign
before obtaining the plans: Send me an email
and you will get all conditions - nothing is kept secret
as Buck wrote. Probably his mail was lost in the
Internet, and that is not my responsibility. Sorry.
With kind regards: Felix - HB9ABX
--... ...-- = 73

371. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 19:21:17 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9a57f4ea-d380-415a-a5b8-5d997afbf8c9@z66g2000hsc.googlegroups.com>
Source record: 24295

On Jul 11, 11:57 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "Of course you can show your academic ability in telling the group WHY
> it "cannot possibly work" or wait for another expert to state "why" to
> save face."
>
> No one is saving face or conspiring against a new idea. You can`t break
> the laws of physics no matter how hard you try.
Correct Please point to the particular law that I am breaking, that
would really help out a lot
>
> Antenna performance is based on lengths of wire in the air and the
> currents in them.
By performance you meam energy in vesus radiation out
as with a closed arbitary border.

Take a broadside array for example. It is usual to
> drive current through all the elements of a plane in the same phase so
> that the fields at a distant point perpendicular to the plane of the
> array are additive to make a large signal. It is a matter of radiator
> lengths and currents.
That is for a radiator based around intercoupling of radiators not one
based on radiation per unit length of radiator
The "large" signal is a resuly of how the radiation is arranged. It
does not create extra radiation it just removes radiation fro one
arear
to supplement radiation in other areas. It does not create more
radiation per radiator unit length
>
> Now consider a small diameter coil as a radiator.
A loop radiator or did you mean a coil?

It is called an radial
> mode helix because radiation is radial (perpendicular to the axis of the
> coil).
No. That is definitely not true!

It has two extremes. If collapsed, the coil becomes a single
> loop.
Wire stays the same length ala apples with apples

If stretched to its maximum, the coil becomes a straight wire.

Ok. still the same amount of wire

If
> controlled so that the same magnitude and direction of current flows in
> all configurations, the straight-wire version of this coil should
> produce the greatest radiated field strength perpendicular to the coil
> axis in the far field.

This doesn't radiate more per unit energy supplied. Ther is no total
increase of radiation per energy put in.

Hmm so now you are moving away from total radiation to a robbing Peter
to pay Paul situation
So your radiator is very lossy as much as it has gain, which adds up
to total radiation
per unit length

You forgot to make your point. My antenna with the same wire length
has the same radiation as yours does per unit length of radiator
so in your casev some how the ratio root LC became smaller while the
wire stayed the same lengthj!
How did that happen?

You are saying that a straight radiator produces more radiation per
unit length than any other antenna that does not have a straight
position such that the radiation per unit length reduces the
efficiency of the radiator the ability of producing radiation.

So this is where we part

since for a given length in equilibrium root LC is always the same
thus so is the radiation. Is this a law that I am violating?

What does the law state?

RH this is my last shot of trying to analyse what you are saying that
leads to the demise of my antenna.
Now be specific for once and respond to each which I have high ligted.
And as a final comment describe how one helix antenna radiates more
than two helix anteena made of opposite polarisation because you
continue to suggest this despite the fact we have doubled the wire!.
Let us come to finality with respect to what you have been pushing for
the last decade,

P.S I am in St Louis for a get away and it is to hot and humid to go
out. Makes sense?

>
> Best regards, Richard Harrison, KB5WZI

372. Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 19:46:27 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <t62i74567jijev0fq92suvaardhlja5psr@4ax.com>
Source record: 24296

Why do we always mount our HF Yagi's in the horizontal plane?
Antenna maintenance would be much easier for those of us with tilt
over towers if the antenna were in the horizontal plane when down for
maintenance!

John Ferrell W8CCW

373. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 20:42:36 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a4aee57d-2a31-4480-bae5-3b8997310beb@d45g2000hsc.googlegroups.com>
Source record: 24297

On Jul 12, 2:46 pm, John Ferrell <johnferr...@sprintmail.com> wrote:
> Why do we always mount our HF Yagi's in the horizontal plane?
> Antenna maintenance would be much easier for those of us with tilt
> over towers if the antenna were in the horizontal plane when down for
> maintenance!
>
> John Ferrell W8CCW

John, A local guy has his yagi hinged at the top where the downward
pole slips
into a "U " shaped clasp. a
As his foldover comes down the leverage supplied by
the yagi removes the pole from the clasp and the yagi arrives at
ground level in a horizontal position

374. Re: RoomCap Antenna - last results

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 21:27:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5b7ki$3s1$1@news.albasani.net>
Source record: 24298

hb9abx wrote:

>> ...
> With kind regards: Felix - HB9ABX
> --... ...-- = 73

As alway, I remain open to embrace any new
designs/techniques/construction-methods/plans/breakthroughs/etc.

After building/using "it" (your antenna in question) I went back to the
DLM. Granted, I have not figured out how to make a true multi-band
version of the DLM, yet, no problem; I have never been fond of the
"one-size-fits-all" antenna, anyway.

I would encourage other to give it a go--I am not infallible and may
have sloppy or inadequate means to realize the full potential ... I have
made plenty such errors in the past ... :-(

Choice is nice!

Regards,
JS

375. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 23:19:32 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <k_aek.545$Oa1.459@newsfe02.lga>
Source record: 24299

"larry d clark" <kd5foy@att.net> wrote in message
news:S8Qdk.32139$ZE5.7171@nlpi061.nbdc.sbc.com...
> W3CQH wrote:
> > "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> > news:183c20bb-cd8a-42ab-9277-414777a96296@e53g2000hsa.googlegroups.com...
> >> On Jul 9, 10:08 pm, Tom Ring <news0...@taring.org> wrote:
> >>> Art Unwin wrote:
> >>>
> >>> 99% of crap cut
> >>>
> >>>> Richard, you can;'t mess with mother nature or the Universe
> >>> This is even better than Rosie O'Donnell!
> >>>
> >>> Which isn't saying much, of course.
> >>>
> >>> And no Art, I haven't added a whit of information here. Which precisely
> >>> matches the sum total of what you have posted here since you showed up.
> >>>
> >>> tom
> >>> K0TAR
> >> Well you have made your point ! Now what do you feel I should do?
> >> Copy your words and return them? Say that I see a veiled threat?
> >> All the above is free speech without contention of any sort so what
> >> do we have to talk about now?
> >
> > This smells of what went around a couple of years ago about the FRACTAL
> > antennas
> >
> >
>
> crossfield antenna & fractal antenna and this crap from art unwin are
> just ravings. they simply don't hold up under scrutiny. all the claims
> are just so much bs, read kraus, end of subject
>
> kd5foy

Has it ever occurred to those involved in this thread that Art has outsmarted us all, and that he is simply pulling our legs and we fell for it all the way? I know some Brits who are pretty smart blokes, but would like to make us look like idiots. Some of them can't even get over their loss in the late 1700's.

Walt, W2DU

376. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-12 23:26:31 UTC
From: nm5k@wt.net
Message-ID: <25fd7579-d615-40e9-aeb9-5db5645efa97@m44g2000hsc.googlegroups.com>
Source record: 24300

On Jul 12, 6:19 pm, "Walter Maxwell" <w...@w2du.com> wrote:

>
> Has it ever occurred to those involved in this thread that Art has outsmarted us
> all, and that he is simply pulling our legs and we fell for it all the way? I
> know some Brits who are pretty smart blokes, but would like to make us look like
> idiots. Some of them can't even get over their loss in the late 1700's.
>
> Walt, W2DU

I was thinking the same thing the other day when I read part #1 of
the Art papers..
My first thought was sheesh, there is no way anyone could be "this"
crazy... This must be a troll of epic proportions, and we all are
taking
the bait, hook , line , and gaussian sinker.

377. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 00:04:55 UTC
From: Dave <noone@nowhere.com>
Message-ID: <HEbek.91$kf4.54@trnddc03>
Source record: 24151

"John Ferrell" <johnferrell@sprintmail.com> wrote in message
news:t62i74567jijev0fq92suvaardhlja5psr@4ax.com...
> Why do we always mount our HF Yagi's in the horizontal plane?
> Antenna maintenance would be much easier for those of us with tilt
> over towers if the antenna were in the horizontal plane when down for
> maintenance!
>
> John Ferrell W8CCW

vertical yagi's work fine... if you can get them far enough away from the conductive tower and mast either vertically or horizontally... though i do believe you get better ground reflection from the horizontal polarization. There is a new product that allows yagis mounted horizontally to automatically pivot as you tilt over a tower so they stay level with the ground.

378. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 00:09:36 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9e7edf80-06d9-4214-8244-6dc169dfbb87@34g2000hsf.googlegroups.com>
Source record: 24152

On Jul 12, 6:19 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> "larry d clark" <kd5...@att.net> wrote in
messagenews:S8Qdk.32139$ZE5.7171@nlpi061.nbdc.sbc.com...
>
>
>
> > W3CQH wrote:
> > > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> > >news:183c20bb-cd8a-42ab-9277-414777a96296@e53g2000hsa.googlegroups.com...
> > >> On Jul 9, 10:08 pm, Tom Ring <news0...@taring.org> wrote:
> > >>> Art Unwin wrote:
>
> > >>> 99% of crap cut
>
> > >>>> Richard, you can;'t mess with mother nature or the Universe
> > >>> This is even better than Rosie O'Donnell!
>
> > >>> Which isn't saying much, of course.
>
> > >>> And no Art, I haven't added a whit of information here. Which precisely
> > >>> matches the sum total of what you have posted here since you showed up.
>
> > >>> tom
> > >>> K0TAR
> > >> Well you have made your point ! Now what do you feel I should do?
> > >> Copy your words and return them? Say that I see a veiled threat?
> > >> All the above is free speech without contention of any sort so what
> > >> do we have to talk about now?
>
> > > This smells of what went around a couple of years ago about the FRACTAL
> > > antennas
>
> > crossfield antenna & fractal antenna and this crap from art unwin are
> > just ravings. they simply don't hold up under scrutiny. all the claims
> > are just so much bs, read kraus, end of subject
>
> > kd5foy
>
> Has it ever occurred to those involved in this thread that Art has outsmarted us
> all, and that he is simply pulling our legs and we fell for it all the way? I
> know some Brits who are pretty smart blokes, but would like to make us look like
> idiots. Some of them can't even get over their loss in the late 1700's.
>
> Walt, W2DU

Walter It was the English residents that fought the Hessians and made them leave
America was the prison camp for all bad criminals at that time and when that war came to an end
criminals were then sent to Australia to work their prison terms. At that time England was at war in Spain so English officers who could not speak German
were put in charge of the Hessians. Remember that is why Americans try to speak the english language as it is the language of its forfathers and soon the language of our fore fathers will prevail on the population of the Country which will be Spanish. Actually America had to changer its laws to prevent the president being of English blood because the English were running the Country. Americans finally took power and then you were able to make America a debtor country where we were Bushed wacked If I remember correctly many Uk residents stayed at the Alamo to fight, don't know where every body else
If what I was sharing was something that I made up I would be so proud.of my mental capabilities that I would write a fantasy book like yours and have it printed over and over again to get money from silly hams! By the way we don't consider America a loss the rent we got for more than a hundred of years
was quite hansom.. Now china is the lease holder!

379. does any design arrow antenna by using mmana-gal?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 00:45:24 UTC
From: nobody <nobody@nobody.com>
Message-ID: <48795027$1@127.0.0.1>
Source record: 24153

in A0 51 antenna
http://xe1mex.gq.nu/antenas/yagi.html the original design is basic.
would I like to learn about antenna and put the actual antenna into
mmana-gal.

I have built the antenna but I want to fine tune the antenna with mmana-gal
so I understand more about how these term " good reception", "good
signalling... good connection " really mean in the design.

how to fit in reflector, driven, direction 1... direction N?

first time to mmana-gal would you please guide me a little bit.

380. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 01:25:01 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <uvli741vk5ua6flhblva641nj0birpa1k4@4ax.com>
Source record: 24154

On Sat, 12 Jul 2008 13:42:36 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Jul 12, 2:46 pm, John Ferrell <johnferr...@sprintmail.com> wrote:
>> Why do we always mount our HF Yagi's in the horizontal plane?
>> Antenna maintenance would be much easier for those of us with tilt
>> over towers if the antenna were in the horizontal plane when down for
>> maintenance!
>>
>> John Ferrell W8CCW
>
>John, A local guy has his yagi hinged at the top where the downward
>pole slips
>into a "U " shaped clasp. a
>As his foldover comes down the leverage supplied by
> the yagi removes the pole from the clasp and the yagi arrives at
>ground level in a horizontal position
That is ingenious!
I will have to think through the details but I think I can implement
it. Keeping weight to a minimum is an important factor.

John Ferrell W8CCW

381. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 01:44:29 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <1emi74h3inbd0uqr68qdjr77kdrohuani7@4ax.com>
Source record: 24155

On Sun, 13 Jul 2008 00:04:55 GMT, "Dave" <noone@nowhere.com> wrote:

>
>"John Ferrell" <johnferrell@sprintmail.com> wrote in message
>news:t62i74567jijev0fq92suvaardhlja5psr@4ax.com...
>> Why do we always mount our HF Yagi's in the horizontal plane?
>> Antenna maintenance would be much easier for those of us with tilt
>> over towers if the antenna were in the horizontal plane when down for
>> maintenance!
>>
>> John Ferrell W8CCW
>
>vertical yagi's work fine... if you can get them far enough away from the
>conductive tower and mast either vertically or horizontally... though i do
>believe you get better ground reflection from the horizontal polarization.
>There is a new product that allows yagis mounted horizontally to
>automatically pivot as you tilt over a tower so they stay level with the
>ground.
>

As soon as I get an opportunity I will rotate mine to vertical at
least until I can investigate the possibilities. If you can recall
more details of the new product I am interested.
The scheme offered by Art sounds like my best bet so far.

In the past I have worked from a step ladder with the tower lowered
and tilted as far as possible. I did not forsee that two knee joint
replacements would take away my use of stepladders for a while!

John Ferrell W8CCW

382. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 03:34:46 UTC
From: richardharrison@webtv.net
Message-ID: <2138-487977D6-1223@storefull-3252.bay.webtv.net>
Source record: 24156

John Smith wrote:
"There is a thread runnung now on the lazy H antenna--never one of my favorites.:

Yes. I believe it started with the question: "Has anyone ever actually built a Lazy H for 10 or 11 meters?"

Although I`ve built many antennas for 33 MHz, a frequency assigned to a company I worked for over a long period of time, none of those were Lazy H`s. I have built many Lazy H`s for several other frequency bands used for shortwave broadcasting but 10 and 11 meters are not assigned to broadcasting. The Lazy H, with a plane of phased resonant reflectors directly behind to make the array unidtrectional, is one of the most popular for shortwave broadcasting. The highest frequency band I`ve used is the 17 MHz band. Nothing significant will happen if the same 17 MHz antenna is scaled for 29 MHz. In fact our shortwave antennas were physically modeled at 450 MHz, before the first full-sized shortwave antenna was ever built, just to prove the design. Measurements on big and little antennas proved both to give the same results.

I`m inclined to believe the questioner made some mistake and there is nothing wrong with a properly designed and constructed Lazy-H antenna on any frequency.

Best regards, Richard Harrison, KB5WZI

383. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 07:28:13 UTC
From: <>
Message-ID: <i1bj74h45n3u9redkg4qr1oel8k9nhnqt3@4ax.com>
Source record: 24157

On Sun, 13 Jul 2008 00:04:55 GMT, "Dave" <noone@nowhere.com> wrote:

>
>"John Ferrell" <johnferrell@sprintmail.com> wrote in message
>news:t62i74567jijev0fq92suvaardhlja5psr@4ax.com...
>> Why do we always mount our HF Yagi's in the horizontal plane?
>> Antenna maintenance would be much easier for those of us with tilt
>> over towers if the antenna were in the horizontal plane when down for
>> maintenance!
>>
>> John Ferrell W8CCW
>
>vertical yagi's work fine...
>....

No.

Look at the horizontal and vertical diagrams of a Yagi.
(Talking about a single Yagi, not stacked)

The narrowing of the beam characteristic is only dominant
in the horizontal orientation, the vertical retains about the
characteristic of a single dipole.

So if you tilt a yagi to vertical, it will receive from all
directions, especially the EMF noise in your vicinity.

When horizontally mounted, it will receive of course from
above (the sky) and from the bottom below your tower
but generally there is less interference than in the whole
360 degrees around you.

Repeat: the vertical yagi diagram is not much better than
that of a single dipole, regardless how many horizontal elements
you add in length of the beam. Try it out of you don't believe,
but listen to the noise you get, not the signals.
Only stacking of yagis can improve the situation.

w.

384. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 07:46:02 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9ADAB4B788C5nonenowhere@61.9.191.5>
Source record: 24158

hwabnig@ .- --- -. dotat wrote in news:i1bj74h45n3u9redkg4qr1oel8k9nhnqt3@4ax.com:

...
> The narrowing of the beam characteristic is only dominant
> in the horizontal orientation, the vertical retains about the
> characteristic of a single dipole.

That proposition is not born out my models or measurements of real antennas.

It is true that the E plane and H plane half power beamwidths are different, but as boom length (gain) is increased, the two approach each other.

Owen

385. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 07:59:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <A8WdnYZttNx5KOTVnZ2dnUVZ_oTinZ2d@posted.easystreetonline>
Source record: 24159

One of the advantages of a Yagi is its directivity. When mounted horizontally, its horizontal pattern is quite directional, but the pattern in the vertical plane is relatively broad -- the vertical pattern of a typical HF Yagi in the forward direction, in fact, isn't much different from a single dipole. If you mount the Yagi vertically, the two patterns swap so the horizontal pattern ends up very much broader than when mounted vertically.

A vertically mounted Yagi is vertically polarized, and vertically polarized radiation reacts differently with the ground than horizontally polarized radiation. So rotating a moderately or very high yagi from horizontal to vertical will result in loss of low angle radiation unless your ground is very highly conductive.

These effects can be very easily be seen by modeling.

Roy Lewallen, W7EL

John Ferrell wrote:
> Why do we always mount our HF Yagi's in the horizontal plane?
> Antenna maintenance would be much easier for those of us with tilt
> over towers if the antenna were in the horizontal plane when down for
> maintenance!
>
> John Ferrell W8CCW

386. Re: Part three of many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 08:00:03 UTC
From: Clark Kent <kentc@daily-planet.com>
Message-ID: <bCiek.16809$tN1.14157@newsfe17.phx>
Source record: 24160

```
"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:a951b54f-7d2e-4c49-ac12-b76541cffad5@2g2000hsn.googlegroups.com...
> On Jul 11, 2:32 pm, "Wayne" <mygarbage...@verizon.net> wrote:
> > "Clark Kent" <ke...@daily-planet.com> wrote in message
> >
> > news:n9Edk.7962$1L1.4612@newsfe15.phx...
> >
> >
> >
> > > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >
>news:72fb93c8-788f-40f0-8931-aa849d8f82d1@m45g2000hsb.googlegroups.com...
> >
> > >> Tell you what, get some wire twice the WL of the frequency you are
> > >> interested in.
> > >> Wind a close coil any diameter with it until half the wire is used
> > >> then change direction and come back
> > >> without changing wire winding direction and wind the wire on top of
> > >> the first coil where you finish with two wires to feed.
> > >> Put a variometer in series with it and then get on the air. Now this
> > >> is not exactly in equilibrium because one coil is a larger diameter
> > >> than
> > >> the other. Nor is the wire pre twisted pair which nullifies near
field
> > >> noise to my thinking. Now you have a helix style antenna but without
> > >> the helix.
> > >> Coat the antenna with an alkyd type solution before you slide it off
> > >> the tube since the inside coil must be exposed the same way the
> > >> outside coil is exposed
> >
> > > OK, I can do most of that. However, I went to your page for some
> > > variometer
> > > details, as I don't have one. No luck. From other reading it appears
to
> > > be
> > > a loosely couple balun or un-un. But near there on your page, I
> > > discovered
> > > some verbiage about building an antenna and saw the reference to a
12-inch
> > > diameter. Good find, as I was going to go smaller.
> >
> > > If I wound the thing on cardboard (like a big empty ice cream tub from
the
> > > ice cream store), could I avoid having to take the coil(s) off the
```

form?
> > > What about a paint bucket or an empty pool chlorine tub? I'd sorta
like
> > > to
> > > skip that alkyd step. Messy.
> >
> > > Need more variometer data, but I'll dig for that
> >
> > I thought I might try and experiment with building one, since it seems
> > simple. The variometer is a deal killer however. Is there any reason a
> > transmatch/balun couldn't be used?
>
> The variometer allows the frequency to be moved as a multiple of a
> wavelength.
> Thus allows your antenna to vary as you turn the knob on the radio.
> If you do not use a variometer then you just have to hope that one of
> the many suitable swr points rest
> upon your frequency of choice. This can also be simulated by a series
> of jumpers or a slider method
> over the surface of the windings. For me I prefer a variometer since
> the motor drive can be that which is dismantled from the radio's tuner
> such that you have an automatic set up the same as the new variable
> antenna that hit the market a few years ago except this design
> is less than $100.....big difference.......and much much
> smaller....... and yes the variometer is placed on the top of the
> tower with your 160M
> rotatable antenna. Don't know where I will go next! Sweaty...need a
> shower
> Unwinantennas.com/

Suddenly, here's just a TON of stuff that needs some good sense sprinkled on
it. Just a few highlights:

I just took another look at the website and further examined the graphs at
the bottom. Per your instructions, using approximately 2000 ft of wire
means the antenna is wound for a wl of 1000 ft, 305 meters or around 1 MHz.
How is it you're getting a decent SWR nearly everywhere from 1.0 to 100 MHz?
Look, the WORST number for SWR is about 4:1, well within the range of any
decent tuner. BTW, it looks like the response of a comb filter, except
that the cancellation frequencies between the reinforcements don't look as
lossy as they should look.

The variometer will do variable transformer coupling. OK fine, but I think
you should have provided a description for one. The link to
http://www.qsl.net/in3otd/variodes.html was instructive but ... I have no
idea what coil inductances to shoot for. Groping in the dark is not fun.

What does it mean to move the frequency as a multiple of wavelength?

What does it mean for the antenna to vary as I turn the knob on the radio?
I've got decades of experience with this hobby and that does not compute.
You shouldn't throw this stuff out and figure we're mind readers.

160m rotatable antenna? I don't travel in those circles. If that was a joke, I guess I need my sense of humor recalibrated.

Here's my own "tell you what": I'll wind one of these things for 20m, which isn't a lot of wire. I have an antenna analyzer that will tell me a few nice things about what I have.

Then if the SWR is anything like reasonable, it's Kenwood Time! I'll check for who I can hear and try working him. ... and I'll check for WWV on 15. I can usually hear him any day, often on a cheap portable radio with a whip antenna.

Using a local ham (eliminating the bulk of QSB) I can compare antennas for equal S-meter readings with a switchable attenuator in line with the better antenna.

That will settle it for me.

387. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 09:15:07 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <QBp7IzGbeceIFwpA@b-howie.demon.co.uk>
Source record: 24161

In message <t62i74567jijev0fq92suvaardhlja5psr@4ax.com>, John Ferrell
<johnferrell@sprintmail.com> writes
>Why do we always mount our HF Yagi's in the horizontal plane?
>Antenna maintenance would be much easier for those of us with tilt
>over towers if the antenna were in the horizontal plane when down for
>maintenance!
>
>John Ferrell W8CCW

I read somewhere you get more ground gain with horizontal . Something
to do with Brewster angle.

Brian GM4DIJ

--
Brian Howie

388. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 11:21:03 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <Gylek.104$2A5.46@fe127.usenetserver.com>
Source record: 24162

Art Unwin wrote:
> On Jul 12, 6:19 pm, "Walter Maxwell" <w...@w2du.com> wrote:
>> "larry d clark" <kd5...@att.net> wrote in
messagenews:S8Qdk.32139$ZE5.7171@nlpi061.nbdc.sbc.com...
>>
>>
>>
>>> W3CQH wrote:
>>>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>>> news:183c20bb-cd8a-42ab-9277-414777a96296@e53g2000hsa.googlegroups.com...
>>>>> On Jul 9, 10:08 pm, Tom Ring <news0...@taring.org> wrote:
>>>>>> Art Unwin wrote:
>>>>>> 99% of crap cut
>>>>>>> Richard, you can;'t mess with mother nature or the Universe
>>>>>> This is even better than Rosie O'Donnell!
>>>>>> Which isn't saying much, of course.
>>>>>> And no Art, I haven't added a whit of information here. Which precisely
>>>>>> matches the sum total of what you have posted here since you showed up.
>>>>>> tom
>>>>>> K0TAR
>>>>> Well you have made your point ! Now what do you feel I should do?
>>>>> Copy your words and return them? Say that I see a veiled threat?
>>>>> All the above is free speech without contention of any sort so what
>>>>> do we have to talk about now?
>>>> This smells of what went around a couple of years ago about the FRACTAL
>>>> antennas
>>> crossfield antenna & fractal antenna and this crap from art unwin are
>>> just ravings. they simply don't hold up under scrutiny. all the claims
>>> are just so much bs, read kraus, end of subject
>>> kd5foy
>> Has it ever occurred to those involved in this thread that Art has outsmarted us
>> all, and that he is simply pulling our legs and we fell for it all the way? I
>> know some Brits who are pretty smart blokes, but would like to make us look like
>> idiots. Some of them can't even get over their loss in the late 1700's.
>>
>> Walt, W2DU
>
> Walter It was the English residents that fought the Hessians and made
> them leave
> America was the prison camp for all bad criminals at that time and
> when that war came to an end
> criminals were then sent to Australia to work their prison terms. At
> that time England was at war in Spain so English officers who could
> not speak German

> were put in charge of the Hessians. Remember that is why Americans try
> to speak the english language as it is the language of its forfathers
> and soon the language of our fore fathers will prevail on the
> population of the Country which will be Spanish. Actually America had
> to changer its laws to prevent the president being of English blood
> because the English were running the Country. Americans finally took
> power and then you were able to make America a debtor country where
> we were Bushed wacked If I remember correctly many Uk residents stayed
> at the Alamo to fight, don't know where every body else
> If what I was sharing was something that I made up I would be so
> proud.of my mental capabilities that I would write a fantasy book like
> yours and have it printed over and over again to get money from silly
> hams! By the way we don't consider America a loss the rent we got for
> more than a hundred of years
> was quite hansom.. Now china is the lease holder!

Arthur, you have such a charming way about you. I note that you don't mind feeding at the American trough.

Not only are you an antenna theory revisionist, you've now become a historical revisionist.

Dave K8MN

389. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 12:38:20 UTC
From: Dave <noone@nowhere.com>
Message-ID: <0Hmek.116$6O4.58@trnddc06>
Source record: 24163

http://www.nn4zz.com/tiltplate.htm

"Dave" <noone@nowhere.com> wrote in message news:HEbek.91$kf4.54@trnddc03...
>
> "John Ferrell" <johnferrell@sprintmail.com> wrote in message
> news:t62i74567jijev0fq92suvaardhlja5psr@4ax.com...
>> Why do we always mount our HF Yagi's in the horizontal plane?
>> Antenna maintenance would be much easier for those of us with tilt
>> over towers if the antenna were in the horizontal plane when down for
>> maintenance!
>>
>> John Ferrell W8CCW
>
> vertical yagi's work fine... if you can get them far enough away from the
> conductive tower and mast either vertically or horizontally... though i do
> believe you get better ground reflection from the horizontal polarization.
> There is a new product that allows yagis mounted horizontally to
> automatically pivot as you tilt over a tower so they stay level with the
> ground.
>

390. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 12:53:28 UTC
From: Alan Peake <adpeake@nosspam.activ8.net.au>
Message-ID: <4879FAC8.7080108@nosspam.activ8.net.au>
Source record: 24164

Roy Lewallen wrote:
> One of the advantages of a Yagi is its directivity. When mounted
> horizontally, its horizontal pattern is quite directional, but the
> pattern in the vertical plane is relatively broad -- the vertical
> pattern of a typical HF Yagi in the forward direction, in fact, isn't
> much different from a single dipole. If you mount the Yagi vertically,
> the two patterns swap so the horizontal pattern ends up very much
> broader than when mounted vertically.

Roy, are you talking about high gain yagis? I just looked at the
beamwidths of an 11 element DL6WU Yagi on 2m and got 35 degrees
horizontal and 39 degrees vertical in EZNEC. Not much difference there.
Alan

391. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 14:03:29 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <0m2k74d44faf4ajmm8aeg9c3bkiq19961h@4ax.com>
Source record: 24165

On Sun, 13 Jul 2008 12:38:20 GMT, "Dave" <noone@nowhere.com> wrote:

>http://www.nn4zz.com/tiltplate.htm
That looks like it is real close to what I need!
Thanks!
John Ferrell W8CCW

>
>"Dave" <noone@nowhere.com> wrote in message news:HEbek.91$kf4.54@trnddc03...
>>
>> "John Ferrell" <johnferrell@sprintmail.com> wrote in message
>> news:t62i74567jijev0fq92suvaardhlja5psr@4ax.com...
>>> Why do we always mount our HF Yagi's in the horizontal plane?
>>> Antenna maintenance would be much easier for those of us with tilt
>>> over towers if the antenna were in the horizontal plane when down for
>>> maintenance!
>>>
>>> John Ferrell W8CCW
>>
>> vertical yagi's work fine... if you can get them far enough away from the
>> conductive tower and mast either vertically or horizontally... though i do
>> believe you get better ground reflection from the horizontal polarization.
>> There is a new product that allows yagis mounted horizontally to
>> automatically pivot as you tilt over a tower so they stay level with the
>> ground.
>>
>

392. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 14:09:07 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <6s2k74p2damdi6vonv3bflfvn7qursq3cn@4ax.com>
Source record: 24166

The EZNEC5 model that I did left me with the feeling that my model was
too vague.
John Ferrell W8CCW

On Sun, 13 Jul 2008 00:59:30 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>One of the advantages of a Yagi is its directivity. When mounted
>horizontally, its horizontal pattern is quite directional, but the
>pattern in the vertical plane is relatively broad -- the vertical
>pattern of a typical HF Yagi in the forward direction, in fact, isn't
>much different from a single dipole. If you mount the Yagi vertically,
>the two patterns swap so the horizontal pattern ends up very much
>broader than when mounted vertically.
>
>A vertically mounted Yagi is vertically polarized, and vertically
>polarized radiation reacts differently with the ground than horizontally
>polarized radiation. So rotating a moderately or very high yagi from
>horizontal to vertical will result in loss of low angle radiation unless
>your ground is very highly conductive.
>
>These effects can be very easily be seen by modeling.
>
>Roy Lewallen, W7EL
>
>John Ferrell wrote:
>> Why do we always mount our HF Yagi's in the horizontal plane?
>> Antenna maintenance would be much easier for those of us with tilt
>> over towers if the antenna were in the horizontal plane when down for
>> maintenance!
>>
>> John Ferrell W8CCW

393. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 14:10:37 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <86015436-f9a5-4276-8a6e-36254e24a6a8@c65g2000hsa.googlegroups.com>
Source record: 24167

On Jul 13, 6:21 am, Dave Heil <k...@frontiernet.net> wrote:
> Art Unwin wrote:
> > On Jul 12, 6:19 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> >> "larry d clark" <kd5...@att.net> wrote in
messagenews:S8Qdk.32139$ZE5.7171@nlpi061.nbdc.sbc.com...
>
> >>> W3CQH wrote:
> >>>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >>>>news:183c20bb-cd8a-42ab-9277-414777a96296@e53g2000hsa.googlegroups.com...
> >>>>> On Jul 9, 10:08 pm, Tom Ring <news0...@taring.org> wrote:
> >>>>>> Art Unwin wrote:
> >>>>>> 99% of crap cut
> >>>>>>> Richard, you can;'t mess with mother nature or the Universe
> >>>>>> This is even better than Rosie O'Donnell!
> >>>>>> Which isn't saying much, of course.
> >>>>>> And no Art, I haven't added a whit of information here. Which precisely
> >>>>>> matches the sum total of what you have posted here since you showed up.
> >>>>>> tom
> >>>>>> K0TAR
> >>>>> Well you have made your point ! Now what do you feel I should do?
> >>>>> Copy your words and return them? Say that I see a veiled threat?
> >>>>> All the above is free speech without contention of any sort so what
> >>>>> do we have to talk about now?
> >>>> This smells of what went around a couple of years ago about the FRACTAL
> >>>> antennas
> >>> crossfield antenna & fractal antenna and this crap from art unwin are
> >>> just ravings. they simply don't hold up under scrutiny. all the claims
> >>> are just so much bs, read kraus, end of subject
> >>> kd5foy
> >> Has it ever occurred to those involved in this thread that Art has outsmarted us
> >> all, and that he is simply pulling our legs and we fell for it all the way? I
> >> know some Brits who are pretty smart blokes, but would like to make us look like
> >> idiots. Some of them can't even get over their loss in the late 1700's.
>
> >> Walt, W2DU
>
> > Walter It was the English residents that fought the Hessians and made
> > them leave
> > America was the prison camp for all bad criminals at that time and
> > when that war came to an end
> > criminals were then sent to Australia to work their prison terms. At
> > that time England was at war in Spain so English officers who could
> > not speak German
> > were put in charge of the Hessians. Remember that is why Americans try

> > to speak the english language as it is the language of its forfathers
> > and soon the language of our fore fathers will prevail on the
> > population of the Country which will be Spanish. Actually America had
> > to changer its laws to prevent the president being of English blood
> > because the English were running the Country. Americans finally took
> > power and then you were able to make America a debtor country where
> > we were Bushed wacked If I remember correctly many Uk residents stayed
> > at the Alamo to fight, don't know where every body else
> > If what I was sharing was something that I made up I would be so
> > proud.of my mental capabilities that I would write a fantasy book like
> > yours and have it printed over and over again to get money from silly
> > hams! By the way we don't consider America a loss the rent we got for
> > more than a hundred of years
> > was quite hansom.. Now china is the lease holder!
>
> Arthur, you have such a charming way about you. I note that you don't
> mind feeding at the American trough.
>
> Not only are you an antenna theory revisionist, you've now become a
> historical revisionist.
>
> Dave K8MN

Well I do get parcels from the red cross like all my present prisoners
of war.Yes I am that old!

394. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 15:57:23 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <DBpek.4334$7%6.1935@edtnps82>
Source record: 24168

> My program is not Nec based so I am not familiar with that routine.,
> I cant model my antenna because of the pre twisted wires. I can
> however
> model a combination of two helix antennas without interweaving into
> one circuit.
> where one helix antenna is slightly larger diameter than the other
> My program shows instances of gain! So the question becomes is your
> model
> based on zip cord which is suggested by one and secondly what was the
> reason for the combimation of two antennas
> to shrivle away into dust or the equivalent of a dummy load. It is
> also suggested that antennas such as this
> are breaking the laws of nature so does your program show the arrival
> of doom ?.
> I am making this antenna very frequently and all these things
> predicted are just not happening. But then I would never use
> zip cord or violate the rules of nature if I was advised which one I
> was violating but apparently that is a secret.
> So Frank what is the antenna configuration etc that your program
> represents so that I can understand the particulars that you have so
> genouresly probided so all may share

I have tried two variants of the model: Interleaved, and one slightly
inside the other. I used uninsulated # 14 AWG copper, and designed for 7
MHz.
The copper conductivity used is 5.8001E7 S/m. At resonance the
the input impedance is 3.1 ohms. The radiation resistance computes
to 0.14E-3 ohms. For 100 W input the total radiated power is
2 mW. At 1000 m, normal to the axis of helices, the field strength
is 3.7E-4 V/m (RMS). I have found, for such closed spaced helical models,
that segmentation is critical. My model uses 2200 segments,
and takes 28 seconds to run. The "Average gain test" returns "Good".
The "Average gain test" is a method employed by Nittany Scientific's
NEC based programs to estimate model validity.

The interleaved model version appears to have a slightly better
performance than the "Coaxial" structure. It is essential,
when testing such a higly compact radiator, that a balun
be used to feed the antenna. The "Tak-tenna", for
example, has a very low radiation efficiency. It is
designed for use witout a balun, and the bulk of the radiation
occurs from currents flowing on the outside of the
coaxial shield.

73,

Frank

395. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 17:10:36 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1a79351b-abb1-4249-8ed4-846f82df42ab@s50g2000hsb.googlegroups.com>
Source record: 24169

On Jul 13, 10:57 am, "Frank" <frank...@nospam.telus.net> wrote:
> > My program is not Nec based so I am not familiar with that routine.,
> > I cant model my antenna because of the pre twisted wires. I can
> > however
> > model a combination of two helix antennas without interweaving into
> > one circuit.
> > where one helix antenna is slightly larger diameter than the other
> > My program shows instances of gain! So the question becomes is your
> > model
> > based on zip cord which is suggested by one and secondly what was the
> > reason for the combimation of two antennas
> > to shrivle away into dust or the equivalent of a dummy load. It is
> > also suggested that antennas such as this
> > are breaking the laws of nature so does your program show the arrival
> > of doom ?.
> > I am making this antenna very frequently and all these things
> > predicted are just not happening. But then I would never use
> > zip cord or violate the rules of nature if I was advised which one I
> > was violating but apparently that is a secret.
> > So Frank what is the antenna configuration etc that your program
> > represents so that I can understand the particulars that you have so
> > genouresly probided so all may share
>
> I have tried two variants of the model: Interleaved, and one slightly
> inside the other. I used uninsulated # 14 AWG copper, and designed for 7
> MHz.
> The copper conductivity used is 5.8001E7 S/m. At resonance the
> the input impedance is 3.1 ohms. The radiation resistance computes
> to 0.14E-3 ohms. For 100 W input the total radiated power is
> 2 mW. At 1000 m, normal to the axis of helices, the field strength
> is 3.7E-4 V/m (RMS). I have found, for such closed spaced helical models,
> that segmentation is critical. My model uses 2200 segments,
> and takes 28 seconds to run. The "Average gain test" returns "Good".
> The "Average gain test" is a method employed by Nittany Scientific's
> NEC based programs to estimate model validity.
>
> The interleaved model version appears to have a slightly better
> performance than the "Coaxial" structure. It is essential,
> when testing such a higly compact radiator, that a balun
> be used to feed the antenna. The "Tak-tenna", for
> example, has a very low radiation efficiency. It is
> designed for use witout a balun, and the bulk of the radiation
> occurs from currents flowing on the outside of the
> coaxial shield.

>
> 73,
>
> Frank

Thank you for that Frank but something is incorrect sorry to say!
The impedance for a single wavelength of wire was close to a 100 ohms.
When I dampened it by adding wasvelengths to it the impedance
stabalised around 68 ohms.
I do not know what the optimum number of wavelengths should be for the
high band.with respect to gain and impedance
There was a question asked some where with respect to the number of
wavelengths required for optimum
which really I do not know.! What I do know that equilibrium is the
cornerstone so the magnetic field produced
by the radiator must equal that of n times wavelength. The Variometer
either extends the strength of the field
or diminishes it such that it is symptomatic of a wavelength which is
in equilibrium and also resonant. at the particular frequency at hand.
If all is at the above there is never a need for a choke or a balun
since with this radiator you never move away from the resonant point
as with a filter. The on ly imbalance is the coax feed that you are
connecting to a perennial balanced load. I would add that I wind my
antennas with a pretwisted wire whiich basically four coils
Regards
Art
unwinantennas

396. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 17:32:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <buck74t4hg1ph4pmeaapj3qd0fq9n253tp@4ax.com>
Source record: 24170

On Sun, 13 Jul 2008 15:57:23 GMT, "Frank" <frank599@nospam.telus.net>
wrote:

> For 100 W input the total radiated power is 2 mW.

-47dB

It will take a whole lot more signal degradation to reach the Weak
Force threshold (about 83dB more, just to compare to the Strong Force
- much less a standard dipole).

Hi Frank,

With the disclaimer:
On Sat, 12 Jul 2008 10:38:06 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:
>My program is not Nec based so I am not familiar with that routine.,

Your results will no doubt be shunned as unauthentic (in spite of his
program being NEC based, but 20+ years older - we won't go into his
confusion of not knowing what NEC is).

I've noticed an old hobby horse trotted out to the starting gate:
On Sat, 12 Jul 2008 12:21:17 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:
>based on radiation per unit length of radiator

This nostrum was offered years ago to explain "efficiency," and no
doubt the corruption of what "efficiency" means will be used to muddy
the stupendous loss into figures of amazing merit.

It should come as no surprise that even allowing (patronizing the
authur as several contributors here desire) for this aberrant reading
of "efficiency" (per unit length) that the authur's Weak Force Antenna
design is not one ten-thousandth the size of the standard dipole. As
such, this new design is still not as "efficient per unit length" as a
standard dipole when the authur's terms are accepted.

73's
Richard Clark, KB7QHC

397. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 17:39:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p4fk745di2lf073befsf5jbjhqorso0dg9@4ax.com>
Source record: 24171

On Sun, 13 Jul 2008 10:10:36 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:
>I would add that I wind my antennas with a pretwisted wire

Note the contradiction to the construction instructions offered just 4
days before:

>On Wed, 9 Jul 2008 19:11:52 -0700 (PDT), Art Unwin <ArthurUnwin@gmail.com> wrote:
>> Nor is the wire pre twisted pair which nullifies near field

The authur's construction instructions have been violated by the
authur. This violates the necessary equilibrium.

73's
Richard Clark, KB7QHC

398. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 18:22:44 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <2c6dnSWMiK1_2ufVnZ2dnUVZ_qjinZ2d@giganews.com>
Source record: 24172

John Ferrell wrote:
> Why do we always mount our HF Yagi's in the horizontal plane?
> Antenna maintenance would be much easier for those of us with tilt
> over towers if the antenna were in the horizontal plane when down for
> maintenance!
>
> John Ferrell W8CCW

Over the past 38 years, I've had HF yagis... a homebrew 3-el 15m monoband yagi (16' boom) and 3-element triband trap yagis (12' booms) on tiltover masts. I've never encountered maintenance issues with operating them in the horizontal plane. A step lader is all that's needed to reach the driven element, and the antenna can be rotated to reach both parasitic elements.

It seems to me that while Front/Back ratio might be similar, a vertically polarized yagi would have a significantly reduced Front/Side ratio. If operated in the vertical plane, I'm guessing that performance may also be adversely affected by a conductive mast in the near-field. If performance was same/similar and maintenance was much easier, I think you'd see many more vertically polarized HF yagis.

Bryan WA7PRC

399. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 18:33:57 UTC
From: nm5k@wt.net
Message-ID: <79649a34-f479-4890-b8b1-0271ec87f9cf@l42g2000hsc.googlegroups.com>
Source record: 24173

On Jul 13, 12:10 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

> I do not know what the optimum number of wavelengths should be for the
> high band.with respect to gain and impedance

I thought your present world revolved around 1 wavelength...
Obviously there must be a chink in this armor..

> There was a question asked some where with respect to the number of
> wavelengths required for optimum
> which really I do not know.!

I thought your present world revolved around 1 wavelength...
Obviously there must be a chink in this armor..

>What I do know that equilibrium is the
> cornerstone so the magnetic field produced
> by the radiator must equal that of n times wavelength.

If you n times a wavelength, the armor will become to
heavy to wear. :/

>The Variometer
> either extends the strength of the field
> or diminishes it such that it is symptomatic of a wavelength which is
> in equilibrium and also resonant. at the particular frequency at hand.
> If all is at the above there is never a need for a choke or a balun
> since with this radiator you never move away from the resonant point
> as with a filter.

Hate to break this to you but resonance, SWR, match, etc, ad
nausium have nothing at all to do with the presence or lack of
common mode currents on a feedline.

400. Re: RoomCap Antenna - last results

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 18:56:40 UTC
From: nm5k@wt.net
Message-ID: <9f9a3626-4e16-4ab3-b516-ce9dd9291273@m73g2000hsh.googlegroups.com>
Source record: 24174

On Jul 12, 1:48 pm, hb9abx <hb9...@freesurf.ch> wrote:

>
> It is incredible , how silly and wrong the comments here are.
> - All facts are disregarded and so many wrong things are
> told, that I think, you all better remain with your wire antennas

What "facts" have been disregarded?
Don't piss down my back and tell me it's raining..
I have needed test apparatus to be able to tell the difference.
And yes, I'm sure I would be better off sticking with "my"
wire antennas, but that has nothing to do with the issues
at hand. I use only manly full sized antennas designed to
kick butt. It would only be natural that they would be superior
to lesser loaded designs.
Now, don't be confused. I have no real issues with your
antenna. Just the antenna you used as a reference.
I'm sure your antenna is far superior to the Unwin design
which is presently being offered by the wizard of IL.
But don't be confusing yourself that it is equal to a
full size specimen. It's not, and never will be. Ever.

401. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 20:28:15 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <vdok74t1f30do3k5a4eol55543j74tlehq@4ax.com>
Source record: 24175

On Sun, 13 Jul 2008 11:22:44 -0700, "Bryan"
<bryan.swadenerNOSPAM@comcast.net> wrote:

>John Ferrell wrote:
>> Why do we always mount our HF Yagi's in the horizontal plane?
>> Antenna maintenance would be much easier for those of us with tilt
>> over towers if the antenna were in the horizontal plane when down for
>> maintenance!
>>
>> John Ferrell W8CCW
>
>Over the past 38 years, I've had HF yagis... a homebrew 3-el 15m monoband
>yagi (16' boom) and 3-element triband trap yagis (12' booms) on tiltover
>masts. I've never encountered maintenance issues with operating them in the
>horizontal plane. A step lader is all that's needed to reach the driven
>element, and the antenna can be rotated to reach both parasitic elements.
>
>It seems to me that while Front/Back ratio might be similar, a vertically
>polarized yagi would have a significantly reduced Front/Side ratio. If
>operated in the vertical plane, I'm guessing that performance may also be
>adversely affected by a conductive mast in the near-field. If performance
>was same/similar and maintenance was much easier, I think you'd see many
>more vertically polarized HF yagis.
>
>Bryan WA7PRC
>
There have been several very credible posts that have convinced me
that I do need to stick with horizontal polarization with the Yagi.

Fortunately, the physical limitation of "no ladders" will go away in a
few months as I continue my recovery from two knee joint replacements.
However, as I get older I may find the limitation returning. I want to
be prepared for that time.

My antenna is modest in that it is only a Cushcraft A3S and I
generally keep the crank up antenna height at about 50 feet. This area
(Greensboro NC) does get an occasional hurricane and some ice storms.
There are times when I would like to reduce my risks on the forecast
weather.

I expect I will pursue a lighter (home brew) version of the Tilt Plate
system.

Currently the coax is fouled at the rotor and I will need outside
assistance to clear the problem. It is not a big issue but I do like
to solve my own problems!

John Ferrell W8CCW

402. Ham Radio Test

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 20:47:32 UTC
From: Webmaster <webmaster@oaklanesoftware.com>
Message-ID: <NRtek.20407$%q.9564@newsfe24.lga>
Source record: 24176
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc

Test Preparation Software

Pass your US FCC ham radio license test with ease. Our test preparation software
serves as a training aid to help amateurs and prospective amateurs pass the VEC's administered test. When you can consistently pass the test given by our test preparation software, you will almost certainly pass an actual test.

Our ham radio license test preparation software uses the latest officially released VEC's approved question pools. The program breaks the test into different sub-element. Integrated into the software are illustrations and Part 97 rules pertaining to the current question. The program tracks the progress of the tests taken. Once you have mastered each sub-element you are ready for the official test.

Visit our web site at http://www.hamradiolicense.net for more information.

403. ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 20:48:52 UTC
From: derek <derekbluey@gmail.com>
Message-ID: <6049895a-5bd2-4a25-8f01-8bd39246e905@z66g2000hsc.googlegroups.com>
Source record: 24177

Met an old ham a couple of weeks ago he had recently moved into a senior citizens complex and was unable to have antennas of any sort erected, all he had was, as he put it, a piece of wire in the loft. After a bit of thought I decided to make one of Art's antennas for him. I made a former 16" long by 10.5"diameter and contra-wound aprox 550' of twisted (1100' single) 19 gauge copper magnet wire onto it, covered same in pvc tape and took it over to him yesterday morning, he took some swr readings they were as follows.

SWR
1.8 = 1.2 :1
3.75 = 1 :1
7.075 = 1.7 :1
14.075 = 4 :1
21.075 = 6 :1

He did not have a variometer but is going to build one, will post results when He gives them to me, I left him playing with the antenna and he seemed to be a very happy man.

Derek

404. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 23:10:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5e20ttc1@news.albasani.net>
Source record: 24178

derek wrote:
> Met an old ham a couple of weeks ago he had recently moved into a
> senior citizens complex and was unable to have antennas of any sort
> erected, all he had was, as he put it, a piece of wire in the loft.
> After a bit of thought I decided to make one of Art's antennas for
> him. I made a former 16" long by 10.5"diameter and contra-wound
> aprox 550' of twisted (1100' single) 19 gauge copper magnet wire onto
> it, covered same in pvc tape and took it over to him yesterday
> morning, he took some swr readings they were as follows.
>
> SWR
> 1.8 = 1.2 :1
> 3.75 = 1 :1
> 7.075 = 1.7 :1
> 14.075 = 4 :1
> 21.075 = 6 :1
>
> He did not have a variometer but is going to build one, will post
> results when He gives them to me, I left him playing with the antenna
> and he seemed to be a very happy man.
>
> Derek

Derek:

That was very kind of you. That kind of help is rare these days--at
least where I live in the USA ...

I will hope against hope that it serves him better than anyone could
have hoped for.

I need more neighbors like yourself (or, at least a few!) :-)

Warm regards,
JS

405. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-13 23:14:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5e28utc2@news.albasani.net>
Source record: 24179

derek wrote:

> ...
> Derek

By the way, I was just into Lowes hardware store this day. I was in search of some "Sono Tube" or "Quick Tube." It is a cardboard tube, very sturdy. They had lengths of ~4-6 ft. The largest diameter they had was 12" (they had 8,10,12 inch dia. in stock.) I needed 18" or larger as I was going to use it for construction of a "cat tree."

But, anyway, sounds like excellent material for a "former."

Regards,
JS

406. ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 00:15:46 UTC
From: ml <m@di.net>
Message-ID: <m-9177C3.20154613072008@news.optonline.net>
Source record: 24180

hi

i was just wondering once nyc hits the deadline to switch
broadcasting to digital if the channals we use now

2-13vhf would continue specifically would other channals in
that range be avail like say ch6

or will it just be say one or more digital channals stuffed into
the same space now occupied by ch2 for example depending on how cbs
wants to do it

also here uhf 14-> had really only a few channels that were
broadcasting should we expect many new channels to be
broadcating in that range or just mostly same

wondering if were going to see a shift of the primary channels
here being more 14->> vs the current heavy use of 2-13

reason being most have antennas that are really for 2-13 and
alot are wondering if the uhf is going to be hot they will obv
need to add new antennas

thanks

407. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 00:16:14 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8e456447-fd1e-440b-91df-230762c7b86b@r66g2000hsg.googlegroups.com>
Source record: 24181

On Jul 13, 3:48 pm, derek <derekbl...@gmail.com> wrote:
> Met an old ham a couple of weeks ago he had recently moved into a
> senior citizens complex and was unable to have antennas of any sort
> erected, all he had was, as he put it, a piece of wire in the loft.
> After a bit of thought I decided to make one of Art's antennas for
> him. I made a former 16" long by 10.5"diameter and contra-wound
> aprox 550' of twisted (1100' single) 19 gauge copper magnet wire onto
> it, covered same in pvc tape and took it over to him yesterday
> morning, he took some swr readings they were as follows.
>
> SWR
> 1.8 = 1.2 :1
> 3.75 = 1 :1
> 7.075 = 1.7 :1
> 14.075 = 4 :1
> 21.075 = 6 :1
>
> He did not have a variometer but is going to build one, will post
> results when He gives them to me, I left him playing with the antenna
> and he seemed to be a very happy man.
>
> Derek

Good on you Derek. It would appear the instructions on my page
worked out OK for you.
Can you give details about the former you made and what was the length
of the turnings?
If you like I can send details on how to make the variometer and it
wouldn't surprise me if tha
local club doesn't ask you for a demonstration how to make one.
You have no idea how happy you made that ham since he can now work
anywhere
he wants to as well as the local repeaters I garantee he was not a
happy man in the old peoples home
and having the ability of just a piece of wire
Cheers
Art
Unwinantennas.com/

408. RE: Mounting on the peak of porch roof

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 02:17:10 UTC
From: jetjocky555 <jetjocky555@gmail.com>
Message-ID: <8de6f591-d014-4275-8614-5d55042f08c5@m44g2000hsc.googlegroups.com>
Source record: 24182

Does anyone have any ideas of how to mount a Hy-Gain AV-640 on the
peak of a porch with about a 45 degree slope?
Would like to use a non damage mount but don't want the antenna to
blow off or fall off the roof...
Any ideas would be great !!!!!!
Thanks in advance...
73's
K4KJM

409. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 03:04:08 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <lmzek.4425$7%6.1027@edtnps82>
Source record: 24183

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:buck74t4hg1ph4pmeaapj3qd0fq9n253tp@4ax.com...
> On Sun, 13 Jul 2008 15:57:23 GMT, "Frank" <frank599@nospam.telus.net>
> wrote:
>
>> For 100 W input the total radiated power is 2 mW.
>
> -47dB
>
> It will take a whole lot more signal degradation to reach the Weak
> Force threshold (about 83dB more, just to compare to the Strong Force
> - much less a standard dipole).
>
> Hi Frank,
>
> With the disclaimer:
> On Sat, 12 Jul 2008 10:38:06 -0700 (PDT), Art Unwin
> <ArthurUnwin@gmail.com> wrote:
>>My program is not Nec based so I am not familiar with that routine.,
>
> Your results will no doubt be shunned as unauthentic (in spite of his
> program being NEC based, but 20+ years older - we won't go into his
> confusion of not knowing what NEC is).
>
> I've noticed an old hobby horse trotted out to the starting gate:
> On Sat, 12 Jul 2008 12:21:17 -0700 (PDT), Art Unwin
> <ArthurUnwin@gmail.com> wrote:
>>based on radiation per unit length of radiator
>
> This nostrum was offered years ago to explain "efficiency," and no
> doubt the corruption of what "efficiency" means will be used to muddy
> the stupendous loss into figures of amazing merit.
>
> It should come as no surprise that even allowing (patronizing the
> authur as several contributors here desire) for this aberrant reading
> of "efficiency" (per unit length) that the authur's Weak Force Antenna
> design is not one ten-thousandth the size of the standard dipole. As
> such, this new design is still not as "efficient per unit length" as a
> standard dipole when the authur's terms are accepted.
>
> 73's
> Richard Clark, KB7QHC

Not sure what to say. I have designed some ultra compact vehicular helices for 0.54 to 210 MHz. Network analyzer measurements indicated the models as very close to that predicted by NEC2.

The project was abandoned due to very poor results -- even with a 30 dB pre-amp the reception was unsatisfactory. The auto manufacturers are desperate to have a vehicular BC/FM/Digital antenna that fits into a "Sharkfin" shaped radome.

Heck, I may have to build one of Art's models and measure the parameters.

73,

Frank

410. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 03:31:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0b0ea1cb-a9f9-4567-97e6-2c34324dbbf9@k30g2000hse.googlegroups.com>
Source record: 24184

On Jul 13, 10:04 pm, "Frank" <frank...@nospam.telus.net> wrote:
> "Richard Clark" <kb7...@comcast.net> wrote in message
>
> news:buck74t4hg1ph4pmeaapj3qd0fq9n253tp@4ax.com...
>
>
>
> > On Sun, 13 Jul 2008 15:57:23 GMT, "Frank" <frank...@nospam.telus.net>
> > wrote:
>
> >> For 100 W input the total radiated power is 2 mW.
>
> > -47dB
>
> > It will take a whole lot more signal degradation to reach the Weak
> > Force threshold (about 83dB more, just to compare to the Strong Force
> > - much less a standard dipole).
>
> > Hi Frank,
>
> > With the disclaimer:
> > On Sat, 12 Jul 2008 10:38:06 -0700 (PDT), Art Unwin
> > <ArthurUn...@gmail.com> wrote:
> >>My program is not Nec based so I am not familiar with that routine.,
>
> > Your results will no doubt be shunned as unauthentic (in spite of his
> > program being NEC based, but 20+ years older - we won't go into his
> > confusion of not knowing what NEC is).
>
> > I've noticed an old hobby horse trotted out to the starting gate:
> > On Sat, 12 Jul 2008 12:21:17 -0700 (PDT), Art Unwin
> > <ArthurUn...@gmail.com> wrote:
> >>based on radiation per unit length of radiator
>
> > This nostrum was offered years ago to explain "efficiency," and no
> > doubt the corruption of what "efficiency" means will be used to muddy
> > the stupendous loss into figures of amazing merit.
>
> > It should come as no surprise that even allowing (patronizing the
> > authur as several contributors here desire) for this aberrant reading
> > of "efficiency" (per unit length) that the authur's Weak Force Antenna
> > design is not one ten-thousandth the size of the standard dipole. As
> > such, this new design is still not as "efficient per unit length" as a
> > standard dipole when the authur's terms are accepted.

>
> > 73's
> > Richard Clark, KB7QHC
>
> Not sure what to say. I have designed some ultra compact vehicular
> helices for 0.54 to 210 MHz. Network analyzer measurements
> indicated the models as very close to that predicted by NEC2.
>
> The project was abandoned due to very poor results -- even with
> a 30 dB pre-amp the reception was unsatisfactory. The auto
> manufacturers are desperate to have a vehicular BC/FM/Digital
> antenna that fits into a "Sharkfin" shaped radome.
>
> Heck, I may have to build one of Art's models and measure the
> parameters.
>
> 73,
>
> Frank

Obviously Frank I do not have your experience and for many years total opinioni. I feel comfortable about most things is that it will never work or it is a dummy load e.t.c.
I have never tested it for gain or anything like that as those sort of things arouse the ire of hams more than anything.
One thing I am absoluetly positive is that I have made many antennas of this design over the years and the measurementsmade on the SWR meter in Aussi land is pretty much the same impedance that I get with my MFJ 259 b. If I could model the antenna with interleaving then I would have some idea with respect to testing. When I place a helix over a helix of the standard design pre provided as an example I also get similar impedances to what I measure
so it is the pre twisted wire and the fact that it then becomes four interwound helixes is what makes the difference. When I have finished my present work I am going to think things out all again or wait for the others who are making them to present some observations. My flat matt antenna seems like a good candidate for the shark fin arrangement and that is one of them that I am sending to California! So for this summer I will have to endure the continueing caustic comments of the group who may well finish up on the correct side since they are obviously in the majority. For me the only thing that needs to be completed is a chamber test and Illinois University has one of these so.....By the way Frank the antenna did quit well on a quick sorty thru the TV channels where I anticipated just snow but I didn't get to deep on that as I vie2wed it as novelty for if I want to mess with 2.4 Ghz
Regards
Art
unwinantennas.com

411. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 03:55:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <d72dnUtCF_bbU-fVnZ2dnUVZ_tjinZ2d@posted.easystreetonline>
Source record: 24185

Alan Peake wrote:

> Roy, are you talking about high gain yagis? I just looked at the
> beamwidths of an 11 element DL6WU Yagi on 2m and got 35 degrees
> horizontal and 39 degrees vertical in EZNEC. Not much difference there.
> Alan
>

No, I'm not. The OP specified HF, so I'm talking about Yagis of up to 5 or 6 elements or so. Ones with a larger number of elements would significantly narrow the pattern in both planes. I'm surprised that the beamwidths approach about the same value, but I haven't done much modeling or any measurement of Yagis with a large number of elements, so I'll believe it.

Roy Lewallen, W7EL

412. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 08:06:14 UTC
From: derek <derekbluey@gmail.com>
Message-ID: <e9f5b015-1560-4091-8397-cdad99c74dcb@i76g2000hsf.googlegroups.com>
Source record: 24186

On Jul 14, 8:16 am, Art Unwin <ArthurUn...@gmail.com> wrote:

Hi Art

I made the former out of plywood and half inch doweling, when twisting the wire I aimed for two full turns per inch, the wire I used filled the former with about 6 to 8 foot of wire over. As a matter of interest you say on your page you used aprox 2000 feet of wire on a 12 by 12 inch former, from my experience with my former I would say you only used aprox 1000 feet of wire.

Derek

413. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 08:10:43 UTC
From: derek <derekbluey@gmail.com>
Message-ID: <d8ccd5ea-0b09-4c0f-aec5-75932367b2c3@w7g2000hsa.googlegroups.com>
Source record: 24187

On Jul 14, 8:16 am, Art Unwin <ArthurUn...@gmail.com> wrote

Hi Art
The details for the variometer would be of help if you could
oblige thank you.

Derek

414. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 09:24:59 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b138b0c1-920a-4d9f-b3d2-1ea79ca338c9@f63g2000hsf.googlegroups.com>
Source record: 24188

On Jul 13, 10:04 pm, "Frank" <frank...@nospam.telus.net> wrote:
> "Richard Clark" <kb7...@comcast.net> wrote in message
>
> news:buck74t4hg1ph4pmeaapj3qd0fq9n253tp@4ax.com...
>
>
>
> > On Sun, 13 Jul 2008 15:57:23 GMT, "Frank" <frank...@nospam.telus.net>
> > wrote:
>
> >> For 100 W input the total radiated power is 2 mW.
>
> > -47dB
>
> > It will take a whole lot more signal degradation to reach the Weak
> > Force threshold (about 83dB more, just to compare to the Strong Force
> > - much less a standard dipole).
>
> > Hi Frank,
>
> > With the disclaimer:
> > On Sat, 12 Jul 2008 10:38:06 -0700 (PDT), Art Unwin
> > <ArthurUn...@gmail.com> wrote:
> >>My program is not Nec based so I am not familiar with that routine.,
>
> > Your results will no doubt be shunned as unauthentic (in spite of his
> > program being NEC based, but 20+ years older - we won't go into his
> > confusion of not knowing what NEC is).
>
> > I've noticed an old hobby horse trotted out to the starting gate:
> > On Sat, 12 Jul 2008 12:21:17 -0700 (PDT), Art Unwin
> > <ArthurUn...@gmail.com> wrote:
> >>based on radiation per unit length of radiator
>
> > This nostrum was offered years ago to explain "efficiency," and no
> > doubt the corruption of what "efficiency" means will be used to muddy
> > the stupendous loss into figures of amazing merit.
>
> > It should come as no surprise that even allowing (patronizing the
> > authur as several contributors here desire) for this aberrant reading
> > of "efficiency" (per unit length) that the authur's Weak Force Antenna
> > design is not one ten-thousandth the size of the standard dipole. As
> > such, this new design is still not as "efficient per unit length" as a
> > standard dipole when the authur's terms are accepted.

>
> > 73's
> > Richard Clark, KB7QHC
>
> Not sure what to say. I have designed some ultra compact vehicular
> helices for 0.54 to 210 MHz. Network analyzer measurements
> indicated the models as very close to that predicted by NEC2.
>
> The project was abandoned due to very poor results -- even with
> a 30 dB pre-amp the reception was unsatisfactory. The auto
> manufacturers are desperate to have a vehicular BC/FM/Digital
> antenna that fits into a "Sharkfin" shaped radome.
>
> Heck, I may have to build one of Art's models and measure the
> parameters.
>
> 73,
>
> Frank

You know Frank, there is always the possibility that what I have is in
fact a induction
heater without radiation shielding. In other words the copper actually
radiates a larger portion of energy into heat
if there is a ferro magnetic material with in the near field! So a
heat test is required on the antenna in a field where
there is no possibility of induction heating. Thinking out loud here
as I have not read up on the subject of induction heating
which I thought was a result of hysterysis of ferro magnetic materials
where I am using a diamagnetic material. There maybe a spill over of
sciences here

415. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 12:20:07 UTC
From: Topaz305rk <navajomt@nemont.net>
Message-ID: <RNOdnfZvEqQY2ebVnZ2dnUVZ_uydnZ2d@vnet-inc.com>
Source record: 24189

Another good use for those concrete form tubes is making antenna carriers.
Made one for a three element yagi, A3S, and it works fine.
Put a couple of tubes together so it was just over 14 feet long.
Added two garage door "D" handles, put a plug in one permanently and a
removable plug, held in place with Velcro in the other.
Now for Field Day or SkyWarn Recognition Day we can just pick it up, put it
on the trailer, hold it down with a couple of tarp straps and drive off.
Very easy to get the antenna in and out of the tube.
Protects the antenna and makes transport a snap.
All elements are left at their fully assembled length, no break down
required.
With a 10" inch or larger tube the fiberglass mounting tube for the driven
element does not even need to be removed.

K7SAM

416. Re: Software for measuring S/N and signal strength through soundcard?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 13:28:55 UTC
From: ukmonitor@hotmail.com
Message-ID: <9a4dc2f6-bdf4-4e75-b9b7-a5d6adcc336f@f63g2000hsf.googlegroups.com>
Source record: 24190

```
On Jul 11, 11:37 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> TF3KX wrote:
> > On Jul 11, 6:04 pm, TF3KX <kristi...@gmail.com> wrote:
> >> Is there any software available for measuring S/N and signal strength,
> >> through the soundcard?  My idea is to analyze signals arriving from my
> >> antenna, through the receiver and the soundcard, and thus compare
> >> antennas numerically in terms of signal strength and noise.
>
> >> This capability is already present for the most part in the Faros
> >> beacon monitoring software, but it is tailored to monitoring only the
> >> IARU/NCDXF beacon signals.
>
> >> 73 - Kristinn, TF3KX
>
> > Just to clarify, I would use the HF receiver I already have, turn off
> > the AGC and then process the audio signal.  The strength of the audio
> > signal would be proportional to the strength of the RF signal, and if
> > I can subract the noise level from the signal+noise level, I would
> > believe I should have a fair indication of the RF signal strength, at
> > least for comparison purposes.
>
> Any of the programs suggested so far would work very nicely.- Hide quoted text -
>
> - Show quoted text -

You may also wish to try WSPR which is very useful for antenna
comparisons on both TX and RX by other stations running the software
and reporting.

http://wsprnet.org/drupal/

UKM
```

417. Re: Part of Too Many

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 14:41:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cvom74l2bdal316bhro04ri48lnrk9t2dm@4ax.com>
Source record: 24191

On Mon, 14 Jul 2008 02:24:59 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>there is always the possibility that what I have is in
>fact a induction
>heater without radiation shielding.

It is entirely possible that it is simply conduction heating with
derek's 8 Ohms of wire resistance where yours is going on 17 Ohms of
wire resistance at a minimum:
>On Mon, 14 Jul 2008 01:06:14 -0700 (PDT), derek <derekbluey@gmail.com> wrote:
>
>>As a
>>matter of interest you say on your page you used aprox 2000 feet of
>>wire on a 12 by 12 inch former, from my experience with my former I
>>would say you only used aprox 1000 feet of wire.

I wonder what happened to the equilibrium sense of a wavelength in all
this? Out the window when convenience trumps theory, and necessity
drives claims. Nice to see that confederates can report failure of
the basic underlying thesis.

73's
Richard Clark, KB7QHC

418. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 15:51:16 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <UBKek.4194$1o6.4105@edtnps83>
Source record: 24192

> Hi Art
> The details for the variometer would be of help if you could
> oblige thank you.
>
> Derek

The following explains the construction:

http://www.g0mrf.freeserve.co.uk/variometer.htm

Variometers can be very lossy variable inductors. For proper
matching 2 elements are required.

73,

Frank

419. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 17:11:21 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7f6a3dc3-dc77-4c7d-872c-cafe4256a9c9@34g2000hsh.googlegroups.com>
Source record: 24193

On Jul 14, 10:51 am, "Frank" <frank...@nospam.telus.net> wrote:
> > Hi Art
> > The details for the variometer would be of help if you could
> > oblige thank you.
>
> > Derek
>
> The following explains the construction:
>
> http://www.g0mrf.freeserve.co.uk/variometer.htm
>
> Variometers can be very lossy variable inductors. For proper
> matching 2 elements are required.
>
> 73,
>
> Frank

up that is similar to mine except I split the coilnumbers by two and
it is still to insensitive so now I have to put a blob of solder in
betwwee the coils to short them until I get the right ratio to suit
the antenna. I like to slow down the swr meter so that I constantly do
not scoot pass the right point

420. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 19:29:22 UTC
From: amdx <amdx@knology.net>
Message-ID: <70429$487ba88a$18d6b40c$31842@KNOLOGY.NET>
Source record: 24194

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:7f6a3dc3-dc77-4c7d-872c-cafe4256a9c9@34g2000hsh.googlegroups.com...
> On Jul 14, 10:51 am, "Frank" <frank...@nospam.telus.net> wrote:
>> > Hi Art
>> > The details for the variometer would be of help if you could
>> > oblige thank you.
>>
>> > Derek
>>
>> The following explains the construction:
>>
>> http://www.g0mrf.freeserve.co.uk/variometer.htm
>>
>> Variometers can be very lossy variable inductors. For proper
>> matching 2 elements are required.

Oh, that little, that's thing is for girls, see
http://w5jgv.com/variometer/variometer.htm
Mike :-)

421. Test

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 19:34:12 UTC
From: Spin <noemail@alone.invalid>
Message-ID: <USNek.227$6O4.129@trnddc06>
Source record: 24195

Test.........

422. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 21:23:59 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a633a277-e83c-434d-a9c4-54ee1bfde2d1@e39g2000hsf.googlegroups.com>
Source record: 24196

On Jul 14, 2:29 pm, "amdx" <a...@knology.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:7f6a3dc3-dc77-4c7d-872c-cafe4256a9c9@34g2000hsh.googlegroups.com...
>
> > On Jul 14, 10:51 am, "Frank" <frank...@nospam.telus.net> wrote:
> >> > Hi Art
> >> > The details for the variometer would be of help if you could
> >> > oblige thank you.
>
> >> > Derek
>
> >> The following explains the construction:
>
> >>http://www.g0mrf.freeserve.co.uk/variometer.htm
>
> >> Variometers can be very lossy variable inductors. For proper
> >> matching 2 elements are required.
>
> Oh, that little, that's thing is for girls,
seehttp://w5jgv.com/variometer/variometer.htm
> Mike :-)

That one is at least four times the coil turns needed. The previous
one was at least two times the number of coils need.
And if the wire length used was 1100 feet or so the latter also is
much more than required and can be divided by two again.
The idea is not to put a 1000 feet of wire on the variometer or to use
the radiator beyond the HF bands!

423. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 21:34:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <FYKdnccLAf_EW-bVnZ2dnUVZ_t_inZ2d@posted.easystreetonline>
Source record: 24197

Frank wrote:

> The following explains the construction:
>
> http://www.g0mrf.freeserve.co.uk/variometer.htm
>
> Variometers can be very lossy variable inductors. For proper
> matching 2 elements are required.

A general rule of thumb for electrically small antennas is: small-broadband-efficient, pick any two. One of the common features of many small antennas is some lossy component or components which make the bandwidth acceptable. Of course, this also means lowered efficiency, often to an extreme extent. But most amateurs are able to measure SWR and almost none are able to measure efficiency, so the loss fools a lot of people into thinking the small antenna is performing well. I suspect the variometer is the "secret ingredient" in this case, and that its chief function is to provide loss. People duplicating the antenna might try substituting a non-inductive resistor as a simpler way to achieve the same result.

This isn't to say that a small inefficient antenna "doesn't work". I've personally worked over 30 countries with a watt and a half on 40 meters using simple antennas, and many, many people have done a great deal better with much lower power. So you can still work a lot of stations with a 100 watt rig and 1% efficient antenna.

Roy Lewallen, W7EL

424. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 21:49:41 UTC
From: ml <m@di.net>
Message-ID: <m-BAEB70.17494114072008@news.optonline.net>
Source record: 24198

In article <m-9177C3.20154613072008@news.optonline.net>, ml <m@di.net>
wrote:

> hi
>
> i was just wondering once nyc hits the deadline to switch
> broadcasting to digital if the channals we use now
>
> 2-13vhf would continue specifically would other channals in
> that range be avail like say ch6
>
> or will it just be say one or more digital channals stuffed into
> the same space now occupied by ch2 for example depending on how cbs
> wants to do it
>
>
>
>
> also here uhf 14-> had really only a few channels that were
> broadcasting should we expect many new channels to be
> broadcating in that range or just mostly same
>
>
>
> wondering if were going to see a shift of the primary channels
> here being more 14->> vs the current heavy use of 2-13
>
> reason being most have antennas that are really for 2-13 and
> alot are wondering if the uhf is going to be hot they will obv
> need to add new antennas
>
>
> thanks

could use a little help here i tried searching under google and
fcc i found alot of stuff marked proposed but nothing seemed
to indicate would would be after the current interm layouts ie
what it's going to be their plans after feb so if anyone has
any links or info i'd appreciate it much

425. Re: copper transmission lines with polumer insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 21:54:29 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g5ghul$2gv$1@news.jpl.nasa.gov>
Source record: 24199

Bryan wrote:
> me.merritt wrote:
>> Hi all,
>>
>> I am working on an application of transmission lines for use in
>> magnetic resonance. I know I have seen in the past pre-made
>> transmission line that has an inner conductor surrounded by a white
>> insulator (I think it is Kel-F, it may be teflon) and a copper layer
>> on the outside. It is quite stiff, and comes in long pieces that can
>> be bent with a little effort. Does anyone know where I can pick some
>> of this up? I have been through about 200 google pages with no luck.
>>
>> Thanks
>
> Micro Coax (http://www.micro-coax.com/) is one source for semi-rigid coaxial
> cable, and comes in (IIRC) up to 8' lengths.

You can get it in longer lengths (at least 100') in a big coil (it's
like copper tubing, after all).

The stuff isn't cheap,
> though... be prepared to empty your wallet!

Depends on what you call expensive.. $4-10/ft in 50' coils is a typical
price. Pasternack sells 5' lengths of 0.085" copper for $3.66/ft

426. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 22:10:54 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g5giteaam1@news.jpl.nasa.gov>
Source record: 24102

Alan Peake wrote:
>
>
> Roy Lewallen wrote:
>> One of the advantages of a Yagi is its directivity. When mounted
>> horizontally, its horizontal pattern is quite directional, but the
>> pattern in the vertical plane is relatively broad -- the vertical
>> pattern of a typical HF Yagi in the forward direction, in fact, isn't
>> much different from a single dipole. If you mount the Yagi vertically,
>> the two patterns swap so the horizontal pattern ends up very much
>> broader than when mounted vertically.
>
> Roy, are you talking about high gain yagis? I just looked at the
> beamwidths of an 11 element DL6WU Yagi on 2m and got 35 degrees
> horizontal and 39 degrees vertical in EZNEC. Not much difference there.
> Alan
>

I think he's talking about lower gain (e.g. a 3 element beam for 20m), where the 3dB beamwidth might be about 50-60 degrees in the Eplane (parallel to the elements) and 80 degrees in the H plane (perpendicular to the elements). The 80 is about the same as the 3dB beamwidth of a dipole.

For higher gain antennas (e.g. your VHF/UHF), the beamwidths will be pretty close in E and H planes. (since a larger fraction of the overall antenna gain comes from "array pattern" gain rather than the individual "element patterns")

Of course, the polarization sensitivity of the ground reflection makes the horizontal antenna usually a winner overall.

427. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 22:17:08 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g5gj94fql1@news.jpl.nasa.gov>
Source record: 24101

Roy Lewallen wrote:
> Alan Peake wrote:
>
>> Roy, are you talking about high gain yagis? I just looked at the
>> beamwidths of an 11 element DL6WU Yagi on 2m and got 35 degrees
>> horizontal and 39 degrees vertical in EZNEC. Not much difference there.
>> Alan
>>
>
> No, I'm not. The OP specified HF, so I'm talking about Yagis of up to 5
> or 6 elements or so. Ones with a larger number of elements would
> significantly narrow the pattern in both planes. I'm surprised that the
> beamwidths approach about the same value, but I haven't done much
> modeling or any measurement of Yagis with a large number of elements, so
> I'll believe it.

Here's a sort of intuitive approach to the conceptual analysis...

Consider the overall pattern to be like that of a phased array where you multiply the pattern of an individual element by the pattern of the array assuming that the elements were isotropic. Indeed, in a Yagi, not all the elements are excited equally, but bear with me..

So, in a 3 element antenna with a gain of, say, 5dBi, you're getting about 2 dBi of gain from just the dipoles, and 3dBi of gain from the fact that you've got 3 elements in an array. The beamwidth is going to be a combination of the array pattern (which is the same in vertical and horizontal planes) and the element pattern (which is not)..

In a higher gain antenna (say 12dbi), you've got the same element gain 2dBi) but the array pattern gain is now 10dBi, so the shape of the latter will dominate.

428. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 22:28:12 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4be17328-ba4e-411b-8451-820de9b8cab0@m3g2000hsc.googlegroups.com>
Source record: 24200

On Jul 14, 10:51 am, "Frank" <frank...@nospam.telus.net> wrote:
> > Hi Art
> > The details for the variometer would be of help if you could
> > oblige thank you.
>
> > Derek
>
> The following explains the construction:
>
> http://www.g0mrf.freeserve.co.uk/variometer.htm
>
> Variometers can be very lossy variable inductors. For proper
> matching 2 elements are required.
>
> 73,
>
> Frank

2 elements required? What does that mean?

429. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-14 23:44:43 UTC
From: kb9rqz@yahoo.com
Message-ID: <a7pn74hs213qlck702h3rjka73lbsducp4@4ax.com>
Source record: 24096
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

430. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 00:10:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5gptqnou1@news.albasani.net>
Source record: 24103

Art Unwin wrote:

> ...
> 2 elements required? What does that mean?

Who knows absolutely?

But, most likely, he means a dipole.

On a full wave monopole with no counterpoise and choking off the outer braid ... I guess you have "one element" as opposed to "2 elements" (for example: monopole-with-counterpoise/dipole 1/4 wave, 1/2 wave.)

But then, I am guessing. <scratches head>

Regards,
JS

431. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 00:23:07 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <L5Sek.151$rR2.58@edtnps83>
Source record: 24104

> 2 elements required? What does that mean?

In most cases an inductor, and capacitor, is required to match
a complex impedance, as follows:

Shunt C, Series L;
Shunt L, Series C;
Series L, Shunt C, or;
Series C, Shunt L.

Only rarely can a single component provide a match.

73,

Frank

432. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 01:13:00 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <90aefdbb-d1d4-496a-a62f-67730f68a5b1@d1g2000hsg.googlegroups.com>
Source record: 24105

On Jul 14, 7:23 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > 2 elements required? What does that mean?
>
> In most cases an inductor, and capacitor, is required to match
> a complex impedance, as follows:
>
> Shunt C, Series L;
> Shunt L, Series C;
> Series L, Shunt C, or;
> Series C, Shunt L.
>
> Only rarely can a single component provide a match.
>
> 73,
>
> Frank

Has not a variometer 2 elements?

433. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 01:13:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5gtk9$c59$1@news.albasani.net>
Source record: 24106

Art Unwin wrote:

> ...
> 2 elements required? What does that mean?

There ya' go ... his response.

It appears, what he was saying was/is, you cannot obtain maximum transfer of power to the antenna with the variometer alone--you must use a pi/LC/etc. (a capacitance in conjunction with an inductance) ...

I re-read his post, that meaning was implied well--but I could only see it with hindsight.

JS

434. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 01:36:07 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <baTek.168$rR2.151@edtnps83>
Source record: 24107

>> In most cases an inductor, and capacitor, is required to match
>> a complex impedance, as follows:
>>
>> Shunt C, Series L;
>> Shunt L, Series C;
>> Series L, Shunt C, or;
>> Series C, Shunt L.
>>
>> Only rarely can a single component provide a match.
>>
>> 73,
>>
>> Frank
>
> Has not a variometer 2 elements?

No. A variometer is simply a variable inductor.

I should also have added to the above:
Series L, Shunt L etc. etc.......

Frank

435. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 02:23:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a388626f-9bae-4a14-b2b3-947476c7144e@d77g2000hsb.googlegroups.com>
Source record: 24108

On Jul 14, 8:36 pm, "Frank" <frank...@nospam.telus.net> wrote:
> >> In most cases an inductor, and capacitor, is required to match
> >> a complex impedance, as follows:
>
> >> Shunt C, Series L;
> >> Shunt L, Series C;
> >> Series L, Shunt C, or;
> >> Series C, Shunt L.
>
> >> Only rarely can a single component provide a match.
>
> >> 73,
>
> >> Frank
>
> > Has not a variometer 2 elements?
>
> No. A variometer is simply a variable inductor.
>
> I should also have added to the above:
> Series L, Shunt L etc. etc.......
>
> Frank

Then what I can do is to split the circuit in half of a varometer
and connect one in series with the positive and one in series to the
negative
so I have equal turns added or subtracted of opposite wound and
controlled by the single motor.
Sounds good

436. Re: does any design arrow antenna by using mmana-gal?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 03:56:12 UTC
From: nopq528 <nopq528.2c20ed5@radiobanter.com>
Message-ID: <nopq528.2c20ed5@radiobanter.com>
Source record: 24114

Everyone has his inherent ability(power or capacity?) which is easily concealed by habbits, blurred by time, and eroded by laziness_____We assure you of our best 'wow gold' (http://www.igxee.com/) service at all time. Don? be irresolute! Just place your order to buy Cheap W'wow gold' (http://www.mmorpg365.com/) here then your desired 'wow gold' (http://www.wowgoldme.com/) will be in your mail box in wow game. 'wow gold' (http://www.wowgold50.com/).In order to provide a quickly and easy way of 'wow gold' (http://www.gamegoldnews.com/) delivery

--
nopq528

437. AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 06:05:06 UTC
From: Bill B <wrongaddress@att.net>
Message-ID: <f565a299-ffe7-4488-a751-1efedda7ce50@s50g2000hsb.googlegroups.com>
Source record: 24109

I made a 15 inch square (broadcast band) loop antenna using 2 crossed pieces of wood and about 14 turns of number 18 copper wire. I added spreaders in the center sections to increase the spacing between the windings and reduce the distributed capacitance. Works well and has a Q factor of 100 or more at 600 KHz. I get about 800mV from a local 50KW station.

But the wire is concentrated around the outside perimeter of the loop and I'm wondering if there is an advantage in winding the loop so that the wire occupies more of the interior space. This would require a longer winding to maintain the same inductance and would further reduce the distributed capacitance, but would also increase the total resistance somewhat. Seems like a longer winding in the same space would produce a larger voltage, but at the expense of some additional resistance which may degenerate it somewhat.

What would be the optimum given a 15X15 inch square space?

-Bill

438. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 06:33:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <YbadnZfapNch2eHVnZ2dnUVZ_vWdnZ2d@posted.easystreetonline>
Source record: 24110

Frank wrote:
>> 2 elements required? What does that mean?
>
> In most cases an inductor, and capacitor, is required to match
> a complex impedance, as follows:
>
> Shunt C, Series L;
> Shunt L, Series C;
> Series L, Shunt C, or;
> Series C, Shunt L.
>
> Only rarely can a single component provide a match.

Other combinations can be used, for example, adjusting a transmission line stub length and position, or a transformer in conjunction with a reactance. The point is that an impedance has two values, commonly expressed as R and X or as a magnitude and phase angle, so to achieve a specific impedance requires two "degrees of freedom" -- that is, two things which you can adjust and which, in simple terms, don't adjust exactly the same thing. With only one adjustable element, you can get a specific R, say, or X, but not both.

Roy Lewallen, W7EL

439. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 06:36:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b9ho7457g8kcnburb1jur4bjaqmbs0b1pl@4ax.com>
Source record: 24111

On Mon, 14 Jul 2008 23:05:06 -0700 (PDT), Bill B
<wrongaddress@att.net> wrote:

>What would be the optimum given a 15X15 inch square space?

Hi Bill,

You are already there (or, rather, you are already so close that you wouldn't be able to tell the difference which would be a circle of 15 inch diameter). Subtended area counts for most.

73's
Richard Clark, KB7QHC

440. two special features to homemade antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 07:55:59 UTC
From: nobody <nobody@nobody.com>
Message-ID: <487c580d$1@127.0.0.1>
Source record: 24113

two special features have added to quicken the assembly of the satellite antenna to reduce the total time by at least three minutes.

http://www.web7days.com

441. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 08:00:00 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <cOYek.24996$1L1.16891@newsfe15.phx>
Source record: 24112

"ml" <m@di.net> wrote in message
news:m-BAEB70.17494114072008@news.optonline.net...
> In article <m-9177C3.20154613072008@news.optonline.net>, ml <m@di.net>
> wrote:
>
> > hi
> >
> > i was just wondering once nyc hits the deadline to switch
> > broadcasting to digital if the channals we use now
> >
> > 2-13vhf would continue specifically would other channals in
> > that range be avail like say ch6
> >
> > or will it just be say one or more digital channals stuffed into
> > the same space now occupied by ch2 for example depending on how cbs
> > wants to do it
> >
> >
> >
> >
> > also here uhf 14-> had really only a few channels that were
> > broadcasting should we expect many new channels to be
> > broadcating in that range or just mostly same
> >
> >
> >
> > wondering if were going to see a shift of the primary channels
> > here being more 14->> vs the current heavy use of 2-13
> >
> > reason being most have antennas that are really for 2-13 and
> > alot are wondering if the uhf is going to be hot they will obv
> > need to add new antennas
> >
> >
> > thanks
>
> could use a little help here i tried searching under google and
> fcc i found alot of stuff marked proposed but nothing seemed
> to indicate would would be after the current interm layouts ie
> what it's going to be their plans after feb so if anyone has
> any links or info i'd appreciate it much

This is exactly what you want:
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-72A2.pdf . It's

alphabetical by state, so scroll down to NYC on page 34.

Yes, the action on UHF will be hot, since Channels 2 - 6 are not great for digital TV signals and are being avoided.

Also, please note the existence of newsgroup alt.video.digital-tv which is much more on-point for your question.

BTW, newsgroups are not for text-messages. Using punctuation and capital letters makes it easier to read your questions. Thanks. (Or maybe tks ;-)

442. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 13:03:24 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <Me1fk.15$6c3.11@newsfe07.lga>
Source record: 24115

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:b9ho7457g8kcnburb1jur4bjaqmbs0b1pl@4ax.com...
> On Mon, 14 Jul 2008 23:05:06 -0700 (PDT), Bill B
> <wrongaddress@att.net> wrote:
>
> >What would be the optimum given a 15X15 inch square space?
>
> Hi Bill,
>
> You are already there (or, rather, you are already so close that you
> wouldn't be able to tell the difference which would be a circle of 15
> inch diameter). Subtended area counts for most.
>
> 73's
> Richard Clark, KB7QHC

If yer local to a 50kw station, why do you need an antenna all?

Walt, W2DU

443. Re: Has anyone here actually built a Lazy H for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 13:07:24 UTC
From: Michael <spamtrap@shadowstorm.com>
Message-ID: <8db10ea2-9640-4dcf-9fd0-ee1c5a6842aa@34g2000hsh.googlegroups.com>
Source record: 24116

On Jul 9, 2:35 pm, Harry7 <cpa...@gmail.com> wrote:
> Yes
> I built a 10 meter EDZ Lazy H in 2001 (back when we had sunspots) .
> Top wire was 40' up. Measurements were 22' per leg & 22' vertical
> spacing. Phasing line (non twisted) was 450 ohm window line. Worked
> excellent on 10, 12, 15, 17 & 20. Also used it on 40 where it acted
> like a dipole.
>
> It was bi-directional on 10-20. Didn't measure actual gain but always
> got excellent reports (5x9+) in favored directions (from Siberia,
> Ukraine, etc.) on 10-20 SSB with 100 watts.
y

Did you feed it with 450 ohm ladder lien all the way back to the
tuner, or did you use some type of matching network?

444. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 16:09:53 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <AY3fk.2131$zv7.827@flpi143.ffdc.sbc.com>
Source record: 24117

Roy Lewallen wrote:
> With only one adjustable element, you can get a
> specific R, say, or X, but not both.

With only one adjustable element, i.e. ladder-line length,
I get X=0 and 35 < R < 85 ohms which is close enough to
50 ohms for most of us non-perfectionists.

http://www.w5dxp.com/notuner.htm
--
73, Cecil http://www.w5dxp.com

445. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 16:25:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5ij1f$gn6$1@news.albasani.net>
Source record: 24118

Sal M. Onella wrote:

> ...
> BTW, newsgroups are not for text-messages. Using punctuation and capital
> letters makes it easier to read your questions. Thanks. (Or maybe tks ;-)
>
>

No big deal, but we should keep in mind he may be using his cell phone
to access USENET/internet ... I have done so one mine, but the darn
screen on the phone is so small--well, and my eyes so bad, I gave it
up--but, creating capitals on a cell phone is difficult/slow enough that
one soon abandons any attempt ...

Regards,
JS

446. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 16:29:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5ij8f$gn6$2@news.albasani.net>
Source record: 24119

Walter Maxwell wrote:

> ...
> If yer local to a 50kw station, why do you need an antenna all?
>
> Walt, W2DU
>
>

Walter:

Just guessing here, of course ...

Maybe he wants to null out that 50kw stratosphere burner and hear
another station on a on a cheaper radio on a close channel. LOL!

Regards,
JS

447. Re: Has anyone here actually built a Lazy H for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 16:35:55 UTC
From: Harry7 <cpa599@gmail.com>
Message-ID: <4117416c-0a7e-48d3-81ff-a16969edc03c@27g2000hsf.googlegroups.com>
Source record: 24120

Ladder line all the way from midpoint of phasing section to the tuna.

> Did you feed it with 450 ohm ladder lien all the way back to the
> tuner, or did you use some type of matching network?

448. Re: Has anyone here actually built a Lazy H for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 17:10:02 UTC
From: ltdoc@yahoo.com
Message-ID: <d744ff30-02ab-4d05-a47a-56b10bd39f98@m36g2000hse.googlegroups.com>
Source record: 24121

>
> > Did you feed it with 450 ohm ladder lien all the way back to the
> > tuner, or did you use some type of matching network?

Please don't give me an opening like that! I get myself in enough
trouble with out help.
- 'Doc

449. FA - Mobile Antenna Reflective GROUND PLANE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 17:47:41 UTC
From: SUPERSKYHOOK N8WWM <N8WWM@hotmail.com>
Message-ID: <487ce2c5$1$25951$6e1ede2f@read.cnntp.org>
Source record: 24122
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.equipment,rec.radio.swap

These REALLY Improve mobile antenna transmission by making your antenna an actual ground plane!

Fits at the bottom of standard 3/8" stud mount antennas

http://cgi.ebay.com/Mobile-Antenna-Reflective-GROUND-PLANE-Cb-ham-radio_W0QQitemZ280244585044QQcmdZViewItem?hash=item280244585044&_trksid=p3286.m14.l1318

450. Re: FA - Mobile Antenna Reflective GROUND PLANE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 18:03:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5iopruli1@news.albasani.net>
Source record: 24123
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.equipment,rec.radio.swap

SUPERSKYHOOK N8WWM wrote:
> These REALLY Improve mobile antenna transmission by making your antenna an
> actual ground plane!
>
> Fits at the bottom of standard 3/8" stud mount antennas
>
> http://cgi.ebay.com/Mobile-Antenna-Reflective-GROUND-PLANE-Cb-ham-radio_W0QQitemZ280244585044QQcmdZViewItem?hash=item280244585044&_trksid=p3286.m14.l1318
>
>

Oh yeah, turn an antenna into a real skyburner!

Maybe as a top hat for VHF--if it weren't so darn heavy ...

Regards,
JS

451. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 18:35:55 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <476b8bdd-8429-4908-962d-906d7382f390@34g2000hsh.googlegroups.com>
Source record: 24124

On Jul 14, 11:05 pm, Bill B <wrongaddr...@att.net> wrote:
> I made a 15 inch square (broadcast band) loop antenna using 2 crossed
> pieces of wood and about 14 turns of number 18 copper wire. I added
> spreaders in the center sections to increase the spacing between the
> windings and reduce the distributed capacitance. Works well and has a
> Q factor of 100 or more at 600 KHz. I get about 800mV from a local
> 50KW station.
>
> But the wire is concentrated around the outside perimeter of the loop
> and I'm wondering if there is an advantage in winding the loop so that
> the wire occupies more of the interior space. This would require a
> longer winding to maintain the same inductance and would further
> reduce the distributed capacitance, but would also increase the total
> resistance somewhat. Seems like a longer winding in the same space
> would produce a larger voltage, but at the expense of some additional
> resistance which may degenerate it somewhat.
>
> What would be the optimum given a 15X15 inch square space?
>
> -Bill

Optimum is wire around the outside. You want to capture as much of the field as you reasonably can. Imagine it this way: if you have a 15x15 loop and put say a 5x5 loop inside it, co-axial with it, and put the two in series, you get the sum of the two. But what is the performance of a 5x5 loop relative to that of a 15x15 loop (given that both are much smaller than a wavelength)? There's still some question about the optimum arrangement of the wire around the outside, though. The largest area (the largest total field flux) enclosed by a fixed length perimeter would be where the perimeter is a circle, so there's some advantage of making the loop more circular. It's not terribly likely you'll notice much difference from your square, though. But you might find it useful to download one of Reg Edwards' legacies, RJELOOP3.EXE, "Multi-turn, square, frame (or loop), receiving aerials." It will let you play with different wire sizes, numbers of turns and wire spacings, and give you a good approximation of the expected Q, equivalent shunt capacitance and efficiency.

Small loops at low frequencies can be useful at rejecting locally generated noise from things like electric motors or even microprocessors, because that near-field noise tends to be predominantly electric field which is vertically polarized, but to do that well, the loop must be symmetrical about a vertical axis.

Cheers,
Tom

452. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 19:44:29 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <x67fk.147$Ou3.43@edtnps82>
Source record: 24125

> Then what I can do is to split the circuit in half of a varometer
> and connect one in series with the positive and one in series to the
> negative
> so I have equal turns added or subtracted of opposite wound and
> controlled by the single motor.
> Sounds good

Not sure I understand what you mean. Comments by Roy, and
others, noted. All these methods are certainly valid. The first step is to
determine the actual impedance of your load before you attempt
to match it, and then design an appropriate network.
For measurement a vector network analyzer is the best method,
but expensive. The "TAPR" analyzer, by Tentec looks
good at $655. Most of the cheap analyzers are not very
accurate, and VSWR is not very useful.

The Smith Chart; provided by Dellsperger, at:
http://www.fritz.dellsperger.net/ is an excellent (free) tool for
matching network design. Also Chris Bowick's
"RF Circuit Design" (At Amazon.com) provides an
insight in the use of the Smith Chart.

Experimentation by variable: series L, shunt C, or shunt C, series L,
could provied a reasonable match. Others probably
have some practical idea.

73,

Frank

453. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 20:18:04 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6d9f5e70-dc2c-4c0e-8b4e-a8d60dda4a25@d1g2000hsg.googlegroups.com>
Source record: 24126

On Jul 15, 2:44 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > Then what I can do is to split the circuit in half of a varometer
> > and connect one in series with the positive and one in series to the
> > negative
> > so I have equal turns added or subtracted of opposite wound and
> > controlled by the single motor.
> > Sounds good
>
> Not sure I understand what you mean. Comments by Roy, and
> others, noted. All these methods are certainly valid. The first step is to
> determine the actual impedance of your load before you attempt
> to match it, and then design an appropriate network.
> For measurement a vector network analyzer is the best method,
> but expensive. The "TAPR" analyzer, by Tentec looks
> good at $655. Most of the cheap analyzers are not very
> accurate, and VSWR is not very useful.
>
> The Smith Chart; provided by Dellsperger, at:http://www.fritz.dellsperger.net/is an
excellent (free) tool for
> matching network design. Also Chris Bowick's
> "RF Circuit Design" (At Amazon.com) provides an
> insight in the use of the Smith Chart.
>
> Experimentation by variable: series L, shunt C, or shunt C, series L,
> could provied a reasonable match. Others probably
> have some practical idea.
>
> 73,
>
> Frank

Yes Frank I for some reason found myself settlled on 50 0hms impedance
and I can'r remember why and I didn't make a note of it.
In retrospect I should be looking at around 200 plus or minus! This
should not change to repetitiveness of resonances which is of
importance
for all frequency coverage.
So I am going back to the 100 ohm and upwards that I started with and
first check on sw BC and then fine tune on transmit.
I also checked back on the programming and got somewhere near your
figures tho in practicality my measured impedance
were way higher. I suspect the twisting of wires is the culprit for
the differences
Regards

Art
Regards
Art

454. True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 20:20:22 UTC
From: w4nng <w4nng_1@soalex.us>
Message-ID: <eE7fk.20489$oY2.1183@newsfe21.lga>
Source record: 24127
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Besides Wineguard's HD769 series, anyone know of other Ch 7 thru 69 DTV hi-gain outdoor antennas?

Thanks

Bob

455. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 21:33:25 UTC
From: Bob <bob@cob.dob>
Message-ID: <lH8fk.1848$t32.48@bignews3.bellsouth.net>
Source record: 24128
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

" w4nng" <w4nng_1@soalex.us> wrote in message
news:eE7fk.20489$oY2.1183@newsfe21.lga...
> Besides Wineguard's HD769 series, anyone know of other Ch 7 thru 69 DTV
> hi-gain outdoor antennas?

Im using this one for last year or so.

http://www.radioshack.com/product/index.jsp?parentPage=family&summary=summary&techSpecs=techSpecs&currentTab=techSpecs&cp=2032057.2032187.2032189.2032205&custRatings=custRatings&features=features&accessories=accessories&productId=2103087&support=support&tab=accessories

no complaints. survived some good storms too.

456. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 21:53:46 UTC
From: "D. Stussy" <spam@bde-arc.ampr.org>
Message-ID: <g5j7fn$5pv$1@snarked.org>
Source record: 24130
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

" w4nng" <w4nng_1@soalex.us> wrote in message
news:eE7fk.20489$oY2.1183@newsfe21.lga...
> Besides Wineguard's HD769 series, anyone know of other Ch 7 thru 69 DTV
> hi-gain outdoor antennas?

"Ch 7 thru 69 DTV"? Only 7-51 is authorized after the transition (in the
U.S.).

457. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 22:10:20 UTC
From: ml <m@di.net>
Message-ID: <m-478B5D.18102015072008@news.optonline.net>
Source record: 24129

In article <cOYek.24996$1L1.16891@newsfe15.phx>,
"Sal M. Onella" <salmonella@food.poisoning.org> wrote:

> "ml" <m@di.net> wrote in message
> news:m-BAEB70.17494114072008@news.optonline.net...
> > In article <m-9177C3.20154613072008@news.optonline.net>, ml <m@di.net>
> > wrote:
> >
> > > hi
> > >
> > > i was just wondering once nyc hits the deadline to switch
> > > broadcasting to digital if the channals we use now
> > >
> > > 2-13vhf would continue specifically would other channals in
> > > that range be avail like say ch6
> > >
> > > or will it just be say one or more digital channals stuffed into
> > > the same space now occupied by ch2 for example depending on how cbs
> > > wants to do it
> > >
> > >
> > >
> > >
> > > also here uhf 14-> had really only a few channels that were
> > > broadcasting should we expect many new channels to be
> > > broadcating in that range or just mostly same
> > >
> > >
> > >
> > > wondering if were going to see a shift of the primary channels
> > > here being more 14->> vs the current heavy use of 2-13
> > >
> > > reason being most have antennas that are really for 2-13 and
> > > alot are wondering if the uhf is going to be hot they will obv
> > > need to add new antennas
> > >
> > >
> > > thanks
> >
> > could use a little help here i tried searching under google and
> > fcc i found alot of stuff marked proposed but nothing seemed
> > to indicate would would be after the current interm layouts ie
> > what it's going to be their plans after feb so if anyone has
> > any links or info i'd appreciate it much

>
> This is exactly what you want:
> http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-72A2.pdf . It's
> alphabetical by state, so scroll down to NYC on page 34.
>
> Yes, the action on UHF will be hot, since Channels 2 - 6 are not great for
> digital TV signals and are being avoided.
>
> Also, please note the existence of newsgroup alt.video.digital-tv which is
> much more on-point for your question.
>
> BTW, newsgroups are not for text-messages. Using punctuation and capital
> letters makes it easier to read your questions. Thanks. (Or maybe tks ;-)

<<<<Thanks very much for the info, and that link.

I actually found a simular link, what i can't tell from the above
link, is if it reflects the current state todate or if it is the
planed/proposed listing for after Feb. .

Do you happen to know what that was listed under?? I tried to back
out of the link and just got error msg

thanks again very much

458. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 22:38:47 UTC
From: w4nng <w4nng_1@soalex.us>
Message-ID: <4G9fk.20612$%q.15735@newsfe24.lga>
Source record: 24131
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Thanks D. - got a bit better search results using 7 & 51 in the seach
rather then 7 & 69

"D. Stussy" <spam@bde-arc.ampr.org> wrote in message
news:g5j7fn$5pv$1@snarked.org...
>" w4nng" <w4nng_1@soalex.us> wrote in message
> news:eE7fk.20489$oY2.1183@newsfe21.lga...
>> Besides Wineguard's HD769 series, anyone know of other Ch 7 thru 69 DTV
>> hi-gain outdoor antennas?
>
> "Ch 7 thru 69 DTV"? Only 7-51 is authorized after the transition (in the
> U.S.).
>
>

459. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 22:40:48 UTC
From: w4nng <w4nng_1@soalex.us>
Message-ID: <UH9fk.20613$%q.19699@newsfe24.lga>
Source record: 24132
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Bob that antenna appears to be a standard ant w/ what in Feb 09, will be the unnecessary large elements for ch 2 - 6

"Bob" <bob@cob.dob> wrote in message news:lH8fk.1848$t32.48@bignews3.bellsouth.net...
>
> " w4nng" <w4nng_1@soalex.us> wrote in message
> news:eE7fk.20489$oY2.1183@newsfe21.lga...
>> Besides Wineguard's HD769 series, anyone know of other Ch 7 thru 69 DTV
>> hi-gain outdoor antennas?
>
> Im using this one for last year or so.
>
> http://www.radioshack.com/product/index.jsp?parentPage=family&summary=summary&techSpecs=techSpecs&currentTab=techSpecs&cp=2032057.2032187.2032189.2032205&custRatings=custRatings&features=features&accessories=accessories&productId=2103087&support=support&tab=accessories
>
> no complaints. survived some good storms too.
>

460. Re: FA - Mobile Antenna Reflective GROUND PLANE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 22:41:01 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <uklvk5-udn.ln1@p400bob.personal.cox.net>
Source record: 24133

Get it right John, its a steering wheel for a boat!

Or a holder for a tap and die set...

Lug nut remover...

Boomerang for people with a bad aim..

A death dealing frisbee?

....

John Smith wrote:

>>
>
> Oh yeah, turn an antenna into a real skyburner!
>
> Maybe as a top hat for VHF--if it weren't so darn heavy ...
>
> Regards,
> JS

461. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 23:14:25 UTC
From: Bill B <wrongaddress@att.net>
Message-ID: <7896e3dd-7446-4f01-a17f-a7e99602dfbd@34g2000hsh.googlegroups.com>
Source record: 24134

On Jul 15, 6:03 am, "Walter Maxwell" <w...@w2du.com> wrote:
> "Richard Clark" <kb7...@comcast.net> wrote in message
>
> news:b9ho7457g8kcnburb1jur4bjaqmbs0b1pl@4ax.com...
>
> > On Mon, 14 Jul 2008 23:05:06 -0700 (PDT), Bill B
> > <wrongaddr...@att.net> wrote:
>
> > >What would be the optimum given a 15X15 inch square space?
>
> > Hi Bill,
>
> > You are already there (or, rather, you are already so close that you
> > wouldn't be able to tell the difference which would be a circle of 15
> > inch diameter). Subtended area counts for most.
>
> > 73's
> > Richard Clark, KB7QHC
>
> If yer local to a 50kw station, why do you need an antenna all?
>
> Walt, W2DU

I just use the local 50kw station as a reference. It's hard to see
microvolts from some far away station on a scope, so I just use the
big signals to make comparisons. I can see about 14 stations on a
scope connected directly to the loop, but the amplitudes vary from a
few millivolts to almost a volt.

-Bill

462. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 23:35:12 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Quafk.373$jS4.308@trnddc07>
Source record: 24135

"Bill B" <wrongaddress@att.net> wrote in message
news:7896e3dd-7446-4f01-a17f-a7e99602dfbd@34g2000hsh.googlegroups.com...
> On Jul 15, 6:03 am, "Walter Maxwell" <w...@w2du.com> wrote:
>> "Richard Clark" <kb7...@comcast.net> wrote in message
>>
>> news:b9ho7457g8kcnburb1jur4bjaqmbs0b1pl@4ax.com...
>>
>> > On Mon, 14 Jul 2008 23:05:06 -0700 (PDT), Bill B
>> > <wrongaddr...@att.net> wrote:
>>
>> > >What would be the optimum given a 15X15 inch square space?
>>
>> > Hi Bill,
>>
>> > You are already there (or, rather, you are already so close that you
>> > wouldn't be able to tell the difference which would be a circle of 15
>> > inch diameter). Subtended area counts for most.
>>
>> > 73's
>> > Richard Clark, KB7QHC
>>
>> If yer local to a 50kw station, why do you need an antenna all?
>>
>> Walt, W2DU
>
> I just use the local 50kw station as a reference. It's hard to see
> microvolts from some far away station on a scope, so I just use the
> big signals to make comparisons. I can see about 14 stations on a
> scope connected directly to the loop, but the amplitudes vary from a
> few millivolts to almost a volt.
>
> -Bill

hook a couple of them up to a rectifier and use them to charge batteries to
power your radio. might as well make some use of that rf that is passing
through you all the time!

463. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 23:43:01 UTC
From: Cubit <no@not.not>
Message-ID: <S_idnYP4r5OZq-DVnZ2dnUVZ_uWdnZ2d@comcast.com>
Source record: 24136
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

I don't know your situation, but many folks can get away with using rabbit ears. It works, or it doesn't. Barring a serious distance problem, a proper antenna may not be needed.

If an antenna made exactly for DTV is cheap, then fine. However, I suspect you may pay extra for an antenna with limited bandwidth over a close out sale on an old fashioned 2 through 82 antenna.

464. Re: FA - Mobile Antenna Reflective GROUND PLANE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 23:52:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5jd8a$870$1@news.albasani.net>
Source record: 24137

Bob Bob wrote:

> ...
>>>
>>
>> Oh yeah, turn an antenna into a real skyburner!
>>
>> Maybe as a top hat for VHF--if it weren't so darn heavy ...
>>
>> Regards,
>> JS

LOL! You got that RIGHT!

Warm regards,
JS

465. Re: FA - Mobile Antenna Reflective GROUND PLANE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 23:55:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5jde0$870$2@news.albasani.net>
Source record: 24138

Bob Bob wrote:
> Get it right John, its a steering wheel for a boat!
>
> Or a holder for a tap and die set...
>
> Lug nut remover...
>
> Boomerang for people with a bad aim..
>
> A death dealing frisbee?

Whoops, deleted the wrong text ... got a neighbor that just might be able to use one though (stopped my antenna projects with his constant complaints!) ... maybe I will buy one and toss it over the fence to 'em. <evil grin>

Regards,
JS

466. Re: FA - Mobile Antenna Reflective GROUND PLANE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-15 23:56:13 UTC
From: ltdoc@yahoo.com
Message-ID: <aa56034d-41c6-4e2b-bb68-0636818cd178@a70g2000hsh.googlegroups.com>
Source record: 24139

Geez... give me a break.
- 'Doc

467. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 00:18:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b5e7a2e7-2b62-4b2d-9643-7be040cf37a2@i76g2000hsf.googlegroups.com>
Source record: 24140

On Jul 14, 3:10 am, derek <derekbl...@gmail.com> wrote:
> On Jul 14, 8:16 am, Art Unwin <ArthurUn...@gmail.com> wrote
>
> Hi Art
> The details for the variometer would be of help if you could
> oblige thank you.
>
> Derek

If he hasn't got a variometer he can use his tuner as a substitute.
The SWR meter he is using is referenced to 50 ohms so his readings are
false.
When using twisted wire the impedance will go very much higher than
untwisted wire
at least one hundred times . The impedance of his antenna is probably
around the 300 ohm mark so he should
add a 6 or 9 to one transformer. As a furthur adjustment he can put
the up and down wires in parallell such that the 1100 feet of wire
which is two wavelengths of the top band when wound in series is now 1
wavelength and the impedance will change accoringly. So there are
options available which the ham can chose as well as changing
connections from series to parallel as well as the diferent places he
can add his tuner in the circuit. If he stands the wire tube antenna
upright say as a lamp shade so it appears unobstrusive the radiation
will be omni radial or partialy direcftional if he tilts it and if it
is low power DX that is his hobby then the lower lobe is at least half
of that of a yagi which in his circumstances it should be ideal.Since
the wire is close wound I am not sure of the power limitations but
with it being Hi Temp magnet wire with circuitry of a wavelength I
really don't see a guy in a nursing home having a problem
One thing I am not sure of is the nearnes of the point radiation
antenna with respect to personal health so he may well want to place
it outside say as a frost protector for a rose bush or the like
Regards
Art

468. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 01:25:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <70906cb8-9ab2-419a-9acd-f22d2d23b3d3@m44g2000hsc.googlegroups.com>
Source record: 24141

On Jul 15, 7:18 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Jul 14, 3:10 am, derek <derekbl...@gmail.com> wrote:
>
> > On Jul 14, 8:16 am, Art Unwin <ArthurUn...@gmail.com> wrote
>
> > Hi Art
> > The details for the variometer would be of help if you could
> > oblige thank you.
>
> > Derek
>
> If he hasn't got a variometer he can use his tuner as a substitute.
> The SWR meter he is using is referenced to 50 ohms so his readings are
> false.
> When using twisted wire the impedance will go very much higher than
> untwisted wire
> at least one hundred times . The impedance of his antenna is probably
> around the 300 ohm mark so he should
> add a 6 or 9 to one transformer. As a furthur adjustment he can put
> the up and down wires in parallell such that the 1100 feet of wire
> which is two wavelengths of the top band when wound in series is now 1
> wavelength and the impedance will change accoringly. So there are
> options available which the ham can chose as well as changing
> connections from series to parallel as well as the diferent places he
> can add his tuner in the circuit. If he stands the wire tube antenna
> upright say as a lamp shade so it appears unobstrusive the radiation
> will be omni radial or partialy direcftional if he tilts it and if it
> is low power DX that is his hobby then the lower lobe is at least half
> of that of a yagi which in his circumstances it should be ideal.Since
> the wire is close wound I am not sure of the power limitations but
> with it being Hi Temp magnet wire with circuitry of a wavelength I
> really don't see a guy in a nursing home having a problem
> One thing I am not sure of is the nearnes of the point radiation
> antenna with respect to personal health so he may well want to place
> it outside say as a frost protector for a rose bush or the like
> Regards
> Art

On the suject of transformers. In the US somebody makes a pre packaged
transformer with five female coax conections depending on the ratio
required,
Since the frequency span is so large as well various locations it may
be that his ratio will land between 6 and 9 to 1
He may want to have ratios that are not as course. What he can do is

to have two rotating contacts ie minuits and hours instead of the single one provided
On the female conectors you place a cent or copper disk in the centre which is your contact The rotary cam that moves the contact around is a 5 pointed star cam with slots from each point towards the center. The outside of the star surface moves a pin around a fifth of the way which is the distance between coax connector. So the switch does not just float across the contact the pin which runs on the cam goes down and up each slot which provides a stop of rotary motionwhile the contact is made. I would not make this until the situation proves that you need it but it does supply matches to with one ohm or so for the intervening distance beteen 6 and 9 to one. One last thing , If power is to be used by others on top band it is adviseable to gang two toroids in parallel
to avoid saturation of the toroidal material. I added the above incase other club members decide to copy with more favourable operating conditions
Art
unwinantennas.com/

469. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 01:55:35 UTC
From: G-squared <stratus46@yahoo.com>
Message-ID: <fe467a2e-3b2b-45b0-af6b-107dda7b5e67@j22g2000hsf.googlegroups.com>
Source record: 24142
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

On Jul 15, 3:43 pm, "Cubit" <n...@not.not> wrote:
> I don't know your situation, but many folks can get away with using
rabbit
> ears. It works, or it doesn't. Barring a serious distance
problem, a
> proper antenna may not be needed.

I disagree on the rabbit ears. If you can do an outdoor antenna it's
preferable for many reasons like less multipath and stronger signal.

> If an antenna made exactly for DTV is cheap, then fine. However, I
suspect
> you may pay extra for an antenna with limited bandwidth over a
close out
> sale on an old fashioned 2 through 82 antenna.

If you don't mind the size of the antenna. The Winegard 7694 is only
35" wide vs 110" for the 7082. There is no such ting as an antenna
"made exactly for DTV". Antennas cover a range of frequencies thet may
include analog or digital TV. Flatness of response and directionality
are the important issues and are equally important for analog or
digital.

G²

470. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 02:07:41 UTC
From: Bob <sp@ms.pam>
Message-ID: <qIcfk.1949$t32.76@bignews3.bellsouth.net>
Source record: 24143
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

w4nng wrote:
> Bob that antenna appears to be a standard ant w/ what in Feb 09, will be the
> unnecessary large elements for ch 2 - 6

I plan on not using those anymore at that time. ;) other wise works
good for analog, digital TV and radio.

>
> "Bob" <bob@cob.dob> wrote in message
> news:lH8fk.1848$t32.48@bignews3.bellsouth.net...
>> " w4nng" <w4nng_1@soalex.us> wrote in message
>> news:eE7fk.20489$oY2.1183@newsfe21.lga...
>>> Besides Wineguard's HD769 series, anyone know of other Ch 7 thru 69 DTV
>>> hi-gain outdoor antennas?
>> Im using this one for last year or so.
>>
>> http://www.radioshack.com/product/index.jsp?parentPage=family&summary=summary&techSpecs
=techSpecs&currentTab=techSpecs&cp=2032057.2032187.2032189.2032205&custRatings=custRatings
&features=features&accessories=accessories&productId=2103087&support=support&tab=accessori
es
>>
>> no complaints. survived some good storms too.
>>
>
>

471. Re: ART - re: Your Many Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 02:10:56 UTC
From: richardharrison@webtv.net
Message-ID: <2138-487D58B0-2156@storefull-3252.bay.webtv.net>
Source record: 24145

Richard Fry wrote:
"The RADIATION performance of a transmit antenna should be considered before anything else."

Yes. John D. Kraus, the inventor of the helical antenna, did just that. In his 1950 edition of "Antennas" on page 176 Kraus wrote:
"The term "transmission mode" is used to describe the manner in which an electromagnetic wave is propagated along an infinite helix as though the helix constituted an infinite transmission line or wave guide. A variety of different transmission modes is possible,

The term "radiation mode" is used to describe the general form of the far-field pattern of a finite helix. Although an infinite variety of patterns is possible, two kinds are of particular interest. One is the axial or beam mode of radiation (R1 mode), and the other is the normal mode of radiation (Ro mode).

Best regards, Richard Harrison, KB5WZI

472. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 02:11:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aclq74habk27jj8up0tggh13up8ufk7ni5@4ax.com>
Source record: 24144

On Sun, 13 Jul 2008 13:48:52 -0700 (PDT), derek <derekbluey@gmail.com>
wrote:

>he took some swr readings they were as follows.
>
> SWR
> 1.8 = 1.2 :1
> 3.75 = 1 :1
> 7.075 = 1.7 :1
> 14.075 = 4 :1
> 21.075 = 6 :1

On Tue, 15 Jul 2008 17:18:22 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>The SWR meter he is using is referenced to 50 ohms so his readings are
>false.

What a curious indictment of this design. When it "works" (built to
the authur's specification too) it is a false antenna.

Of course, there are any number of oddities struggling for oxygen in
this goldfish bowl.

> he can put the up and down wires in parallell
and it thus fails:
1. to be the loop Guss designed;
2. to be in equilibrium.
>such that the 1100 feet of wire
>which is two wavelengths of the top band when wound in series is now 1
>wavelength and the impedance will change accoringly.
Equilibrium demands 1 wavelength, but the authur allows up to 100%
error. Pretty loose equilibrium there.

So what does equilibrium mean when both a loop of 1100 feet (not a
wavelength at 160M) and half that, 550 feet (not a wavelength at 160M)
are prescribed simultaneously?

When a half-wave, thin-wire dipole is called for, millions of radio
operators for 3 centuries understood that to be 95% of 262 feet
(accounting for end effect). A full wave loop was similarly closer to
525 feet than 1100 feet.

The oddities abound, but those above are enough to ignite a bonfire of
the vanities.

73's
Richard Clark, KB7QHC

473. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 02:46:08 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <487d60f5$0$60068$8046368a@newsreader.iphouse.net>
Source record: 24146

Art Unwin wrote:

>
> On the suject of transformers. In the US somebody makes a pre packaged
> transformer with five female coax conections depending on the ratio
> required,

How could you consider using anything from the US! What is wrong with
you?! Everything from the US is CRAP! Especially! Anything!
Associated! With! RF!

What in the SEVEN HELLS are you thinking?!

tom
K0TAR

474. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 03:08:53 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <vpOdnXBuVMTY--DVnZ2dnUVZ_h7inZ2d@bright.net>
Source record: 24147
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Dear Bob W4NNG: I have been using a Winegard HD-1080. Reflectors behind two, parallel, broadside UHF fan dipoles that each have an extension to help with 7-13. I an using it with 12 and a bunch of UHF channels and it does behave as expected. I would not call it "high-gain," but good enough in this flat area.

73, Mac N8TT

--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
" w4nng" <w4nng_1@soalex.us> wrote in message
news:eE7fk.20489$oY2.1183@newsfe21.lga...
> Besides Wineguard's HD769 series, anyone know of other Ch 7 thru 69 DTV
> hi-gain outdoor antennas?
>
> Thanks
>
> Bob
>
>
>

475. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 03:14:47 UTC
From: me@privacy.net
Message-ID: <gspq74tite8ga74kc696jnctovhh4q02r4@4ax.com>
Source record: 24148
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

"J. Mc Laughlin" <jcm@power-net.net> wrote:

>Dear Bob W4NNG: I have been using a Winegard HD-1080. Reflectors behind
>two, parallel, broadside UHF fan dipoles that each have an extension to help
>with 7-13. I an using it with 12 and a bunch of UHF channels and it does
>behave as expected. I would not call it "high-gain," but good enough in
>this flat area.
>
>73, Mac N8TT

This is probably the antenna I will buy soon!

476. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 04:45:18 UTC
From: Bill B <wrongaddress@att.net>
Message-ID: <7564c45b-81d1-4bd5-af0e-de21d4078c9a@79g2000hsk.googlegroups.com>
Source record: 24149

On Jul 15, 4:35 pm, "Dave" <no...@nowhere.com> wrote:
> "Bill B" <wrongaddr...@att.net> wrote in message
>
> news:7896e3dd-7446-4f01-a17f-a7e99602dfbd@34g2000hsh.googlegroups.com...
>
>
>
> > On Jul 15, 6:03 am, "Walter Maxwell" <w...@w2du.com> wrote:
> >> "Richard Clark" <kb7...@comcast.net> wrote in message
>
> >>news:b9ho7457g8kcnburb1jur4bjaqmbs0b1pl@4ax.com...
>
> >> > On Mon, 14 Jul 2008 23:05:06 -0700 (PDT), Bill B
> >> > <wrongaddr...@att.net> wrote:
>
> >> > >What would be the optimum given a 15X15 inch square space?
>
> >> > Hi Bill,
>
> >> > You are already there (or, rather, you are already so close that you
> >> > wouldn't be able to tell the difference which would be a circle of 15
> >> > inch diameter). Subtended area counts for most.
>
> >> > 73's
> >> > Richard Clark, KB7QHC
>
> >> If yer local to a 50kw station, why do you need an antenna all?
>
> >> Walt, W2DU
>
> > I just use the local 50kw station as a reference. It's hard to see
> > microvolts from some far away station on a scope, so I just use the
> > big signals to make comparisons. I can see about 14 stations on a
> > scope connected directly to the loop, but the amplitudes vary from a
> > few millivolts to almost a volt.
>
> > -Bill
>
> hook a couple of them up to a rectifier and use them to charge batteries to
> power your radio. might as well make some use of that rf that is passing
> through you all the time!

Actually, I use a 20 watt solar panel to charge batteries that power a
car radio in my bedroom. At 12 cents a KWH, I figure I save 12 cents

in 50 hours under good conditions, but I don't leave the panel outside all the time, just when the batteries get weak. It's good exercise dragging the solar panel out from under my bed and putting it out in the sunshine, and then putting it away again. It weighs about 17 pounds.

-Bill

477. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 06:11:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5k3dr$qe8$1@news.albasani.net>
Source record: 24150

Tom Ring wrote:

> ...
> How could you consider using anything from the US! What is wrong with
> you?! Everything from the US is CRAP! Especially! Anything!
> Associated! With! RF!
>
> What in the SEVEN HELLS are you thinking?!
>
> tom
> K0TAR

That argument may well be true. Can you name something made in the USA
so I could check it out?

Mostly, I am aware of things with American names, but made in other
countries. Sometimes, you I might be fortunate, enough, to find
something assembled in America--with parts made in other countries.

Like I say, the world looks like walmart, to me--nothing in walmart
(mostly!) has had an American hand in its' manufacture--only its
marketing and retail to Americans ... the actual money is going to
another nation.

Regards,
JS

478. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 06:14:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5k3kqoed1@news.albasani.net>
Source record: 24051

John Smith wrote:
... Sometimes, you I might be fortunate, enough, to find ...
>> ...

Change that to:

Sometimes, you OR I might be fortunate, enough, to find ...

Ignore the other mistakes, also ...

Regards,
JS

479. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 06:18:50 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g5k3sg$5jg$1@registered.motzarella.org>
Source record: 24052

"John Smith" <assemblywizard@gmail.com> wrote

> Absolutely not ...
>
> "They" have simply designed the world wrong. We need our jobs closer to
> our homes. We need small manufacturing plants close to cities, and of
> varying products so as supply the most needs of the city as possible. Mass
> transportation in place of single cars ... etc, etc ...
>
> We need to manufacture "things" to last a lifetime or two, and out of
> metal, wood and glass--instead of cheap plastic poisons to fill our dumps,
> streams and oceans with ...
>
> Etc, etc, etc ...
>
> Oh no, it is all easily "fixable", it just won't be done--greed and
> corruption take a far different path--one which always ends in the end of
> the particular civilization in question ... look at the cheap plastic
> "toy" radios we have today--a sharp contrast to the sturdy metal/glass
> cases of yesteryear ...
>
> Those who know NOT their history are doomed to repeat that history ...
> today they "rewrite history" in the image "they" wish ...
>
> Regards,
> JS

No offense intended, but the first really scary thing that I learned as an adult was that there is no "they". It is all random. See, I told you that was scary.

One man's corruption is another man's politics...

Looking back with 20-20 hindsight, it is simple to see how things could have been accomplished in much more efficient manners. Who would have gussed that chemical companies' run-off (ditching) would affect the world so negatively? I lived in a community whose main source of income was the production of various chemicals. Just like the old smoking ads that claimed that smoking was good for you (yes, they did, in fact, exist and were uttered by our government), we blue collar kids were told that chemicals and fumes were good for you. I swear to God. It's true. Seems hard to believe today, but in those days, TV was only on the air for six to seven hours a day and no one, but no one, spread negative news toward industry.

Anyway, we have another chance, in fact, multitude chances, to save our civilization. But it will probably spring from technologies and ways of thinking which we cannot even imagine presently.

Try to enjoy the good things and times while they are here, for they too are transitory. And just in case you forgot, so are we.

Ed Cregger

480. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 07:00:02 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <60hfk.139$eE4.77@newsfe09.iad>
Source record: 24053

"ml" <m@di.net> wrote in message
news:m-478B5D.18102015072008@news.optonline.net...

< snip >

> > This is exactly what you want:
> > http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-72A2.pdf .
It's
> > alphabetical by state, so scroll down to NYC on page 34.
> >
> > Yes, the action on UHF will be hot, since Channels 2 - 6 are not great
for
> > digital TV signals and are being avoided.
> >
> > Also, please note the existence of newsgroup alt.video.digital-tv which
is
> > much more on-point for your question.
> >
> > BTW, newsgroups are not for text-messages. Using punctuation and
capital
> > letters makes it easier to read your questions. Thanks. (Or maybe tks
;-)
>
> <<<<Thanks very much for the info, and that link.
>
> I actually found a simular link, what i can't tell from the above
> link, is if it reflects the current state todate or if it is the
> planed/proposed listing for after Feb. .
>
>
> Do you happen to know what that was listed under?? I tried to back
> out of the link and just got error msg
>
>
> thanks again very much

I got it from www.tvfool.com . Near the top, find "Latest News" and click
"Updated Post-transition Records." On that page, it's the pdf link in the
third paragraph. That paragraph gives you a hint of where it came from:
http://www.fcc.gov/dtv/ but, so sorry, nothing on that page relates.

Furthermore -- and here it gets really depressing -- a search of fcc.gov for
"post transition," shows there's still a steady stream of fresh changes.
Just one, last week, Channel 49 in Bainbridge, Georgia, wants to be channel
50. Not a big Whoop for NYC, but what it really shows is that not

everything is nailed down.

481. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 07:34:20 UTC
From: kb9rqz@yahoo.com
Message-ID: <o39r74df2v4nr38so0kilfb1nhi4tf9gbh@4ax.com>
Source record: 24098
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

482. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 07:36:01 UTC
From: nm5k@wt.net
Message-ID: <94948de3-bfba-4bae-bc77-20d18e7e8fee@m44g2000hsc.googlegroups.com>
Source record: 24054

On Jul 15, 7:18 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>and if it
> is low power DX that is his hobby

I suspect he is Sierra Oscar Lima. :(

483. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 09:16:01 UTC
From: ml <m@di.net>
Message-ID: <m-F8ADFE.05160116072008@news.optonline.net>
Source record: 24055

In article <g5ij1f$gn6$1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> Sal M. Onella wrote:
>
> > ...
> > BTW, newsgroups are not for text-messages. Using punctuation and capital
> > letters makes it easier to read your questions. Thanks. (Or maybe tks ;-)
> >
> >
>
> No big deal, but we should keep in mind he may be using his cell phone
> to access USENET/internet ... I have done so one mine, but the darn
> screen on the phone is so small--well, and my eyes so bad, I gave it
> up--but, creating capitals on a cell phone is difficult/slow enough that
> one soon abandons any attempt ...
>
> Regards,
> JS

thanks again everyone for responding

Sal, seems you encountered some of the same issues as I, so at least
i know i am not crazy, well, not toally

thanks

484. Re: FA - Mobile Antenna Reflective GROUND PLANE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 14:33:30 UTC
From: JB <nospam@goofball.net>
Message-ID: <_Enfk.318$gH4.80@trnddc05>
Source record: 24056
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.equipment,rec.radio.swap

Nothing to do with ground reflection but...

Shunt matching capacitor to raise feed point impedance. But do you need it
in your installation?

I used to use a BC variable cap hooked up to a throttle cable so I could
fine tune my Hamsticks, Yes it made a difference although I never gave it a
Buck Rogers name.

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g5iopruli1@news.albasani.net...
> SUPERSKYHOOK N8WWM wrote:
> > These REALLY Improve mobile antenna transmission by making your antenna
an
> > actual ground plane!
> >
> > Fits at the bottom of standard 3/8" stud mount antennas
> >
> >
http://cgi.ebay.com/Mobile-Antenna-Reflective-GROUND-PLANE-Cb-ham-radio_W0QQitemZ280244585
044QQcmdZViewItem?hash=item280244585044&_trksid=p3286.m14.l1318
> >
> >
>
> Oh yeah, turn an antenna into a real skyburner!
>
> Maybe as a top hat for VHF--if it weren't so darn heavy ...
>
> Regards,
> JS

485. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 15:10:02 UTC
From: kb9rqz@yahoo.com
Message-ID: <8q3s7416kpk849htcjmjbcqbhsagmbgti9@4ax.com>
Source record: 24097
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

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btw i can be found at
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Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

486. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 15:40:48 UTC
From: richardharrison@webtv.net
Message-ID: <3732-487E1680-2273@storefull-3253.bay.webtv.net>
Source record: 24057

Bill B wrote:
"What would be the optimum given a 15x15 inch square space?"

Terman`s 1955 opus on page 929 says:
"In particular, a loop antenna responds much less to the electric induction field than does a simple wire antenna of comparable intercept area. This is of importance because electric induction fields predominate in the man-made noise that causes disturbances in padio receivers, and this explains in part the popularity of loop antennas in broadcast receivers.

Best regards, Richard Harrison, KB5WZI

487. Re: does any design arrow antenna by using mmana-gal?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 15:55:08 UTC
From: Easyforss <Easyforss.2c4090f@radiobanter.com>
Message-ID: <Easyforss.2c4090f@radiobanter.com>
Source record: 24066

I'm going to bump the tread up.----------our wow gold site:-buy 'wow gold' (http://www.wowgoldcc.cn), cheap 'wow gold' (http://www.wowgoldcc.cn/wowgoldworld.htm), free 'wow gold' (http://www.wowgoldcc.cn/Newplayers.htm),-

--
Easyforss

488. Re: ART'S ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 16:04:55 UTC
From: richardharrison@webtv.net
Message-ID: <3732-487E1C27-2280@storefull-3253.bay.webtv.net>
Source record: 24058

John Smith wrote:
"That argument may be true. Could you name something made in the USA so I could check it out?"

You may not want to check out with it. I bought a field-effect Heathkit dipper at a hamfest and it needed a 9-volt battery. Fry`s Electronics was having a made in USA Energizer battery sale so I bought a 9V two-pack for $5.89. Next time I`ll buy Panasonic or Sony batteries at the 99-Cent Store.

Best regards, Richard Harrison, KB5WZI

489. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 19:06:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5lgrbigd1@news.albasani.net>
Source record: 24059

Ed Cregger wrote:

> ...
> -----------
>
> No offense intended, but the first really scary thing that I learned as an
> adult was that there is no "they". It is all random. See, I told you that
> was scary.
> ...

Well, I differ, the "they" are those in power with the chance to make
things better, or make a buck--however, we seem to live in a world where
this two things are mutually exclusive! If it were I or you, or we
together, who were the ones in "power", we would face great temptations
to do the same--sell out our fellow citizens to fatten our wallets. The
safeguards, which were once in place, are now gone--money purchasing
your congressmen and senators fixed that ...

>
> Anyway, we have another chance, in fact, multitude chances, to save our
> civilization. But it will probably spring from technologies and ways of
> thinking which we cannot even imagine presently.
>
> Try to enjoy the good things and times while they are here, for they too are
> transitory. And just in case you forgot, so are we.
>
> Ed Cregger
>
>

We are indeed in a time of GREAT transition. The gold in the gold
fields is gone. The BIG trees in the forests have all been harvested.
In the Sierra Nevada's, "they" have left belts of trees along the
highways for aesthetics, but venture a little ways off these highways
and you find great areas of clear cut land. In the old days, one single
log could fill a logging truck; today, these trucks appear to be
carrying loads of pencils! Every acre of ground is now in the hands of
private citizens, companies/corps or the gov't. All the farm ground is
now in production which is economically feasible to grow crops on; we
tax the reserves of cheaply available fertilizer we have left to raise
these crops. Every gallon of water in the lakes, rivers and streams is
owned by some entity.

Without anymore natural resources to exploit--we now face a much
different world. While capitalism was wonderful when resources were
abundantly plentiful to be raped, it will now be interesting to see how

it functions.

I see a world with vast numbers of impoverished "have-nothings" and a
few members of a ruling class with their knaves and female servents ...
but come hell-or-high-water, we shall see this "new world order." The
gears which bring it turn now; and, I see none powerful enough to halt them.

But then, I digress from antennas ...

Regards,
JS

490. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 19:10:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5lh3aigd2@news.albasani.net>
Source record: 24060

John Smith wrote:

> ...
> But then, I digress from antennas ...
>
> Regards,
> JS

I failed to mention oil/energy, but then, you already know about those ...

Regards,
JS

491. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 19:16:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5lhfbigd3@news.albasani.net>
Source record: 24061

Richard Harrison wrote:
> Bill B wrote:
> "What would be the optimum given a 15x15 inch square space?"
>
> Terman`s 1955 opus on page 929 says:
> "In particular, a loop antenna responds much less to the electric
> induction field than does a simple wire antenna of comparable intercept
> area. ...
>
> Best regards, Richard Harrison, KB5WZI
>

Can't most of that be accounted for with the loops directional
properties? And, that is just another way of stating the importance of
the loops directional properties?

Regards,
JS

492. Re: FA - Mobile Antenna Reflective GROUND PLANE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 19:20:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5lhm8igd4@news.albasani.net>
Source record: 24062
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.equipment,rec.radio.swap

JB wrote:
> ...
> I used to use a BC variable cap hooked up to a throttle cable so I could
> fine tune my Hamsticks, Yes it made a difference although I never gave it a
> Buck Rogers name.
> ...

That is a REAL shame, let's do that right now ...

How about AITD? For "Alien Intelligence Tuning Device", you like that name?

Regards,
JS

493. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 19:26:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <JXrfk.13321$cW3.10123@nlpi064.nbdc.sbc.com>
Source record: 24063

John Smith wrote:
> While capitalism was wonderful when resources were
> abundantly plentiful to be raped, it will now be interesting to see how
> it functions.

---Eight stages of democracy---
From bondage to spiritual faith;
From spiritual faith to great courage;
From courage to liberty;
From liberty to abundance;
From abundance to complacency;
From complacency to apathy;
From apathy to dependence; (2008?)
From dependence back into bondage.
--
73, Cecil http://www.w5dxp.com

494. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 19:34:57 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g5lih1$6du$1@news.jpl.nasa.gov>
Source record: 24065

John Smith wrote:
> Richard Harrison wrote:
>> Bill B wrote:
>> "What would be the optimum given a 15x15 inch square space?"
>>
>> Terman`s 1955 opus on page 929 says:
>> "In particular, a loop antenna responds much less to the electric
>> induction field than does a simple wire antenna of comparable intercept
>> area. ...
>>
>> Best regards, Richard Harrison, KB5WZI
>
> Can't most of that be accounted for with the loops directional
> properties? And, that is just another way of stating the importance of
> the loops directional properties?
>
> Regards,
> JS

I think it's more an issue with being in the "near field" of the interference source, and/or the interference source being in the near field of the antenna. So the relationship between the E and H fields isn't the free space 377 ohms. More of the energy of the interference source might be in the H field than the E field, and the antenna may be more sensitive to the E field than the H field, or vice versa.

495. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 19:55:44 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g5ljnv$uq4$1@f04n12.cac.psu.edu>
Source record: 24064

Ed Cregger wrote:
> "John Smith" <assemblywizard@gmail.com> wrote
>
>> Absolutely not ...
>>
>> "They" have simply designed the world wrong. We need our jobs closer to
>> our homes. We need small manufacturing plants close to cities, and of
>> varying products so as supply the most needs of the city as possible. Mass
>> transportation in place of single cars ... etc, etc ...
>>
>> We need to manufacture "things" to last a lifetime or two, and out of
>> metal, wood and glass--instead of cheap plastic poisons to fill our dumps,
>> streams and oceans with ...
>>
>> Etc, etc, etc ...
>>
>> Oh no, it is all easily "fixable", it just won't be done--greed and
>> corruption take a far different path--one which always ends in the end of
>> the particular civilization in question ... look at the cheap plastic
>> "toy" radios we have today--a sharp contrast to the sturdy metal/glass
>> cases of yesteryear ...
>>
>> Those who know NOT their history are doomed to repeat that history ...
>> today they "rewrite history" in the image "they" wish ...
>>
>> Regards,
>> JS
>
> -----------
>
> No offense intended, but the first really scary thing that I learned as an
> adult was that there is no "they". It is all random. See, I told you that
> was scary.
>
> One man's corruption is another man's politics...
>
> Looking back with 20-20 hindsight, it is simple to see how things could have
> been accomplished in much more efficient manners. Who would have gussed that
> chemical companies' run-off (ditching) would affect the world so negatively?

Odd, but it was obvious to a lot of people. They were just ignored or
ostracized.

> I lived in a community whose main source of income was the production of
> various chemicals.

In our area, we had a world class trout fishing stream. when I say that, I mean that people from all over the world came here and spent a lot of money to fish, and stay in hotels, eat in restaraunts.

We also had a chemical production company that wanted to do a lot of things that some of the populous didn't want them to do. It got to the point of township meetings. Some folks said that the companies practices were going to destroy the local watershed. The company and a lot of people accused them of being anti-business, anti job, anti growth, and worse.

The chemical company got it's way.

Fast forward to today....

The watershed has been destroyed by two chemicals that leaked from poorly constructed holding areas. The world class trout stream is no more. No more visitors spending all that money - it was millions in the 60's, who knows what it would be now. The chemicals have reached a lake about 30 miles away now, and people aren't supposed to eat fish from either the lake or stream.

And the chemical company? They aren't in business any more. They were bought out by a european company who then closed down the competition, took a write off, and left. That isn't all they left. The bill for the cleanup is with us.

The end result:

Jobs are gone.

World class fishing stream gone.

A nice lake downstream gone as an added benefit.

No one can say they didn't know. They didn't listen.

Just like the old smoking ads that claimed that smoking
> was good for you (yes, they did, in fact, exist and were uttered by our
> government),

And yet, I read a book from the late 1800's that stated that smoking tobacco caused Lung cancer and emphysema, and that chewing it caused oral and stomach cancer.

We knew. We just didn't listen.

> we blue collar kids were told that chemicals and fumes were
> good for you. I swear to God. It's true. Seems hard to believe today, but in
> those days, TV was only on the air for six to seven hours a day and no one,
> but no one, spread negative news toward industry.

When I was a kid, of course I didn't pay much attention. But as I grew, I found that the answers were out there somewhere.We just had to look for them. Even as a teenager, I wanted to look for the unfiltered source for knowledge.

> Anyway, we have another chance, in fact, multitude chances, to save our
> civilization. But it will probably spring from technologies and ways of
> thinking which we cannot even imagine presently.

I just don't think it will happen. I suspect the last humans' words will
be "We just didn't know!"

- 73 de Mike N3LI -

496. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 21:17:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5lohh$3qt$1@news.albasani.net>
Source record: 24067

Michael Coslo wrote:

> ...
> When I was a kid, of course I didn't pay much attention. But as I
> grew, I found that the answers were out there somewhere.We just had to
> look for them. Even as a teenager, I wanted to look for the unfiltered
> source for knowledge.
>

Most look at "the news" on tv/radio, I don't think the answers to their questions are there. I don't think the news is responsible to "Joe-Blow_Citizen"; I think "the news" is responsible to "the men with the money." This is highly dangerous to over 99% of the citizens ... "the truth" can be very difficult to find--when it has the potential to threaten those in power ...

>> Anyway, we have another chance, in fact, multitude chances, to save
>> our civilization. But it will probably spring from technologies and
>> ways of thinking which we cannot even imagine presently.
>
> I just don't think it will happen. I suspect the last humans' words will
> be "We just didn't know!"
>
> - 73 de Mike N3LI -

I agree with you here. Even if "the technologies" provide answers (and, that is NOT on the horizon), our "public servants" (the president, senators, congressmen, military, police, etc.) are bought and owned; this is what has really brought on the problems you have named and those which face us now, and in the foreseeable future. Until we have made "them" responsible to us, with great penalties placed on "them" for prostituting themselves for money, we will remain where we are ... the man behind the curtain is pulling the strings and leavers.

Regards,
JS

497. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 21:18:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5lojo$4if$1@news.albasani.net>
Source record: 24068

Cecil Moore wrote:
> John Smith wrote:
>> While capitalism was wonderful when resources were abundantly
>> plentiful to be raped, it will now be interesting to see how it
>> functions.
>
> ---Eight stages of democracy---
> From bondage to spiritual faith;
> From spiritual faith to great courage;
> From courage to liberty;
> From liberty to abundance;
> From abundance to complacency;
> From complacency to apathy;
> From apathy to dependence; (2008?)
> From dependence back into bondage.

Or, simply, those who do not know their history are doomed to repeat
their history ...

Regards,
JS

498. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 21:21:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5lopf$4pv$1@news.albasani.net>
Source record: 24069

Cecil Moore wrote:
> John Smith wrote:
>> While capitalism was wonderful when resources were abundantly
>> plentiful to be raped, it will now be interesting to see how it
>> functions.
>
> ---Eight stages of democracy---
> From bondage to spiritual faith;
> From spiritual faith to great courage;
> From courage to liberty;
> From liberty to abundance;
> From abundance to complacency;
> From complacency to apathy;
> From apathy to dependence; (2008?)
> From dependence back into bondage.

I should also have stated, remember that the "Boston Tea Party" was over
a penny a pound tax on tea ... Now, count all the hidden taxes we pay
... the forefathers MUST be turning in their graves ...

Regards,
JS

499. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 21:32:25 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g5lqhh$h1p$1@news.service.uci.edu>
Source record: 24070

Michael Coslo wrote:
>
> In our area, we had a world class trout fishing stream. when I say
> that, I mean that people from all over the world came here and spent a
> lot of money to fish, and stay in hotels, eat in restaraunts.
>
> We also had a chemical production company that wanted to do a lot of
> things that some of the populous didn't want them to do. It got to the
> point of township meetings. Some folks said that the companies practices
> were going to destroy the local watershed. The company and a lot of
> people accused them of being anti-business, anti job, anti growth, and
> worse.
>
> The chemical company got it's way.
>
> Fast forward to today....
>
>
> The watershed has been destroyed by two chemicals that leaked from
> poorly constructed holding areas. The world class trout stream is no
> more. No more visitors spending all that money - it was millions in the
> 60's, who knows what it would be now. The chemicals have reached a lake
> about 30 miles away now, and people aren't supposed to eat fish from
> either the lake or stream.
>
>
> And the chemical company? They aren't in business any more. They were
> bought out by a european company who then closed down the competition,
> took a write off, and left. That isn't all they left. The bill for the
> cleanup is with us.
>
>
> The end result:
>
> Jobs are gone.
>
> World class fishing stream gone.
>
> A nice lake downstream gone as an added benefit.
>
> No one can say they didn't know. They didn't listen.

What a disaster - and a huge tragedy. Clearly the world would be a
better place....if it was uninhabited.

I guess a better message would have been that holding areas should not be poorly constructed, rather than just shouting the tired old eco-mantra 'corporations are evil' - which nobody listens to. But eco groups aren't exactly the best listeners either.

ac6xg

500. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 22:41:25 UTC
From: Jim Prescott <jgp@seas.rochester.edu>
Message-ID: <g5ltel$iu4@harn.ceas.rochester.edu>
Source record: 24071
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

In article <UH9fk.20613$%q.19699@newsfe24.lga>,
w4nng <w4nng_1@soalex.us> wrote:
>Bob that antenna appears to be a standard ant w/ what in Feb 09, will be the
>unnecessary large elements for ch 2 - 6

Channels 2-6 are still allocated to TV, even after 2/09. Only channels
52-69 go away.

Granted, not many major stations are sticking with low-vhf but there
are a few. One of the more notable is WNAZ, the NBC affiliate in
Phoenix which intends to keep using channel 2.

You can check to see what type of antenna you'll need at
www.tvfool.com
You can select either the current stations, or post cutover. For
antenna purposes you want to look at "real channel". Some lucky
markets will be pure UHF after cutover, greatly simplifying their
antenna needs.
--
Jim Prescott - Computing and Networking Group jgp@seas.rochester.edu
School of Engineering and Applied Sciences, University of Rochester, NY

501. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 23:00:50 UTC
From: Jim Prescott <jgp@seas.rochester.edu>
Message-ID: <g5luj2$ivo@harn.ceas.rochester.edu>
Source record: 24072
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

In article <g5j7fn$5pv$1@snarked.org>,
D. Stussy <replies@newsgroups.kd6lvw.ampr.org> wrote:
>"Ch 7 thru 69 DTV"? Only 7-51 is authorized after the transition (US)

Channels 2-51 are all allocated to DTV (except for 37). Channels
2-6 aren't as popular so many people won't need an antenna that can
receive them; some people can even get by with UHF only (14-51). To
be sure about what you will need go to www.tvfool.com and see what
real channels will be used in your area after transition.

http://www.fcc.gov/cgb/consumerfacts/dtvantennas.html
--
Jim Prescott - Computing and Networking Group jgp@seas.rochester.edu
School of Engineering and Applied Sciences, University of Rochester, NY

502. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 23:20:40 UTC
From: "D. Stussy" <spam@bde-arc.ampr.org>
Message-ID: <g5lvo6$ei2$1@snarked.org>
Source record: 24073
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

"Jim Prescott" <jgp@seas.rochester.edu> wrote in message
news:g5luj2$ivo@harn.ceas.rochester.edu...
> In article <g5j7fn$5pv$1@snarked.org>,
> D. Stussy <replies@newsgroups.kd6lvw.ampr.org> wrote:
> >"Ch 7 thru 69 DTV"? Only 7-51 is authorized after the transition (US)
>
> Channels 2-51 are all allocated to DTV (except for 37). Channels
> 2-6 aren't as popular so many people won't need an antenna that can
> receive them; some people can even get by with UHF only (14-51). To
> be sure about what you will need go to www.tvfool.com and see what
> real channels will be used in your area after transition.
>
> http://www.fcc.gov/cgb/consumerfacts/dtvantennas.html

Are you certain? I'm in Los Angeles, the #2 market of the U.S., and NONE of our existing stations in Southern California (including the San Diego market too) are keeping their allocations on 2-5 (6 is assigned to Mexico, but even XETV (FOX) is moving to UHF). None of them have even filed construction permits for that range - but have actually filed permits for other allocations (UHF). If there were to be a place where something were to remain in 2-6, I'd think that the top 10 (out of the ~200 TV markets) would have such occur.

503. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 23:42:06 UTC
From: richardharrison@webtv.net
Message-ID: <3732-487E874E-2440@storefull-3253.bay.webtv.net>
Source record: 24075

John Smith wrote:
"Can`t most of that be accounted for with the loop`s directional properties?"

I don`t have time to verify the answer but will respond from memory. The far fields decline linearly in direct proportion to the distance from the noise source while the near fields decline in proportion to the square of the distance from the source. So an ability to discriminate against local electric near field noise is a destinct advantage separate and apart from any directivity of a loop.

Terman always says what he means and means what he says. He was a sucinct and excellent writer who mastered his topic.

Best regards, Richard Harrison, KB5WZI

504. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-16 23:45:43 UTC
From: Jim-NN7K
Message-ID: <KKvfk.14948$mh5.4055@nlpi067.nbdc.sbc.com>
Source record: 24074

ml wrote:
> In article <m-9177C3.20154613072008@news.optonline.net>, ml <m@di.net>
> wrote:
>
>> hi
>>
>> i was just wondering once nyc hits the deadline to switch
>> broadcasting to digital if the channals we use now
>>
>> 2-13vhf would continue specifically would other channals in
>> that range be avail like say ch6
>>
>> or will it just be say one or more digital channals stuffed into
>> the same space now occupied by ch2 for example depending on how cbs
>> wants to do it
>>
>>
>>
>>
>> also here uhf 14-> had really only a few channels that were
>> broadcasting should we expect many new channels to be
>> broadcating in that range or just mostly same
As I understand it-- there will be (more, or less), no TV signals in
the LOW vhf (Channel 2-6), there will be some in the High (Ch 7-13 vhf),
and the bulk of the NEW High Def stations will be in the uhf rangeCh 14,
and up.
BUT to complicate matters, there will be NO MAJOR changes to the
existing NTSC programming , on Cable. Also, IF you are receiveing
your broadcasts from TRANSLATORS, their NTSC, and Freq assignments
WILL NOT CHANGE! Someone into tv broadcasting can give you a better
Defination than I can. As for DTV, to NTSC converters, there is a
$40 Coupon (2 per family) available from

https://www.dtv2009.gov/ApplyCoupon.aspx

Jim- NN7K

505. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 02:17:09 UTC
From: afiggatt1@verizon.net
Message-ID: <9f5eb0b5-c64c-4584-b06d-c0bdd5587955@y21g2000hsf.googlegroups.com>
Source record: 24076
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

On Jul 16, 7:20 pm, "D. Stussy" <s...@bde-arc.ampr.org> wrote:
> "Jim Prescott" <j...@seas.rochester.edu> wrote in message
>
> > Channels 2-51 are all allocated to DTV (except for 37). Channels
> > 2-6 aren't as popular so many people won't need an antenna that can
> > receive them; some people can even get by with UHF only (14-51). To
> > be sure about what you will need go towww.tvfool.comand see what
> > real channels will be used in your area after transition.
>
> >http://www.fcc.gov/cgb/consumerfacts/dtvantennas.html
>
> Are you certain? I'm in Los Angeles, the #2 market of the U.S., and NONE of
> our existing stations in Southern California (including the San Diego market
> too) are keeping their allocations on 2-5 (6 is assigned to Mexico, but even
> XETV (FOX) is moving to UHF). None of them have even filed construction
> permits for that range - but have actually filed permits for other
> allocations (UHF). If there were to be a place where something were to
> remain in 2-6, I'd think that the top 10 (out of the ~200 TV markets) would
> have such occur.

Yes, VHF 2 to 6 will be in use after the analog shutdown. There are currently 40 full power stations set to operate on low VHF after 02/17/09. The low VHF channels for digital signals are more sensitive to electrical impulse noise and interference. Few stations in the major urban cities have opted to use low VHF for digital TV because they are most prone to interference there. The largest market station that is currently slated to be on low VHF is WPVI-DT ABC 6 in Philadelphia which will flash cut from UHF 64 to VHF 6 next February.

In a crowded spectrum market such as LA, what may happen is that some low power (LP) stations will eventually be forced to go to low VHF because they can't find any viable upper VHF or UHF channels to be on. But the LPs that do that are going to be stations that really don't care about OTA reception, but want a broadcast station so they can get on the local cable systems - religious stations mostly if I had to guess.

Over 50 stations submitted petitions in June to the FCC asking for a different post-transition channel assignment because their current post-trans channel allotment presents problems for them. A few of these are stations currently alloted to be on low VHF and asked for a upper VHF or UHF channel, so when the dust settles next year (and there will be a LOT of dust), we may have fewer than 40 low VHF full power stations, but they will be there. Many cities will not have any

low VHF digital stations, but will have at least 1 upper VHF station. Hence the need for antenna for upper VHF and UHF.

BTW, low power stations will be allowed to operate on UHF 52 to 59 if they have no alternate good channel assignment, but they also have to have permission from who ever brought the channel frequency to operate there. The last part will likely limit any LP stations in the UHF 52 to 59 range to rural or remote areas, but a LP station in Denver recently filed for a digital UHF 52 channel post-transition.

Alan F

PS Verizon messed up my usenet access when they dropped alt.* groups. Thanks a lot, Verizon and the NY AG.

506. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 03:19:56 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g5mdp3$4nd$1@registered.motzarella.org>
Source record: 24077

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g5lgrbigd1@news.albasani.net...
> Ed Cregger wrote:
>
>> ...
>> -----------
>>
>> No offense intended, but the first really scary thing that I learned as
>> an adult was that there is no "they". It is all random. See, I told you
>> that was scary.
>> ...
>
> Well, I differ, the "they" are those in power with the chance to make
> things better, or make a buck--however, we seem to live in a world where
> this two things are mutually exclusive! If it were I or you, or we
> together, who were the ones in "power", we would face great temptations to
> do the same--sell out our fellow citizens to fatten our wallets. The
> safeguards, which were once in place, are now gone--money purchasing your
> congressmen and senators fixed that ...
>
>>
>> Anyway, we have another chance, in fact, multitude chances, to save our
>> civilization. But it will probably spring from technologies and ways of
>> thinking which we cannot even imagine presently.
>>
>> Try to enjoy the good things and times while they are here, for they too
>> are transitory. And just in case you forgot, so are we.
>>
>> Ed Cregger
>
> We are indeed in a time of GREAT transition. The gold in the gold fields
> is gone. The BIG trees in the forests have all been harvested. In the
> Sierra Nevada's, "they" have left belts of trees along the highways for
> aesthetics, but venture a little ways off these highways and you find
> great areas of clear cut land. In the old days, one single log could fill
> a logging truck; today, these trucks appear to be carrying loads of
> pencils! Every acre of ground is now in the hands of private citizens,
> companies/corps or the gov't. All the farm ground is now in production
> which is economically feasible to grow crops on; we tax the reserves of
> cheaply available fertilizer we have left to raise these crops. Every
> gallon of water in the lakes, rivers and streams is owned by some entity.
>
> Without anymore natural resources to exploit--we now face a much different
> world. While capitalism was wonderful when resources were abundantly

> plentiful to be raped, it will now be interesting to see how it functions.
>
> I see a world with vast numbers of impoverished "have-nothings" and a few
> members of a ruling class with their knaves and female servents ... but
> come hell-or-high-water, we shall see this "new world order." The gears
> which bring it turn now; and, I see none powerful enough to halt them.
>
> But then, I digress from antennas ...
>
> Regards,
> JS

The more people that want a piece of the pie, the smaller the pieces will be. Our main, number #1 problem is over population for the resources we have remaining and the lifestyle we wish to live. But you know that.

Nature culls its creatures occasionally. Will it be by disease/plague? By wars? By things we cannot even imagine? No one knows. Enjoy the party while it is going on. Analyze later. Worrying hurts no one but you and those around you. I have given up worrying about it all. It is now in God's hands. I surrender.

Ed, NM2K

back to antennas

507. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 03:29:58 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g5mebtlpu1@registered.motzarella.org>
Source record: 24078

"Jim Kelley" <jwkelley@uci.edu> wrote
>
> What a disaster - and a huge tragedy. Clearly the world would be a better
> place....if it was uninhabited.
>
> I guess a better message would have been that holding areas should not be
> poorly constructed, rather than just shouting the tired old eco-mantra
> 'corporations are evil' - which nobody listens to. But eco groups aren't
> exactly the best listeners either.
>
> ac6xg

And that is the answer in a nutshell.

The environmental folks have to make ridiculous statements to the news media to obtain any coverage of their views. The general population sees the wackos on TV and dismisses anything they have to say because, "they aren't like us". But you will never get the general population to think through the unusual clothing, phrasing and behavior of the environmentalists. How can such brilliant folks (the environmentalists on the average) miss such a mundane marketing practice as "do not alienate the customer"? It appears that they could use some help from the very industrial folks they hold in such high disdain.

Ed Cregger

508. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 03:36:07 UTC
From: Steve Urbach <dragonsclaw@NOTmindspring.com>
Message-ID: <1eft74d1c9un278eilk4nkb0eug76jlpmh@4ax.com>
Source record: 24079
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

On 16 Jul 2008 19:00:50 -0400, Jim Prescott <jgp@seas.rochester.edu> wrote:

>In article <g5j7fn$5pv$1@snarked.org>,
>D. Stussy <replies@newsgroups.kd6lvw.ampr.org> wrote:
>>"Ch 7 thru 69 DTV"? Only 7-51 is authorized after the transition (US)
>
>Channels 2-51 are all allocated to DTV (except for 37). Channels
>2-6 aren't as popular so many people won't need an antenna that can
>receive them; some people can even get by with UHF only (14-51). To
>be sure about what you will need go to www.tvfool.com and see what
>real channels will be used in your area after transition.
>
> http://www.fcc.gov/cgb/consumerfacts/dtvantennas.html
San Francisco,Oakland,San Jose area
2, 4, 5 are very good and popular stations in the low VHF band

509. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 03:39:10 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9ADDF140FE957mcoslocomcastnet@216.196.97.136>
Source record: 24080

Jim Kelley <jwkelley@uci.edu> wrote in
news:g5lqhh$h1p$1@news.service.uci.edu:

> Michael Coslo wrote:
>>
>> In our area, we had a world class trout fishing stream. when I
>> say
>> that, I mean that people from all over the world came here and spent
>> a lot of money to fish, and stay in hotels, eat in restaraunts.
>>
>> We also had a chemical production company that wanted to do a lot of
>> things that some of the populous didn't want them to do. It got to
>> the point of township meetings. Some folks said that the companies
>> practices were going to destroy the local watershed. The company and
>> a lot of people accused them of being anti-business, anti job, anti
>> growth, and worse.
>>
>> The chemical company got it's way.
>>
>> Fast forward to today....
>>
>>
>> The watershed has been destroyed by two chemicals that leaked from
>> poorly constructed holding areas. The world class trout stream is no
>> more. No more visitors spending all that money - it was millions in
>> the 60's, who knows what it would be now. The chemicals have reached
>> a lake about 30 miles away now, and people aren't supposed to eat
>> fish from either the lake or stream.
>>
>>
>> And the chemical company? They aren't in business any more. They were
>> bought out by a european company who then closed down the
>> competition, took a write off, and left. That isn't all they left.
>> The bill for the cleanup is with us.
>>
>>
>> The end result:
>>
>> Jobs are gone.
>>
>> World class fishing stream gone.
>>
>> A nice lake downstream gone as an added benefit.
>>

>> No one can say they didn't know. They didn't listen.
>
> What a disaster - and a huge tragedy. Clearly the world would be a
> better place....if it was uninhabited.
>
> I guess a better message would have been that holding areas should not
> be poorly constructed, rather than just shouting the tired old
> eco-mantra 'corporations are evil' - which nobody listens to. But eco
> groups aren't exactly the best listeners either.

Jim, I'll give you a universal truth. It is all about money. Nothing else. Either through the chemicals or the world class fishing stream.

Take your pick. Have a company that comes in, pays about 20 people a little above minimum wage, and maybe 5 managers a decent wage for a few years. Or a setup that keeps returning money as long as it can be kept up?

Know what the problem with well constructed holding areas is? If you try to insist on them, it will cost the company more money, and in an effort to avoid that, you are painted as an eco-nut or a tree hugger. I was perhaps remiss in that the quality of the holding ponds was part of the controversy. You might be glad to know that the design settled upon saved the company a lot of money. Great, huh? Showed the tree huggers a thing or two. Problem was, it leaked like a seive. Roughty equivalent to just pouring th echemicals on the ground, which would have saved the company even more money.

Contrast that to millions that would have come in if the fishing stream was protected and maintained.

As a person who stood to make money on one of the two endeavors, which would you prefer? One that could make you a whole lot of money over a long long period of time, or the ten year model that puts a lot less money into the community, eventually leaves you footing a very large bill. What we did, we lost money on, not made money.

No tree hugging, no Sierra club, no leeeburuls, no "Corporations are evil", nothing but pure bottom line. Money. Why would you be against making as mouch money as possible? I like capitalism myself, how about you?

- 73 de Mike N3LI -

510. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 05:01:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5mjneght1@news.albasani.net>
Source record: 24081

Ed Cregger wrote:

Ed:

You are not just right, you are right on.

> ...
> The more people that want a piece of the pie, the smaller the pieces will
> be. Our main, number #1 problem is over population for the resources we have
> remaining and the lifestyle we wish to live. But you know that.

Yes, strange the last thing our public servants will consider is closing
the borders ... well, until you consider the desire for dirt-cheap labor
and an impoverished work force which will work for next to nothing ...
and you are quite right, I did know that--but then, anyone with the gray
matter to blow away a fly would ... :-(

> Nature culls its creatures occasionally. Will it be by disease/plague? By
> wars? By things we cannot even imagine? No one knows. Enjoy the party while
> it is going on. Analyze later. Worrying hurts no one but you and those
> around you. I have given up worrying about it all. It is now in God's hands.
> I surrender.
>
> Ed, NM2K
>
> back to antennas

Yes, a disease which favored the control freaks, corrupt public servants
and the power-hungry would be useful right about now ...

And yes, something new, unique or at least interesting and not seen
before would be nice--even with antennas! I am all ears! :-)

Warm regards,
JS

511. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 05:09:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5mk6oght2@news.albasani.net>
Source record: 24082

Mike Coslo wrote:

> ...
> No tree hugging, no Sierra club, no leeeburuls, no "Corporations are
> evil", nothing but pure bottom line. Money. Why would you be against
> making as mouch money as possible? I like capitalism myself, how about
> you?
>
>
> - 73 de Mike N3LI -

Then I suggest you listen to rush linbaugh (sp?) He clearly explains that there is nothing wrong; things are good and only getting better!

However, I think he is mainly speaking to those which enjoy the smog polluted airs of Los Angeles and drinking water containing chemicals I have great difficulty pronouncing. Those who think the climbing numbers of sterile males is "natural." Those who like the charts showing climbing numbers of cancer, birth defects, etc. Those who never did like the taste of salmon and can certainly rejoice in its' extinction, etc., etc.

You know who I speak of, those who will only empty the trash can when garbage starts hitting the floor and stinking so bad it takes their breath away, and they ponder why the rats have taken on such a sickly look ...

Regards,
JS

512. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 05:12:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5mkcnght3@news.albasani.net>
Source record: 24083

Richard Harrison wrote:
> John Smith wrote:
> "Can`t most of that be accounted for with the loop`s directional
> properties?"
>
> I don`t have time to verify the answer but will respond from memory. The
> far fields decline linearly in direct proportion to the distance from
> the noise source while the near fields decline in proportion to the
> square of the distance from the source. So an ability to discriminate
> against local electric near field noise is a destinct advantage separate
> and apart from any directivity of a loop.
>
> Terman always says what he means and means what he says. He was a
> sucinct and excellent writer who mastered his topic.
>
> Best regards, Richard Harrison, KB5WZI
>

Unable, at least at the moment, to test/verify that, I am inclined to
believe what you present. It sounds logical anyway. I will keep my
eyes open for data on the subject. :-)

Warm regards,
JS

513. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 05:14:49 UTC
From: Richard <rng@richbonnie.com>
Message-ID: <3okt74pe1knf67lbkrtf6npqve8bc55lp8@4ax.com>
Source record: 24084
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

On Tue, 15 Jul 2008 14:53:46 -0700, "D. Stussy" <spam@bde-arc.ampr.org> wrote:

>" w4nng" <w4nng_1@soalex.us> wrote in message
>news:eE7fk.20489$oY2.1183@newsfe21.lga...
>> Besides Wineguard's HD769 series, anyone know of other Ch 7 thru 69 DTV
>> hi-gain outdoor antennas?
>
>"Ch 7 thru 69 DTV"? Only 7-51 is authorized after the transition (in the
>U.S.).

After February 2009, some DTV stations still will be on lower VHF (Channels 2 through 6. See
http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-138A2.pdf
Look up your city in this URL; you may find that you need a Low VHF antenna also. For example, in Las Vegas (near where I live) NTSC Channel 3 will be on Channel 2 broadcasting DTV.

514. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 15:19:11 UTC
From: afiggatt1@verizon.net
Message-ID: <dec556f7-bea7-4ea2-bbde-4495cfdf05df@r66g2000hsg.googlegroups.com>
Source record: 24085
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

On Jul 16, 11:36 pm, Steve Urbach <dragonsc...@NOTmindspring.com>
wrote:
>
> San Francisco,Oakland,San Jose area
> 2, 4, 5 are very good and popular stations in the low VHF band

All active analog stations with a digital signal are broadcasting
that digital signal on a different channel. The ATSC tuners maps them
to the displayed channel number. Some 500 stations will flash cut
their digital signal back to their analog channel next February after
the analog shutdown, but the vast majority of the low VHF analog
stations will have their physical be on UHF or upper VHF.

In the San Francisco market,
KTVU-DT Fox 2 is currently on UHF 56, will move to UHF 44 next year.
KRON-DT MyN 4 is currently on UHF 57, will move to UHF 38 next year.
KPIX-DT CBS 5 is currently on UHF 29 and will stay there next year.
KGO-DT ABC 7 is currently on UHF 24, will flash cut to VHF 7 next
year.
KNTV-DT NBC 11 is on UHF 12 and will stay there next year.

The San Francisco market has perhaps the most complicated transition
of any city in the US next February and in the months afterwords,
Stations will be putting up new antennas on the Sutro Tower, taking
old ones off, moving to channels currently occupied by other analog
stations. Many stations will be using their backup reduced coverage
antennas in the daytime when the tower is being worked on.

Alan F

515. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 15:34:46 UTC
From: Bob <sp@ms.pam>
Message-ID: <xDJfk.2678$9V5.339@bignews6.bellsouth.net>
Source record: 24086
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Bob wrote:
> w4nng wrote:
>> Bob that antenna appears to be a standard ant w/ what in Feb 09, will
>> be the unnecessary large elements for ch 2 - 6
>
> I plan on not using those anymore at that time. ;) other wise works
> good for analog, digital TV and radio.

oops guess i wuz wrong I see a couple in my potenetial area on DTV
channel 6. May be a good thing to have the full antenna after all. :)>

http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-138A2.pdf

516. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 15:40:48 UTC
From: kb9rqz@yahoo.com
Message-ID: <vvpu74570bs3q0j57kafauet75ondsvr3v@4ax.com>
Source record: 24099
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

517. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 15:42:05 UTC
From: Jim Kelley <jimkelleyamps@gmail.com>
Message-ID: <b15621f5-ca1b-4011-b3da-95f730cc7203@b1g2000hsg.googlegroups.com>
Source record: 24087

On Jul 16, 8:39 pm, Mike Coslo <mco...@youknow.comcast.net> wrote:
>
> Jim, I'll give you a universal truth. It is all about money. Nothing
> else. Either through the chemicals or the world class fishing stream.
>
> Take your pick. Have a company that comes in, pays about 20 people a
> little above minimum wage, and maybe 5 managers a decent wage for a few
> years. Or a setup that keeps returning money as long as it can be kept
> up?
>
> Know what the problem with well constructed holding areas is? If you try
> to insist on them, it will cost the company more money, and in an effort
> to avoid that, you are painted as an eco-nut or a tree hugger. I was
> perhaps remiss in that the quality of the holding ponds was part of the
> controversy. You might be glad to know that the design settled upon saved
> the company a lot of money. Great, huh? Showed the tree huggers a thing
> or two. Problem was, it leaked like a seive. Roughty equivalent to just
> pouring th echemicals on the ground, which would have saved the company
> even more money.
>
> Contrast that to millions that would have come in if the fishing stream
> was protected and maintained.
>
>   As a person who stood to make money on one of the two endeavors,
> which would you prefer? One that could make you a whole lot of money over
> a long long period of time, or the ten year model that puts a lot less
> money into the community, eventually leaves you footing a very large
> bill. What we did, we lost money on, not made money.
>
> No tree hugging, no Sierra club, no leeeburuls, no "Corporations are
> evil", nothing but pure bottom line. Money. Why would you be against
> making as mouch money as possible? I like capitalism myself, how about
> you?
>
>   - 73 de Mike N3LI -- Hide quoted text -
>
> - Show quoted text -

The primary redeeming quality and prerequisite of any good mantra is
that it must fit nicely on a bumper sticker - inescapable logic in
four words or less. Print enough of them and it becomes a truism.

Never trust anyone over 30, man.

ac6xg

518. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 15:57:05 UTC
From: me@privacy.net
Message-ID: <9uqu74d05vras7uj9cek8jh45ts37epj61@4ax.com>
Source record: 24088
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

"J. Mc Laughlin" <jcm@power-net.net> wrote:

>I have been using a Winegard HD-1080

How big is it? Compact?

519. Re: AM Loop Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 16:21:59 UTC
From: richardharrison@webtv.net
Message-ID: <2138-487F71A7-2663@storefull-3252.bay.webtv.net>
Source record: 24089

John Smith wrote:
"It sounds logical anyway."

B. Whitfield Griffith, Jr. confirms rates of near field and far field decline in "Radio-Electronic Transnission Fundamentals" on page 323:

"As the distance from the antenna is increased, the induction field is found to diminish quite rapidly; in fact, its intensity is approximately proportional to the inverse square of the distance. In the region very close to the antenna (at distances of 1/8 wavelength or less), the induction field is very strong and may cause induction of large voltages or currents in nearby conductors."

Best regards, Richard Harrison, KB5WZI

520. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 17:38:59 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <TsLfk.202564$TT4.70959@attbi_s22>
Source record: 24090

> - Show quoted text -

The primary redeeming quality and prerequisite of any good mantra is
that it must fit nicely on a bumper sticker - inescapable logic in
four words or less. Print enough of them and it becomes a truism.

Never trust anyone over 30, man.

ac6xg

This has drifted an awfully long way off the original topic, and the purpose
of the newsagroup. Any chance of you folks proclaiming your non-antenna
beliefs somewhere else?

W4ZCB
over 30.

521. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 17:47:40 UTC
From: phil-news-nospam@ipal.net
Message-ID: <g5o0js1v2c@news2.newsguy.com>
Source record: 24092
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

In alt.tv.tech.hdtv Jim Prescott <jgp@seas.rochester.edu> wrote:
| In article <UH9fk.20613$%q.19699@newsfe24.lga>,
| w4nng <w4nng_1@soalex.us> wrote:
|>Bob that antenna appears to be a standard ant w/ what in Feb 09, will be the
|>unnecessary large elements for ch 2 - 6
|
| Channels 2-6 are still allocated to TV, even after 2/09. Only channels
| 52-69 go away.
|
| Granted, not many major stations are sticking with low-vhf but there
| are a few. One of the more notable is WNAZ, the NBC affiliate in
| Phoenix which intends to keep using channel 2.

Usuaully its the stations the FCC did a screw-job on. They already had
low-band analog and were given either a low-band transition or a depricated
UHF transition in 52-69.

Congress should have mandated that the FCC find space on high VHF or UHF for
all stations that wanted it, with an emphasis on making a market have all on
UHF where possible, and where not possible, put many on high VHF so that not
a single station is alone there.

--
|WARNING: Due to extreme spam, googlegroups.com is blocked. Due to ignorance |
| by the abuse department, bellsouth.net is blocked. If you post to |
| Usenet from these places, find another Usenet provider ASAP. |
| Phil Howard KA9WGN (email for humans: first name in lower case at ipal.net) |

522. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 17:49:43 UTC
From: phil-news-nospam@ipal.net
Message-ID: <g5o0nn2v2c@news2.newsguy.com>
Source record: 24091
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

In alt.tv.tech.hdtv D. Stussy <spam@bde-arc.ampr.org> wrote:
| "Jim Prescott" <jgp@seas.rochester.edu> wrote in message
| news:g5luj2$ivo@harn.ceas.rochester.edu...
|> In article <g5j7fn$5pv$1@snarked.org>,
|> D. Stussy <replies@newsgroups.kd6lvw.ampr.org> wrote:
|> >"Ch 7 thru 69 DTV"? Only 7-51 is authorized after the transition (US)
|>
|> Channels 2-51 are all allocated to DTV (except for 37). Channels
|> 2-6 aren't as popular so many people won't need an antenna that can
|> receive them; some people can even get by with UHF only (14-51). To
|> be sure about what you will need go to www.tvfool.com and see what
|> real channels will be used in your area after transition.
|>
|> http://www.fcc.gov/cgb/consumerfacts/dtvantennas.html
|
| Are you certain? I'm in Los Angeles, the #2 market of the U.S., and NONE of
| our existing stations in Southern California (including the San Diego market
| too) are keeping their allocations on 2-5 (6 is assigned to Mexico, but even
| XETV (FOX) is moving to UHF). None of them have even filed construction
| permits for that range - but have actually filed permits for other
| allocations (UHF). If there were to be a place where something were to
| remain in 2-6, I'd think that the top 10 (out of the ~200 TV markets) would
| have such occur.

See if you can find an available channel for WDTV, then (ironic callsign).

--
|WARNING: Due to extreme spam, googlegroups.com is blocked. Due to ignorance |
| by the abuse department, bellsouth.net is blocked. If you post to |
| Usenet from these places, find another Usenet provider ASAP. |
| Phil Howard KA9WGN (email for humans: first name in lower case at ipal.net) |

523. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 17:52:02 UTC
From: phil-news-nospam@ipal.net
Message-ID: <g5o0s23v2c@news2.newsguy.com>
Source record: 24093
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

In alt.tv.tech.hdtv D. Stussy <spam@bde-arc.ampr.org> wrote:

| Are you certain? I'm in Los Angeles, the #2 market of the U.S., and NONE of
| our existing stations in Southern California (including the San Diego market
| too) are keeping their allocations on 2-5 (6 is assigned to Mexico, but even
| XETV (FOX) is moving to UHF). None of them have even filed construction
| permits for that range - but have actually filed permits for other
| allocations (UHF). If there were to be a place where something were to
| remain in 2-6, I'd think that the top 10 (out of the ~200 TV markets) would
| have such occur.

Most markets in the USA have to deal with issues from stations in all directions
around those cities. Los Angeles doesn't have to deal with stations to the west.

--
|WARNING: Due to extreme spam, googlegroups.com is blocked. Due to ignorance |
| by the abuse department, bellsouth.net is blocked. If you post to |
| Usenet from these places, find another Usenet provider ASAP. |
| Phil Howard KA9WGN (email for humans: first name in lower case at ipal.net) |

524. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 18:01:18 UTC
From: phil-news-nospam@ipal.net
Message-ID: <g5o1de4v2c@news2.newsguy.com>
Source record: 24094
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

In alt.tv.tech.hdtv afiggatt1@verizon.net wrote:

| PS Verizon messed up my usenet access when they dropped alt.* groups.
| Thanks a lot, Verizon and the NY AG.

I trust that you are calling them every single day to tell them that it is absolute stupidity to remove newgroups that have no child porn as part of a compaign they claim to be against child porn.

And then you switch to using the NUMBER ONE source of Usenet spam as your alternative? Just pray that the spammers don't start doing "followup spam" via Google groups to try to get past the blocking that allows followups to bypass filters (e.g. I'll figure out how to block it all if spammers do that before Google cleans house, and will be quite willing to tell everyone else how to do it).

You could, instead, switch to one of the paid Usenet providers, and just treat it as Verizon raised your billing price again.

--
|WARNING: Due to extreme spam, googlegroups.com is blocked. Due to ignorance |
| by the abuse department, bellsouth.net is blocked. If you post to |
| Usenet from these places, find another Usenet provider ASAP. |
| Phil Howard KA9WGN (email for humans: first name in lower case at ipal.net) |

525. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 18:02:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5o1gm$q0f$1@news.albasani.net>
Source record: 24095

Harold E. Johnson wrote:

> ...
> This has drifted an awfully long way off the original topic, and the purpose
> of the newsagroup. Any chance of you folks proclaiming your non-antenna
> beliefs somewhere else?
>
> W4ZCB
> over 30.
>
>

Oh, good!

Your post brought this to mind:

http://www.goerie.com/apps/pbcs.dll/article?AID=/20080717/NEWS02/721687445/-1/NEWS

Just thought you might enjoy it ... ;-)

Regards,
JS

526. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 18:06:14 UTC
From: phil-news-nospam@ipal.net
Message-ID: <g5o1mm5v2c@news2.newsguy.com>
Source record: 24100
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

In alt.tv.tech.hdtv G-squared <stratus46@yahoo.com> wrote:

| If you don't mind the size of the antenna. The Winegard 7694 is only
| 35" wide vs 110" for the 7082. There is no such ting as an antenna
| "made exactly for DTV". Antennas cover a range of frequencies thet may
| include analog or digital TV. Flatness of response and directionality
| are the important issues and are equally important for analog or
| digital.

However, antennas could be made for "post-transition channel allocations".
E.g. the UHF antennas tuned for 14-51, and dual-banders for 7-51. And DTV
benefits more from more directional antennas, so even those will end up
with sales people labelling them as "DTV".

--
|WARNING: Due to extreme spam, googlegroups.com is blocked. Due to ignorance |
| by the abuse department, bellsouth.net is blocked. If you post to |
| Usenet from these places, find another Usenet provider ASAP. |
| Phil Howard KA9WGN (email for humans: first name in lower case at ipal.net) |

527. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 18:28:36 UTC
From: Bob <sp@ms.pam>
Message-ID: <D8Mfk.2778$US3.1822@bignews2.bellsouth.net>
Source record: 23901
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Bob wrote:
> Bob wrote:
>> w4nng wrote:
>>> Bob that antenna appears to be a standard ant w/ what in Feb 09, will
>>> be the unnecessary large elements for ch 2 - 6
>>
>> I plan on not using those anymore at that time. ;) other wise works
>> good for analog, digital TV and radio.
>
> oops guess i wuz wrong I see a couple in my potenetial area on DTV
> channel 6. May be a good thing to have the full antenna after all. :)>
>
> http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-138A2.pdf
>
>
>
FOUND ANOTHER ON DTV 4 CBS. dude don't be leaving out channels by
getting the wrong antenna. could be sporting events from different
cities and states you'll be missing out on if you don't get low vhf.

528. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 20:31:04 UTC
From: Jim Kelley <jimkelleyamps@gmail.com>
Message-ID: <6ac8866c-0321-4472-a02f-c69cc006f3a1@a3g2000prm.googlegroups.com>
Source record: 23902

On Jul 17, 10:38 am, "Harold E. Johnson" <W4...@mchsi.com> wrote:

> This has drifted an awfully long way off the original topic, and the purpose
> of the newsagroup.

Yes, but one could take consolation in the fact that with enough self-
righteous indignation and proselytizing, there would eventually be a
law against it.

ac6xg

529. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 22:01:56 UTC
From: Hasan Schiers <schiers@netins.net>
Message-ID: <487FC154.6050306@netins.net>
Source record: 23903
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

w4nng wrote:
> Bob that antenna appears to be a standard ant w/ what in Feb 09, will be the
> unnecessary large elements for ch 2 - 6
>
> "Bob" <bob@cob.dob> wrote in message
> news:lH8fk.1848$t32.48@bignews3.bellsouth.net...
>> " w4nng" <w4nng_1@soalex.us> wrote in message
>> news:eE7fk.20489$oY2.1183@newsfe21.lga...
>>> Besides Wineguard's HD769 series, anyone know of other Ch 7 thru 69 DTV
>>> hi-gain outdoor antennas?
>> Im using this one for last year or so.
>>
>> http://www.radioshack.com/product/index.jsp?parentPage=family&summary=summary&techSpecs
=techSpecs&currentTab=techSpecs&cp=2032057.2032187.2032189.2032205&custRatings=custRatings
&features=features&accessories=accessories&productId=2103087&support=support&tab=accessori
es
>>
>> no complaints. survived some good storms too.
>>
>
>

That is NOT a safe bet, depending on your local stations. Two of our
local stations will be reverting BACK to VHF at that time. They are on
UHF now. So before telling someone that they will not need the "longer
elements" (VHF), it would behoove them to check and see just what their
local conditions will dictate.

530. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 22:04:56 UTC
From: Hasan Schiers <schiers@netins.net>
Message-ID: <g5ofm8$m5m$2@news.netins.net>
Source record: 23904
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

D. Stussy wrote:
> "Jim Prescott" <jgp@seas.rochester.edu> wrote in message
> news:g5luj2$ivo@harn.ceas.rochester.edu...
>> In article <g5j7fn$5pv$1@snarked.org>,
>> D. Stussy <replies@newsgroups.kd6lvw.ampr.org> wrote:
>>> "Ch 7 thru 69 DTV"? Only 7-51 is authorized after the transition (US)
>> Channels 2-51 are all allocated to DTV (except for 37). Channels
>> 2-6 aren't as popular so many people won't need an antenna that can
>> receive them; some people can even get by with UHF only (14-51). To
>> be sure about what you will need go to www.tvfool.com and see what
>> real channels will be used in your area after transition.
>>
>> http://www.fcc.gov/cgb/consumerfacts/dtvantennas.html
>
> Are you certain? I'm in Los Angeles, the #2 market of the U.S., and NONE of
> our existing stations in Southern California (including the San Diego market
> too) are keeping their allocations on 2-5 (6 is assigned to Mexico, but even
> XETV (FOX) is moving to UHF). None of them have even filed construction
> permits for that range - but have actually filed permits for other
> allocations (UHF). If there were to be a place where something were to
> remain in 2-6, I'd think that the top 10 (out of the ~200 TV markets) would
> have such occur.
>
>
Our local ABC affiliate WOI is reverting from UHF to VHF channel 5 in
Feb 2009. It's nuts, but that's what they are doing. Nother station is
going from UHF channel 31 to VHF channel 8...so it is NOT unheard of and
those who blindly go UHF only in an antenna without knowing what EXACTLY
their locals are going to do may find another antenna purchase in their
future.

531. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 22:08:06 UTC
From: Hasan Schiers <schiers@netins.net>
Message-ID: <g5ofs6$m5m$3@news.netins.net>
Source record: 23905
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

phil-news-nospam@ipal.net wrote:
> In alt.tv.tech.hdtv G-squared <stratus46@yahoo.com> wrote:
>
> | If you don't mind the size of the antenna. The Winegard 7694 is only
> | 35" wide vs 110" for the 7082. There is no such ting as an antenna
> | "made exactly for DTV". Antennas cover a range of frequencies thet may
> | include analog or digital TV. Flatness of response and directionality
> | are the important issues and are equally important for analog or
> | digital.
>
> However, antennas could be made for "post-transition channel allocations".
> E.g. the UHF antennas tuned for 14-51, and dual-banders for 7-51. And DTV
> benefits more from more directional antennas, so even those will end up
> with sales people labelling them as "DTV".
>

Which will do no good here at all. Post transition our local ABC
affiliate is going to VHF channel 5.

There is no substitute for the long tried and tested combo vhf/uhf
antenna in our area.

532. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 22:10:33 UTC
From: David <someone@some-where.com>
Message-ID: <wrPfk.14575$xZ.8776@nlpi070.nbdc.sbc.com>
Source record: 23906
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

<phil-news-nospam@ipal.net> wrote in message
news:g5o0js1v2c@news2.newsguy.com...
>(snip)
> Usuaully its the stations the FCC did a screw-job on.
> They already had
> low-band analog and were given either a low-band
> transition or a depricated
> UHF transition in 52-69.
>
> Congress should have mandated that the FCC find space on
> high VHF or UHF for
> all stations that wanted it, with an emphasis on making a
> market have all on
> UHF where possible, and where not possible, put many on
> high VHF so that not
> a single station is alone there.

Phil,

Some stations wanted to remain on the low VHF channels for power and propagation reasons. Some broadcasters in the Midwest with large coverage areas get a lower electric bill on those channels even though the threat of interference is higher. Interference is a bigger problem in metropolitan areas than it is in the flat rural corn fields of the U.S. bread basket.

David

533. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 22:12:43 UTC
From: Hasan Schiers <schiers@netins.net>
Message-ID: <g5og4r$m5m$4@news.netins.net>
Source record: 23907

Jim-NN7K wrote:
> ml wrote:
>> In article <m-9177C3.20154613072008@news.optonline.net>, ml <m@di.net>
>> wrote:
>>
>>> hi
>>>
>>> i was just wondering once nyc hits the deadline to switch
>>> broadcasting to digital if the channals we use now
>>> 2-13vhf would continue specifically would other channals
>>> in that range be avail like say ch6
>>> or will it just be say one or more digital channals stuffed
>>> into the same space now occupied by ch2 for example depending on
>>> how cbs wants to do it
>>>
>>>
>>>
>>>
>>> also here uhf 14-> had really only a few channels that
>>> were broadcasting should we expect many new channels to
>>> be broadcating in that range or just mostly same
> As I understand it-- there will be (more, or less), no TV signals in
> the LOW vhf (Channel 2-6), there will be some in the High (Ch 7-13 vhf),
> and the bulk of the NEW High Def stations will be in the uhf rangeCh 14,
> and up.
> BUT to complicate matters, there will be NO MAJOR changes to the
> existing NTSC programming , on Cable. Also, IF you are receiveing
> your broadcasts from TRANSLATORS, their NTSC, and Freq assignments
> WILL NOT CHANGE! Someone into tv broadcasting can give you a better
> Defination than I can. As for DTV, to NTSC converters, there is a
> $40 Coupon (2 per family) available from
>
> https://www.dtv2009.gov/ApplyCoupon.aspx
>
> Jim- NN7K

That is NOT correct. our local ABC affiliate is currently on channel 56
UHF and will be reverting to channel 5 VHF in Feb 2009. (at least that's
what they are telling us)

534. 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 22:37:40 UTC
From: Stan Cooper <Stan@nospam.com>
Message-ID: <g5ohjn$ru7$1@news.albasani.net>
Source record: 23908

Hello I hope I'm not intruding by asking for advice on a CB antenna but I figured this would be the group to ask about such things for the straight scoop. At any rate I'm considering a store bought beam with both vertical and horizontal polarization and my choices are limited to these two below. (not many being manufactured anymore)

The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the JO GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there is a lot of smoke and mirrors involved with advertised gains and so my question is...is it possible for the JO GUNN to perform as well as the Maco antenna?

The GUNN is of much stronger construction and a smaller windload so I'd rather put it up, but the short boom makes me wonder if the gain and rejection numbers are suspect.

Any help would be greatly appreciated, antenna choices, price tags and urls below.

73
Stan

MACO-Shooting Star $279.95
http://www.mpaudio1.com/Macobeamantennas2.html

JO GUNN 3 + 3 STAR $382.00
http://tinyurl.com/6hzteu

Oh btw, I'll be tower mounting it about 40' from the ground and turning it with a hamIV rotator.

Thanks again.

535. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 23:36:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t7lv741kclfkd1s9q6gftk7q0ab1r37fq4@4ax.com>
Source record: 23909

On Thu, 17 Jul 2008 18:37:40 -0400, "Stan Cooper" <Stan@nospam.com>
wrote:

>MACO-Shooting Star $279.95
>http://www.mpaudio1.com/Macobeamantennas2.html
>
>JO GUNN 3 + 3 STAR $382.00
>http://tinyurl.com/6hzteu

Choose MACO for three reasons:
1. They understand the dB relationship to power gain;
b. their dB isn't relative to TRUE (whatever that means);
iii. it's cheaper.

On the negative side, neither seem to be acquainted with the dBi or
dBd basis of comparison (giving them the appearance of being yokels
selling out the trunk of their car). Imagine, having more "audio
gain" than rf gain from an antenna (do they inluded phased speakers?).

A claim of "2kw power handling capability!" is to suggest this is
part of the gain package? Don't exceed 2kw/28 input power?

Howabout "quad reflector to obtain the best combination of gain and
front-to-back ratio." Why not fully quad design to obtain the best
combination of ALL gains?

What's the difference between FRONT TO BACK RATIO and BACK REJECTION?

73's
Richard Clark, KB7QHC

536. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 23:50:04 UTC
From: Dave <noone@nowhere.com>
Message-ID: <MUQfk.540$jS4.289@trnddc07>
Source record: 23910

"Stan Cooper" <Stan@nospam.com> wrote in message
news:g5ohjn$ru7$1@news.albasani.net...
> Hello I hope I'm not intruding by asking for advice on a CB antenna but I
> figured this would be the group to ask about such things for the straight
> scoop. At any rate I'm considering a store bought beam with both vertical
> and horizontal polarization and my choices are limited to these two below.
> (not many being manufactured anymore)
>
> The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the
> JO GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there
> is a lot of smoke and mirrors involved with advertised gains and so my
> question is...is it possible for the JO GUNN to perform as well as the
> Maco antenna?
>

well, there are a couple possibilities... first the Maco could be poorly designed so it doesn't perform as well as the JO GUNN, or the Maco advertisers could be more honest than the JO GUNN ones are... or the JO GUNN is extremely well designed, or their advertisers aren't as honest as the Maco ones are.

OR, they could just be comparing to completely different references, thats the basic problem with antenna gains, they usually don't tell you what they are compared to if the JO GUNN was compared to an isotropic radiator where the Maco was compared to a dipole that buys them a couple db right there.

confused yet? there's even more...

Maybe the JO GUNN is measured over real ground at the best height and elevation angle they could find... and the Maco was measured in free space. Measuring an antenna over real ground and finding the max gain lobe could give the JO GUNN a whole bunch more gain than the free space Maco... enough to make up for half the boom length and a worse design put together.

So there you have it... my suggestion, put up a ground plane to talk to your local buddies and get a ham license so you can legally and openly talk around the world.

537. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-17 23:50:29 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <jWQfk.12756$LG4.4491@nlpi065.nbdc.sbc.com>
Source record: 23911

Stan Cooper wrote:
> Hello I hope I'm not intruding by asking for advice on a CB antenna but I
> figured this would be the group to ask about such things for the straight
> scoop. At any rate I'm considering a store bought beam with both vertical
> and horizontal polarization and my choices are limited to these two below.
> (not many being manufactured anymore)
>
> The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the JO
> GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there is a
> lot of smoke and mirrors involved with advertised gains and so my question
> is...is it possible for the JO GUNN to perform as well as the Maco antenna?
>
> The GUNN is of much stronger construction and a smaller windload so I'd
> rather put it up, but the short boom makes me wonder if the gain and
> rejection numbers are suspect.
>
> Any help would be greatly appreciated, antenna choices, price tags and urls
> below.
>
> 73
> Stan
>
> MACO-Shooting Star $279.95
> http://www.mpaudio1.com/Macobeamantennas2.html
>
> JO GUNN 3 + 3 STAR $382.00
> http://tinyurl.com/6hzteu
>
> Oh btw, I'll be tower mounting it about 40' from the ground and turning it
> with a hamIV rotator.
>
> Thanks again.
>
>

Stan;

I don't know if you have considered it but I would like to suggest that
you look into ham radio. It is a more adventurous hobby,one that offers
greater opportunity to exercise your operating skills. By and large the
licensed ham radio operators offer a courteous, friendly and extremely
helpful environment. I have to assume that since you are here looking
for assistance you already have a feeling for all this.
Getting a ham license has never been easier. There are only three
classes of license now, Technician, General and Extra. The code test has

been eliminated so that shouldn't be a problem. The tests are multiple choice and have a minimum passing level of 80%. That works out to be 28 correct answers for tech and general out of 35, the extra test has 15 more questions and so requires 40 correct answers. All questions are published and if you go to http://www.qrz.com you can take sample tests. Take enough samples and you should be able to pass the exam. Go to http://www.arrl.org for locations and times for exams. There is a cost for the exam but it isn't much.

Now as to your question. There isn't much to recommend either antenna. They are based on designs used in the ham radio field. You might look for these antennas and compare the numbers there. A source of ham radio equipment is www.aesham.com. This is one of the premier ham radio houses.

Good luck
Dave WD9BDZ

538. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 00:33:33 UTC
From: dplatt@radagast.org
Message-ID: <tv45l5-ukh.ln1@radagast.org>
Source record: 23912

>The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the JO
>GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there is a
>lot of smoke and mirrors involved with advertised gains and so my question
>is...is it possible for the JO GUNN to perform as well as the Maco antenna?

I would be sceptical. The fact that both manufacturers are quoting gain in dB, without saying what it's in reference to (dBi for isotropic, dBd for dipole) is a bit of a warning sign. Assume it's dBi - the numbers come out bigger, and that's attractive in ads.

I'd be sceptical of the numbers offered for both of these antennas, but I'd be quite a bit more sceptical concerning the JO GUNN.

It's probably useful to compare the design, and the numbers, with what's known and published about various reference Yagi designs and the results that can be achieved. I looked at some of the documentation that Cebik (SK) published on his excellent web site.

The Maco is advertised as a "6-element" antenna, but the drawing doesn't show a full set of six elements on either vertical or horizontal polarization. I can't tell whether they omitted showing some elements to leave the drawing less cluttered, or whether it's supposed to be a "three elements vertical plus three elements horizontal, equals six elements" design. It looks to me as if it's essentially a Quagi antenna - a quad element in back (reflector?) plus one or more set of linear elements in a Yagi-style arrangement.

At 11.5 feet, it's about a third of a wavelength long... and for any antenna of this general type, the boom length is likely to be the parameter which dominates the maximum gain figure you can achieve.

Cebik's figures indicate that well-designed quarter-wavelength-boom Yagis typically deliver somewher around 8 dBi of gain, and one-half-wavelength-boom Yagis are up somewhere around 10 dBi. Front-to-back figures in the 25 - 35 dB range seem to be achievable. There's usually a tradeoff in the optimization process... for any given boom length, optimizing for maximum gain will usually cost you F/B ratio, and vice versa.

I'd guess that it's *possible* that the Maco actually achieves 12.5 dBi of gain (at least on paper) at some frequency with its one-third-lambda boom length, but that's more than I'd expect.

This assumes that the Maco has separate feeds for horizontal and vertical polarization, and that it feeds only one at a time (e.g. via a switch) and that there are no losses involved. If it's actually feeding power to both polarizations at once (either linear or

circular), subtract 3 dB from the effective gain to a
linearly-polarized vertical or horizontal antenna at the other end.

The JO GUNN... well, I'm not sure just what sort of antenna it thinks
it is, other than "tries to be snazzy looking". It seems to be a
three-element short-beam antenna (at 8 feet it's less than 1/4
wavelength long), and yet it's claiming a 14.5 dB gain. This is
around 6 dB more gain than Cebik indicates is delivered by Yagis in
this boom-length class. The F/B ratio, "side rejection" and "back
rejection" are all extremely high (40 dB)... such high numbers suggest
that these are the best-looking numbers, taken from the deepest
rejection lobes of a mathematical model of the antenna in free space.

>The GUNN is of much stronger construction and a smaller windload so I'd
>rather put it up, but the short boom makes me wonder if the gain and
>rejection numbers are suspect.

Well, before I trusted these numbers at all, I'd want to get a NEC2 or
similar model of the antenna from the manufacturer, and run the model
myself.

My guess is that the Maco folks *might* give you a model deck if you
ask nicely, and that the JO GUNN folks with either refuse or say "What
are you talking about?" or claim that their antenna incorporates
principles that cannot be accurately modeled.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

539. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 01:11:58 UTC
From: 998cc <hrd998cc@yahooo.com>
Message-ID: <F5Sfk.8569$L_.852@flpi150.ffdc.sbc.com>
Source record: 23913

Stan, just go with what you like. I too am suspicious of claimed gain by manufacturers.

I will also throw in a plug for getting your ham license. It costs very little to get your license, and it opens many new adventures far and above 11 meters. You can work the world on 100 watts and a wire strung between a couple of trees.

Try the practice tests on QRZ.com.

73.
Russ W6OHM

"Stan Cooper" <Stan@nospam.com> wrote in message
news:g5ohjn$ru7$1@news.albasani.net...
> Hello I hope I'm not intruding by asking for advice on a CB antenna but I
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> scoop. At any rate I'm considering a store bought beam with both vertical
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> Stan
>
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>
> JO GUNN 3 + 3 STAR $382.00
> http://tinyurl.com/6hzteu
>
> Oh btw, I'll be tower mounting it about 40' from the ground and turning it
> with a hamIV rotator.

>
> Thanks again.
>

540. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 01:30:48 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <9b85l5-crt.ln1@p400bob.personal.cox.net>
Source record: 23916

Hi Richard

Isnt there a difference there? (I'll admit I dont think in these terms. I use the actual pattern instead)

Isn't F/B a comparison of "forward" vs "backward" at the optimum/best case "single angle" and Back Rejection (or some other name) the comparison of all radiated power forward vs backwards?

Many parasitic designs end up with very good F/B but as soon as you go off a few degrees a rearward lobe comes into play.

Cheers Bob VK2YQA

Richard Clark wrote:
> What's the difference between FRONT TO BACK RATIO and BACK REJECTION?

541. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 01:42:48 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <TOydnaBWBquSaOLVnZ2dnUVZ_tLinZ2d@giganews.com>
Source record: 23914

Stan Cooper wrote:
> Hello I hope I'm not intruding by asking for advice on a CB antenna but I
> figured this would be the group to ask about such things for the straight
> scoop. At any rate I'm considering a store bought beam with both vertical
> and horizontal polarization and my choices are limited to these two below.
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>
> The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the
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> GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there is
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> lot of smoke and mirrors involved with advertised gains and so my question
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> The GUNN is of much stronger construction and a smaller windload so I'd
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> Stan
>
> MACO-Shooting Star $279.95
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> http://tinyurl.com/6hzteu
>
> Oh btw, I'll be tower mounting it about 40' from the ground and turning it
> with a hamIV rotator.
>
> Thanks again.
>
Hi Stan,

The Maco Shooting star "data" says it has a gain of 14dB (the Comet is the
one rated at 12.5dB). Both manufacturers claim decibels of gain as well as
power gain. The relationship is logarithmic, where dB = 10 log(base10)
P1/P2. The Maco Shooting star claims 28X power gain. This would be
14.47dB... close to what they claim. The JO GUNN 3+3 Star claims 40X power

gain. This would be 16.02dB... 2dB more than what they claim. The Maco item doesn't make any claim about Front/Back or Front/Side rejection, while the JO GUNN item makes some very wild claims of over 40dB. Based on this information, I'd probably go with the Maco.

The late William I. Orr said it best in the preface to his book, 'The Truth About CB Antennas', "PT Barnum is alive and well, and writing CB antenna ads."

Bryan WA7PRC

542. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 01:44:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5osimbii1@news.albasani.net>
Source record: 23915

Stan Cooper wrote:

> ...
> MACO-Shooting Star $279.95
> http://www.mpaudio1.com/Macobeamantennas2.html
>
> JO GUNN 3 + 3 STAR $382.00
> http://tinyurl.com/6hzteu
>
> Oh btw, I'll be tower mounting it about 40' from the ground and turning it
> with a hamIV rotator.
>
> Thanks again.
>
>

I have never ran either one. However, I would go with the MACO also--if forced to choose on the data which has been presented, alone ... It is a four element antenna, the JO GUNN is three and in an unconventional configuration.

The MACO, on the other hand, appears to be completely switchable from vertical mode to horizontal mode.

Regards,
JS

543. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 03:07:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vf1084105pc4hei7s88i7r0ot1ehhrid6a@4ax.com>
Source record: 23917

On Thu, 17 Jul 2008 20:30:48 -0500, Bob Bob <bob3bob3@suddenlink.net>
wrote:

>Hi Richard
>
>Isnt there a difference there? (I'll admit I dont think in these terms.
>I use the actual pattern instead)
>
>Isn't F/B a comparison of "forward" vs "backward" at the optimum/best
>case "single angle" and Back Rejection (or some other name) the
>comparison of all radiated power forward vs backwards?
>
>Many parasitic designs end up with very good F/B but as soon as you go
>off a few degrees a rearward lobe comes into play.
>
>Cheers Bob VK2YQA
>
>Richard Clark wrote:
>> What's the difference between FRONT TO BACK RATIO and BACK REJECTION?

Hi Bobï¿½,

If you examine the specifications for both, they reveal exactly the
same value. It follows they measure the same thing but use different
terms (one can only imagine they have ad writers who find their
inspiration for straining terms in claims for Gussian antennas).

There are very few antennas with a null located at 180ï¿½ (Cardioid
comes to mind); and, as you infer, it quickly disappears off
boresight. Further, your suggestion of average forward compared to
average backward is, perhaps, a useful indicator. However, neither
supplier appears to interested in averages.

73's
Richard Clark, KB7QHC

544. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 03:30:36 UTC
From: G-squared <stratus46@yahoo.com>
Message-ID: <8d4d756e-b58a-4cff-b176-aa2580ba4353@w8g2000prd.googlegroups.com>
Source record: 23918
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

On Jul 17, 2:10 pm, "David" <some...@some-where.com> wrote:
> <phil-news-nos...@ipal.net> wrote in message
>
> news:g5o0js1v2c@news2.newsguy.com...
>
> >(snip)
> > Usuaully its the stations the FCC did a screw-job on.
> > They already had
> > low-band analog and were given either a low-band
> > transition or a depricated
> > UHF transition in 52-69.
>
> > Congress should have mandated that the FCC find space on
> > high VHF or UHF for
> > all stations that wanted it, with an emphasis on making a
> > market have all on
> > UHF where possible, and where not possible, put many on
> > high VHF so that not
> > a single station is alone there.
>
> Phil,
>
> Some stations wanted to remain on the low VHF channels for
> power and propagation reasons. Some broadcasters in the
> Midwest with large coverage areas get a lower electric bill
> on those channels even though the threat of interference is
> higher. Interference is a bigger problem in metropolitan
> areas than it is in the flat rural corn fields of the U.S.
> bread basket.
>
> David

I used to work at a low band VHF station that was running 56 kW ERP.
The actual transmitter output was 8kW visual and 2.3 kW aural. When I
bellyached that KABC 7 in LA would be running only 13kW DT, Alan
Figgatt pointed out that DTV doesn't require as much power as analog
and 13 kW should be good here. The point is that from a power
standpoint, VHF-lo vs VHF-hi wouldn't be all that big a deal. The
station gear and A/C would be a much bigger load than the actual
transmitter. Compare that to analog UHF where 55 kW visual and 10kW
aural is common. THOSE folks will see a big savings but compared to
the power load when all the studio lights are on for a production or
newcast, even 65 kW is a big part but not the biggest. HVAC can be a

bigger load issue - particularly with VHF-hi where 13kW ERP may only need a few kW of acutal transmitter output.

I hope I don't hear how the DTV breaks up a lot during lightning strikes. I know that on VHF-lo analog you get LOTS of 'sparklies' during lightning storms.

G²

545. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 03:33:17 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <BeadnYPpbqRmkx3VnZ2dnUVZ_vednZ2d@bright.net>
Source record: 23919
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Dear "me" Not big at all. It is intended for high VHF and UHF. I have it mounted on a tube that is supported in turn by the top section of a tower, which became surplus after a rotator change. The whole assembly is in a second story room with the main computer and can be rotated by hand.

It is deceptive to put numbers on the size. The reflector consists of five doublets each with a tip-to-top length of 26.5 inches and a total height of a little over 16 inches. The twin "driven" elements are spaced about 6.6 inches in front of the reflectors (obviously the reflectors are only effective for UHF). The tip-to-tip length of the driven elements is about 34.5 inches (giving a predicted 0.5 WL resonance towards the bottom of the higher VHF TV band). Each driven element is coaxial with a fan dipole that should have a resonance somewhere in the UHF band. Thus one expects a small gain with a small F/B in the higher VHF band and fair gain with good F/B in the UHF band.

I hope that this is of some assistance. I regret that you believe you must be anonymous.

Regards, Mac N8TT

--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
<me@privacy.net> wrote in message
news:9uqu74d05vras7uj9cek8jh45ts37epj61@4ax.com...
> "J. Mc Laughlin" <jcm@power-net.net> wrote:
>
>>I have been using a Winegard HD-1080
>
> How big is it? Compact?

546. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 03:41:35 UTC
From: root <george@dyb.com>
Message-ID: <PhUfk.8572$L_.2158@flpi150.ffdc.sbc.com>
Source record: 23920

When you are measuring gain, if dBi isn't specified it is normal to assume dBd. I cannot get that JoGunn page to load and display, but based on what you have said, the better, or should I say, more believable one is the Maco. Those gain numbers seem high by a bit for a four element antenna, but there may be some advantage from the dual polarity, but I doubt it, as the power is split between Hand V as well going in. And 4 elements/16 foot boom, 27 MHz sounds much closer to right than 8' boom 3 elements and 14 db. Those are just plain wrong, or at least lack reference.

The ARRL handbook years ago had a construction article on a ten meter beam, that I scaled very successfully to 15 meters. 12 foot boom three eleemnts, made from basic aluminum tubing, probably cost well under $100 to build today. But you'd need to be handy with a 'grid dip meter" to get it right. Just another thought.

My $0.02

RE: getting ham license and operating ten meters, I'd guess you're actually interested in talking to someone, so 11 meters is probably better for that. I frequently listen on 27.185 as an indicator of weather or not ten meters is open. Lots of activity from about 26.8 thru 27.6 or higher, nothing above 28 except some lonely beacons...true shame. But if you go beyond the ten meter deal, and get with the other HF bands or 2 meters, 440, etc, you'll have a blast, and the code no longer stands in the way...

Good luck with the Maco.

GeorgeC
W2DB
Awstin, TX

547. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 04:16:56 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9ADF9143E11D1nonenowhere@61.9.191.5>
Source record: 23921

root <george@dyb.com> wrote in
news:PhUfk.8572$L_.2158@flpi150.ffdc.sbc.com:

> When you are measuring gain, if dBi isn't specified it is normal to
> assume dBd. I cannot get that JoGunn page to load and display, but

George,

Fundamental relationships depend on dBi, it is dBd that is the fudge.

dBd seems to have its popularity from the mistaken view by some that
because it is not possible to construct a real isotropic radiator, that dBi
doesn't have a real meaning.

Owen

548. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 04:31:18 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <KYUfk.3151$bN2.1815@bignews9.bellsouth.net>
Source record: 23922

"Stan Cooper" wrote
> The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the
> JO GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there
> is a lot of smoke and mirrors involved with advertised gains and so my
> question is...is it possible for the JO GUNN to perform as well as the
> Maco antenna?
>
> The GUNN is of much stronger construction and a smaller windload so I'd
> rather put it up, but the short boom makes me wonder if the gain and
> rejection numbers are suspect.
>
> Any help would be greatly appreciated, antenna choices, price tags and
> urls below.

snip

Stan
The Maco antennas are built here in Memphis, and are not of a high
quality. If
I had to use one of their products, it would be a pair of
horizontal-stacked V-quads.
Small, light, works well and can be easily re-tuned to 10 meters later on.
The Jo Gunn model is a copy of the Charles "Gizmotchi" antenna (still
being made,
by the way). Construction is better, tubing fit and finish are quite good,
but the gain
figures are really about 7 dbi for both of the antennas.
Gain figures are inflated to catch a sale, so I'd consider quality,
price, and strength
of materials/design as more important factors.
I've got enough tubing in my antenna junk to build a 3 element Gizmotchi
for 10
meters, and I might just do that, for the sake of having something different
in the
neighborhood.

Mike W5CHR
Memphis

549. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 04:32:07 UTC
From: "D. Stussy" <spam@bde-arc.ampr.org>
Message-ID: <g5p6c6$n8m$1@snarked.org>
Source record: 23923
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

"Hasan Schiers" <schiers@netins.net> wrote in message
news:g5ofm8$m5m$2@news.netins.net...
> D. Stussy wrote:
> > "Jim Prescott" <jgp@seas.rochester.edu> wrote in message
> > news:g5luj2$ivo@harn.ceas.rochester.edu...
> >> In article <g5j7fn$5pv$1@snarked.org>,
> >> D. Stussy <replies@newsgroups.kd6lvw.ampr.org> wrote:
> >>> "Ch 7 thru 69 DTV"? Only 7-51 is authorized after the transition (US)
> >> Channels 2-51 are all allocated to DTV (except for 37). Channels
> >> 2-6 aren't as popular so many people won't need an antenna that can
> >> receive them; some people can even get by with UHF only (14-51). To
> >> be sure about what you will need go to www.tvfool.com and see what
> >> real channels will be used in your area after transition.
> >>
> >> http://www.fcc.gov/cgb/consumerfacts/dtvantennas.html
> >
> > Are you certain? I'm in Los Angeles, the #2 market of the U.S., and
NONE of
> > our existing stations in Southern California (including the San Diego
market
> > too) are keeping their allocations on 2-5 (6 is assigned to Mexico, but
even
> > XETV (FOX) is moving to UHF). None of them have even filed construction
> > permits for that range - but have actually filed permits for other
> > allocations (UHF). If there were to be a place where something were to
> > remain in 2-6, I'd think that the top 10 (out of the ~200 TV markets)
would
> > have such occur.
> >
> >
> Our local ABC affiliate WOI is reverting from UHF to VHF channel 5 in
> Feb 2009. It's nuts, but that's what they are doing. Nother station is
> going from UHF channel 31 to VHF channel 8...so it is NOT unheard of and
> those who blindly go UHF only in an antenna without knowing what EXACTLY
> their locals are going to do may find another antenna purchase in their
> future.

You are aware that channel 8 is NOT in the 2-6 segment (VHF-low), so that is
irrevelant.

Channels 2-4 = 54-72Mhz.
5-6 = 76-88MHz.
7-13 = 174-216Mhz.

550. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 04:33:51 UTC
From: "D. Stussy" <spam@bde-arc.ampr.org>
Message-ID: <g5p6ff$n8q$1@snarked.org>
Source record: 23924
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

<afiggatt1@verizon.net> wrote in message
news:dec556f7-bea7-4ea2-bbde-4495cfdf05df@r66g2000hsg.googlegroups.com...
On Jul 16, 11:36 pm, Steve Urbach <dragonsc...@NOTmindspring.com> wrote:
> San Francisco,Oakland,San Jose area
> 2, 4, 5 are very good and popular stations in the low VHF band

All active analog stations with a digital signal are broadcasting
that digital signal on a different channel. The ATSC tuners maps them
to the displayed channel number. Some 500 stations will flash cut
their digital signal back to their analog channel next February after
the analog shutdown, but the vast majority of the low VHF analog
stations will have their physical be on UHF or upper VHF.

In the San Francisco market,
KTVU-DT Fox 2 is currently on UHF 56, will move to UHF 44 next year.
KRON-DT MyN 4 is currently on UHF 57, will move to UHF 38 next year.
KPIX-DT CBS 5 is currently on UHF 29 and will stay there next year.
KGO-DT ABC 7 is currently on UHF 24, will flash cut to VHF 7 next
year.
KNTV-DT NBC 11 is on UHF 12 and will stay there next year.
...

Which, for the clueless, means NO DTV on 2-6, which is exactly what I said.

551. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 04:40:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5p6sdggc1@news.albasani.net>
Source record: 23925

Stan Cooper wrote:
>> ...

You might as well check out this page, you can find the prices on a link
on the page ...

http://www.gizmotchy.com/

Regards,
JS

552. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 08:04:02 UTC
From: gsm@mendelson.com
Message-ID: <slrng80jav.da0.gsm@cable.mendelson.com>
Source record: 23926

David G. Nagel wrote:

> I don't know if you have considered it but I would like to suggest that
> you look into ham radio. It is a more adventurous hobby,one that offers
> greater opportunity to exercise your operating skills. By and large the
> licensed ham radio operators offer a courteous, friendly and extremely
> helpful environment. I have to assume that since you are here looking
> for assistance you already have a feeling for all this.
> Getting a ham license has never been easier. There are only three
> classes of license now, Technician, General and Extra. The code test has
> been eliminated so that shouldn't be a problem.

Since he did not say where he is, your answer may be wrong. While I agree with it in principal, not everyone has it so easy. Here in Israel there still is a code requirement, testing is twice a year, and ANY permanent antenna requires a permit which no one seems to know how to get. Technicaly any operation over 20 watts EIRP requires radiation level certification.

But then CB is just as bad. Except for a few off-roaders who have not gone to 446 mHz it's even deader than ham radio.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

553. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 08:42:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <UKWdnVgcZaUJyh3VnZ2dnUVZ_vSdnZ2d@posted.easystreetonline>
Source record: 23927

Owen Duffy wrote:
>
> George,
>
> Fundamental relationships depend on dBi, it is dBd that is the fudge.
>
> dBd seems to have its popularity from the mistaken view by some that
> because it is not possible to construct a real isotropic radiator, that dBi
> doesn't have a real meaning.
>
> Owen

At least one manufacturer has taken advantage of the fact that, unlike dBi, dBd has no universal definition. Some think it's dB relative to a dipole in free space; others think it's relative to a dipole mounted over ground. And few seem to realize that the difference between the two is typically 4 - 6 dB. Creative marketeers are able to capitalize on this confusion, and have.

Roy Lewallen, W7EL

554. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 12:08:07 UTC
From: cliff wright <c.c.wright@paradise.net.nz>
Message-ID: <48808797$1@clear.net.nz>
Source record: 23928
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

D. Stussy wrote:

> <afiggatt1@verizon.net> wrote in message
> news:dec556f7-bea7-4ea2-bbde-4495cfdf05df@r66g2000hsg.googlegroups.com...
> On Jul 16, 11:36 pm, Steve Urbach <dragonsc...@NOTmindspring.com> wrote:
>
>>San Francisco,Oakland,San Jose area
>>2, 4, 5 are very good and popular stations in the low VHF band
>
>
> All active analog stations with a digital signal are broadcasting
> that digital signal on a different channel. The ATSC tuners maps them
> to the displayed channel number. Some 500 stations will flash cut
> their digital signal back to their analog channel next February after
> the analog shutdown, but the vast majority of the low VHF analog
> stations will have their physical be on UHF or upper VHF.
>
> In the San Francisco market,
> KTVU-DT Fox 2 is currently on UHF 56, will move to UHF 44 next year.
> KRON-DT MyN 4 is currently on UHF 57, will move to UHF 38 next year.
> KPIX-DT CBS 5 is currently on UHF 29 and will stay there next year.
> KGO-DT ABC 7 is currently on UHF 24, will flash cut to VHF 7 next
> year.
> KNTV-DT NBC 11 is on UHF 12 and will stay there next year.
> ...
>
>
> Which, for the clueless, means NO DTV on 2-6, which is exactly what I said.
>
>
Hi Stussy. Well I see that HDTV arrangements are just as chaotic in the
us as they are in NZ. Even now many in the trade are still "guessing".
We have allocated 6 UHF channels for HDTV but since NZ is a very hilly
country this gives only patchy coverage out to about 50Km with a lot of
dead spots. At least we are keeping SDTV running for a few years yet on
VHF and UHF.
Where I live about 55Km from Auckland we can't get solid HDTV reception
and they aren't using satellite HDTV for free to air Tv for a while, so
we will have to wait despite having a suitable RX.
Let's hope they sort themselves out soon everywhere, though I fear that
things have been allowed to become too disorganised.
Cliff Wright ZL1BDA

555. "Tower Dogs"

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 12:41:36 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <yeGdnRDr-5kdEh3VnZ2dnUVZ_gCdnZ2d@comcast.com>
Source record: 23929
Cross-posted to: news.misc.radio.amateur.antenna,rec.radio.amateur.antenna

Since late last year, rumors have been circulating that a major network or cable station was going to do a special on tower erectors.

NBC confirmed it today, and their "Tower Dogs" special will air on July 21 at 10 P.M/ET.

For an overview of the one hour special, the background on the producers and some production shots and notes, see:

http://www.wirelessestimator.com/breaking_news.cfm

556. Re: keeping wire antennas up

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 13:00:50 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <oLudnX8o1pKeCR3VnZ2dnUVZ_judnZ2d@comcast.com>
Source record: 23930
Cross-posted to: alt.radio.amateur,news.misc.radio.amateur.antenna,rec.radio.amateur.antenna

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13r4nf8coutmq75@corp.supernews.com...
> Buck wrote:
>>
>> I can't speak for your specific situation, but here is how I handled
>> the similar situation.
>>
>> I used either a multi-band-parallel dipole (sometimes referred to as a
>> fan dipole) or a 135 foot dipole fed with 300 ohm twin-lead. These
>> antennas were raised about 100 feet or so into trees by mason's line
>> which can be purchased at Walmart or most hardware or building supply
>> stores. . . .
>
>> While I still use it today, I don't recommend it for anyone wanting to
>> put up a permanent antenna and just leave it alone for more than a
>> year.
>
> I don't think it works equally well for all kinds of trees. For many years
> I've used nylon twine or mason's line for raising Field Day antennas. The
> trees here in the Pacific Northwest are of course mostly evergreens which
> have a lot of pitchy sap and in many varieties, fairly soft wood. An
> antenna with a fair amount of tension causes the line to dig into the wood
> in a very short period of time. And even after two days, the line can
> sometimes be hard to get down because of being seized in the pitchy slot
> it cuts in the wood. So while it's fine for a very short time temporary
> setup, I don't consider it viable for longer term installation in the
> kinds of trees we have here.
>
> Roy Lewallen, W7EL

If it is going to be a either temporary or permanent you might want to use the first line up to hold a pulley, then run the antenna line thru the pulley. Another way is to run your line thru a couple thickness of plastic tubing positioning the tubing over the branch to keep the line from digging into the bark.

Also, if you have a old spare bowling ball (don't laugh), either the 4lb (duckpin) or the 16lb (tenpin) they make great weights for the end of the lines instead of having to use a pail with cement for the weight with eyebolt. Most of the bowling balls are made from hard rubber - all you do is drill a hole and insert some epoxy glue or super glue in it and then screw-in an eyebolt type of screw! When the wind blows and the tree sways the antenna line should remain constant. Make sure that the line is about 3 - 5 ft above the ground when using a weighted system.

73 de Howard W3CQH

557. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 14:22:46 UTC
From: Bob <sp@ms.pam>
Message-ID: <kE1gk.3296$dP6.1704@bignews1.bellsouth.net>
Source record: 23931
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

D. Stussy wrote:
> <afiggatt1@verizon.net> wrote in message
> news:dec556f7-bea7-4ea2-bbde-4495cfdf05df@r66g2000hsg.googlegroups.com...
> On Jul 16, 11:36 pm, Steve Urbach <dragonsc...@NOTmindspring.com> wrote:
>> San Francisco,Oakland,San Jose area
>> 2, 4, 5 are very good and popular stations in the low VHF band
>
> All active analog stations with a digital signal are broadcasting
> that digital signal on a different channel. The ATSC tuners maps them
> to the displayed channel number. Some 500 stations will flash cut
> their digital signal back to their analog channel next February after
> the analog shutdown, but the vast majority of the low VHF analog
> stations will have their physical be on UHF or upper VHF.
>
> In the San Francisco market,
> KTVU-DT Fox 2 is currently on UHF 56, will move to UHF 44 next year.
> KRON-DT MyN 4 is currently on UHF 57, will move to UHF 38 next year.
> KPIX-DT CBS 5 is currently on UHF 29 and will stay there next year.
> KGO-DT ABC 7 is currently on UHF 24, will flash cut to VHF 7 next
> year.
> KNTV-DT NBC 11 is on UHF 12 and will stay there next year.
> ...
>
>
> Which, for the clueless, means NO DTV on 2-6, which is exactly what I said.
>
>
[adding qualifier] in Frisco, for now.
there is and will be DTV on 2-6 in other areas.

558. ======> Secret Video CLIPS <=========

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 14:34:01 UTC
From: cutee <cutteeeee@lycos.com>
Message-ID: <20757d0f-a347-4ac1-9ced-9a193344ee6d@f1g2000prb.googlegroups.com>
Source record: 23932

HAI.....
Guys this web site s very useful to
you.....
How This site
helps.....
how to earn money form
online.....
In this site, you wil earn more than 10000/- Rs per month....
its true ..... just login this site and << EARN MONEY
>>

www.freeonlinedollers.blogspot.com

www.freedollers.blogspot.com

www.moviesgossips.blogspot.com

559. .©©©©©©© -- Actress Secret BOTH ROOM scenes -- ©©©©

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 14:36:29 UTC
From: cutee <cutteeeee@lycos.com>
Message-ID: <86289eb7-586a-4131-82db-be176361d84f@z16g2000prn.googlegroups.com>
Source record: 23933

HAI.....
Guys this web site s very useful to
you.....
How This site
helps.....
how to earn money form
online.....
In this site, you wil earn more than 10000/- Rs per month....
its true ..... just login this site and << EARN MONEY
>>

www.freeonlinedollers.blogspot.com

www.freedollers.blogspot.com

www.moviesgossips.blogspot.com

560. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 16:22:09 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <yr3gk.15231$mh5.13363@nlpi067.nbdc.sbc.com>
Source record: 23934

Geoffrey S. Mendelson wrote:
> David G. Nagel wrote:
>
>> I don't know if you have considered it but I would like to suggest that
>> you look into ham radio. It is a more adventurous hobby,one that offers
>> greater opportunity to exercise your operating skills. By and large the
>> licensed ham radio operators offer a courteous, friendly and extremely
>> helpful environment. I have to assume that since you are here looking
>> for assistance you already have a feeling for all this.
>> Getting a ham license has never been easier. There are only three
>> classes of license now, Technician, General and Extra. The code test has
>> been eliminated so that shouldn't be a problem.
>
> Since he did not say where he is, your answer may be wrong. While I
> agree with it in principal, not everyone has it so easy. Here in Israel
> there still is a code requirement, testing is twice a year, and ANY
> permanent antenna requires a permit which no one seems to know how to
> get. Technicaly any operation over 20 watts EIRP requires radiation
> level certification.
>
> But then CB is just as bad. Except for a few off-roaders who have not gone
> to 446 mHz it's even deader than ham radio.
>
> Geoff.
>
>
Geoff;

Your are right in one sense, however the antenna's in question are, I
believe, USA products so it is fairly save to assume that the writer is
a USA resident.

From your comments I assume (that word again) that you are a resident
of Israel. Given the situation there I can see why the government would
try to make it hard for someone to install and operate a radio station.
I look forward to the day when everyone in the Mideast can live together
in peace and harmony.

Until that time thank you for your comments.

Dave WD9BDZ

561. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 16:23:39 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <Xs3gk.15232$mh5.3561@nlpi067.nbdc.sbc.com>
Source record: 23935

Roy Lewallen wrote:
> Owen Duffy wrote:
>>
>> George,
>>
>> Fundamental relationships depend on dBi, it is dBd that is the fudge.
>>
>> dBd seems to have its popularity from the mistaken view by some that
>> because it is not possible to construct a real isotropic radiator,
>> that dBi doesn't have a real meaning.
>>
>> Owen
>
> At least one manufacturer has taken advantage of the fact that, unlike
> dBi, dBd has no universal definition. Some think it's dB relative to a
> dipole in free space; others think it's relative to a dipole mounted
> over ground. And few seem to realize that the difference between the two
> is typically 4 - 6 dB. Creative marketeers are able to capitalize on
> this confusion, and have.
>
> Roy Lewallen, W7EL

Roy;

I think that this a subject custom made for the phrase: Your Mileage May Vary.

Dave WD9BDZ

562. cheap DG belt PayPal gift discount

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 16:25:50 UTC
From: yuwenwu006@gmail.com
Message-ID: <f8534a3b-c7dd-4926-b910-13d91f09edbc@x36g2000prg.googlegroups.com>
Source record: 23936

cheap DG belt PayPal gift discount
Dear friend
welcome to shopping on www.electronic-paypal.cn
1.5% paypal handling charge supports the online payment!
2.Use your intergla replacement more good gift!
3.notes by email and website of deliver each package at first time.

Have a good day!
Sincerely yours,
CHINASILKROAD EXPORTS CO., LTD

563. For Sale: Premodded Video Game Consoles, Games & Retro Stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 17:03:44 UTC
From: kevwongpg@yahoo.com
Message-ID: <927a40cc-7e9c-4853-845d-30731f011cd2@s21g2000prm.googlegroups.com>
Source record: 23937
Cross-posted to: alt.radio.digital,aus.radio.broadcast,aus.tv.digital,aus.tv,rec.radio.amateur.antenna

We’re a video game specialist and wholesaler for modded consoles, retro consoles and game backups, we ship worldwide. Below are some of our offerings at wholesale prices. For any enquiries, please feel free to contact us at gamersparadisemy@gmail.com

Sony Playstation 3 - 40GB Pack (NTSC/U & NTSC/J versions available) comes with two dual shock 3 controllers and Hori cooling fan.
USD 350 (with worldwide shipping)

XBOX 360 Elite (with HDMI)
– 120GB Pack (NTSC/U & NTSC/J) comes with two controllers and Nyko cooling fan.
Modded and able to run XBOX 360 backups, homebrew softwares and able to go online via XBOX Live.
USD 400 (with worldwide shipping)

XBOX 360 Premium (with HDMI, free 2 ori games, Forza 2 and Viva Pinata)
– 20GB Pack (NTSC/U & NTSC/J) comes with two controllers and Nyko cooling fan.
Modded and able to run XBOX 360 backups, homebrew softwares and able to go online via XBOX Live.
USD 330 (with worldwide shipping)

XBOX 360 Core (without HDD and HD cable, only composite video)
– (NTSC/U & NTSC/J) comes with 1 controller.
Modded and able to run XBOX 360 backups, homebrew softwares and able to go online via XBOX Live.
USD 260 (with worldwide shipping)

Nintendo Wii - (NTSC/U & NTSC/J) comes with two controllers and Nyko cooling fan.
Modded and able to run Nintendo Wii backups and homebrew softwares.
USD290 (with worldwide shipping)

Sony PS2 - (NTSC/U & NTSC/J) comes with two controllers and Nyko cooling fan.
Modded and able to run PS2 backups and homebrew softwares.
USD140 (with worldwide shipping)

Sony PSP with 4GB MSPD
Able to run PSP backups and homebrew softwares.
USD180 (with worldwide shipping)

Nintendo NDS Lite with R4 (2GB MiniSD card included)
Able to run NDS backups and homebrew softwares

USD180 (with worldwide shipping)

*** Remarks: All modded consoles come with 5 backups of your choice
whereas for portables, they will come with 5-10 preloaded games of
your choice on the memory card.

XBOX 360 / Wii / PS2 Backups,
USD2 each (dvd-r), USD3 each (factory pressed gold disc) – minimum
order of 10 games needed.

NDS / PSP Roms
USD2 per game, burnt on dvd-r, USD5 for any 3 games burnt on dvd-r

---

Used Retro Consoles, Original Games & Backups
(Please email us for the best price, we have many used retro consoles
and games in stock, all in perfect condition, sourced from Shibuya,
Japan)

Neo Geo Cart (Original Games Only)
Neo Geo CD
PSX
SNES (CD Backup Machine with complete SNES roms)
N64 (CD Backup Machines with complete N64 roms)
Sega Saturn
Sega Dreamcast
Sega Megadrive
Sega Game Gear (Original Games Only)
Sega 32X (Original Games only)
Panasonic 3DO
Atari Jaguar (Original Games Only)
PC Engine (Backups Only For CD Version)
XBOX
Gameboy Advance
Gameboy Micro
Atari Jaguar (Original Games Only)

Gamers Paradise Sdn. Bhd.
LG 148, Sungai Wang Plaza,
Jalan Bukit Bintang,
55100 Kuala Lumpur,
Malaysia
gamersparadisemy@gmail.com

564. Re: FA - Mobile Antenna Reflective GROUND PLANE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 17:33:40 UTC
From: JB <nospam@goofball.net>
Message-ID: <Ut4gk.16$GI.12@trnddc05>
Source record: 23938
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.equipment,rec.radio.swap

Hey quit talking tek'ncl!!
I think I'll call it the "Back Seat Cloud Scratcher"

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g5lhm8igd4@news.albasani.net...
> JB wrote:
> > ...
> > I used to use a BC variable cap hooked up to a throttle cable so I could
> > fine tune my Hamsticks, Yes it made a difference although I never gave
it a
> > Buck Rogers name.
> > ...
>
>
> That is a REAL shame, let's do that right now ...
>
> How about AITD? For "Alien Intelligence Tuning Device", you like that
name?
>
> Regards,
> JS

565. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 20:47:02 UTC
From: Alan F <afiggatt1@xxverizonx.net>
Message-ID: <FpCdnWakyabEnBzVnZ2dnUVZ_jWdnZ2d@giganews.com>
Source record: 23939
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

phil-news-nospam@ipal.net wrote:
> In alt.tv.tech.hdtv afiggatt1@verizon.net wrote:
>
> | PS Verizon messed up my usenet access when they dropped alt.* groups.
> | Thanks a lot, Verizon and the NY AG.
>
> I trust that you are calling them every single day to tell them that it is
> absolute stupidity to remove newgroups that have no child porn as part of a
> compaign they claim to be against child porn.
>
> And then you switch to using the NUMBER ONE source of Usenet spam as your
> alternative? Just pray that the spammers don't start doing "followup spam"
> via Google groups to try to get past the blocking that allows followups to
> bypass filters (e.g. I'll figure out how to block it all if spammers do that
> before Google cleans house, and will be quite willing to tell everyone else
> how to do it).
>
> You could, instead, switch to one of the paid Usenet providers, and just
> treat it as Verizon raised your billing price again.

I used google groups as a temporary measure to post because my posts
were not getting through via the 2 newsgroups services I was trying.
We'll see if it now all works...

Alan F

566. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-18 21:05:55 UTC
From: Alan F <afiggatt1@xxverizonx.net>
Message-ID: <9PWdnVye3PNWmBzVnZ2dnUVZ_gKdnZ2d@giganews.com>
Source record: 23940
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Hasan Schiers wrote:
> phil-news-nospam@ipal.net wrote:
>> In alt.tv.tech.hdtv G-squared <stratus46@yahoo.com> wrote:
>>
>> | If you don't mind the size of the antenna. The Winegard 7694 is only
>> | 35" wide vs 110" for the 7082. There is no such ting as an antenna
>> | "made exactly for DTV". Antennas cover a range of frequencies thet may
>> | include analog or digital TV. Flatness of response and directionality
>> | are the important issues and are equally important for analog or
>> | digital.
>>
>> However, antennas could be made for "post-transition channel
>> allocations".
>> E.g. the UHF antennas tuned for 14-51, and dual-banders for 7-51. And
>> DTV
>> benefits more from more directional antennas, so even those will end up
>> with sales people labelling them as "DTV".
>>
>
> Which will do no good here at all. Post transition our local ABC
> affiliate is going to VHF channel 5.
>
> There is no substitute for the long tried and tested combo vhf/uhf
> antenna in our area.

I see only 1 ABC affiliate going to VHF 5 post-transition and that is WOI-DT ABC 5 in Des Moines moving from UHF 59 to VHF 5. Is that your local ABC affiliate? The FCC database shows WOI-DT with a low STA (Special Temporary Authority) power of 500 Watts on UHF 59 which is a very weak power if correct.

The good news to some extent is that WOI-DT was granted their request to run at an increased power of 8.2 kW (up from 3.91 kW) for the post-transition VHF 5 allotment which is a good power level for digital low VHF. In Des Moines, IA, there should be a number of open channels to broadcast on UHF if WIO wanted to.

Alan F

567. FS: AT-271 Fishing Pole Antenna. .. Military Collapsible Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-19 02:01:13 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <QVbgk.24119$Mc.3148@read1.cgocable.net>
Source record: 23941
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

This portable antenna can be used for the top section of a Vertical Antenna
OR Horizontal elements for an Antenna System such as the Buddipole tm
..... A Great QRP / Portable Antenna weighs only 400 Grams [14 Oz]
and measures 104" extended yet only 14" long when folded. Picture
The construction is the same as is used for sectional fishing poles. Each
of the 8 hollow tubular metal sections has a plug one one end and a socket
on the other end. All the sections are connected by a string made of either
a cloth or metal cord. At the bottom of the base element there's a spring
inside the tube to tension the cord. Some units may use an elastic
shock-cord material. This way all the elements are kept in order when
they are disconnected from each other and are held together when assembled
into a 104" [8.6 Ft] long antenna. When the elements are folded or
disassembled the package is only 14 inches long.
The base has a male 3/8-24 thread which is the same as is used on most Ham
Radio and CB antennas. Some sort of spring base could be used when this
antenna is used because the hollow antenna elements will "fold" if too much
force is applied to them.
These units are in Like New Condition.. Sold AS-IS but will not be DOA.
ONLY $30 Plus Shipping

Have access to more...ASK!

568. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-19 02:10:11 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <82cgk.2293$8R1.1108@newsfe03.iad>
Source record: 23942

"Hasan Schiers" <schiers@netins.net> wrote in message
news:g5og4r$m5m$4@news.netins.net...
> Jim-NN7K wrote:
> > ml wrote:
> >> In article <m-9177C3.20154613072008@news.optonline.net>, ml <m@di.net>
> >> wrote:
> >>
> >>> hi
> >>>

> > As I understand it-- there will be (more, or less), no TV signals in
> > the LOW vhf (Channel 2-6), there will be some in the High (Ch 7-13 vhf),
> > and the bulk of the NEW High Def stations will be in the uhf rangeCh 14,

>
> That is NOT correct. our local ABC affiliate is currently on channel 56
> UHF and will be reverting to channel 5 VHF in Feb 2009. (at least that's
> what they are telling us)

Document http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-138A2.xls
is an 1800-record spreadsheet listing the current and proposed channels. Do
what I did and sort it on the NEW DTV channel numbers. You will discover,
as I did, that only a few dozen stations were headed for low-VHF after
transition.

Here are the actual numbers (after the sort):

Records 1 to 37 are on TV Channels 2 - 6
Records 38 to 487 are on TV channels 7 - 13
Records 488 to 1811 are on TV channels 14 - 51

http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-138A3.xls appears
to be a minor supplement to the big guy, having only 16 records:

Records 1 is on TV Channels 2 - 6
Records 2 to 5 are on TV channels 7 - 13
Records 6 to 13 are on TV channels 14 - 51

Trying to nail this down any better is like trying to nail Jello to the
wall.

569. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-19 02:24:10 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <6aadnfqWYOm3zRzVnZ2dnUVZ_o7inZ2d@comcast.com>
Source record: 23943

```
"ml" <m@di.net> wrote in message
news:m-478B5D.18102015072008@news.optonline.net...
> In article <cOYek.24996$1L1.16891@newsfe15.phx>,
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote:
>
>> "ml" <m@di.net> wrote in message
>> news:m-BAEB70.17494114072008@news.optonline.net...
>> > In article <m-9177C3.20154613072008@news.optonline.net>, ml <m@di.net>
>> > wrote:
>> >
>> > > hi
>> > >
>> > > i was just wondering once nyc hits the deadline to switch
>> > > broadcasting to digital if the channals we use now
>> > >
>> > > 2-13vhf would continue specifically would other channals
>> > > in
>> > > that range be avail like say ch6
>> > >
>> > > or will it just be say one or more digital channals stuffed
>> > > into
>> > > the same space now occupied by ch2 for example depending on how
>> > > cbs
>> > > wants to do it
>> > >
>> > >
>> > >
>> > >
>> > > also here uhf 14-> had really only a few channels that
>> > > were
>> > > broadcasting should we expect many new channels to be
>> > > broadcating in that range or just mostly same
>> > >
>> > >
>> > >
>> > > wondering if were going to see a shift of the primary channels
>> > > here being more 14->> vs the current heavy use of 2-13
>> > >
>> > > reason being most have antennas that are really for 2-13
>> > > and
>> > > alot are wondering if the uhf is going to be hot they will
>> > > obv
>> > > need to add new antennas
>> > >
```

>> > >
>> > > thanks
>> >
>> > could use a little help here i tried searching under google and
>> > fcc i found alot of stuff marked proposed but nothing seemed
>> > to indicate would would be after the current interm layouts ie
>> > what it's going to be their plans after feb so if anyone has
>> > any links or info i'd appreciate it much
>>
>> This is exactly what you want:
>> http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-72A2.pdf .
>> It's
>> alphabetical by state, so scroll down to NYC on page 34.
>>
>> Yes, the action on UHF will be hot, since Channels 2 - 6 are not great
>> for
>> digital TV signals and are being avoided.
>>
>> Also, please note the existence of newsgroup alt.video.digital-tv which
>> is
>> much more on-point for your question.
>>
>> BTW, newsgroups are not for text-messages. Using punctuation and capital
>> letters makes it easier to read your questions. Thanks. (Or maybe tks
>> ;-)
>
> <<<<Thanks very much for the info, and that link.
>
> I actually found a simular link, what i can't tell from the above
> link, is if it reflects the current state todate or if it is the
> planed/proposed listing for after Feb. .
>
>
> Do you happen to know what that was listed under?? I tried to back
> out of the link and just got error msg
>
>
> thanks again very much

According to the info I have, NYC stations will be on UHF, except for CH7, 11, and 13, which will revert back to the present analog channels. All NYC channels are on UHF right now.

Tam

570. Financial Risk Manager/Professional Risk Manager/Chartered Aleternative Investment Analyst/Chartered Financial Analyst

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-19 17:23:55 UTC
From: FRM Help <educational.risk@gmail.com>
Message-ID: <119473da-e1f1-4c28-babb-f346f6a6f43c@x36g2000prg.googlegroups.com>
Source record: 23944

Financial Risk Manager (FRM)
http://career-assessments.blogspot.com/2008/01/frm-financial-risk-manager-newbies.html

Professional Risk Manager (PRM)
http://career-assessments.blogspot.com/2008/02/prm-professional-risk-manager-newbie.html

Chartered Alternative Investment Analyst (CAIA)
http://career-assessments.blogspot.com/2008/02/caia-chartered-alternative-investment.html

Chartered Financial Analyst (CFA)
http://career-assessments.blogspot.com/2008/02/cfa-chartered-financial-analyst.html

571. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-19 19:33:08 UTC
From: phil-news-nospam@ipal.net
Message-ID: <g5tfhk11g0j@news3.newsguy.com>
Source record: 23945
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

```
In alt.tv.tech.hdtv Alan F <afiggatt1@xxverizonx.net> wrote:
| phil-news-nospam@ipal.net wrote:
|> In alt.tv.tech.hdtv afiggatt1@verizon.net wrote:
|>
|> | PS Verizon messed up my usenet access when they dropped alt.* groups.
|> | Thanks a lot, Verizon and the NY AG.
|>
|> I trust that you are calling them every single day to tell them that it is
|> absolute stupidity to remove newgroups that have no child porn as part of a
|> compaign they claim to be against child porn.
|>
|> And then you switch to using the NUMBER ONE source of Usenet spam as your
|> alternative? Just pray that the spammers don't start doing "followup spam"
|> via Google groups to try to get past the blocking that allows followups to
|> bypass filters (e.g. I'll figure out how to block it all if spammers do that
|> before Google cleans house, and will be quite willing to tell everyone else
|> how to do it).
|>
|> You could, instead, switch to one of the paid Usenet providers, and just
|> treat it as Verizon raised your billing price again.
|
| I used google groups as a temporary measure to post because my posts
| were not getting through via the 2 newsgroups services I was trying.
| We'll see if it now all works...

It seems giganews is working for you.

--
|WARNING: Due to extreme spam, googlegroups.com is blocked. Due to ignorance |
| by the abuse department, bellsouth.net is blocked. If you post to |
| Usenet from these places, find another Usenet provider ASAP. |
| Phil Howard KA9WGN (email for humans: first name in lower case at ipal.net) |
```

572. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-19 20:49:01 UTC
From: gsm@mendelson.com
Message-ID: <slrng84khj.bv5.gsm@cable.mendelson.com>
Source record: 23946

David G. Nagel wrote:
> Your are right in one sense, however the antenna's in question are, I
> believe, USA products so it is fairly save to assume that the writer is
> a USA resident.

I thought so, but sometimes the people asking are not. They only have
access to U.S. manufacturer's products and catalogs via web sites,
with no local dealers.

> From your comments I assume (that word again) that you are a resident
> of Israel. Given the situation there I can see why the government would
> try to make it hard for someone to install and operate a radio station.

Well, actually it's not. The antenna restriction is because the
"cellphone towers will kill you" people have forced laws through to prevent
anyone setting up a radio transmitter in their neighborhood.

The morse code requirment is because the people who run the Israel equivalent
of the ARRL pushed the Minstry of Communications to keep it. It keeps out
new hams from foreign countries. I have no idea how they handle visiting
operators now.

> I look forward to the day when everyone in the Mideast can live together
> in peace and harmony.

Thanks,

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

573. Re: Has anyone here actually built a Lazy H for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-19 23:14:45 UTC
From: kitty4uhi <kitty4uhi.2c843d7@radiobanter.com>
Message-ID: <kitty4uhi.2c843d7@radiobanter.com>
Source record: 23949

Farming for 'eq2 plat' (http://www.ugamegold.com/c_EQ2-Sale/) isn't easy, but you can buy 'eq2 plat' (http://www.ugamegold.com/c_EQ2-Sale/), guides, accounts & items on sale. We have revolutionized the exchange of money to 'eq2 plat' (http://www.ugamegold.com/c_EQ2-Sale/). Purchase 'eq2 plat' (http://www.ugamegold.com/c_EQ2-Sale/)& power up your character ot the next level. Our world class customer service will make sure you are more than satisfied with every purchase. Feel free to contact our 24 hour live support with any questions you may have. Shop now and play as a VIP!

--
kitty4uhi

574. Free news server for the asking ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-19 23:36:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g5ttqvvkh1@news.albasani.net>
Source record: 23947

http://www.albasani.net/

Just send 'em an email or complete their form. Get your user name and password, POOF!, you are good to go ... use the news client of your choice--I recommend Thunderbird from Mozilla. It is free and loaded with features and add-ons.

Regards,
JS

575. WANTED DIS-72 Hy Gain Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-20 00:32:14 UTC
From: sawman02@yahoo.com
Message-ID: <32b8ac1a-ae6f-4537-9229-8e1d8f097b97@m44g2000hsc.googlegroups.com>
Source record: 23948

WANT TO BUY: Hy Gain 2 Element 40 Meter Discoverer HF Beam Antenna E-mail w2npt@arrl.net

576. MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-20 10:23:02 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <4mEgk.2022$%F3.1650@newsfe27.ams2>
Source record: 23950

I have finally got my Cushcraft MA5B up in the air. But I am very disappointed with it.

Is it normal for this antenna to have a lot of background noise behind strong signals 9+?

The reason I ask is that I also own a cobwebb antenna and the side by side comparison between them, there is no background hiss on the same strong signals on the cobwebb S4 - 9+ but there is on the same signal on the MA5B and it is enough to make listening on the MA5B very unpleasant even at S9+.

Is this normal?

73 Andy

577. Window ladder line losses ton environment vs coax losses

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-20 12:57:10 UTC
From: ve2pid <ve2pid@videotron.ca>
Message-ID: <b439364b-a195-4c4b-bbee-ae87ac2c8193@b1g2000hsg.googlegroups.com>
Source record: 24001

Hi to all

When running a length of TX line through an environment where it is susceptible to contact leaves or maybe branches, what is the best choice.. window ladder line or coaxial wire?

In other words, will both of these type of lines have about the same loss to natural environment objects or is one more sensible than the other?

I am not talking about SWR losses or matched line losses.

Thanks de VE2PID

578. Re: Window ladder line losses ton environment vs coax losses

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-20 13:50:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <KoHgk.30672$co7.22150@nlpi066.nbdc.sbc.com>
Source record: 24002

ve2pid wrote:
> In other words, will both of these type of lines have about the same
> loss to natural environment objects or is one more sensible than the
> other?

If no common-mode currents exist on the coax, it will
be impervious to environmental losses. Under ideal
conditions, 100% of the energy fields are confined
inside the coax. That is not true for ladder-line whose
fields around the wires should be kept some distance
from environmental objects.
--
73, Cecil http://www.w5dxp.com

579. Re: Window ladder line losses ton environment vs coax losses

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-20 13:52:12 UTC
From: ltdoc@yahoo.com
Message-ID: <bdcd45a7-dee5-4dba-b591-162d8c53557b@s50g2000hsb.googlegroups.com>
Source record: 24003

A very 'general' answer is that coax will have less 'variable' loss
from being near stuff than 'ladder-line' because of the way it's
constructed (and why it was originally made anyway). If that's the
only consideration you have to think about, then it's a fairly simple
question to answer. When you start thinking about the other
properties/characteristics of coax/ladder line, the answer isn't quite
so simple any more. (I like using ladder line, but I seriously doubt
if I try running it in a vehicle, see what I mean?)
- 'Doc

I've found that a 10ga loaded with small shot will clear out most
leaves that might interfere with ladder line. Large twigs, limbs,
etc, require larger shot. Gotta get that angle right though, that's
the hard part. Not to mention the neighbors...
(No, I'm really not that dumb. Just depends on how frustrated I am.)

580. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-20 14:10:55 UTC
From: ltdoc@yahoo.com
Message-ID: <41f6341c-98d2-4cd1-b0ea-ceaa0992b1a5@d1g2000hsg.googlegroups.com>
Source record: 24004

Andy,
This is pure speculation so take it that way. I've noticed that any antenna with 'sharp points' associated with it has typically been noisier than antennas without those sharp points (capacity hats in this case). That's certainly not 'definitive' in any way, so... speculation. Also, considering where those cap-hats are mounted, using a very smooth huge ball instead of those 'sharp-points' is sort of dumb. So they did the best they could, right?
- 'Doc

(Completely beside the point. Once used a very large metal ball as a capacitive hat on a mobile antenna. Worked fine sitting still. Not very broad banded, but certainly shorter than the usual whip. Absolute catastrophe when trying to drive! Didn't last long at all.)

581. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-20 15:22:32 UTC
From: Jay in the Mojave <Jay123a@qnet.com>
Message-ID: <5tOdnYfwO8SnxR7VnZ2dnUVZ_jSdnZ2d@posted.quantumnetworking>
Source record: 24005

Hello Stan:

Try to find a Hy-Gain 3 element yagi beam that uses the Hairpin Matching system. And use the Hy-Gain Balun. That way you won't have the significant loss of the Gamma Match.

Jay in the Mojave

Stan Cooper wrote:
> Hello I hope I'm not intruding by asking for advice on a CB antenna but I
> figured this would be the group to ask about such things for the straight
> scoop. At any rate I'm considering a store bought beam with both vertical
> and horizontal polarization and my choices are limited to these two below.
> (not many being manufactured anymore)
>
> The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the JO
> GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there is a
> lot of smoke and mirrors involved with advertised gains and so my question
> is...is it possible for the JO GUNN to perform as well as the Maco antenna?
>
> The GUNN is of much stronger construction and a smaller windload so I'd
> rather put it up, but the short boom makes me wonder if the gain and
> rejection numbers are suspect.
>
> Any help would be greatly appreciated, antenna choices, price tags and urls
> below.
>
> 73
> Stan
>
> MACO-Shooting Star $279.95
> http://www.mpaudio1.com/Macobeamantennas2.html
>
> JO GUNN 3 + 3 STAR $382.00
> http://tinyurl.com/6hzteu
>
> Oh btw, I'll be tower mounting it about 40' from the ground and turning it
> with a hamIV rotator.
>
> Thanks again.
>
>

582. Re: Window ladder line losses ton environment vs coax losses

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-20 15:53:24 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <c8Jgk.4497$bN2.1756@bignews9.bellsouth.net>
Source record: 24006

<ltdoc@yahoo.com> wrote in message
news:bdcd45a7-dee5-4dba-b591-162d8c53557b@s50g2000hsb.googlegroups.com...
>A very 'general' answer is that coax will have less 'variable' loss
> from being near stuff than 'ladder-line' because of the way it's
> constructed (and why it was originally made anyway). If that's the
> only consideration you have to think about, then it's a fairly simple
> question to answer. When you start thinking about the other
> properties/characteristics of coax/ladder line, the answer isn't quite
> so simple any more. (I like using ladder line, but I seriously doubt
> if I try running it in a vehicle, see what I mean?)
> - 'Doc
>
>
> I've found that a 10ga loaded with small shot will clear out most
> leaves that might interfere with ladder line. Large twigs, limbs,
> etc, require larger shot. Gotta get that angle right though, that's
> the hard part. Not to mention the neighbors...
> (No, I'm really not that dumb. Just depends on how frustrated I am.)
>

Twinlead/ladder line comes in handy for situations such as mine.

I'm running a Van Gordon All Bander dipole. Fed with 450 ohm twinlead, which it is, I can tune virtually anywhere from 160 meters to 6 meters as long as I'm tolerant of a bit of RF in the shack. To me, the versatility of being able to transmit anywhere I'm legal from six meters down to 160 meters is well worth the pattern changes and other characteristics of the dipole/twinlead combination.

Just be aware that you can enter into situations with this setup that can start a fire by arcing to an interior/exterior object if a kilowatt or more is used. Maybe even less power, come to think of it. I set a curtain on fire once this way. That was an interesting sounding transmission after I saw the curtain ablaze.

For me, this setup works the best for my circumstances.

Feed this same antenna with coax and you'll run out of tuner swing long before you'll match the same antenna to the same bands as matched with twinlead. Chances are you'll also punch a hole through the coax' dielectric insulator, which leads to breakdown (internal arcing) at even lower voltages later on. Coax has its uses and I use plenty of it for the higher bands. Just not on the low bands since I must make do with my single Van Gordon All Bander antenna.

I apologize for not sounding as scholarly as many of you, but I'm getting old and don't have time for that nonsense. 8>)

Ed, NM2K

583. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-20 19:56:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <vLMgk.12981$LG4.1237@nlpi065.nbdc.sbc.com>
Source record: 24007

ltdoc@yahoo.com wrote:
> This is pure speculation so take it that way. I've noticed that
> any antenna with 'sharp points' associated with it has typically been
> noisier than antennas without those sharp points ...

Not speculative at all. Corona loves sharp points.
--
73, Cecil http://www.w5dxp.com

584. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 01:43:16 UTC
From: Hasan Schiers <schiers@netins.net>
Message-ID: <g60pjlkfa1@news.netins.net>
Source record: 24008
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Alan F wrote:
> Hasan Schiers wrote:
>> phil-news-nospam@ipal.net wrote:
>>> In alt.tv.tech.hdtv G-squared <stratus46@yahoo.com> wrote:
>>>
>>> | If you don't mind the size of the antenna. The Winegard 7694 is only
>>> | 35" wide vs 110" for the 7082. There is no such ting as an antenna
>>> | "made exactly for DTV". Antennas cover a range of frequencies thet may
>>> | include analog or digital TV. Flatness of response and directionality
>>> | are the important issues and are equally important for analog or
>>> | digital.
>>>
>>> However, antennas could be made for "post-transition channel
>>> allocations".
>>> E.g. the UHF antennas tuned for 14-51, and dual-banders for 7-51.
>>> And DTV
>>> benefits more from more directional antennas, so even those will end up
>>> with sales people labelling them as "DTV".
>>>
>>
>> Which will do no good here at all. Post transition our local ABC
>> affiliate is going to VHF channel 5.
>>
>> There is no substitute for the long tried and tested combo vhf/uhf
>> antenna in our area.
>
> I see only 1 ABC affiliate going to VHF 5 post-transition and that is
> WOI-DT ABC 5 in Des Moines moving from UHF 59 to VHF 5. Is that your
> local ABC affiliate? The FCC database shows WOI-DT with a low STA
> (Special Temporary Authority) power of 500 Watts on UHF 59 which is a
> very weak power if correct.
>
> The good news to some extent is that WOI-DT was granted their request
> to run at an increased power of 8.2 kW (up from 3.91 kW) for the
> post-transition VHF 5 allotment which is a good power level for digital
> low VHF. In Des Moines, IA, there should be a number of open channels to
> broadcast on UHF if WIO wanted to.
>
> Alan F
>
>

Yes, that is the station and they have applied for a further increase in power to around 13 kW, but I don't know if it has been granted. So, we do have a low band vhf station that will "appear" in Feb 2009. I am at a total loss to explain why they made this decision...it is likely to reduce their footprint significantly. Channel 8-1 is doing the same thing, moving from RF Ch 31 to RF Ch 8, at the same time.

Ch 5 analog has been famous for years here for having a rotten signal. When they went digital to 5-1 on UHF, they skyrocketed and have been solid....now they are going back and probably in the toilet again. Thank God ABC lost Monday Night Football.

585. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 01:47:56 UTC
From: Hasan Schiers <schiers@netins.net>
Message-ID: <g60psckfa2@news.netins.net>
Source record: 24009

```
Sal M. Onella wrote:
> "Hasan Schiers" <schiers@netins.net> wrote in message
> news:g5og4r$m5m$4@news.netins.net...
>> Jim-NN7K wrote:
>>> ml wrote:
>>>> In article <m-9177C3.20154613072008@news.optonline.net>, ml <m@di.net>
>>>> wrote:
>>>>
>>>>> hi
>>>>>
>
>>> As I understand it-- there will be (more, or less), no TV signals in
>>> the LOW vhf (Channel 2-6), there will be some in the High (Ch 7-13 vhf),
>>> and the bulk of the NEW High Def stations will be in the uhf rangeCh 14,
>
>
>> That is NOT correct. our local ABC affiliate is currently on channel 56
>> UHF and will be reverting to channel 5 VHF in Feb 2009. (at least that's
>> what they are telling us)
>
> Document http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-138A2.xls
> is an 1800-record spreadsheet listing the current and proposed channels. Do
> what I did and sort it on the NEW DTV channel numbers. You will discover,
> as I did, that only a few dozen stations were headed for low-VHF after
> transition.
>
> Here are the actual numbers (after the sort):
>
> Records 1 to 37 are on TV Channels 2 - 6
> Records 38 to 487 are on TV channels 7 - 13
> Records 488 to 1811 are on TV channels 14 - 51
>
> http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-138A3.xls appears
> to be a minor supplement to the big guy, having only 16 records:
>
> Records 1 is on TV Channels 2 - 6
> Records 2 to 5 are on TV channels 7 - 13
> Records 6 to 13 are on TV channels 14 - 51
>
> Trying to nail this down any better is like trying to nail Jello to the
> wall.
>
>
>
```

Unfortunately the one station on two through six, is our local ABC affiliate Ch 5, WOI-DT....their signal is going to go into the toilet, running low power on the vhf low band. (also, most modest to largish TV antennas have very low gain and a lousy pattern (horrible for multi-path)on Ch 5 and below. Go figure!

586. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 02:01:59 UTC
From: nm5k@wt.net
Message-ID: <9385e9e6-75b5-423e-b25f-64f817f353f2@z16g2000prn.googlegroups.com>
Source record: 24010

On Jul 20, 5:23 am, "Andy" <d...@blueyounder.co.uk> wrote:
> I have finally got my Cushcraft MA5B up in the air. But I am very
> disappointed with it.
>
> Is it normal for this antenna to have a lot of background noise behind
> strong signals 9+?
>
> The reason I ask is that I also own a cobwebb antenna and the side by side
> comparison between them, there is no background hiss on the same strong
> signals on the cobwebb S4 - 9+ but there is on the same signal on the MA5B
> and it is enough to make listening on the MA5B very unpleasant even at S9+.
>
> Is this normal?
>
> 73 Andy

Dunno. Doesn't really make sense.. As far as receive, there should be
little difference between the two as far as s/n ratio.
I'm not sure if I'm buying that it's corona buildup. That would
depend on your climate, wx, etc..
Being as you seem to notice it most on the strongest signals,
I'd have to ask one thing first.
Is your noise blanker on?

587. Re: Window ladder line losses ton environment vs coax losses

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 02:54:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <hf-dnZ-RMsDoZx7VnZ2dnUVZ_rLinZ2d@posted.easystreetonline>
Source record: 24011

ve2pid wrote:
> Hi to all
>
> When running a length of TX line through an environment where it is
> susceptible to contact leaves or maybe branches, what is the best
> choice.. window ladder line or coaxial wire?
>
> In other words, will both of these type of lines have about the same
> loss to natural environment objects or is one more sensible than the
> other?
>
> I am not talking about SWR losses or matched line losses.
>
> Thanks de VE2PID

The short answer is coax.

When properly balanced (that is, common mode current suppressed), coaxial cable is totally insensitive to its electrical environment. Ladder, window, and other types of twinlead line, however, are not. They're most susceptible if the line has a high SWR and the contact with water, other lossy material, or conductors occurs near a voltage peak, but even when matched, considerable loss and/or impedance disturbances can occur. There's very little good data on the effect of water, but I made measurements of TV twinlead many years ago and found that it could be lossier than even small coax when wet. Wes Stewart measured some ladder line and found that it also could be quite lossy when wet. He posted the results on this forum some years ago. While the loss specifications of dry ladder line in an ideal environment are attractive, it can easily become much lossier than coax when wet and in close proximity to lossy materials such as leaves or damp wood.

Roy Lewallen, W7EL

588. Re: Window ladder line losses ton environment vs coax losses

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 04:53:18 UTC
From: nm5k@wt.net
Message-ID: <5684ace8-0948-42ae-82ec-9afaf3371306@d19g2000prm.googlegroups.com>
Source record: 24012

On Jul 20, 9:54 pm, Roy Lewallen <w...@eznec.com> wrote:
While the loss
> specifications of dry ladder line in an ideal environment are
> attractive, it can easily become much lossier than coax when wet and in
> close proximity to lossy materials such as leaves or damp wood.
>
> Roy Lewallen, W7EL

I've got a UHF TV antenna that I use for 420 mhz ATV
reception. It's one of those corner reflector type deals
with a lot of elements.
In comparing 300 ohm twin lead vs 75 ohm coax, the
twin lead had the lowest loss when dry.
Or at least with the Belden "duo-shield" cable I was using.
But if it got wet, the twin lead loss was quite major.
I'd go from a clear picture to half snow..
I'd have to wait for it to slowly dry off to get my picture back.
I don't really use much ladder line as I prefer coax
for my everyday antennas.
But if I did, I would use a line with mostly air between
the conductors. Which means I'd probably make my own.
But the ladder line with the gaps in the plastic would
be better than twin lead.

589. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 10:36:35 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <UHZgk.48966$7B3.11869@newsfe30.ams2>
Source record: 24013

No. The noise blanker is off.

Andy

<nm5k@wt.net> wrote in message
news:9385e9e6-75b5-423e-b25f-64f817f353f2@z16g2000prn.googlegroups.com...
On Jul 20, 5:23 am, "Andy" <d...@blueyounder.co.uk> wrote:
> I have finally got my Cushcraft MA5B up in the air. But I am very
> disappointed with it.
>
> Is it normal for this antenna to have a lot of background noise behind
> strong signals 9+?
>
> The reason I ask is that I also own a cobwebb antenna and the side by side
> comparison between them, there is no background hiss on the same strong
> signals on the cobwebb S4 - 9+ but there is on the same signal on the MA5B
> and it is enough to make listening on the MA5B very unpleasant even at
> S9+.
>
> Is this normal?
>
> 73 Andy

Dunno. Doesn't really make sense.. As far as receive, there should be
little difference between the two as far as s/n ratio.
I'm not sure if I'm buying that it's corona buildup. That would
depend on your climate, wx, etc..
Being as you seem to notice it most on the strongest signals,
I'd have to ask one thing first.
Is your noise blanker on?

590. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 13:16:09 UTC
From: Alan F <afiggatt1@xxverizonx.net>
Message-ID: <t4Wdnb1IXOfUERnVnZ2dnUVZ_jCdnZ2d@giganews.com>
Source record: 24014
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

Hasan Schiers wrote:
> Alan F wrote:
>> Hasan Schiers wrote:
>>> Which will do no good here at all. Post transition our local ABC
>>> affiliate is going to VHF channel 5.
>>>
>>> There is no substitute for the long tried and tested combo vhf/uhf
>>> antenna in our area.
>>
>> I see only 1 ABC affiliate going to VHF 5 post-transition and that is
>> WOI-DT ABC 5 in Des Moines moving from UHF 59 to VHF 5. Is that your
>> local ABC affiliate? The FCC database shows WOI-DT with a low STA
>> (Special Temporary Authority) power of 500 Watts on UHF 59 which is a
>> very weak power if correct.
>>
>> The good news to some extent is that WOI-DT was granted their request
>> to run at an increased power of 8.2 kW (up from 3.91 kW) for the
>> post-transition VHF 5 allotment which is a good power level for digital
>> low VHF. In Des Moines, IA, there should be a number of open channels to
>> broadcast on UHF if WIO wanted to.
>>
>> Alan F
>>
>
> Yes, that is the station and they have applied for a further increase in
> power to around 13 kW, but I don't know if it has been granted. So, we
> do have a low band vhf station that will "appear" in Feb 2009. I am at a
> total loss to explain why they made this decision...it is likely to
> reduce their footprint significantly. Channel 8-1 is doing the same
> thing, moving from RF Ch 31 to RF Ch 8, at the same time.
>
> Ch 5 analog has been famous for years here for having a rotten signal.
> When they went digital to 5-1 on UHF, they skyrocketed and have been
> solid....now they are going back and probably in the toilet again. Thank
> God ABC lost Monday Night Football.

WOI-DT applied for a 11.5 kW ERP on VHF 5 in June, but the FCC has not
granted or rejected the application yet. The only real reason I can see
for going to low-VHF for where they are is to save money by re-using the
VHF 5 antenna & transmitter and for the lower operating costs of low
VHF. Their UHF 59 digital signal is out of core, so they have to give
that up. If they have interference problems for analog on VHF 5, that
won't go away for digital VHF 5.

You have 3 stations in Des Moines do a digital flash cut to their upper VHF analog channel. Upper VHF at 174 to 216 MHz (compared to low VHF at 54 to 88 MHz) is considered a good band for digital broadcasting.

KCCI-DT CBS 8 will move from 31 to VHF 8 at 23 kW ERP.
KDIN-DT PBS 11 will move from UHF 50 to 11 at 19.8 kW, but plans to operate on UHF 50 for a while after the analog shutdown for VHF 11 antenna work (http://fjallfoss.fcc.gov/prod/cdbs/forms/prod/getattachment_exh.cgi?exhibit_id=618292).
WHO-DT NBC 13 will move from UHF 19 to VHF 13 at 29 kW ERP.

All 3 of them will have respectable power levels for digital upper VHF. I also see that KDMI-DT My Network 56(?) will take over KCCI's RF 31 antenna and transmitter. Good luck with WOI-DT reception after they switch.

Alan F

591. Video clip from 60 minutes on K3TUP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 18:22:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g62k5ubsh2@news.albasani.net>
Source record: 24015

Amateur makes good! Best PR for amateur radio in decades ...

http://www.cbsnews.com/sections/i_video/main500251.shtml?id=4011961n?source=search_video

Regards,
JS

592. coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 18:37:12 UTC
From: francesco.messineo@gmail.com
Message-ID: <49df774a-336d-4cab-8d92-be0f94ae343b@a70g2000hsh.googlegroups.com>
Source record: 24016

Hi all,

I post this here since probably here lurks a good amount of smith chart and transmission lines wizards.

I was trying to make a simple two stub filter with coaxial lines, basicly it would serve as 88-108 MHz notch with a working frequency of 70 MHz.
The filter is like this:

```
< length A>
rig--|---------------|--ant
| |
b | | b
| |
```

The two "b" stubs are 64 cm cellflex 1/2 inch, with the antenna analyzer they measure R=0 X=21 at 70 MHz, almost as they should per a quick smith chart check, they should be 1/4 lambda at 98 MHz, open at the end.
Now with two of these stubs the lenght A that gives a 50 ohm match should be 0.378 lambda as per the smith chart calculation.

In real life with that value for A the only 50 ohm match (substituting a dummy load for ant and the analyzer on the "rig" port) is around 36 MHz.

What doesn't seem to agree between theory and practice is that measuring any "b" stub in parallel with the dummy load shows an impedance of about R=11 and X=11, while on the smith chart this should be R=11 and X=21 (obviously all at 70 MHz). Why it does measure right alone and wrong with a coaxial "T" adapter and the dummy load in parallel?
Of course in real life I'm assuming a Vf=0.88 for the cellflex cable and checking measures with the analyzer.

What could be wrong?
Any hint is appreciated

73 de Frank IZ8DWF

593. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 19:50:02 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <71q984le446f80c9dd14ig7s69s348le3t@4ax.com>
Source record: 24017

On Sun, 20 Jul 2008 11:23:02 +0100, "Andy" <dx90@blueyounder.co.uk>
wrote:

>I have finally got my Cushcraft MA5B up in the air. But I am very
>disappointed with it.
>
>Is it normal for this antenna to have a lot of background noise behind
>strong signals 9+?
>
>The reason I ask is that I also own a cobwebb antenna and the side by side
>comparison between them, there is no background hiss on the same strong
>signals on the cobwebb S4 - 9+ but there is on the same signal on the MA5B
>and it is enough to make listening on the MA5B very unpleasant even at S9+.
>
>Is this normal?
>
>73 Andy
>
I will place my bet on a bad connector. How hard is it to swap
feedlines?
John Ferrell W8CCW

594. Re: Video clip from 60 minutes on K3TUP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 20:11:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g62qhhnpv1@news.albasani.net>
Source record: 24018

John Smith wrote:
> Amateur makes good! Best PR for amateur radio in decades ...
>
> http://www.cbsnews.com/sections/i_video/main500251.shtml?id=4011961n?source=search_video
>
>
> Regards,
> JS

http://www.winknews.com/features/health/25664174.html

http://www.kanziuscancerresearch.org/

Human trials have moved up in date--this thing is accelerating and the
excitement about it is only growing ... most here will have cancer touch
their lives, either directly or though relative or close friend.

News this good only happens rarely these days. If you have cancer now,
hang on; help is on the way ...

It is simply too good to be true to have had an amateur solely
responsible for it!

Regards,
JS

595. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 20:35:47 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g62rv3$uo8$1@f04n12.cac.psu.edu>
Source record: 24019

Jim Kelley wrote:

> The primary redeeming quality and prerequisite of any good mantra is
> that it must fit nicely on a bumper sticker - inescapable logic in
> four words or less. Print enough of them and it becomes a truism.

The problem with soundbites and bumper stickers and tiny mantras is
that they appeal to the least common denominator.

Ideas and theories in nutshells belong in nutshells.

- 73 de Mike N3LI -

596. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 20:40:10 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g62s7a$1iq2$1@f04n12.cac.psu.edu>
Source record: 24020

Harold E. Johnson wrote:
>> - Show quoted text -
>
> The primary redeeming quality and prerequisite of any good mantra is
> that it must fit nicely on a bumper sticker - inescapable logic in
> four words or less. Print enough of them and it becomes a truism.
>
> Never trust anyone over 30, man.
>
> ac6xg
>
> This has drifted an awfully long way off the original topic, and the purpose
> of the newsagroup. Any chance of you folks proclaiming your non-antenna
> beliefs somewhere else?

Probably not a whole lot, Harold. For that matter, there isn't a whole
lot in the newsgroup that is on topic,these days. Or if it is, it is
just a rehashed argument that has been going on for months now. Bleh.

Heck, even the original thread was off topic. So do you want us to go
back to the topic of the thread, of just quit posing on the topic.

Outlook should be able to allow you to filter us though. Might be a
better option for you.

- 73 de Mike N3LI -

597. Re: Video clip from 60 minutes on K3TUP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-21 21:28:28 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <skbfl5-a0a.ln1@p400bob.personal.cox.net>
Source record: 24021

Hi John

If your interested about a cellular repair product in development (that doesnt use stem cells, but gives similar results) please contact me off list. It isnt really amateur radio related, but is just as exciting!

Cheers Bob

John Smith wrote:
> Human trials have moved up in date--this thing is accelerating and the
> excitement about it is only growing ... most here will have cancer touch
> their lives, either directly or though relative or close friend.

598. Re: ny area hidef antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 00:40:35 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g63aa3shv1@news.jpl.nasa.gov>
Source record: 24022

Hasan Schiers wrote:

>>
>>
> Unfortunately the one station on two through six, is our local ABC
> affiliate Ch 5, WOI-DT....their signal is going to go into the toilet,
> running low power on the vhf low band. (also, most modest to largish TV
> antennas have very low gain and a lousy pattern (horrible for
> multi-path)on Ch 5 and below. Go figure!

Multipath isn't necessarily a big deal for DTV. The usual receiver has an adaptive equalizer that deals with it quite nicely, particularly if the multipath environment is stable. Throw in doppler and fast fading, and they're not so hot, but that's not a real issue for consumer residential use.

599. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 01:12:29 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <1uahk.202$GI.80@trnddc05>
Source record: 24023

<francesco.messineo@gmail.com> wrote in message
news:49df774a-336d-4cab-8d92-be0f94ae343b@a70g2000hsh.googlegroups.com...
> Hi all,
>
> I post this here since probably here lurks a good amount of smith
> chart and transmission lines wizards.
>
> I was trying to make a simple two stub filter with coaxial lines,
> basicly it would serve as 88-108 MHz notch with a working frequency of
> 70 MHz.
> The filter is like this:
>
> < length A>
> rig--|---------------|--ant
> | |
> b | | b
> | |
>
>
>
> The two "b" stubs are 64 cm cellflex 1/2 inch, with the antenna
> analyzer they measure R=0 X=21 at 70 MHz, almost as they should per a
> quick smith chart check, they should be 1/4 lambda at 98 MHz, open at
> the end.
> Now with two of these stubs the lenght A that gives a 50 ohm match
> should be 0.378 lambda as per the smith chart calculation.
>
> In real life with that value for A the only 50 ohm match (substituting
> a dummy load for ant and the analyzer on the "rig" port) is around 36
> MHz.
>
> What doesn't seem to agree between theory and practice is that
> measuring any "b" stub in parallel with the dummy load shows an
> impedance of about R=11 and X=11, while on the smith chart this should
> be R=11 and X=21 (obviously all at 70 MHz). Why it does measure right
> alone and wrong with a coaxial "T" adapter and the dummy load in
> parallel?
> Of course in real life I'm assuming a Vf=0.88 for the cellflex cable
> and checking measures with the analyzer.
>
> What could be wrong?
> Any hint is appreciated
>
> 73 de Frank IZ8DWF

Hi Frank

At 70 MHz, when the open stub presents a reactance of -J21 across the 50 ohm "dummy load", the resultant R-Jx is a serious mismatch to the 50 ohm "A" line. Your Smith Chart calculations for the length of "A" may be incorrect. Try making "A"
about 1/10th lambda.

Jerry KD6JDJ

600. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 03:39:14 UTC
From: Frank <ve6cb@spamfree.telus.net>
Message-ID: <CDchk.904$nu6.498@edtnps83>
Source record: 24024

> What doesn't seem to agree between theory and practice is that
> measuring any "b" stub in parallel with the dummy load shows an
> impedance of about R=11 and X=11, while on the smith chart this should
> be R=11 and X=21 (obviously all at 70 MHz). Why it does measure right
> alone and wrong with a coaxial "T" adapter and the dummy load in
> parallel?
> Of course in real life I'm assuming a Vf=0.88 for the cellflex cable
> and checking measures with the analyzer.
>
> What could be wrong?
> Any hint is appreciated
>
> 73 de Frank IZ8DWF

In simulation I am getting 86.8 degrees for the shunt stubs, and
62.4 degrees for the series coax between stubs. Seems about
the best compromise with results as follows:

65 to 75 MHz S11 < -10 db
65 to 75 MHz S21 > -1 db
88 to 90 MHz S21 < -16 db
90 to 116 MHz S21 < -20 db.

73, Also Frank (VE6CB)

601. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 03:46:02 UTC
From: Frank <ve6cb@spamfree.telus.net>
Message-ID: <_Jchk.905$nu6.310@edtnps83>
Source record: 24025

"Frank" <ve6cb@spamfree.telus.net> wrote in message
news:CDchk.904$nu6.498@edtnps83...
>> What doesn't seem to agree between theory and practice is that
>> measuring any "b" stub in parallel with the dummy load shows an
>> impedance of about R=11 and X=11, while on the smith chart this should
>> be R=11 and X=21 (obviously all at 70 MHz). Why it does measure right
>> alone and wrong with a coaxial "T" adapter and the dummy load in
>> parallel?
>> Of course in real life I'm assuming a Vf=0.88 for the cellflex cable
>> and checking measures with the analyzer.
>>
>> What could be wrong?
>> Any hint is appreciated

PS the single shunt stub of 86.8 degrees calculates to 11.7 - j 21 ohms,
when in parallel with a 50 ohm load (At 70 MHz).

Frank

602. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 05:36:04 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <8lehk.213$GI.77@trnddc05>
Source record: 24026

"Frank" <ve6cb@spamfree.telus.net> wrote in message
news:_Jchk.905$nu6.310@edtnps83...
>
> "Frank" <ve6cb@spamfree.telus.net> wrote in message
> news:CDchk.904$nu6.498@edtnps83...
>>> What doesn't seem to agree between theory and practice is that
>>> measuring any "b" stub in parallel with the dummy load shows an
>>> impedance of about R=11 and X=11, while on the smith chart this should
>>> be R=11 and X=21 (obviously all at 70 MHz). Why it does measure right
>>> alone and wrong with a coaxial "T" adapter and the dummy load in
>>> parallel?
>>> Of course in real life I'm assuming a Vf=0.88 for the cellflex cable
>>> and checking measures with the analyzer.
>>>
>>> What could be wrong?
>>> Any hint is appreciated
>
> PS the single shunt stub of 86.8 degrees calculates to 11.7 - j 21 ohms,
> when in parallel with a 50 ohm load (At 70 MHz).
>
> Frank

Hi Frank

My calculations indicate that the length of "A" (50 ohm coax) should be close to 48.6 degrees between two identical open stubs with a 50 ohm termiantion on the 50 ohm line when I use your 11.7 -J21 impedance. So, my recommendation stands. Try a little shorter "A" if impedance match at 70 MHz is the objective.

Jerry

603. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 07:44:32 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Kdghk.3137$8R1.2407@newsfe03.iad>
Source record: 24027

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:g5ljnv$uq4$1@f04n12.cac.psu.edu...

< snip >

> And yet, I read a book from the late 1800's that stated that smoking
> tobacco caused Lung cancer and emphysema, and that chewing it caused
> oral and stomach cancer.
>
> We knew. We just didn't listen.

Sure. Even so, I didn't realize the truth was known _that_ far back. But
in the fifties, when I started smoking (briefly, thank goodness) we referred
to cigarettes as cancer sticks and coffin nails. Yet, lots of people
referred to the first Surgeon General's Report (1964?) as "groundbreaking."
Ah ... no!

604. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 11:30:51 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <s4OfNDCrTchIFw0x@g3ohx.demon.co.uk>
Source record: 24028

In message <8lehk.213$GI.77@trnddc05>, Jerry <jerrymartes@verizon.net>
writes
>
>"Frank" <ve6cb@spamfree.telus.net> wrote in message
>news:_Jchk.905$nu6.310@edtnps83...
>>
>> "Frank" <ve6cb@spamfree.telus.net> wrote in message
>> news:CDchk.904$nu6.498@edtnps83...
>>>> What doesn't seem to agree between theory and practice is that
>>>> measuring any "b" stub in parallel with the dummy load shows an
>>>> impedance of about R=11 and X=11, while on the smith chart this should
>>>> be R=11 and X=21 (obviously all at 70 MHz). Why it does measure right
>>>> alone and wrong with a coaxial "T" adapter and the dummy load in
>>>> parallel?
>>>> Of course in real life I'm assuming a Vf=0.88 for the cellflex cable
>>>> and checking measures with the analyzer.
>>>>
>>>> What could be wrong?
>>>> Any hint is appreciated
>>
>> PS the single shunt stub of 86.8 degrees calculates to 11.7 - j 21 ohms,
>> when in parallel with a 50 ohm load (At 70 MHz).
>>
>> Frank
>
> Hi Frank
>
> My calculations indicate that the length of "A" (50 ohm coax) should be
>close to 48.6 degrees between two identical open stubs with a 50 ohm
>termiantion on the 50 ohm line when I use your 11.7 -J21 impedance. So, my
>recommendation stands. Try a little shorter "A" if impedance match at 70
>MHz is the objective.
>

I never was an expert on Smith Chart calculations, so I would adopt a
somewhat less precise (and definitely more suck-it-and-see) approach.

(1) Make 'A' a quarterwave at the centre of the FM band. This can be
done by temporarily connecting it as a simple shunt stub, and snipping
for a notch centred at around 98MHz.

(2) Make up stub 'B1' by temporarily connecting it as a simple shunt
stub, and snipping for a notch centred at around 93MHz.

Now, at 70MHz, the frequency response will be rolling off into the 93MHz notch, and the RLR will be getting rapidly worse. It will be a capacitive mismatch, so it can be corrected by adding shunt inductance in parallel with the stub. This can be an actual inductor, or a parallel stub with its end short circuited.

[The advantage of a stub is that you don't need additional screening. It can be tuned by pushing a shorting pin through the coax. The short can later be made permanent.]

So,

(3) Tune the shunt inductor/stub for best match and lowest through loss at 70MHz.

(4) Make up stub 'B2' by repeating (2) and (3), but for (say) 103MHz.

(5) Connect up the complete filter, with the 'matched' stubs separated by the quarterwave 'A'.

You should now have a filter with minimal loss and a good match at 70MHz, but with two deep notches at 93 and 103MHz. If you are happy with the results, finalize any temporary short circuits etc. If you are not happy, you can still make a few tweaks to the tuning. If all else fails, it costs virtually nothing to replace a bit of coax which is too short.
--
Ian

605. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 13:12:58 UTC
From: Frank <ve6cb@spamfree.telus.net>
Message-ID: <u1lhk.1034$%b7.358@edtnps82>
Source record: 24029

> I never was an expert on Smith Chart calculations, so I would adopt a
> somewhat less precise (and definitely more suck-it-and-see) approach.
>
> (1) Make 'A' a quarterwave at the centre of the FM band. This can be done
> by temporarily connecting it as a simple shunt stub, and snipping for a
> notch centred at around 98MHz.
>
> (2) Make up stub 'B1' by temporarily connecting it as a simple shunt stub,
> and snipping for a notch centred at around 93MHz.
>
> Now, at 70MHz, the frequency response will be rolling off into the 93MHz
> notch, and the RLR will be getting rapidly worse. It will be a capacitive
> mismatch, so it can be corrected by adding shunt inductance in parallel
> with the stub. This can be an actual inductor, or a parallel stub with its
> end short circuited.
>
> [The advantage of a stub is that you don't need additional screening. It
> can be tuned by pushing a shorting pin through the coax. The short can
> later be made permanent.]
>
> So,
>
> (3) Tune the shunt inductor/stub for best match and lowest through loss at
> 70MHz.
>
> (4) Make up stub 'B2' by repeating (2) and (3), but for (say) 103MHz.
>
> (5) Connect up the complete filter, with the 'matched' stubs separated by
> the quarterwave 'A'.
>
> You should now have a filter with minimal loss and a good match at 70MHz,
> but with two deep notches at 93 and 103MHz. If you are happy with the
> results, finalize any temporary short circuits etc. If you are not happy,
> you can still make a few tweaks to the tuning. If all else fails, it costs
> virtually nothing to replace a bit of coax which is too short.
> --
> Ian

Interesting Ian, but of course you cheated by adding two extra components.
Just the same, it works exactly as you describe.

In my model I used inductors with a Q of 50. Step 3, above, works out
to 47.6 nH, and for stub "b" the shunt inductor is 62.5 nH. S21 from
88 to 108 MHz is << -20 db. S11 from 65 to 75 MHz is << - 20 dB.
The insertion loss is a nominal 0.4 db at 70 MHz. I used open ended stubs,

not that it makes any difference to the end result. The series stub is not very
critical, but response symmetry (S21 65 - 75, and S21 rejection 88 - 108) appears better. Note b1 = 94.5 degrees, and b2 85.7 degrees for my open ended stub model. Also the network is perfectly symmetrical; i.e. S11(f) = S22(f), and S21(f) = S12(f).

If anybody is interested I can provide JPEG copies of the response, and schematic, including a Smith chart plot.

73,

Frank

606. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 13:56:58 UTC
From: francesco.messineo@gmail.com
Message-ID: <63909716-2bb7-4cec-89e1-0f8c3562f380@a1g2000hsb.googlegroups.com>
Source record: 24030

On 22 Lug, 15:12, "Frank" <ve...@spamfree.telus.net> wrote:
> > I never was an expert on Smith Chart calculations, so I would adopt a
> > somewhat less precise (and definitely more suck-it-and-see) approach.
>
> > (1) Make 'A' a quarterwave at the centre of the FM band. This can be done
> > by temporarily connecting it as a simple shunt stub, and snipping for a
> > notch centred at around 98MHz.
>
> > (2) Make up stub 'B1' by temporarily connecting it as a simple shunt stub,
> > and snipping for a notch centred at around 93MHz.
>
> > Now, at 70MHz, the frequency response will be rolling off into the 93MHz
> > notch, and the RLR will be getting rapidly worse. It will be a capacitive
> > mismatch, so it can be corrected by adding shunt inductance in parallel
> > with the stub. This can be an actual inductor, or a parallel stub with its
> > end short circuited.
>
> > [The advantage of a stub is that you don't need additional screening. It
> > can be tuned by pushing a shorting pin through the coax. The short can
> > later be made permanent.]
>
> > So,
>
> > (3) Tune the shunt inductor/stub for best match and lowest through loss at
> > 70MHz.
>
> > (4) Make up stub 'B2' by repeating (2) and (3), but for (say) 103MHz.
>
> > (5) Connect up the complete filter, with the 'matched' stubs separated by
> > the quarterwave 'A'.
>
> > You should now have a filter with minimal loss and a good match at 70MHz,
> > but with two deep notches at 93 and 103MHz. If you are happy with the
> > results, finalize any temporary short circuits etc. If you are not happy,
> > you can still make a few tweaks to the tuning. If all else fails, it costs
> > virtually nothing to replace a bit of coax which is too short.
> > --
> > Ian
>
> Interesting Ian, but of course you cheated by adding two extra components.
> Just the same, it works exactly as you describe.
>
> In my model I used inductors with a Q of 50. Step 3, above, works out
> to 47.6 nH, and for stub "b" the shunt inductor is 62.5 nH. S21 from

> 88 to 108 MHz is << -20 db. S11 from 65 to 75 MHz is << - 20 dB.
> The insertion loss is a nominal 0.4 db at 70 MHz. I used open ended stubs,
> not that it makes any difference to the end result. The series stub is not
> very
> critical, but response symmetry (S21 65 - 75, and S21 rejection 88 - 108)
> appears better. Note b1 = 94.5 degrees, and b2 85.7 degrees for my
> open ended stub model. Also the network is perfectly symmetrical; i.e.
> S11(f) = S22(f),
> and S21(f) = S12(f).
>
> If anybody is interested I can provide JPEG copies of the response,
> and schematic, including a Smith chart plot.
>

I would be interested of course, I tried to come up with an "all coax"
filter and with minimal parts because the thing must live under the
antenna and pass all the power on TX which can be a few hundred watts
one day, that's why I was using 1/2 inch cellflex (have also 7/8 inch
but no connectors for it).
I still don't get why a perfectly reasonable filter on the smith chart
turns out to be trash when realized, I'd really like to learn
something.

73
Francesco IZ8DWF

607. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 14:19:25 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <N%lhk.333$DS3.285@trnddc01>
Source record: 24031

"Ian Jackson" <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote in message
news:s4OfNDCrTchIFw0x@g3ohx.demon.co.uk...
> In message <8lehk.213$GI.77@trnddc05>, Jerry <jerrymartes@verizon.net>
> writes
>>
>>"Frank" <ve6cb@spamfree.telus.net> wrote in message
>>news:_Jchk.905$nu6.310@edtnps83...
>>>
>>> "Frank" <ve6cb@spamfree.telus.net> wrote in message
>>> news:CDchk.904$nu6.498@edtnps83...
>>>>> What doesn't seem to agree between theory and practice is that
>>>>> measuring any "b" stub in parallel with the dummy load shows an
>>>>> impedance of about R=11 and X=11, while on the smith chart this should
>>>>> be R=11 and X=21 (obviously all at 70 MHz). Why it does measure right
>>>>> alone and wrong with a coaxial "T" adapter and the dummy load in
>>>>> parallel?
>>>>> Of course in real life I'm assuming a Vf=0.88 for the cellflex cable
>>>>> and checking measures with the analyzer.
>>>>>
>>>>> What could be wrong?
>>>>> Any hint is appreciated
>>>
>>> PS the single shunt stub of 86.8 degrees calculates to 11.7 - j 21 ohms,
>>> when in parallel with a 50 ohm load (At 70 MHz).
>>>
>>> Frank
>>
>> Hi Frank
>>
>> My calculations indicate that the length of "A" (50 ohm coax) should be
>>close to 48.6 degrees between two identical open stubs with a 50 ohm
>>termiantion on the 50 ohm line when I use your 11.7 -J21 impedance. So,
>>my
>>recommendation stands. Try a little shorter "A" if impedance match at 70
>>MHz is the objective.
>>
>
> I never was an expert on Smith Chart calculations, so I would adopt a
> somewhat less precise (and definitely more suck-it-and-see) approach.
>
> (1) Make 'A' a quarterwave at the centre of the FM band. This can be done
> by temporarily connecting it as a simple shunt stub, and snipping for a
> notch centred at around 98MHz.
>

> (2) Make up stub 'B1' by temporarily connecting it as a simple shunt stub,
> and snipping for a notch centred at around 93MHz.
>
> Now, at 70MHz, the frequency response will be rolling off into the 93MHz
> notch, and the RLR will be getting rapidly worse. It will be a capacitive
> mismatch, so it can be corrected by adding shunt inductance in parallel
> with the stub. This can be an actual inductor, or a parallel stub with its
> end short circuited.
>
> [The advantage of a stub is that you don't need additional screening. It
> can be tuned by pushing a shorting pin through the coax. The short can
> later be made permanent.]
>
> So,
>
> (3) Tune the shunt inductor/stub for best match and lowest through loss at
> 70MHz.
>
> (4) Make up stub 'B2' by repeating (2) and (3), but for (say) 103MHz.
>
> (5) Connect up the complete filter, with the 'matched' stubs separated by
> the quarterwave 'A'.
>
> You should now have a filter with minimal loss and a good match at 70MHz,
> but with two deep notches at 93 and 103MHz. If you are happy with the
> results, finalize any temporary short circuits etc. If you are not happy,
> you can still make a few tweaks to the tuning. If all else fails, it costs
> virtually nothing to replace a bit of coax which is too short.
> --
> Ian

Hi Ian

I have had just enough experience with filter design to know that I dont
want to get involved with someone elses choice of which to use.
I am pretty sure that you are as "expert" with Smith Chart use as you care
to be. I make no claim to being a Smith Chart expert. But, I have alot
of experience using them.

I suspect that you know that impedances move along the lines (circles) of
constant R when pure reactance is added in series. And impedances move
along lines of constant conductance when reactance is added in shunt.
The chart with both lines of constant Resistance and constant Conductance
can be made by overlaying a second Smith Chart on the other with the line of
zero reactance aligned and the hi R flipped to overlay the low R of the
other chart.

Any impedance, with a REAL resistance will plot somewhere on the Smith
Chart. The outer boundrie of the Chart is marked in wavelengths. A line
drawn from the chart center thru the plotted impedance intersects the outer
boundry to identify a starting point. When that "load impedance " is seen

thru a length of lossles transmission line, it will plot somewhere on a circle whoes center is the chart center and which passes thru the plotted impedance.

In Frank's case, the where the load impedance is 11 -J21, the chart shows that 0.135 lambda of line length is required to move the load impedance to where it intersects the circle of constant Admittance, where the second stub moves the impedance to a good match.

Jerry KD6JDJ

608. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 14:40:42 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <Kjmhk.334$DS3.256@trnddc01>
Source record: 24032

<francesco.messineo@gmail.com> wrote in message
news:63909716-2bb7-4cec-89e1-0f8c3562f380@a1g2000hsb.googlegroups.com...
> On 22 Lug, 15:12, "Frank" <ve...@spamfree.telus.net> wrote:
>> > I never was an expert on Smith Chart calculations, so I would adopt a
>> > somewhat less precise (and definitely more suck-it-and-see) approach.
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>> > (1) Make 'A' a quarterwave at the centre of the FM band. This can be
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>> > (2) Make up stub 'B1' by temporarily connecting it as a simple shunt
>> > stub,
>> > and snipping for a notch centred at around 93MHz.
>>
>> > Now, at 70MHz, the frequency response will be rolling off into the
>> > 93MHz
>> > notch, and the RLR will be getting rapidly worse. It will be a
>> > capacitive
>> > mismatch, so it can be corrected by adding shunt inductance in parallel
>> > with the stub. This can be an actual inductor, or a parallel stub with
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>> > end short circuited.
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>> > [The advantage of a stub is that you don't need additional screening.
>> > It
>> > can be tuned by pushing a shorting pin through the coax. The short can
>> > later be made permanent.]
>>
>> > So,
>>
>> > (3) Tune the shunt inductor/stub for best match and lowest through loss
>> > at
>> > 70MHz.
>>
>> > (4) Make up stub 'B2' by repeating (2) and (3), but for (say) 103MHz.
>>
>> > (5) Connect up the complete filter, with the 'matched' stubs separated
>> > by
>> > the quarterwave 'A'.
>>
>> > You should now have a filter with minimal loss and a good match at
>> > 70MHz,
>> > but with two deep notches at 93 and 103MHz. If you are happy with the

>> > results, finalize any temporary short circuits etc. If you are not
>> > happy,
>> > you can still make a few tweaks to the tuning. If all else fails, it
>> > costs
>> > virtually nothing to replace a bit of coax which is too short.
>> > --
>> > Ian
>>
>> Interesting Ian, but of course you cheated by adding two extra
>> components.
>> Just the same, it works exactly as you describe.
>>
>> In my model I used inductors with a Q of 50. Step 3, above, works out
>> to 47.6 nH, and for stub "b" the shunt inductor is 62.5 nH. S21 from
>> 88 to 108 MHz is << -20 db. S11 from 65 to 75 MHz is << - 20 dB.
>> The insertion loss is a nominal 0.4 db at 70 MHz. I used open ended
>> stubs,
>> not that it makes any difference to the end result. The series stub is
>> not
>> very
>> critical, but response symmetry (S21 65 - 75, and S21 rejection 88 - 108)
>> appears better. Note b1 = 94.5 degrees, and b2 85.7 degrees for my
>> open ended stub model. Also the network is perfectly symmetrical; i.e.
>> S11(f) = S22(f),
>> and S21(f) = S12(f).
>>
>> If anybody is interested I can provide JPEG copies of the response,
>> and schematic, including a Smith chart plot.
>>
>
> I would be interested of course, I tried to come up with an "all coax"
> filter and with minimal parts because the thing must live under the
> antenna and pass all the power on TX which can be a few hundred watts
> one day, that's why I was using 1/2 inch cellflex (have also 7/8 inch
> but no connectors for it).
> I still don't get why a perfectly reasonable filter on the smith chart
> turns out to be trash when realized, I'd really like to learn
> something.
>
> 73
> Francesco IZ8DWF

Hi Frank

I am confident that you chose open ended stubs for good reason. Open
circuit stubs behave very unpredictably due to their sensitivity to their
environment. They radiate. Can you consider using longer stubs, and
making them shorted?

Jerry KD6JDJ

609. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 16:04:23 UTC
From: francesco.messineo@gmail.com
Message-ID: <33870889-bac0-48a9-9612-5405eaa1494b@56g2000hsm.googlegroups.com>
Source record: 24033

```
On 22 Lug, 16:40, "Jerry" <jerrymar...@verizon.net> wrote:
> <francesco.messi...@gmail.com> wrote in message
>
> news:63909716-2bb7-4cec-89e1-0f8c3562f380@a1g2000hsb.googlegroups.com...
>
>
>
> > On 22 Lug, 15:12, "Frank" <ve...@spamfree.telus.net> wrote:
> >> > I never was an expert on Smith Chart calculations, so I would adopt a
> >> > somewhat less precise (and definitely more suck-it-and-see) approach.
>
> >> > (1) Make 'A' a quarterwave at the centre of the FM band. This can be
> >> > done
> >> > by temporarily connecting it as a simple shunt stub, and snipping for a
> >> > notch centred at around 98MHz.
>
> >> > (2) Make up stub 'B1' by temporarily connecting it as a simple shunt
> >> > stub,
> >> > and snipping for a notch centred at around 93MHz.
>
> >> > Now, at 70MHz, the frequency response will be rolling off into the
> >> > 93MHz
> >> > notch, and the RLR will be getting rapidly worse. It will be a
> >> > capacitive
> >> > mismatch, so it can be corrected by adding shunt inductance in parallel
> >> > with the stub. This can be an actual inductor, or a parallel stub with
> >> > its
> >> > end short circuited.
>
> >> > [The advantage of a stub is that you don't need additional screening.
> >> > It
> >> > can be tuned by pushing a shorting pin through the coax. The short can
> >> > later be made permanent.]
>
> >> > So,
>
> >> > (3) Tune the shunt inductor/stub for best match and lowest through loss
> >> > at
> >> > 70MHz.
>
> >> > (4) Make up stub 'B2' by repeating (2) and (3), but for (say) 103MHz.
>
> >> > (5) Connect up the complete filter, with the 'matched' stubs separated
> >> > by
```

> >> > the quarterwave 'A'.
>
> >> > You should now have a filter with minimal loss and a good match at
> >> > 70MHz,
> >> > but with two deep notches at 93 and 103MHz. If you are happy with the
> >> > results, finalize any temporary short circuits etc. If you are not
> >> > happy,
> >> > you can still make a few tweaks to the tuning. If all else fails, it
> >> > costs
> >> > virtually nothing to replace a bit of coax which is too short.
> >> > --
> >> > Ian
>
> >> Interesting Ian, but of course you cheated by adding two extra
> >> components.
> >> Just the same, it works exactly as you describe.
>
> >> In my model I used inductors with a Q of 50. Step 3, above, works out
> >> to 47.6 nH, and for stub "b" the shunt inductor is 62.5 nH. S21 from
> >> 88 to 108 MHz is << -20 db. S11 from 65 to 75 MHz is << - 20 dB.
> >> The insertion loss is a nominal 0.4 db at 70 MHz. I used open ended
> >> stubs,
> >> not that it makes any difference to the end result. The series stub is
> >> not
> >> very
> >> critical, but response symmetry (S21 65 - 75, and S21 rejection 88 - 108)
> >> appears better. Note b1 = 94.5 degrees, and b2 85.7 degrees for my
> >> open ended stub model. Also the network is perfectly symmetrical; i.e.
> >> S11(f) = S22(f),
> >> and S21(f) = S12(f).
>
> >> If anybody is interested I can provide JPEG copies of the response,
> >> and schematic, including a Smith chart plot.
>
> > I would be interested of course, I tried to come up with an "all coax"
> > filter and with minimal parts because the thing must live under the
> > antenna and pass all the power on TX which can be a few hundred watts
> > one day, that's why I was using 1/2 inch cellflex (have also 7/8 inch
> > but no connectors for it).
> > I still don't get why a perfectly reasonable filter on the smith chart
> > turns out to be trash when realized, I'd really like to learn
> > something.
>
> > 73
> > Francesco IZ8DWF
>
> Hi Frank
>
> I am confident that you chose open ended stubs for good reason. Open
> circuit stubs behave very unpredictably due to their sensitivity to their

> environment. They radiate. Can you consider using longer stubs, and
> making them shorted?

Yes, I considered that, however shorted stubs mean 1/2 wl at 98 MHz or so, and they become more than 1m long, making the filter not that easy to fit under the antenna, but who knows, maybe I'll be forced to abandon open stubs if nothing works.

Thanks for all inputs

73
Francesco IZ8DWF

610. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 17:18:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s55c84tuo5sm38nhko5h5k0b601ec649ll@4ax.com>
Source record: 24034

On Tue, 22 Jul 2008 09:04:23 -0700 (PDT), francesco.messineo@gmail.com
wrote:

>>Open circuit stubs behave very unpredictably due to their sensitivity to their
>> environment. They radiate.
>
>Yes, I considered that, however shorted stubs mean 1/2 wl at 98 MHz or
>so, and they become more than 1m long, making the filter not that easy
>to fit under the antenna,

Hi Francesco,

The point made about unpredictable open ends is found in their being
prone to common mode currents. You fix this through choking. Choking
can be achieved through coiling the stub. One, in a classical sense
(usually arrived at through examples oriented in microwave), does not
think of stubs coiled up; but coiling is a suitable, physical and
electrical solution. However, the open end is still prone to
environmental issues (moisture, bugs....). A shorted stub is
self-shielding, keeps out the environment, and coiling it up removes
the "too long" objection.

73's
Richard Clark, KB7QHC

611. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 17:41:07 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <e255c42f-713e-4fdb-b9a7-2d2dd2acfd2f@2g2000hsn.googlegroups.com>
Source record: 24035

On Jul 21, 11:37 am, francesco.messi...@gmail.com wrote:
> Hi all,
>
> I post this here since probably here lurks a good amount of smith
> chart and transmission lines wizards.
>
> I was trying to make a simple two stub filter with coaxial lines,
> basicly it would serve as 88-108 MHz notch with a working frequency of
> 70 MHz.
> The filter is like this:
>
> < length A>
> rig--|---------------|--ant
> | |
> b | | b
> | |
>
> The two "b" stubs are 64 cm cellflex 1/2 inch, with the antenna
> analyzer they measure R=0 X=21 at 70 MHz, almost as they should per a
> quick smith chart check, they should be 1/4 lambda at 98 MHz, open at
> the end.
> Now with two of these stubs the lenght A that gives a 50 ohm match
> should be 0.378 lambda as per the smith chart calculation.
>
> In real life with that value for A the only 50 ohm match (substituting
> a dummy load for ant and the analyzer on the "rig" port) is around 36
> MHz.
>
> What doesn't seem to agree between theory and practice is that
> measuring any "b" stub in parallel with the dummy load shows an
> impedance of about R=11 and X=11, while on the smith chart this should
> be R=11 and X=21 (obviously all at 70 MHz). Why it does measure right
> alone and wrong with a coaxial "T" adapter and the dummy load in
> parallel?
> Of course in real life I'm assuming a Vf=0.88 for the cellflex cable
> and checking measures with the analyzer.
>
> What could be wrong?
> Any hint is appreciated
>
> 73 de Frank IZ8DWF

First, I apologize that I don't have time to look in detail at the
following ten postings in this thread; I did look over them quickly.

But two quick comments: First, I believe the "A" length should be about 44 electrical degrees at 70MHz to get a 50 ohm match at 70MHz. Second, if I were doing this and wanted to seriously attenuate 88-108MHz, I'd make a small L-C filter. At these frequencies, such a filter should be much more compact than a coax stub filter for some given performance. Of course, if there were specific frequencies I wanted to get rid of, I'd put zeros on them. Coaxial cavities are nice if you need very high Q around 100MHz, but stubs of even half-inch coax are not particularly high Q--expect Qu about 400 at 70MHz. A 47.7nH coil will give you your desired X=21 ohms at 70MHz, and you can get that inductance with about three turns of #10 AWG (2.5mm), spaced two wire diameters center to center, at about 9mm ID, and the Q will be just about the same as the coax (in obviously a much smaller space). But even better, a filter with max 1dB attenuation from 68-72MHz and min 55dB attenuation above 88Mhz (close to 100dB at 98MHz) can be built with four small coils and some C0G capacitors in a shielded volume perhaps 4cm x 4cm x 15cm. (Schematic is available...)

Cheers,
Tom

612. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 17:48:44 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g656hr$195s$1@f04n12.cac.psu.edu>
Source record: 24036

Sal M. Onella wrote:
> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:g5ljnv$uq4$1@f04n12.cac.psu.edu...
>
> < snip >
>
>
>> And yet, I read a book from the late 1800's that stated that smoking
>> tobacco caused Lung cancer and emphysema, and that chewing it caused
>> oral and stomach cancer.
>>
>> We knew. We just didn't listen.
>
> Sure. Even so, I didn't realize the truth was known _that_ far back. But
> in the fifties, when I started smoking (briefly, thank goodness) we referred
> to cigarettes as cancer sticks and coffin nails. Yet, lots of people
> referred to the first Surgeon General's Report (1964?) as "groundbreaking."
> Ah ... no!

To be completely fair, they relied on cause and effect, which is to say
that they noticed a lot of people who smoked and chewed ended up with
these diseases.

But deep pockets kept tangling things up until testing came along that
not only showed that they caused the diseases, but the pathways, and
how, and in a 100 percent unambiguous way.

If we were to apply the same rationale and proof to say, falling out of
airplanes at 30 thousand feet, the argument would be " Well, can you
prove that the person died form the fall, or did they perhaps die of
fright on the way down? Can you testify with a certainty that is what
happened? As if the exact mechanism being indeterminate means the
activity should be promoted, when we all know that whatever the exact
cause of death, if you do fall out at that height, it ain't gonna be too
happy of an ending.

- 73 de Mike N3LI -

613. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 17:56:44 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <f9a5bbfa-1f10-4104-90f5-1291e9e25d15@59g2000hsb.googlegroups.com>
Source record: 24037

On Jul 22, 10:41 am, K7ITM <k7...@msn.com> wrote:
...
> wanted to get rid of, I'd put zeros on them. Coaxial cavities are
> nice if you need very high Q around 100MHz, but stubs of even half-
> inch coax are not particularly high Q--expect Qu about 400 at 70MHz.
...
I gave the Qu about 400 number based on 1/2" ID of the outer
conductor, but I guess 1/2" CellFlex is actually about 0.33" ID of the
outer. Based on that, or based on the listed attenuation specs for
the line in this frequency range, I'd have to revise my Qu estimate
down to no more than 300.

> Cheers,
> Tom

614. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 19:49:37 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <qnguqIBRnjhIFwEc@g3ohx.demon.co.uk>
Source record: 24038

In message
<33870889-bac0-48a9-9612-5405eaa1494b@56g2000hsm.googlegroups.com>,
francesco.messineo@gmail.com writes
>>
>> Hi Frank
>>
>> I am confident that you chose open ended stubs for good reason. Open
>> circuit stubs behave very unpredictably due to their sensitivity to their
>> environment. They radiate. Can you consider using longer stubs, and
>> making them shorted?
>
>Yes, I considered that, however shorted stubs mean 1/2 wl at 98 MHz or
>so, and they become more than 1m long, making the filter not that easy
>to fit under the antenna, but who knows, maybe I'll be forced to
>abandon open stubs if nothing works.
>
> Thanks for all inputs
>
>73
>Francesco IZ8DWF

Francesco, before you go, may I ask what is the purpose of the filter?
Is it to prevent the local FM stations interfering with reception? Or is
it to stop any unexpected transmitter spurious signals from being
transmitted in the FM band?
--
Ian

615. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 19:59:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g65e7p$91n$1@news.albasani.net>
Source record: 24039

Michael Coslo wrote:

> ...
> To be completely fair, they relied on cause and effect, which is to say
> that they noticed a lot of people who smoked and chewed ended up with
> these diseases.
>
> But deep pockets kept tangling things up until testing came along that
> not only showed that they caused the diseases, but the pathways, and
> how, and in a 100 percent unambiguous way.
>
> If we were to apply the same rationale and proof to say, falling out of
> airplanes at 30 thousand feet, the argument would be " Well, can you
> prove that the person died form the fall, or did they perhaps die of
> fright on the way down? Can you testify with a certainty that is what
> happened? As if the exact mechanism being indeterminate means the
> activity should be promoted, when we all know that whatever the exact
> cause of death, if you do fall out at that height, it ain't gonna be too
> happy of an ending.
>
> - 73 de Mike N3LI -

You are quite correct, as are the others comments in the same direction(s.)

Now, having been "burnt", in the past, by gov't, medicine, big money,
power and "the media", can you look around and see these exact same
tactics in use today? And, what percentage of the population is so
stupid they make no use of past history which recorded these lies and so
sadly demonstrated those lies ability to do much damage and death?

I will give you this--I feel it is a HIGH percentage!

"But you tell me
Over and over and over again, my friend
Ah, you doni¿½t believe
Wei¿½re on the eve
of destruction." -- Barry McGuire, Eve of Destruction.

Regards,
JS

616. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 21:05:20 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <ekic845lreiopbfkfud09fkp9qd0tuu3l3@4ax.com>
Source record: 24040

On Sat, 12 Jul 2008 15:46:27 -0400, John Ferrell
<johnferrell@sprintmail.com> wrote:

>Why do we always mount our HF Yagi's in the horizontal plane?
>Antenna maintenance would be much easier for those of us with tilt
>over towers if the antenna were in the horizontal plane when down for
>maintenance!
>
>John Ferrell W8CCW
I sometimes wonder if anybody ever does any actual work or if we just
talk about it here.

I offer up a progress report here with my work so far on the "Tilt
Over Gadget"

http://dixienc.us/TiltOverGadget/TiltOverGadget.mht

I will concede up front that it is but a crude prototype with some
unfinished aspects, but it works!

Thanks to all
John Ferrell W8CCW

617. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-22 22:51:51 UTC
From: francesco.messineo@gmail.com
Message-ID: <2b727f55-5c56-4f08-97ea-18ceebcef9d6@59g2000hsb.googlegroups.com>
Source record: 24041

On 22 Lug, 21:49, Ian Jackson <ianREMOVETHISjack...@g3ohx.demon.co.uk>
wrote:
> In message
> <33870889-bac0-48a9-9612-5405eaa14...@56g2000hsm.googlegroups.com>,
> francesco.messi...@gmail.com writes
>
>
>

>
> Francesco, before you go, may I ask what is the purpose of the filter?
> Is it to prevent the local FM stations interfering with reception? Or is
> it to stop any unexpected transmitter spurious signals from being
> transmitted in the FM band?

It is to prevent desensing from strong local FM stations. Noise can go
up to S7 when beaming the local transmitters. An LC filter could be
easily made but that would need to be switched out when in TX (or made
to pass a few hundred watts), I just thougth a couple of stubs could
be easier to made. I think I was wrong.

73
Francesco IZ8DWF

618. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 00:50:05 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <1fvhk.1153$%b7.314@edtnps82>
Source record: 24042

>> Francesco, before you go, may I ask what is the purpose of the filter?
>> Is it to prevent the local FM stations interfering with reception? Or is
>> it to stop any unexpected transmitter spurious signals from being
>> transmitted in the FM band?
>
> It is to prevent desensing from strong local FM stations. Noise can go
> up to S7 when beaming the local transmitters. An LC filter could be
> easily made but that would need to be switched out when in TX (or made
> to pass a few hundred watts), I just thougth a couple of stubs could
> be easier to made. I think I was wrong.
>
> 73
> Francesco IZ8DWF

Francesco, You can build a notch filter with two stubs, and get a good match, and rejection. The velocity factor of Cellflex 1/2" is 0.82, as per: http://www2.rfsworld.com/RFS_Edition4/pdfs/CELLFLEX_Foam_Cable_30-46.pdf The lengths of the shunt, open stubs, are reasonably critical within +/- 1cm.

I have used a Genesys optimization program with the physical parameters of the Cellflex coax. The open shunt stub lengths are 63 cm. The series stub is 41.3 cm. The insertion loss at 70 MHz is < 0.4 db. The return loss
at 70 MHz is < 20 db. Rejection over the whole FM band is > 20 db.

Using the Smith Chart to design a filter is tricky, since you are dealing with
multiple frequencies, and three variables.

Let me know if you would like to see my results, will be glad to e-mail them as JPEGs.

73,

Frank (VE6CB)

619. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 02:06:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g663n8$p24$2@news.albasani.net>
Source record: 24043

John Ferrell wrote:

> ...
> I offer up a progress report here with my work so far on the "Tilt
> Over Gadget"
>
> http://dixienc.us/TiltOverGadget/TiltOverGadget.mht
>
> I will concede up front that it is but a crude prototype with some
> unfinished aspects, but it works!
>
> Thanks to all
> John Ferrell W8CCW

Whatever that link is to, it will not open in internet explorer or
firefox on my computer ...

Regards,
JS

620. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 02:07:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g663p7$p24$3@news.albasani.net>
Source record: 24044

John Smith wrote:
> John Ferrell wrote:
>
>> ...
>> I offer up a progress report here with my work so far on the "Tilt
>> Over Gadget"
>> http://dixienc.us/TiltOverGadget/TiltOverGadget.mht
>>
>> I will concede up front that it is but a crude prototype with some
>> unfinished aspects, but it works!
>>
>> Thanks to all
>> John Ferrell W8CCW
>
> Whatever that link is to, it will not open in internet explorer or
> firefox on my computer ...
>
> Regards,
> JS

I stand corrected--I was finally able to get it to load into internet explorer--after three tries!

Regards,
JS

621. Re: True Outdoor HDTV yagi's

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 05:33:19 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Eqzhk.40232$NU3.9924@newsfe01.iad>
Source record: 24045
Cross-posted to: alt.tv.tech.hdtv,rec.radio.amateur.antenna

"Alan F" <afiggatt1@xxverizonx.net> wrote in message
news:t4Wdnb1IXOfUERnVnZ2dnUVZ_jCdnZ2d@giganews.com...

< snip >

Good luck with WOI-DT reception after they
> switch.
>
> Alan F

Right. The "noisy" devices -- motors, CFLs, dimmers, electronic ignition for furnaces -- are the problem for most users. Lightning is a consideration, but not all day and all night, like the appliances. A nice tall tower and a tight coax cable system will help keep out the domestic RFI, but the people who live in town are likely not going to have towers.

622. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 06:03:41 UTC
From: francesco.messineo@gmail.com
Message-ID: <f2fe9cf4-42ae-49fa-acfe-c98d58895f9a@p25g2000hsf.googlegroups.com>
Source record: 24046

On 23 Lug, 02:50, "Frank" <frank...@nospam.telus.net> wrote:

> Francesco, You can build a notch filter with two stubs, and get a good
> match, and rejection. The velocity factor of Cellflex 1/2" is 0.82, as
per:http://www2.rfsworld.com/RFS_Edition4/pdfs/CELLFLEX_Foam_Cable_30-46.pdf
> The lengths of the shunt, open stubs, are reasonably critical within +/-
> 1cm.
>
> I have used a Genesys optimization program with the physical parameters of
> the Cellflex coax. The open shunt stub lengths are 63 cm. The series
> stub is 41.3 cm. The insertion loss at 70 MHz is < 0.4 db. The return
> loss
> at 70 MHz is < 20 db. Rejection over the whole FM band is > 20 db.
>

ok, with cut and try arrived at similar results, shunts are 64 cm and
series is 47 cm, the antenna analyzer is happy, I'm not so happy
because I don't understand where's my original error.

> Using the Smith Chart to design a filter is tricky, since you are dealing
> with
> multiple frequencies, and three variables.

well, yes, but actually the design started with the shorts at 98 MHz
which are easy, then the only unknown variable becomes the series stub
that gives a 50 ohm match at 70 MHz, I still don't get why the
matching section appear to be 3/8 wl on a smith chart and actually is
1/8 like if I inverted the sense of load/generator (yes, I worked with
admittances for shunt stubs).

>
> Let me know if you would like to see my results, will be glad to e-mail them
> as JPEGs.

sure, my email address is valid, thank you very much.

73
Francesco IZ8DWF

623. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 07:58:05 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <lqX9ZhCNSuhIFw0z@g3ohx.demon.co.uk>
Source record: 24047

In message
<2b727f55-5c56-4f08-97ea-18ceebcef9d6@59g2000hsb.googlegroups.com>,
francesco.messineo@gmail.com writes
>On 22 Lug, 21:49, Ian Jackson <ianREMOVETHISjack...@g3ohx.demon.co.uk>
>wrote:
>> In message
>> <33870889-bac0-48a9-9612-5405eaa14...@56g2000hsm.googlegroups.com>,
>> francesco.messi...@gmail.com writes
>>
>>
>>
>
>>
>> Francesco, before you go, may I ask what is the purpose of the filter?
>> Is it to prevent the local FM stations interfering with reception? Or is
>> it to stop any unexpected transmitter spurious signals from being
>> transmitted in the FM band?
>
>It is to prevent desensing from strong local FM stations. Noise can go
>up to S7 when beaming the local transmitters. An LC filter could be
>easily made but that would need to be switched out when in TX (or made
>to pass a few hundred watts), I just thougth a couple of stubs could
>be easier to made. I think I was wrong.
>

No, you ARE correct. For non-experts like me, simple stub filters are
often very easy to make. This is especially true if you need to pass
only one frequency, and reject another. The one thing that you must do
at the 'pass' frequency is to tune out the unwanted reactance of the
rejection stub by adding a shunt inductor (where the 'stop' frequency is
on the HF side of the pass) or a shunt capacitor (where the 'stop'
frequency is on the LF side of the pass).

It helps if you should have (or have assess to) some test equipment
which shows you a swept frequency response and impedance match, but you
can also tune them using individual frequency measurements.

One great advantage of coax stub filters is that, unlike LC filters, you
do not need to screen each section. You can coil up the coax neatly, and
secure it with cable ties. However, it is sometimes a good idea to
ensure that the coax outers are completely 'RF dead' by bonding one to
another at several places (ie more than simply where one piece of coax
is connected to another). Of course, you can put the whole filter in a
metal box, and make sure that coax braid is connected to the box in
several places (and especially at the open end of the shunt stubs).

Of course, you can also make 'hybrid' filters which make use of the best features of LC circuits and stub circuits. I made such a filter for use with an FM CB radio which I had modified for use at the HF end of 10m. I found that I was still radiating (and receiving) some signal on the original CB band. The only practical way to eliminate this problem was to use an external filter which rejected 27 to 28MHz, but passed 29.3 to 29.7MHz. I did this by using two LC 'suck-blow' (stop-pass) filters in individual metal boxes, separated by a quarterwave of coax (coiled up, of course).

On the internet, there is quite a lot of information about coaxial stub filters (try a Google search). Anyway, may I wish you success, whatever filter you choose to use!
--
Ian

624. shox r2 r3 r4 r5 r6 tn tl1 tl3, sandals, nhl jerseys, mlb jerseys, mauri shoes, dsquared , hogan shoes, dunks , red monkey,

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 08:14:02 UTC
From: jumpmanlocker3@yahoo.com.cn
Message-ID: <b3ec51dd-c884-4784-af4b-09f70ef162f8@h1g2000prh.googlegroups.com>
Source record: 24048

welcome to visit www.jumpmanlocker.com.cn
air max 87 89 90 95 ltd timberland jeans ugg boots lacoste sandals
hoodies,
t-shirts, mauri shoes, dsquared , hogan shoes, dunks , red monkey,
polo t-shirts,
evisu jeans, bbc jeans , dior, lv, dg, versace, coach puma shoes, nfl
jerseys
shox r2 r3 r4 r5 r6 tn tl1 tl3, sandals, nhl jerseys, mlb jerseys,
nba
jerseys
probowl jerseys,prada shoes,kobe james, hockey jerseys, nfl jerseys,
football
jerseys, baseball jerseys, jordan shoes, jordan fusion air force ones
25 years
basketball jerseys Men's women's shocks OZ NZ TL shoes Discount
Coach
Sandals,
Dior Sandals, Prada Sandals, Chanel Sandals, Versace Sandals, Crocs
Sandals,
Women's Sandals Men's Slippers From China jordan shoes, jordan fusion
air force ones www.jumpmanlocker.com.cn
Affliction T-shirts lacoste T-shirts Polo T-shirts Brand ShirtsGGG T-
www.jumpmanlocker.com.cn
shirts Designer T-Shirts Helen Coat burberry coat Jacket Juicy
www.jumpmanlocker.com.cn
Couture bbc hoodies bape hoodies Designer Hoodies NFL NHL NBA
www.jumpmanlocker.com.cn
MLB Jersey Lacoste Trainers, Prada Sneakers,

625. Anybody where the find W4RNL's antenna-modelling series ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 08:30:19 UTC
From: 4nec2 <4nec2@gmx.net>
Message-ID: <81a36dc7-297e-4aad-9c27-1e3d3908e58d@j22g2000hsf.googlegroups.com>
Source record: 24049

Hello...,

I was looking for LB Cebik's amod series (antenna modelling articles)
ranging from amod1.html to somewhere around amod137.html

Despite the fact that antennaX says that all of LB's articles are
freely accessable, I only find amod91 to amod114 available on their
website.

Anybody who does have the whole range of LB's antenna modelling
articles available ?

Thanks in advance,
Arie.

626. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 08:34:08 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <U1Chk.35930$m62.2080@newsfe27.ams2>
Source record: 24050

I've swapped the feed line over and its still the same.

When I put the antenna together I made sure all connections where good and the analyser gave a good match on the frequencies I want to use.

I did use some conductive grease for the first time on the antenna. Wonder if the grease is the problem or maybe this antenna just picks up a lot of background hiss.

Andy

"John Ferrell" <johnferrell@sprintmail.com> wrote in message news:71q984le446f80c9dd14ig7s69s348le3t@4ax.com...
> On Sun, 20 Jul 2008 11:23:02 +0100, "Andy" <dx90@blueyounder.co.uk>
> wrote:
>
>>I have finally got my Cushcraft MA5B up in the air. But I am very
>>disappointed with it.
>>
>>Is it normal for this antenna to have a lot of background noise behind
>>strong signals 9+?
>>
>>The reason I ask is that I also own a cobwebb antenna and the side by side
>>comparison between them, there is no background hiss on the same strong
>>signals on the cobwebb S4 - 9+ but there is on the same signal on the MA5B
>>and it is enough to make listening on the MA5B very unpleasant even at
>>S9+.
>>
>>Is this normal?
>>
>>73 Andy
>>
> I will place my bet on a bad connector. How hard is it to swap
> feedlines?
> John Ferrell W8CCW
>

627. DOZENS of antique radios for sale-mics-CB's-short wave-audio-etc-old time collection from estate sale

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 10:02:48 UTC
From: "Dwight D. Eisenhower" <rottedHonda@yahoo.com>
Message-ID: <9c7aa574-0e43-46be-a0a3-7648752ab592@k30g2000hse.googlegroups.com>
Source record: 23951

http://shop.ebay.com/merchant/66-catalina_W0QQ_nkwZQQ_armrsZ1QQ_fromZQQ_mdoZ

auction list has been updated- over 35 items for sale

more to come- there are (5) large wooden console units short wave/am/
fm/police to be listed soon

16 TAPES LOT 4-TRACK CARTRIDGES-SINATRA-PETER,PAUL,MARY 0 Bids $24.99
$50.00
Free 5d 15h 34m
WWII SIGNAL CORPS LANTERN-U.S.ARMY-MX290GV-VINTAGE-$$$$ 0 Bids $24.99
$45.00
Free 5d 15h 34m
PHILCO VINTAGE BAKELITE TELEVISION BOOSTER BOX-COMPLETE 0 Bids $9.98
+$10.00 5d 15h 34m
AMPEX MICRO 85 STEREO CASSETTE RECORDER-INTEGRATED AMP-
MADE IN AUSTRIA-VINTAGE HIGH END DECK w/120 VAC MOTOR-$ 0 Bids $24.99
$50.00
+$20.00 5d 15h 34m
1930's WOODEN RADIO CATHEDRAL EXTERNAL SPEAKER-ANTIQUE- 1 Bid $24.99
+$20.00 5d 15h 34m
(6) RCA SOUNDTAPE MAGAZINE LOADED LARGE CASSETTE TAPES- 0 Bids $24.99
$125.00
+$10.00 5d 15h 34m
PHILCO MODEL 66 WOODEN TOMBSTONE ANTIQUE RADIO-TUBES-$$ 0 Bids $49.98
$250.00
+$40.00 5d 15h 34m
ANTIQUE CUNNINGHAM WOOD RADIO w/TUBES-parts/fix/restore 1 Bid $24.99
+$20.00 5d 15h 34m
ANTIQUE WOODEN ASTATIC TV STATION CONTROLLER-1940-50's- 0 Bids $9.98
+$10.00 6d 14h 0m
(3) VINTAGE WALKIE-TALKIE CB RADIOS-ASSORTED MAKES-$$$$ 0 Bids $9.98
+$10.00 6d 15h 34m
STANDARD BRAND AM/FM STEREO TUNER-VINTAGE COMPONENT-$$$ 0 Bids $9.98
+$15.00 6d 15h 34m
VINTAGE RCA MODEL MI-12016G MICROPHONE w/CORD-rare-$$$$ 0 Bids $9.98
+$10.00 6d 15h 34m
WIPER MOTOR LINKAGE-GTC-CHEVELLE-GRAN SPORT-442-SKYLARK
CUTLASS-F85-SPECIAL-JUDGE-GT37-T37-MALIBU-SS396-SS454-$ 0 Bids $9.98
+$10.00 6d 15h 34m
VINTAGE ASTATIC D-104 MIC w/UG8 CHROME STAND-classic-$$ 0 Bids $9.98
+$10.00 6d 15h 34m
JULIETTE TOPPLAY CARTRIDGE PLAYER-2 TRACK ENDLESS LOOP-
SIMILAR TO PLAYTAPE-RARE VINTAGE AUDIO FORMAT PLAYER-$$ 0 Bids $9.98

+$10.00 6d 15h 34m
VINTAGE LIONEL-MULTI CONTROL TRAINMASTER TRANSFORMER-$$
25 VOLT OUTPUT w/ WHISTLE, DIRECTION, SPEED CONTROLS-VG 0 Bids $24.99
+$15.00 6d 15h 34m
BENDIX SAPPHIRE II ANTIQUE CAR RADIO-WHITE BUTTONS-part 0 Bids $9.98
+$10.00 6d 15h 34m
STEWART-WARNER MOD 07-5R5 ANTIQUE TUBE WOODEN RADIO-old 0 Bids $24.99
+$20.00 6d 15h 34m
FIRESTONE MODEL S-7403-3 WOOD RADIO-TUBES-parts/fix-$$$ 0 Bids $24.99
+$25.00 5d 15h 34m
MUNTZ 4-TRACK CARTRIDGE STEREO TAPE DECK W/MOUNT-NICE-$ 0 Bids $24.99
$100.00
+$30.00 5d 15h 34m
ZENITH LONG DISTANCE WAVE MAGNET SUITCASE TUBE RADIO-$$ 0 Bids $24.99
+$25.00 5d 15h 34m
RCA SOUNDTAPE MAGAZINE LOADED CASSETTE RECORDER-SCP2-$$
STEREO SINGLE ENDED TUBE AMP INSIDE W/6V6'S-VINTAGE AMP 1 Bid $99.88
+$50.00 5d 15h 34m
LOT OF (14) OLD PLASTIC-BAKELITE-ANTIQUE TUBE RADIOS-$$ 0 Bids $99.88
+$100.00 5d 15h 34m
STEWART ANTIQUE PHONOGRAPH-EARLY 1900's-parts/restore-$ 0 Bids $24.99
+$35.00 5d 15h 34m
RCA VICTOR MOD. 96T7 WOODEN RADIO W/TUBES-PARTS/RESTORE 0 Bids $24.99
+$35.00 6d 15h 34m
AIR KING MODEL 4602 WOODEN RADIO W/TUBES-parts/restore- 0 Bids $24.99
+$35.00 6d 15h 34m
ADMIRAL MOD.6RT43A-5B1A radio/phono-vintage-tubes-78rpm 0 Bids $24.99
+$35.00 6d 15h 34m
(2) MINIATURE VINTAGE RADIO/PHONOGRAPHS-VG CONDITION-$$ 0 Bids $24.99
+$25.00 6d 15h 34m
SPORTSMAN VINTAGE ENGRAVED CHROMED BAITCAST REEL-OLD-$$ 0 Bids $9.98
+$10.00 6d 15h 34m
SILVERTONE MODEL 7104 ANTIQUE WOOD RADIO w/tubes-NICE-$ 0 Bids $24.99
+$35.00 6d 15h 34m
HEATHKIT VIBRATION TESTER MODEL VT-1 VINTAGE-antique-$$ 0 Bids $9.98
+$15.00 6d 15h 34m
LAFAYETTE MODEL HB-111 VINTAGE TUBE AMPED CB RADIO-$$$$ 0 Bids $9.98
+$25.00 6d 15h 34m

628. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 12:35:44 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <tv8e84tglirqlpue6um39el0qjqgp0q88h@4ax.com>
Source record: 23952

On Tue, 22 Jul 2008 19:07:40 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>John Smith wrote:
>> John Ferrell wrote:
>>
>>> ...
>>> I offer up a progress report here with my work so far on the "Tilt
>>> Over Gadget"
>>> http://dixienc.us/TiltOverGadget/TiltOverGadget.mht
>>>
>>> I will concede up front that it is but a crude prototype with some
>>> unfinished aspects, but it works!
>>>
>>> Thanks to all
>>> John Ferrell W8CCW
>>
>> Whatever that link is to, it will not open in internet explorer or
>> firefox on my computer ...
>>
>> Regards,
>> JS
>
>I stand corrected--I was finally able to get it to load into internet
>explorer--after three tries!
>
>Regards,
>JS
I will try to rework the web page into several smaller pages.
I put the page together with Word 2007 as a single file web page. All
of the pictures as well as all of the control information is packed
into a single (large) file which must be read before the display can
start. Since everything is in one file it is easy for me to keep it
intact for editing but cumbersome to dwnload...
John Ferrell W8CCW

629. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 13:25:34 UTC
From: Jerseyj <jerseyj69@comcast.net>
Message-ID: <jerseyj69-DD305A.09253423072008@cpe-76-190-186-198.neo.res.rr.com>
Source record: 23953

> I will try to rework the web page into several smaller pages.
> I put the page together with Word 2007 as a single file web page. All
> of the pictures as well as all of the control information is packed
> into a single (large) file which must be read before the display can
> start. Since everything is in one file it is easy for me to keep it
> intact for editing but cumbersome to dwnload...
> John Ferrell W8CCW

Good thing. Most standards based web browsers, such as Firefox, Safari
etc. do not support this format. I refuse to use Internet Exploder
(which seems to have a bunch of non-standard stuff it supports and only
it supports)

630. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 13:54:17 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <gjde849q22ed8ovcqra4vj6mqe11gp7ojd@4ax.com>
Source record: 23954

On Wed, 23 Jul 2008 09:25:34 -0400, Jerseyj <jerseyj69@comcast.net>
wrote:

>
>> I will try to rework the web page into several smaller pages.
>> I put the page together with Word 2007 as a single file web page. All
>> of the pictures as well as all of the control information is packed
>> into a single (large) file which must be read before the display can
>> start. Since everything is in one file it is easy for me to keep it
>> intact for editing but cumbersome to dwnload...
>> John Ferrell W8CCW
>
>Good thing. Most standards based web browsers, such as Firefox, Safari
>etc. do not support this format. I refuse to use Internet Exploder
>(which seems to have a bunch of non-standard stuff it supports and only
>it supports)
I am sorry to hear this! The ability to keep everything in a single
file greatly simplifies maintenance. I take care of several web sites
on a volunteer basis and keeping track of thngs is getting pretty
compicated. I will probably go back to Front Page for editing but not
uploading.
John Ferrell W8CCW

631. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 16:38:50 UTC
From: "Jim, K7JEB" <k7jeb_2@yahoo.com>
Message-ID: <v8Jhk.4901$8R1.4343@newsfe03.iad>
Source record: 23955

(...Please download a browser that supports Web Archive,
such as Windows Internet Explorer.)

John Ferrell W8CCW wrote:
> I am sorry to hear this! The ability to keep everything in a single
> file greatly simplifies maintenance. I take care of several web sites
> on a volunteer basis....

And those websites would be for.... the local Bill Gates Fan Club?

632. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 18:29:59 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <HMKhk.1277$nu6.889@edtnps83>
Source record: 23956

> well, yes, but actually the design started with the shorts at 98 MHz
> which are easy, then the only unknown variable becomes the series stub
> that gives a 50 ohm match at 70 MHz, I still don't get why the
> matching section appear to be 3/8 wl on a smith chart and actually is
> 1/8 like if I inverted the sense of load/generator (yes, I worked with
> admittances for shunt stubs).
>
>>
>> Let me know if you would like to see my results, will be glad to e-mail
>> them
>> as JPEGs.
>
> sure, my email address is valid, thank you very much.
>
> 73
> Francesco IZ8DWF

Francesco, I will be e-mailing my results for your interest. We seem to have arrived at the same conclusions.

I think I understand where you are confused. Initially, starting at the center of the Smith Chart, the shunt open stub moves down, along the constant conductance circle (0.2S). At 0.175 WL at 70 MHz (0.25 WL at 98 MHz) - 62 cm, the input impedance is 10 - j 20 ohms. Next; the series section of transmission line moves clockwise along the 10 ohm resistance circle. At 0.125 WL (70 MHz) - 44 cm, the impedance reaches 10 + j 20. The final shunt section then moves the impedance to the center of the Smith Chart along the 0.2 S circle.

73,

Frank (VE6CB)

633. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 20:02:04 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <n93f845ecp3f7pc3jmb6v7o0ai5bhpns0l@4ax.com>
Source record: 23957

On Wed, 23 Jul 2008 09:38:50 -0700, "Jim, K7JEB" <k7jeb_2@yahoo.com>
wrote:

>
>(...Please download a browser that supports Web Archive,
> such as Windows Internet Explorer.)
>
>John Ferrell W8CCW wrote:
>> I am sorry to hear this! The ability to keep everything in a single
>> file greatly simplifies maintenance. I take care of several web sites
>> on a volunteer basis....
>
>And those websites would be for.... the local Bill Gates Fan Club?
If Bill wanted a fan club he would probably just buy one. After all,
it really doesn't have to work...

It is all here at the moment....
http://dixienc.us/Home.htm
John Ferrell W8CCW

634. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-23 23:19:02 UTC
From: nm5k@wt.net
Message-ID: <4b3c4ee6-1853-43ba-baa1-9376e8f7dfd9@n33g2000pri.googlegroups.com>
Source record: 23958

On Jul 23, 3:34 am, "Andy" <d...@blueyounder.co.uk> wrote:
> I've swapped the feed line over and its still the same.
>
> When I put the antenna together I made sure all connections where good and
> the analyser gave a good match on the frequencies I want to use.
>
> I did use some conductive grease for the first time on the antenna. Wonder
> if the grease is the problem or maybe this antenna just picks up a lot of
> background hiss.

Noise is RF the same as any other signal. The only exception would
be bad connections, etc that cause "locally generated" noise.
You need to find out if the source is received, or from a local
problem.
The SWR means little as far as receive. Any difference in level
due to SWR changes should be very small, and it would not effect
the s/n ratio if it did.
Does rotating the antenna vary the level of the noise? If so, the
noise is most likely received. You should be able to semi null
it out using the right direction if this was the case.
I doubt the element connections are the problem, or you would
see sudden spikes in the SWR when the connections flaked out.
What band is this on?
At this point just not enough info to tell what the deal is.
I could tell a lot more if I heard it. Can you record a sample
and post it somewhere?
Like I say, there should be little if any real difference in s/n
ratio if both antennas are pointed in the same direction.
Even if one had more gain in that direction, or was more
efficient overall, this would not effect the s/n ratio.
Noise and desired signals should increase in a linear
fashion.
IE: If antenna A receives the base noise level at S5, and the
desired signal is S8, and then you switch to antenna B
and the base noise is S7, and the desired signals are S9+,
they should still "sound" the same through the speaker.
The noise shouldn't seem any louder on antenna B, as
the desired signals and noise increase at an equal level.
This is why I say overall, it doesn't make much sense.
The reason I asked about the noise blanker is they
really degrade the dynamic range when strong signals
are present, and many overlook this while trying everything
else in the book. But.. A NB usually causes more of a
distorted audio sound, not static.

Do you get this same static when the band is "dead"?
That would tend to point to a pretty close noise source.
Either locally generated by bad connections, etc, or a
noise source nearby that is received normally.
But like I say, if you receive the noise, you should be
able to effect the level by turning the antenna.

635. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 00:42:07 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g68jagnpp1@news.service.uci.edu>
Source record: 23959

Andy wrote:
> I've swapped the feed line over and its still the same.
>
> When I put the antenna together I made sure all connections where good and
> the analyser gave a good match on the frequencies I want to use.
>
> I did use some conductive grease for the first time on the antenna. Wonder
> if the grease is the problem or maybe this antenna just picks up a lot of
> background hiss.
>
> Andy

The instruction manual for the antenna doesn't make it real obvious how the feedline attaches, but it looks to me like the antenna doesn't have a low DC resistance - like a loop would, for example. It's probably reasonable to expect this type of antenna to be noisier than a loop. I think Butternut attaches the feedline in a similar fashion on their HF6V, but puts an air core choke (from memory, 15-20 turns, 14 awg, approx 1" dia x 2.5" long) across the feedpoint. That may just be for noise because the antenna seems to have the same performance with, or without it. Perhaps you could try the same with the MA5V.

I think what the OP was getting at is the noise should be a lot louder with just the center conductor attached to the radio, and then get quieter when you thread the barrel on. If it doesn't do that, then there may be a connectivity problem somewhere.

ac6xg

636. Re: Anybody where the find W4RNL's antenna-modelling series ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 03:40:55 UTC
From: no@spam.net
Message-ID: <fcuf84hs36uo6u6a6kaasusjietnrair71@4ax.com>
Source record: 23960

don't know if it's in this or not.....
http://download.come2store.com/DufusMcGee/CebikWebsite.zip

Rusty

On Wed, 23 Jul 2008 01:30:19 -0700 (PDT), 4nec2 <4nec2@gmx.net> wrote:

>Hello...,
>
>I was looking for LB Cebik's amod series (antenna modelling articles)
>ranging from amod1.html to somewhere around amod137.html
>
>Despite the fact that antennaX says that all of LB's articles are
>freely accessable, I only find amod91 to amod114 available on their
>website.
>
>Anybody who does have the whole range of LB's antenna modelling
>articles available ?
>
>Thanks in advance,
>Arie.

637. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 07:31:19 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mwsjbybzs.fsf@persaunet.uninett.no>
Source record: 23961

John Ferrell <johnferrell@sprintmail.com> writes:

> On Wed, 23 Jul 2008 09:38:50 -0700, "Jim, K7JEB" <k7jeb_2@yahoo.com>
> wrote:
>
>>
>>(...Please download a browser that supports Web Archive,
>> such as Windows Internet Explorer.)
>>
>>John Ferrell W8CCW wrote:
>>> I am sorry to hear this! The ability to keep everything in a single
>>> file greatly simplifies maintenance. I take care of several web sites
>>> on a volunteer basis....
>>
>>And those websites would be for.... the local Bill Gates Fan Club?
> If Bill wanted a fan club he would probably just buy one. After all,
> it really doesn't have to work...
>
> It is all here at the moment....
> http://dixienc.us/Home.htm
> John Ferrell W8CCW

As Microsoftisms go, this one is not among the worst. The format has a
standards track Internet RFC (RFC 2557) dating from 1999, and an open
Firefox bug dating from the same year. It is also supported by Opera.

However, the page doesn't open properly in Opera either. The web server
sends the browser the http header line 'Content-Type: text/plain',
telling the browser that the format is plain text.

So your web server isn't correctly configured for this format.

73
LA4RT Jon

638. Re: Anybody where the find W4RNL's antenna-modelling series ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 07:46:55 UTC
From: LA4RT Jon <dev@null.com>
Message-ID: <1mprp3yb9s.fsf@persaunet.uninett.no>
Source record: 23962

no@spam.net writes:

> don't know if it's in this or not.........
> http://download.come2store.com/DufusMcGee/CebikWebsite.zip

Nice thought. However, posting the URL like that is like asking for a
takedown notice.

I also downloaded a copy before the site was locked
down. Unfortunately, I missed the files Arie is asking for.

Downloading the mirror was certainly legal. Under Norwegian law, I am
allowed to give copies to others "within the private sphere", whatever
that may mean, but not to make it available to the public. I have no
idea what happens if a copy crosses an international border.

73
LA4RT Jon
Jon K Hellan, Trondheim, Norway, hellan <at> acm dot org

639. Re: Anybody where the find W4RNL's antenna-modelling series ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 09:19:22 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2008.07.24.09.19.20@netins.net>
Source record: 23963

On Wed, 23 Jul 2008 23:40:55 -0400, no wrote:

> don't know if it's in this or not.........
> http://download.come2store.com/DufusMcGee/CebikWebsite.zip
>
> Rusty

Its the thought that counts.
That zip file is just a collection of index pages which link to
content on WY6K's mirror site.... which no longer exists.

--Teh

640. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 12:32:40 UTC
From: Jerseyj <jerseyj69@comcast.net>
Message-ID: <jerseyj69-8F8E04.08324024072008@cpe-76-190-186-198.neo.res.rr.com>
Source record: 23964

In article <1mwsjbybzs.fsf@persaunet.uninett.no>,
Jon Kare Hellan <dev@null.com> wrote:

> RFC 2557

But as I understand it, this RFC is only standards track, not an
approved standard.

641. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 12:39:36 UTC
From: Jerseyj <jerseyj69@comcast.net>
Message-ID: <jerseyj69-594F41.08393624072008@cpe-76-190-186-198.neo.res.rr.com>
Source record: 23965

In article <1mwsjbybzs.fsf@persaunet.uninett.no>,
Jon Kare Hellan <dev@null.com> wrote:

> http://dixienc.us/Home.htm

I just added the UnMHT extension to Firefox and got the same result, I
suspect there's a bug in the server.

642. Re: Vertical Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 13:05:45 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mljzrxwie.fsf@persaunet.uninett.no>
Source record: 23966

Jerseyj <jerseyj69@comcast.net> writes:

> In article <1mwsjbybzs.fsf@persaunet.uninett.no>,
> Jon Kare Hellan <dev@null.com> wrote:
>
>> RFC 2557
>
> But as I understand it, this RFC is only standards track, not an
> approved standard.

That's true, but there are surprisingly few actual IETF standards. A
lot of the stuff which is expected of a good net citizen is actually
just "standards track" or even lower status.

643. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 14:32:27 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <%n0ik.479$DS3.228@trnddc01>
Source record: 23967

"Frank" <frank599@nospam.telus.net> wrote in message
news:HMKhk.1277$nu6.889@edtnps83...
>> well, yes, but actually the design started with the shorts at 98 MHz
>> which are easy, then the only unknown variable becomes the series stub
>> that gives a 50 ohm match at 70 MHz, I still don't get why the
>> matching section appear to be 3/8 wl on a smith chart and actually is
>> 1/8 like if I inverted the sense of load/generator (yes, I worked with
>> admittances for shunt stubs).
>>
>>>
>>> Let me know if you would like to see my results, will be glad to e-mail
>>> them
>>> as JPEGs.
>>
>> sure, my email address is valid, thank you very much.
>>
>> 73
>> Francesco IZ8DWF
>
> Francesco, I will be e-mailing my results for your interest. We seem to
> have arrived at the same conclusions.
>
> I think I understand where you are confused. Initially, starting at the
> center of the Smith Chart, the shunt open stub moves down, along the
> constant conductance circle (0.2S). At 0.175 WL at 70 MHz (0.25
> WL at 98 MHz) - 62 cm, the input impedance is 10 - j 20 ohms.
> Next; the series section of transmission line moves clockwise along
> the 10 ohm resistance circle. At 0.125 WL (70 MHz) - 44 cm, the
> impedance
> reaches 10 + j 20. The final shunt section then moves the impedance
> to the center of the Smith Chart along the 0.2 S circle.
>
> 73,
>
> Frank (VE6CB)

Hi Frank

When describing the path on the Smith Chart from the "load" Z to the "rig"
Z, you write "along the 10 ohm resistance circle". I would have refered
to that circle as the circle of constant VSWR.

Jerry KD6JDJ

644. Re: Anybody where the find W4RNL's antenna-modelling series ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 14:52:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6a4uupmm1@news.albasani.net>
Source record: 23968

LA4RT Jon wrote:

> ...
> Nice thought. However, posting the URL like that is like asking for a
> takedown notice.
> ...
>
> 73
> LA4RT Jon
> Jon K Hellan, Trondheim, Norway, hellan <at> acm dot org

I don't know if I am "reading" that sentence for the meaning you wish to imply ... or not.

However, most here in the USA put up a website to generate as much traffic to it as possible. The more traffic generated, the bigger the success realized. (i.e., I have never put up a site where mass traffic to it is viewed as a "problem.")

While some low bandwidth sites may use up their traffic allotment for the month (this encourages the successful to purchase more bandwidth), the next month the bandwidth is available, again. (on a free ISP, you may use up your bandwidth, but next month, it is available again.)

Your countries mileage may vary ... but then, in this country (USA), we cannot imagine paying a "Tele-tax", such as in England ...

Regards,
JS

645. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 16:01:53 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <RH1ik.1379$%b7.1159@edtnps82>
Source record: 23969

> Hi Frank
>
> When describing the path on the Smith Chart from the "load" Z to the
> "rig" Z, you write "along the 10 ohm resistance circle". I would have
> refered to that circle as the circle of constant VSWR.
>
> Jerry KD6JDJ

Of course you are correct Jerry. I realized what I had done after I posted the comments.

Frank, VE6CB

646. Re: coax filter dilemma

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 16:29:16 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <w52ik.496$_I.267@trnddc04>
Source record: 23970

"Frank" <frank599@nospam.telus.net> wrote in message
news:RH1ik.1379$%b7.1159@edtnps82...
>> Hi Frank
>>
>> When describing the path on the Smith Chart from the "load" Z to the
>> "rig" Z, you write "along the 10 ohm resistance circle". I would have
>> refered to that circle as the circle of constant VSWR.
>>
>> Jerry KD6JDJ
>
> Of course you are correct Jerry. I realized what I had done after I
> posted
> the comments.
>
> Frank, VE6CB

Hi Frank

My reply was delayed because I had anticipated that someone might ask you for clarification on Smith Chart use. I was sure you'd clear up the confusion. I even thought I might learn something new. Smith Chart use is so valuable to my thinking that I just couldnt let this thread finish without checking in with you.

Jerry KD6JDJ

647. Re: Anybody where the find W4RNL's antenna-modelling series ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 19:01:55 UTC
From: 4nec2 <4nec2@gmx.net>
Message-ID: <1c013c11-1eed-4bf6-afe0-01dd7022dd90@s21g2000prm.googlegroups.com>
Source record: 23971

Hmm, unfortionally, no real usefull response.

I thougth that in the past L.B. Cebik's pages were some kind of
'freeware' and public accessable.

It's hard to understand for me that one is able to claim someone
others 'creation' and make money out of it.
I would have thougth that especially for someone like L.B. who did
such a tremendous job, writing all those articles for free and
publishing them for free, that all those who 'surrounded' him would
have honoured him and continue publishing his work without
restrictions...

Unfortionally this seems not possible anymore nowadays.
Too bad.

Arie.

Where are the days that people did things for free, just because they
enjoyed it...

648. What kind of antenna connector is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 22:45:28 UTC
From: Marty McFly <pellati@tiscali.it>
Message-ID: <g6b0medlc1@tdi.cu.mi.it>
Source record: 23972

Who can tell me what kind of connector is this:
http://share.ovi.com/media/Marty_73.public/Marty_73.10005

It's around 3 millimeters (0.118 inches) diameter.

Thanx a lot.

649. Re: Anybody where the find W4RNL's antenna-modelling series ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 23:10:28 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <IZ7ik.2$3l5.1@newsfe06.iad>
Source record: 23973

"4nec2" <4nec2@gmx.net> wrote in message
news:1c013c11-1eed-4bf6-afe0-01dd7022dd90@s21g2000prm.googlegroups.com...

< snip >

> those who 'surrounded' him would
> have honoured him and continue publishing his work without
> restrictions...
>
> Unfortionally this seems not possible anymore nowadays.
> Too bad.
>
> Where are the days that people did things for free, just because they
> enjoyed it...

They're still here. NGs are one proof. Every year, hundreds or thousands
of insightful posts in almost any group you can name -- all without any
thought of compensation.

650. Re: What kind of antenna connector is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-24 23:18:50 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AE65EB98527Fnonenowhere@61.9.191.5>
Source record: 23974

"Marty McFly" <pellati@tiscali.it> wrote in news:g6b0medlc1@tdi.cu.mi.it:

> http://share.ovi.com/media/Marty_73.public/Marty_73.10005

A bit hard to tell from the pic... but it looks like an MCX connector (and
they are very popular on GPSs).

Owen

651. Re: What kind of antenna connector is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 07:43:18 UTC
From: Cheers <moussa_el@hotmail.com>
Message-ID: <MPG.22f404ec1aa510fc989860@freenews.iinet.net.au>
Source record: 23975

HI
In article <g6b0medlc1@tdi.cu.mi.it>, pellati@tiscali.it says...
> Who can tell me what kind of connector is this:
> http://share.ovi.com/media/Marty_73.public/Marty_73.10005
>
> It's around 3 millimeters (0.118 inches) diameter.
>
> Thanx a lot.
>
>
>
AFAICT, SMA Male!

--
The information contained in this post is copyright of
the poster, and specifically may not be published in,
or used by http://www.jlaforums.com

652. Re: What kind of antenna connector is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 08:25:38 UTC
From: LA4RT Jon Kåre Hellan <dev@null.com>
Message-ID: <1mbq0mxtdp.fsf@persaunet.uninett.no>
Source record: 23976

Owen Duffy <none@no.where> writes:

> "Marty McFly" <pellati@tiscali.it> wrote in news:g6b0medlc1@tdi.cu.mi.it:
>
>> http://share.ovi.com/media/Marty_73.public/Marty_73.10005
>
> A bit hard to tell from the pic... but it looks like an MCX connector (and
> they are very popular on GPSs).
>
> Owen

Here's a comparison chart:
http://yves.maguer.free.fr/WiFi/connect_proxim_mcx_mmcx_mc-card_u.fl.jpg

I found a link to it on the discussion page of the Wikipedia article
about MCX.

LA4RT Jon

653. Re: What kind of antenna connector is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 08:42:03 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1m63quxsmc.fsf@persaunet.uninett.no>
Source record: 23977

Owen Duffy <none@no.where> writes:

> "Marty McFly" <pellati@tiscali.it> wrote in news:g6b0medlc1@tdi.cu.mi.it:
>
>> http://share.ovi.com/media/Marty_73.public/Marty_73.10005
>
> A bit hard to tell from the pic... but it looks like an MCX connector (and
> they are very popular on GPSs).
>
> Owen

A nice overview of connectors here:
http://www.wimo.com/cgi-bin/verteiler.pl?url=wifi-cables_e.html

654. Re: What kind of antenna connector is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 08:46:55 UTC
From: Jeff <jeff@local.host>
Message-ID: <4889932d$0$10968$834e42db@reader.greatnowhere.com>
Source record: 23978

"Cheers" <moussa_el@hotmail.com> wrote in message
news:MPG.22f404ec1aa510fc989860@freenews.iinet.net.au...
> HI
> In article <g6b0medlc1@tdi.cu.mi.it>, pellati@tiscali.it says...
>> Who can tell me what kind of connector is this:
>> http://share.ovi.com/media/Marty_73.public/Marty_73.10005
>>
>> It's around 3 millimeters (0.118 inches) diameter.
>>
>> Thanx a lot.
>>
>>
>>
> AFAICT, SMA Male!
>

Not an SMA at 3mm dia and I can't see a thread!!

Jeff

655. how can 5 W or 7W trasnsceiver reach AO 51?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 08:49:18 UTC
From: nobody <nobody@nobody.com>
Message-ID: <4889938c$1@127.0.0.1>
Source record: 23979

100 m W can 7 Km

according http://uk.youtube.com/watch?v=xNFg8l5tjDI

I draw conclusion from the movie at 0.22 second from the above movie

1000 m W = 1 W

1 W can reach 7KM * 10

5 W = 7KM * 10 * 5

= 350 KM the signal still cannot reach the AO 51 satellite which is
850 Km away from the earth.

to reach AO 51 the power required at least 12.5 W

7KM * 10 * 12.5
=875 KM

is my calculation correct?

656. Re: how can 5 W or 7W trasnsceiver reach AO 51?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 11:23:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ZIiik.560$_I.162@trnddc04>
Source record: 23980

"nobody" <nobody@nobody.com> wrote in message news:4889938c$1@127.0.0.1...
> 100 m W can 7 Km
>
> according http://uk.youtube.com/watch?v=xNFg8l5tjDI
>
> I draw conclusion from the movie at 0.22 second from the above movie
>
>
> 1000 m W = 1 W
>
> 1 W can reach 7KM * 10
>
> 5 W = 7KM * 10 * 5
>
> = 350 KM the signal still cannot reach the AO 51 satellite which is
> 850 Km away from the earth.
>
>
> to reach AO 51 the power required at least 12.5 W
>
> 7KM * 10 * 12.5
> =875 KM
>
>
> is my calculation correct?
>

raw transmitter power is only one factor, you have to also consider the antenna gain, receiver sensitivity for the different modulation used, bandwidth, and noise. The biggest factors in this case are probably the modulation type and noise. with ssb or even nbfm you are dealing with a much narrower band signal than 802.11 that hops all over a wide bandwidth. This lets the receiver pull the signal out better. Also the ssb or even nbfm is easier for the human ear to copy through noise, and cw is even better, but the access points have to deal with separating out the frequency hopping digital data from all the other digital data noise on the same frequencies... and if noise takes some of it out it is much less forgiving than the low data rate human ear and brain.

657. Re: how can 5 W or 7W trasnsceiver reach AO 51?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 11:30:45 UTC
From: nobody <nobody@nobody.com>
Message-ID: <4889b967$1@127.0.0.1>
Source record: 23981

"Dave" <noone@nowhere.com> д����Ц����:ZIiik.560$_I.162@trnddc04...
>
> "nobody" <nobody@nobody.com> wrote in message news:4889938c$1@127.0.0.1...
>> 100 m W can 7 Km
>>
>> according http://uk.youtube.com/watch?v=xNFg8I5tjDI
>>
>> I draw conclusion from the movie at 0.22 second from the above movie
>>
>>
>> 1000 m W = 1 W
>>
>> 1 W can reach 7KM * 10
>>
>> 5 W = 7KM * 10 * 5
>>
>> = 350 KM the signal still cannot reach the AO 51 satellite which is
>> 850 Km away from the earth.
>>
>>
>> to reach AO 51 the power required at least 12.5 W
>>
>> 7KM * 10 * 12.5
>> =875 KM
>>
>>
>> is my calculation correct?
>>
>
> raw transmitter power is only one factor, you have to also consider the
> antenna gain, receiver sensitivity for the different modulation used,
> bandwidth, and noise. The biggest factors in this case are probably the
> modulation type and noise. with ssb or even nbfm you are dealing with a
> much narrower band signal than 802.11 that hops all over a wide bandwidth.
> This lets the receiver pull the signal out better. Also the ssb or even
> nbfm is easier for the human ear to copy through noise, and cw is even
> better, but the access points have to deal with separating out the
> frequency hopping digital data from all the other digital data noise on
> the same frequencies... and if noise takes some of it out it is much less
> forgiving than the low data rate human ear and brain.
>

```
please explain what is ssb, nbfm and cw?
```

658. Re: how can 5 W or 7W trasnsceiver reach AO 51?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 12:37:23 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <wOSdnTpfRoFQJxTVnZ2dnUVZ_uydnZ2d@earthlink.com>
Source record: 23982

"nobody" <nobody@nobody.com> wrote in message news:4889938c$1@127.0.0.1...
> 100 m W can 7 Km
>
> according http://uk.youtube.com/watch?v=xNFg8l5tjDI
>
> I draw conclusion from the movie at 0.22 second from the above movie
>
>
> 1000 m W = 1 W
>
> 1 W can reach 7KM * 10
>
> 5 W = 7KM * 10 * 5
>
> = 350 KM the signal still cannot reach the AO 51 satellite which is
> 850 Km away from the earth.
>
>
> to reach AO 51 the power required at least 12.5 W
>
> 7KM * 10 * 12.5
> =875 KM
>
>
> is my calculation correct?

You have reached the wrong conclusion about the distance 100 mw can reach. That distance is just one persons expirment and also over earth and not direct line of sight. Also the type of equipment used is not very well designed for maximum distance. There is no real set distance that a given ammount of power can reach. It also depends on the antennas and receiver and several other factors. Knowing all factors involved the distance can be estimated very close.

659. Re: how can 5 W or 7W trasnsceiver reach AO 51?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 13:05:01 UTC
From: Dave <noone@nowhere.com>
Message-ID: <1ckik.564$_I.300@trnddc04>
Source record: 23983

"nobody" <nobody@nobody.com> wrote in message news:4889b967$1@127.0.0.1...
>
> "Dave" <noone@nowhere.com> д����Щ����:ZIiik.560$_I.162@trnddc04...
>>
>> "nobody" <nobody@nobody.com> wrote in message
>> news:4889938c$1@127.0.0.1...
>>> 100 m W can 7 Km
>>>
>>> according http://uk.youtube.com/watch?v=xNFg8I5tjDI
>>>
>>> I draw conclusion from the movie at 0.22 second from the above movie
>>>
>>>
>>> 1000 m W = 1 W
>>>
>>> 1 W can reach 7KM * 10
>>>
>>> 5 W = 7KM * 10 * 5
>>>
>>> = 350 KM the signal still cannot reach the AO 51 satellite which is
>>> 850 Km away from the earth.
>>>
>>>
>>> to reach AO 51 the power required at least 12.5 W
>>>
>>> 7KM * 10 * 12.5
>>> =875 KM
>>>
>>>
>>> is my calculation correct?
>>>
>>
>> raw transmitter power is only one factor, you have to also consider the
>> antenna gain, receiver sensitivity for the different modulation used,
>> bandwidth, and noise. The biggest factors in this case are probably the
>> modulation type and noise. with ssb or even nbfm you are dealing with a
>> much narrower band signal than 802.11 that hops all over a wide
>> bandwidth. This lets the receiver pull the signal out better. Also the
>> ssb or even nbfm is easier for the human ear to copy through noise, and
>> cw is even better, but the access points have to deal with separating out
>> the frequency hopping digital data from all the other digital data noise
>> on the same frequencies... and if noise takes some of it out it is much
>> less forgiving than the low data rate human ear and brain.

>>
>
>
> please explain what is ssb, nbfm and cw?
>
>
>
>

```
ssb = single side band
nbfm = narrow band fm
cw = 'continuous wave' or Morse code
```

660. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 13:56:34 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <79c4729a-e3fe-4568-99d9-acb83fb410ce@p31g2000prf.googlegroups.com>
Source record: 23984

On Jul 17, 6:37 pm, "Stan Cooper" <S...@nospam.com> wrote:
> Hello I hope I'm not intruding by asking for advice on a CB antenna but I
> figured this would be the group to ask about such things for the straight
> scoop. At any rate I'm considering a store bought beam with both vertical
> and horizontal polarization and my choices are limited to these two below.
> (not many being manufactured anymore)
>
> The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the JO
> GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there is a
> lot of smoke and mirrors involved with advertised gains and so my question
> is...is it possible for the JO GUNN to perform as well as the Maco antenna?
>
> The GUNN is of much stronger construction and a smaller windload so I'd
> rather put it up, but the short boom makes me wonder if the gain and
> rejection numbers are suspect.
>
> Any help would be greatly appreciated, antenna choices, price tags and urls
> below.
>
> 73
> Stan
>
> MACO-Shooting Star $279.95http://www.mpaudio1.com/Macobeamantennas2.html
>
> JO GUNN 3 + 3 STAR $382.00http://tinyurl.com/6hzteu
>
> Oh btw, I'll be tower mounting it about 40' from the ground and turning it
> with a hamIV rotator.
>
> Thanks again.

Why buy either. There are plenty of plans for beams around. It is my
opinion that building one from scratch is not much more difficult that
putting one togetther from the box. In the process you will learn how
boom length, element spacing, numer of elements all come together to
give you a good antenna, If you can download the assembly manual you
will probably have enough detail for building your own.

Back in the 70s I belonged to a CB club. A group of us started
building antennas for ourselves and other club members. We purchased
our aluminum at an extrusion plant. By going through there reject pile
were were able to get the tubing for pennies on the pound. We placed
the tubing in a jig and was able to cut nearly all the pieces(even for
large booms) to length with one pass of a radial arm saw. Nearly all
that was left was to put the parts in a cardboard box with

instructions and a hardware list.

This was a great club with over a thousand members. We did not tolerate illegal or obnoxous operation. The penalty was expulsion from the club and you would be placed on the list where other members just wouldnt talk to you. On the other hand benifits of belonging to the club were considerable. Education Inexpensive antennas and equipment lots of help and fellowship and numerous family oriented events throughout the year. The group as a whole was a huge pool of talent for just about anything you could think of and we helped each in a lot more ways than just CB. A model for even the best ham clubs I have seen.

Jimmie

.

661. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 14:42:14 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <7Dlik.177$zA7.35@newsfe28.ams2>
Source record: 23985

The noise stays the same when I turn the beam.

I will try to get a recording done this weekend if I can.

I just pulled out the PL259, so just the canter pin on the PL259 on the
canter fed dipole was connected
and the noise increased with the signal and then dropped when the PL259 was
screwed back in. I had the same on the Cobwebb.

When I did this on the MA5B the 10, 12, 15 and 17 meter bands did the same ,
on 20 meters it was different. When I pulled out the PL259 so just the
canter pin of the PL259 was connected the noise dropped and with the PL259
screwed in
fully the noise went up. The opposite to what I thought would happen after
trying this out on my other antennas.

Andy

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:g68jagnpp1@news.service.uci.edu...
> Andy wrote:
>> I've swapped the feed line over and its still the same.
>>
>> When I put the antenna together I made sure all connections where good
>> and the analyser gave a good match on the frequencies I want to use.
>>
>> I did use some conductive grease for the first time on the antenna.
>> Wonder if the grease is the problem or maybe this antenna just picks up a
>> lot of background hiss.
>>
>> Andy
>
> The instruction manual for the antenna doesn't make it real obvious how
> the feedline attaches, but it looks to me like the antenna doesn't have a
> low DC resistance - like a loop would, for example. It's probably
> reasonable to expect this type of antenna to be noisier than a loop. I
> think Butternut attaches the feedline in a similar fashion on their HF6V,
> but puts an air core choke (from memory, 15-20 turns, 14 awg, approx 1"
> dia x 2.5" long) across the feedpoint. That may just be for noise because
> the antenna seems to have the same performance with, or without it.
> Perhaps you could try the same with the MA5V.
>
> I think what the OP was getting at is the noise should be a lot louder
> with just the center conductor attached to the radio, and then get quieter
> when you thread the barrel on. If it doesn't do that, then there may be a
> connectivity problem somewhere.

>
> ac6xg
>
>

662. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 16:40:05 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g6d0j6$h6n$1@news.service.uci.edu>
Source record: 23987

Andy wrote:

> I just pulled out the PL259, so just the canter pin on the PL259 on the
> canter fed dipole was connected
> and the noise increased with the signal and then dropped when the PL259 was
> screwed back in. I had the same on the Cobwebb.
>
> When I did this on the MA5B the 10, 12, 15 and 17 meter bands did the same ,
> on 20 meters it was different. When I pulled out the PL259 so just the
> center pin of the PL259 was connected the noise dropped and with the PL259
> screwed in
> fully the noise went up. The opposite to what I thought would happen after
> trying this out on my other antennas.
>
> Andy

Sorry, but my previous comments pertained to the MA5V (vertical).

Having just assembled a TH-3, I can only suggest that perhaps you have
an open trap or two. Did you check the electrical continuity along each
of the elements after assembling them? What is the SWR on 20?

ac6xg

663. Re: how can 5 W or 7W trasnsceiver reach AO 51?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 16:48:35 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g6d053gqc1@news.jpl.nasa.gov>
Source record: 23988

nobody wrote:
> 100 m W can 7 Km
>
> according http://uk.youtube.com/watch?v=xNFg8l5tjDI
>
> I draw conclusion from the movie at 0.22 second from the above movie
>
>
> 1000 m W = 1 W
>
> 1 W can reach 7KM * 10
>
> 5 W = 7KM * 10 * 5
>
> = 350 KM the signal still cannot reach the AO 51 satellite which is
> 850 Km away from the earth.
>
>
> to reach AO 51 the power required at least 12.5 W
>
> 7KM * 10 * 12.5
> =875 KM
>
>
> is my calculation correct?

No.Bear in mind that signal strength goes as inverse square of distance.. Doubling the distance requires 4 times the power. Or conversely, 10 times the power only gives you about 3x the range (square root of 10)).

However, the initial assumptions for required power (100mW = 700m) is invalid.

For example Pioneer 10 radiated about 8 Watts at 2.2 GHz from well past the orbit of Saturn, and we detected it here on Earth (but we used a big 70m dish with a cryogenic receiver to do it). And it's not like it carried voice.. more like telemetry at 8 bits/second.

So, let's get back in the realm of possibility.

Since you're looking at AO51, that's an FM receiver on the bird. It's spec'd to require -125dBm on 2meters. The range to the satellite varies from 800km (satellite overhead) to 3000km (satellite on horizon).

On 2M uplink, the path loss due to distance is about -145 to -134 dB plus another 3 or 4 dB for ionosphere and polarization losses. Working backwards: -125dBm +140dB = about +25dBm (300mW) into a omnidirectional antenna should do it. In reality, you might want to use a 4-5 Watt transmitter and a 6 dB gain antenna to really get a good signal in there.

http://www.qsl.net/kb7ino/2_sat_calc.html has more info, as does http://www.amsat.org/amsat-new/echo/Echo_Linkbudget.php

664. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 16:54:09 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <Oynik.16244$9I1.2884@newsfe16.ams2>
Source record: 23986

I also forgot to mention that the noise is on all bands from 10 - 20m, only
on the MA5B.

"Andy" <dx90@blueyounder.co.uk> wrote in message
news:7Dlik.177$zA7.35@newsfe28.ams2...
> The noise stays the same when I turn the beam.
>
> I will try to get a recording done this weekend if I can.
>
> I just pulled out the PL259, so just the canter pin on the PL259 on the
> canter fed dipole was connected
> and the noise increased with the signal and then dropped when the PL259
> was
> screwed back in. I had the same on the Cobwebb.
>
> When I did this on the MA5B the 10, 12, 15 and 17 meter bands did the same
> ,
> on 20 meters it was different. When I pulled out the PL259 so just the
> canter pin of the PL259 was connected the noise dropped and with the PL259
> screwed in
> fully the noise went up. The opposite to what I thought would happen after
> trying this out on my other antennas.
>
> Andy
>
>
> "Jim Kelley" <jwkelley@uci.edu> wrote in message
> news:g68jagnpp1@news.service.uci.edu...
>> Andy wrote:
>>> I've swapped the feed line over and its still the same.
>>>
>>> When I put the antenna together I made sure all connections where good
>>> and the analyser gave a good match on the frequencies I want to use.
>>>
>>> I did use some conductive grease for the first time on the antenna.
>>> Wonder if the grease is the problem or maybe this antenna just picks up
>>> a
>>> lot of background hiss.
>>>
>>> Andy
>>
>> The instruction manual for the antenna doesn't make it real obvious how
>> the feedline attaches, but it looks to me like the antenna doesn't have a
>> low DC resistance - like a loop would, for example. It's probably

>> reasonable to expect this type of antenna to be noisier than a loop. I
>> think Butternut attaches the feedline in a similar fashion on their HF6V,
>> but puts an air core choke (from memory, 15-20 turns, 14 awg, approx 1"
>> dia x 2.5" long) across the feedpoint. That may just be for noise
>> because
>> the antenna seems to have the same performance with, or without it.
>> Perhaps you could try the same with the MA5V.
>>
>> I think what the OP was getting at is the noise should be a lot louder
>> with just the center conductor attached to the radio, and then get
>> quieter
>> when you thread the barrel on. If it doesn't do that, then there may be
>> a
>> connectivity problem somewhere.
>>
>> ac6xg
>>
>>
>
>
>
>
>

665. Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 17:44:46 UTC
From: 826 <methinks@nospam.com>
Message-ID: <g6d3ebrft1@news.albasani.net>
Source record: 23989

Hi. Have a new Hustler 6 band vertical. Installed the radials and also buried 75 foot of RG213 coax between shack and antenna. I used a 6 foot peace of coax connected to adjust the antenna with a MFJ-259. Every band was tuned to the middle and SWR was lower than 1.7:1 at the edges. After the adjustments, I reconnected the buried coax to the antenna and on all bands everything had shift up by any where from 200 to 400 khz. Now the rig is seeing greater than 2:1 SWR.
Should I retune the antenna with the MFJ 259 in the shack?
Thanks Vern M0WQR

666. Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 18:23:55 UTC
From: "rolfedh@gmail.com" <rolfedh@gmail.com>
Message-ID: <7b32c284-5002-49a3-8846-3b45155e4950@y21g2000hsf.googlegroups.com>
Source record: 23990

We've been having trouble with bicycle thieves in my neighborhood. I'd like to set up a "bait-bike" that includes a low-power pulse beacon AM transmitter inside the frame and ***no visible*** antenna outside the frame. I'd like to have approximately 1-mile range. I've built a couple of Ramsey kits, but don't have much expertise.

- I'd appreciate any recommendations for a transmitter circuit.
- Will the frame perform as an adequate antenna?
- How about a dipole made from insulated wire taped to the exterior of the frame?

667. Re: how can 5 W or 7W trasnsceiver reach AO 51?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 18:38:15 UTC
From: dplatt@radagast.org
Message-ID: <n5jpl5-r2t.ln1@radagast.org>
Source record: 23992

In article <wOSdnTpfRoFQJxTVnZ2dnUVZ_uydnZ2d@earthlink.com>,
Ralph Mowery <rmowery28146@earthlink.net> wrote:

>You have reached the wrong conclusion about the distance 100 mw can reach.
>That distance is just one persons expirment and also over earth and not
>direct line of sight. Also the type of equipment used is not very well
>designed for maximum distance. There is no real set distance that a given
>ammount of power can reach. It also depends on the antennas and receiver
>and several other factors. Knowing all factors involved the distance can be
>estimated very close.

As a point of comparison: the Voyager space probes have transmitters
running at around 23 watts, and are capable of sending a useful
telemetry signal over a distance of 7 billion (!) miles.

Lots of antenna gain on the sending end (14-foot dish), lots of
antenna gain on the receiving end (100-foot dish), and a low data rate
(and hence a narrow signal bandwidth, minimizing the impact of noise).

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

668. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 18:49:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8p7k84hotflq9sug98i2fum70ts61jrcuq@4ax.com>
Source record: 23991

On Fri, 25 Jul 2008 11:23:55 -0700 (PDT), "rolfedh@gmail.com"
<rolfedh@gmail.com> wrote:

>We've been having trouble with bicycle thieves in my neighborhood. I'd
>like to set up a "bait-bike" that includes a low-power pulse beacon AM
>transmitter inside the frame and ***no visible*** antenna outside the
>frame. I'd like to have approximately 1-mile range. I've built a
>couple of Ramsey kits, but don't have much expertise.
>- I'd appreciate any recommendations for a transmitter circuit.
>- Will the frame perform as an adequate antenna?

No.

>- How about a dipole made from insulated wire taped to the exterior of
>the frame?

Equally unlikely.

If you have built Ramsey kits for AM transmitters, you should be well
aware that they rarely transmit more than a block for the suggested,
large (relatively speaking, of course) antenna. Putting something
smaller, inside the frame is like trying to yell through a straw.

Look for an FM transmitter kit. The antenna can be the frame and a
wire wrapped around what looks like one of those kid's fiberglass
whips for a flag. The whip only has to be a meter long at most.

73's
Richard Clark, KB7QHC

669. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 18:50:08 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g6d8etlrd1@news.service.uci.edu>
Source record: 23993

Richard Clark wrote:
> On Fri, 25 Jul 2008 11:23:55 -0700 (PDT), "rolfedh@gmail.com"
> <rolfedh@gmail.com> wrote:
>
>> We've been having trouble with bicycle thieves in my neighborhood. I'd
>> like to set up a "bait-bike" that includes a low-power pulse beacon AM
>> transmitter inside the frame and ***no visible*** antenna outside the
>> frame. I'd like to have approximately 1-mile range. I've built a
>> couple of Ramsey kits, but don't have much expertise.
>> - I'd appreciate any recommendations for a transmitter circuit.
>> - Will the frame perform as an adequate antenna?
>
> No.
>
>> - How about a dipole made from insulated wire taped to the exterior of
>> the frame?
>
> Equally unlikely.
>
> If you have built Ramsey kits for AM transmitters, you should be well
> aware that they rarely transmit more than a block for the suggested,
> large (relatively speaking, of course) antenna. Putting something
> smaller, inside the frame is like trying to yell through a straw.
>
> Look for an FM transmitter kit. The antenna can be the frame and a
> wire wrapped around what looks like one of those kid's fiberglass
> whips for a flag. The whip only has to be a meter long at most.
>
> 73's
> Richard Clark, KB7QHC

Alternatively, Petco has an electric fence kit that could be attached to
the frame. :-)

ac6xg

670. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 19:27:43 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <ROpik.6352$Zf.5413@fe117.usenetserver.com>
Source record: 23994

```
Jim Kelley wrote:
> Richard Clark wrote:
>> On Fri, 25 Jul 2008 11:23:55 -0700 (PDT), "rolfedh@gmail.com"
>> <rolfedh@gmail.com> wrote:
>>
>>> We've been having trouble with bicycle thieves in my neighborhood. I'd
>>> like to set up a "bait-bike" that includes a low-power pulse beacon AM
>>> transmitter inside the frame and ***no visible*** antenna outside the
>>> frame. I'd like to have approximately 1-mile range. I've built a
>>> couple of Ramsey kits, but don't have much expertise.
>>> - I'd appreciate any recommendations for a transmitter circuit.
>>> - Will the frame perform as an adequate antenna?
>>
>> No.
>>
>>> - How about a dipole made from insulated wire taped to the exterior of
>>> the frame?
>>
>> Equally unlikely.
>>
>> If you have built Ramsey kits for AM transmitters, you should be well
>> aware that they rarely transmit more than a block for the suggested,
>> large (relatively speaking, of course) antenna. Putting something
>> smaller, inside the frame is like trying to yell through a straw.
>>
>> Look for an FM transmitter kit. The antenna can be the frame and a
>> wire wrapped around what looks like one of those kid's fiberglass
>> whips for a flag. The whip only has to be a meter long at most.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> Alternatively, Petco has an electric fence kit that could be attached to
> the frame. :-)
>
> ac6xg

Put gentian violet powder on the hand grips, then look for purple hands
on the thieves.
```

671. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 20:25:17 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <NEqik.17275$jI5.10730@flpi148.ffdc.sbc.com>
Source record: 23995

rolfedh@gmail.com wrote:
> - Will the frame perform as an adequate antenna?

What would you use for the counterpoise?
--
73, Cecil http://www.w5dxp.com

672. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 21:29:56 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <7fc9c06c-408f-45d8-8bc0-6cc471c1f32c@34g2000hsh.googlegroups.com>
Source record: 23996

On 25 jul, 20:23, "rolf...@gmail.com" <rolf...@gmail.com> wrote:
> We've been having trouble with bicycle thieves in my neighborhood. I'd
> like to set up a "bait-bike" that includes a low-power pulse beacon AM
> transmitter inside the frame and ***no visible*** antenna outside the
> frame. I'd like to have approximately 1-mile range. I've built a
> couple of Ramsey kits, but don't have much expertise.
> - I'd appreciate any recommendations for a transmitter circuit.
> - Will the frame perform as an adequate antenna?
> - How about a dipole made from insulated wire taped to the exterior of
> the frame?

Hello,

When you mean "AM broadcast band" with AM, you will very likely not get it working. You will not be able to make a concealed efficient antenna and noise level is that high, that you will never receive the signal at one mile distance.

The antenna is the (most) difficult part. I would recommend you to go to VHF (as Richard suggested). You can use the bicycle frame as ground (counterpoise). You could insulate some metallic parts of the bicycle (Rack, Fender, mudguard) and use that as an antenna. Make sure that you don't compromise safety when modifying bicycles. The antenna impedance will be reasonable so you can probably use a simple matching network.

Because of the short(er) wavelength you can have some directivity in the receiving antenna also, this helps to trace your "bait". "Bait-bicycles" are frequently used by the Police.

When this is a non-commercial project, you may seek advice from the Radio Amateur Community (in fact you did via this posting). Also don't forget the legal aspects of radio frequency use.

Best regards,

Wim
PA3DJS
www.tetech.nl
the mail is OK when you remove abc

673. digital tv tx in europe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 21:50:33 UTC
From: user <dag@allemaale.be>
Message-ID: <g6dhr8$i7f$1@registered.motzarella.org>
Source record: 23997

some countries: (future tx)
http://users.fulladsl.be/~spb13810/dvbteu/

dtv is called dvbt
or TNT in France...
or digitenne in Holland
or Freeview in UK
--
--
Shortwave transmissions in English, Francais, Nederlands, Deutsch,
Suid-Afrikaans, Chinese, Dansk, Urdu, Cantonese, Greek, Spanish,
Portuguese, ...
http://users.fulladsl.be/spb13810/swlist/ Updated every month or so ....

674. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-25 22:36:50 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <3Asik.13404$Gb2.8554@newsfe29.ams2>
Source record: 23998

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:g6d0j6$h6n$1@news.service.uci.edu...
> Andy wrote:
>
>> I just pulled out the PL259, so just the canter pin on the PL259 on the
>> canter fed dipole was connected
>> and the noise increased with the signal and then dropped when the PL259
>> was
>> screwed back in. I had the same on the Cobwebb.
>>
>> When I did this on the MA5B the 10, 12, 15 and 17 meter bands did the
>> same ,
>> on 20 meters it was different. When I pulled out the PL259 so just the
>> center pin of the PL259 was connected the noise dropped and with the
>> PL259 screwed in
>> fully the noise went up. The opposite to what I thought would happen
>> after
>> trying this out on my other antennas.
>>
>> Andy
>
> Sorry, but my previous comments pertained to the MA5V (vertical).
>
> Having just assembled a TH-3, I can only suggest that perhaps you have an
> open trap or two. Did you check the electrical continuity along each of
> the elements after assembling them? What is the SWR on 20?
>
> ac6xg
>

No I didn't do a continuity test. I did put an analyser on the beam and the
SWR on all bands at the moment are,

14.225 at 1.06:
18.130 at 1.45:1
21.300 at 1.34:1
24.960 at 1.5:1
28.850 at 1.5:1

How do I check for an open trap?

Andy

675. Re: how can 5 W or 7W trasnsceiver reach AO 51?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 01:49:25 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AE77840D43D1nonenowhere@61.9.191.5>
Source record: 23999

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
news:g6d053gqc1@news.jpl.nasa.gov:

...
> http://www.amsat.org/amsat-new/echo/Echo_Linkbudget.php

Interestingly, the working on the above document ignores rx antenna gain in the uplink calcs, which may mislead the beginner.

The spreadsheet has the uplink 2m rx ant gain at 2dBi, and includes a somewhat unrealistic 3dB of tx line loss on the uplink. These compensating factors deliver somewhat similar outcomes.

The 2m uplink margin with a 5W tx is huge, something less than 1W might still be adequate for the proposed 6dBi antenna and say 1dB of line loss.

Owen

676. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 06:44:39 UTC
From: Jack Schitt <jack_schitt@live.com>
Message-ID: <g6eh51pdo1@registered.motzarella.org>
Source record: 24000

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:g6d8etlrd1@news.service.uci.edu...
> Richard Clark wrote:
>> On Fri, 25 Jul 2008 11:23:55 -0700 (PDT), "rolfedh@gmail.com"
>> <rolfedh@gmail.com> wrote:
>>
>>> We've been having trouble with bicycle thieves in my neighborhood. I'd
>>> like to set up a "bait-bike" that includes a low-power pulse beacon AM
>>> transmitter inside the frame and ***no visible*** antenna outside the
>>> frame. I'd like to have approximately 1-mile range. I've built a
>>> couple of Ramsey kits, but don't have much expertise.
>>> - I'd appreciate any recommendations for a transmitter circuit.
>>> - Will the frame perform as an adequate antenna?
>>
>> No.
>>
>>> - How about a dipole made from insulated wire taped to the exterior of
>>> the frame?
>>
>> Equally unlikely.
>>
>> If you have built Ramsey kits for AM transmitters, you should be well
>> aware that they rarely transmit more than a block for the suggested,
>> large (relatively speaking, of course) antenna. Putting something
>> smaller, inside the frame is like trying to yell through a straw.
>>
>> Look for an FM transmitter kit. The antenna can be the frame and a
>> wire wrapped around what looks like one of those kid's fiberglass
>> whips for a flag. The whip only has to be a meter long at most.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> Alternatively, Petco has an electric fence kit that could be attached to
> the frame. :-)
>
> ac6xg

You're a man after my own heart, ac6xg. 8>)

Jack

677. Re: digital tv tx in europe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 06:46:19 UTC
From: Jack Schitt <jack_schitt@live.com>
Message-ID: <g6eh84$q9a$1@registered.motzarella.org>
Source record: 23801

Is digital TV (USA) the same thing as HDTV (USA)?

Jack

"user" <dag@allemaale.be> wrote in message
news:g6dhr8$i7f$1@registered.motzarella.org...
>
> some countries: (future tx)
> http://users.fulladsl.be/~spb13810/dvbteu/
>
> dtv is called dvbt
> or TNT in France...
> or digitenne in Holland
> or Freeview in UK
> --
> --
> Shortwave transmissions in English, Francais, Nederlands, Deutsch,
> Suid-Afrikaans, Chinese, Dansk, Urdu, Cantonese, Greek, Spanish,
> Portuguese, ...
> http://users.fulladsl.be/spb13810/swlist/ Updated every month or so ....

678. Re: how can 5 W or 7W trasnsceiver reach AO 51?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 08:55:26 UTC
From: nobody <nobody@nobody.com>
Message-ID: <488ae67e$1@127.0.0.1>
Source record: 23802

so one does not need arrow antenna to receive signal from AO 51, just build
2.4 G omni antenna

will be ok?

679. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 09:03:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6ep85$8jq$1@news.albasani.net>
Source record: 23803

rolfedh@gmail.com wrote:
> We've been having trouble with bicycle thieves in my neighborhood. I'd
> like to set up a "bait-bike" that includes a low-power pulse beacon AM
> transmitter inside the frame and ***no visible*** antenna outside the
> frame. I'd like to have approximately 1-mile range. I've built a
> couple of Ramsey kits, but don't have much expertise.
> - I'd appreciate any recommendations for a transmitter circuit.
> - Will the frame perform as an adequate antenna?
> - How about a dipole made from insulated wire taped to the exterior of
> the frame?

You would need an LC (inductance/capacitance) loading circuit to resonate the frame as a 1/2 wave "antenna" before it would even be possible to work (heck, I have never really thought about it before, but resonating it, the frame, at a full wavelength might even be better!)

I have actually heard of people, successfully, using a 1/2 radiator with no counterpoise--with good results. In your idea/plan, this might just be the best go ...

A mile range? That would require power which might be difficult to provide with batteries and for an extended length of time ... where would you hide those batteries? In the handlebars?

Regards,
JS

680. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 10:34:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6eukb$iv6$1@news.albasani.net>
Source record: 23804

Wimpie wrote:

> ...
> The antenna is the (most) difficult part. I would recommend you to go
> to VHF (as Richard suggested). You can use the bicycle frame as ground
> ...
> Best regards,
>
> Wim
> PA3DJS
> www.tetech.nl
> the mail is OK when you remove abc

I concur, perhaps a cheap FM xmitter in the range of 88-108mc. The
frame should serve as a good 1/2 wave antenna for this frequency and the
plans for such an xmitter are readily available--a search of the net
will provide you with multiple options ...

Regards,
JS

681. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 12:53:33 UTC
From: ltdoc@yahoo.com
Message-ID: <12b7c2ca-4b90-4668-beeb-2e60a1b1c21c@z72g2000hsb.googlegroups.com>
Source record: 23805

826,
My first thought is that the feed line has become 'part' of the antenna and has changed the antenna's characteristics accordingly. My second though, if that 6 foot of feed line was connected directly to the antenna when measurements were taken, is that you being that close to the antenna changed it's characteristics.
So, what to do? How about doing that checking from the end of the feed line that will normally be used? Make any antenna adjustments accordingly. Don't want that feed line to be 'part' of the antenna? Well, how about using a feed line to do the checking that's of an appropriate length to sort of 'cancel' it's self out, to do the checking?
Doing all that checking will also give you some idea as to the accuracy of your measuring device, and the characteristic values of the feed lines, etc, sort of.
That's the 'long' version. The 'short' version is that you're probably doing something wrong, re-do it.
- 'Doc

Not much of an answer, huh?

682. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 13:05:33 UTC
From: ltdoc@yahoo.com
Message-ID: <955601df-b7aa-491f-91e8-301ecfab52ba@r66g2000hsg.googlegroups.com>
Source record: 23806

Andy,
Just from those readings, I'd have to say the antenna seems to be
operating normally/correctly. Shaking things while doing that
continuity test is usually a fairly good idea, intermittents, although
shaking the antenna isn't going to be very easy, sort of.
Not making both connections at the antenna terminal, only the
center pin, and changing the antenna's characteristics is normal.
Sort of going from a "tuned"/resonant antenna to a random length wire
kind of thing. (Receivers just aren't as 'picky' as transmitters,
have different requirements. Not a very good way of putting it, but
you get the idea?)
Don't give up, I'm interested in what happens.
- 'Doc

683. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 14:12:27 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <bhGik.22243$Eo3.21287@newsfe14.ams2>
Source record: 23807

<ltdoc@yahoo.com> wrote in message
news:955601df-b7aa-491f-91e8-301ecfab52ba@r66g2000hsg.googlegroups.com...
>
>
> Andy,
> Just from those readings, I'd have to say the antenna seems to be
> operating normally/correctly. Shaking things while doing that
> continuity test is usually a fairly good idea, intermittents, although
> shaking the antenna isn't going to be very easy, sort of.
> Not making both connections at the antenna terminal, only the
> center pin, and changing the antenna's characteristics is normal.
> Sort of going from a "tuned"/resonant antenna to a random length wire
> kind of thing. (Receivers just aren't as 'picky' as transmitters,
> have different requirements. Not a very good way of putting it, but
> you get the idea?)
> Don't give up, I'm interested in what happens.
> - 'Doc
>

I have used some conductive grease for the first time on the beam. I've
never used grease before, do you think this might be the problem?

The other thing is, that the beam is at apex roof height and mounted on the
back of the house. I have no where else to try it out to see if this is a
problem.
The centre fed dipole has the element that connects to the centre pin of the
PL259 at house end and I don't suffer any noise hiss on that like I do on
the beam and the Cobwebb is at the bottom of the garden away from the house
and that has a very quite receive on it.

Andy

684. Re: digital tv tx in europe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 15:50:15 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <XIHik.75$Ht4.2@trnddc01>
Source record: 23808

"Jack Schitt" <jack_schitt@live.com> wrote in message
news:g6eh84$q9a$1@registered.motzarella.org...
> Is digital TV (USA) the same thing as HDTV (USA)?
>
> Jack

<snip>

Hi Jack

I thought I knew you from somewhere but my wife insists that I dont know
you.

Jerry KD6JDJ

685. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 16:51:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <idkm84t5tp82q44dk5ef3reokjsclca4fj@4ax.com>
Source record: 23809

On Sat, 26 Jul 2008 15:12:27 +0100, "Andy" <dx90@blueyounder.co.uk>
wrote:

>I have used some conductive grease for the first time on the beam. I've
>never used grease before, do you think this might be the problem?

Hi Andy,

It is not the problem.

>The other thing is, that the beam is at apex roof height and mounted on the
>back of the house. I have no where else to try it out to see if this is a
>problem.

You are closer to noise in the home.

>The centre fed dipole has the element that connects to the centre pin of the
>PL259 at house end and I don't suffer any noise hiss on that like I do on
>the beam

However close one arm of the dipole is to the house, I will bet the
feedline is far, far away from the noise source.

>and the Cobwebb is at the bottom of the garden away from the house
>and that has a very quite receive on it.

Even further away from the noise source.

So far, no one has asked, and you haven't offered a comprehensive
meaning to this noise.... hiss is not remarkably unique at HF. For
comprehensive you do not state what frequencies it inhabits. OK, its
on the five bands, but is it everywhere else? Is it equally
strengthed?

A portable radio is a must for noise troubleshooting. If the S-9
noise covers 5 bands, this freestanding radio should hear it all. The
noise seems to be uniquely near the house, but can you wander the
neighborhood with a transistor radio and hear it other places? Can
you bring a transistor radio near the point the antenna is mounted and
hear the noise? If you hear it there, do you hear it in the garden?

On the other hand, if you cannot hear noise on a portable; then it is
not over-the-air, it is conducted noise. Severely corroded joints
could do that, but you already state this is a new(?), greased (that
is what the grease is for) joint antenna. Is the feedpoint choked?
(This is common advice.) Does the feedline pass near noise sources?
(Use your portable along the length of the line.)

How do you ground your shack? Some folks think that ground wires everywhere does the job - often that is the problem. Could that hiss be a hum? Poor antenna connections would be more like a sizzle. Descriptive terms are not often reliable symptom indicators.

You have a ground loop with your new installation.

73's
Richard Clark, KB7QHC

686. Re: digital tv tx in europe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 17:27:50 UTC
From: Jack Schitt <jack_schitt@live.com>
Message-ID: <g6fmr0$41n$1@registered.motzarella.org>
Source record: 23810

"Jerry" <jerrymartes@verizon.net> wrote in message
news:XIHik.75$Ht4.2@trnddc01...
>
> "Jack Schitt" <jack_schitt@live.com> wrote in message
> news:g6eh84$q9a$1@registered.motzarella.org...
>> Is digital TV (USA) the same thing as HDTV (USA)?
>>
>> Jack
>
> <snip>
>
> Hi Jack
>
> I thought I knew you from somewhere but my wife insists that I dont know
> you.
>
> Jerry KD6JDJ

You probably won't believe this, but that happens to me a lot.

Jack

687. why he need a repeater at his own home?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 19:29:23 UTC
From: nobody <nobody@nobody.com>
Message-ID: <488b7b9e$1@127.0.0.1>
Source record: 23811

http://uk.youtube.com/watch?v=5DhL-hQQFx4&feature=related

why he need a repeater at his own home?

688. Re: why he need a repeater at his own home?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 21:06:19 UTC
From: ltdoc@yahoo.com
Message-ID: <8320caba-cc90-45f5-b5b9-c0697a6f201d@t54g2000hsg.googlegroups.com>
Source record: 23812

```
...Because that's where he could put it? Bet he isn't the only one
with a 'home' repeater.
- 'Doc
```

689. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 21:14:47 UTC
From: ltdoc@yahoo.com
Message-ID: <c79c7c75-d417-4d88-bd58-75d0ebee8fef@b1g2000hsg.googlegroups.com>
Source record: 23813

Another solution could be APRS or something similar. There are separate transmitters small enough to fit in a 1.5 - 2.0" tube, encluding a battery. Antenna(s) in the seat, frame as the counterpoise? RF burns? Oh, yeah, sure. But who cares, right? All normal stipulations apply.
- 'Doc

690. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 21:29:46 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <OKl3xxcKd5iIFw6q@g3ohx.demon.co.uk>
Source record: 23814

In message
<c79c7c75-d417-4d88-bd58-75d0ebee8fef@b1g2000hsg.googlegroups.com>,
ltdoc@yahoo.com writes
>
>
>Another solution could be APRS or something similar. There are
>separate transmitters small enough to fit in a 1.5 - 2.0" tube,
>encluding a battery. Antenna(s) in the seat, frame as the
>counterpoise? RF burns? Oh, yeah, sure. But who cares, right? All
>normal stipulations apply.
> - 'Doc

The frame itself may resonate on - or around - 2m (a fullwave, end to
end?). Maybe you can tap into it using a gamma-match.
--
Ian

691. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 21:43:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lg6n84pbepldd9emvnhp1p39smo7l405it@4ax.com>
Source record: 23815

>I'd like to set up a "bait-bike"
Cell phone left on, under the seat.
When missing, call the cops and give them the phone number to track.

692. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 22:34:10 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <ZBNik.7262$t32.4930@bignews3.bellsouth.net>
Source record: 23816

<ltdoc@yahoo.com> wrote in message
news:12b7c2ca-4b90-4668-beeb-2e60a1b1c21c@z72g2000hsb.googlegroups.com...
>
>
> 826,
> My first thought is that the feed line has become 'part' of the
> antenna and has changed the antenna's characteristics accordingly. My
> second though, if that 6 foot of feed line was connected directly to
> the antenna when measurements were taken, is that you being that close
> to the antenna changed it's characteristics.
> So, what to do? How about doing that checking from the end of the
> feed line that will normally be used? Make any antenna adjustments
> accordingly. Don't want that feed line to be 'part' of the antenna?
> Well, how about using a feed line to do the checking that's of an
> appropriate length to sort of 'cancel' it's self out, to do the
> checking?
> Doing all that checking will also give you some idea as to the
> accuracy of your measuring device, and the characteristic values of
> the feed lines, etc, sort of.
> That's the 'long' version. The 'short' version is that you're
> probably doing something wrong, re-do it.
> - 'Doc
>
> Not much of an answer, huh?

Surprise!

It is turning out that coax isn't what you thought it was, is it?

Lots of folks think that coax is some miracle device that absolutely
contains all of the RF until the RF reaches (poetic license please) the
termination point. In truth, no such creature exists in any form of
transmission line.

What you are trying to do is to make the transmission line the worst
possible radiator and the antenna the best possible radiator. There are
gazillions of possibilities somewhere betwen those two potentials.

Run the full length of transmission line into your shack and then tune the
antenna based upon the data gathered in the shack. Yes, it is a PITA, but it
is the only way to do it, if you want the best tuning.

Every antenna system is just that, a system. It cannot be tuned piecemeal to
obtain the best end result. Welcome to the world of radio.

Oh, it isn't so bad once you get used to it. Now you have an excuse to invite a ham over to help you by reading the analyzer while you are outside making adjustments to the antenna.

Wait until you discover, if you haven't already, that adjusting one part of the antenna will cause you to readjust another part of the antenna, probably the one that you adjusted before the last part that you adjusted. Hang in there. It is doable. Good luck with your project.

Jack

693. Re: why he need a repeater at his own home?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-26 22:40:14 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <GHNik.7266$t32.259@bignews3.bellsouth.net>
Source record: 23817

<ltdoc@yahoo.com> wrote in message
news:8320caba-cc90-45f5-b5b9-c0697a6f201d@t54g2000hsg.googlegroups.com...
> ...Because that's where he could put it? Bet he isn't the only one
> with a 'home' repeater.
> - 'Doc
>
>

I wouldn't think that homebuilding a repeater for GMRS service would be
legal. Isn't GMRS a CB subdivision? All equipment must be type accepted,
IIRC.

Admittedly, this is well out of my area of expertise (cheesesteaks-eating,
not making).

Jack

694. Re: WANTED DIS-72 Hy Gain Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 01:17:04 UTC
From: sslivingu <sslivingu.2d1d2a5@radiobanter.com>
Message-ID: <sslivingu.2d1d2a5@radiobanter.com>
Source record: 23820

A friend is easier lost than found.*.*. /~
.~\ /~ ~\ /~
.~\ /~ ~\ ***
'   `\/'   * '   `\/
'   *
 V (MY LOEV TO
YOU.*)(. *)
/\|/\ \   'wow gold'
(http://www.wowgoldmap.com)-, .*./ \ -'wow gold'
(http://www.wowgoldhk.com/buy-wow-gold.html), *./
 | `\ .   .
.*/'一 `\ .   . .*/'
 | `\ * .*. */' _  _ `\ *
.*. */'   `\ *
*/' (`\/'*) `\ * */'
       `\/'
\ */' `\/'
           &#
12288;`\/''wow
gold' (http://www.wowgoldmap.com/cheap-wow-gold.php),'wow gold'
(http://www.wowgoldmap.com/buy-wow-gold.php),*

--
sslivingu

695. MDC QSO PARTY Next weekend

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 03:28:29 UTC
From: SWLer <DoNotSendTo@comcast.net>
Message-ID: <488BEB5F.6020601@comcast.net>
Source record: 23818

Click on:

<http://w3cwc.org/2008rules.html>

696. Lakeview 2 meter colinear as a base antenna: High SWR, radial length?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 06:29:35 UTC
From: Fieldops <wq1o.frank@gmail.com>
Message-ID: <f3df2203-d366-4c73-9695-602487f0e677@s50g2000hsb.googlegroups.com>
Source record: 23819

I have been putting together a 2m colinear in a mount bracket for portable base use. I cut three 19.5" radials and noticed that I cannot get the antenna under 2:1 swr. I adjusted the whip for 44" as instructed. Changing lengths did not get me under 2:1. It just changed the resonance point. Does the whip HAVE to be cut so too much does not go into the antenna? I adjusted it to the needed length, but did NOT cut the whip. I know that lakeview also makes this antenna in a base station configuration. Does anyone know what size radials Lakeview uses? Are the radials for this antenna primarily for decoupling? If anyone has experience with this antenna in this configuration, any ideas would be appreciated. Thanks!

697. An all-in-one solution for the HF Turnstile antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 10:45:44 UTC
From: "www.Radiondistics.com" <francesco.errante@tiscali.it>
Message-ID: <c2e47992-94f3-4c03-bdd0-3b06899ea0e4@27g2000hsf.googlegroups.com>
Source record: 23821

I am proud to present our latest release. The HF Turnstile antenna broadband driver. An all in one solution for coupling, balancing and phasing the cross-dipole antennas.

www.Radiondistics.com

698. HUGE lot estate clearance-antique radios-phonos-test equip-mics-Grigsby-Grunow, Philco, Majestic, Wards Airline, consoles, tabletops, cathedral, tombstone, bakelite, wooden, plastic-much more- over 50 items listed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 11:15:35 UTC
From: "Dwight D. Eisenhower" <rottedHonda@yahoo.com>
Message-ID: <f483bedc-c1ac-4bfb-925a-00748f135f95@s50g2000hsb.googlegroups.com>
Source record: 23822

HUGE lot antique radios-estate clearance

updated list

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZ66Q2dcatalina

16 TAPES LOT 4-TRACK CARTRIDGES-SINATRA-PETER,PAUL,MARY 1 $24.99
Free 1d 14h 24m
WWII SIGNAL CORPS LANTERN-U.S.ARMY-MX290GV-VINTAGE-$$$$ -
$24.99
$45.00
Free 1d 14h 24m
(2) SCOTCH 10" DIAMETER, 1/4" WIDE MAGNETIC TAPE REELS- -
$9.98
$15.00
Free 9d 14h 24m
PHILCO MODEL 66 WOODEN TOMBSTONE ANTIQUE RADIO-TUBES-$$ -
$49.98
$250.00
$40.00 1d 14h 24m
ANTIQUE CUNNINGHAM WOOD RADIO w/TUBES-parts/fix/restore 1 $24.99
$20.00 1d 14h 24m
PHILCO VINTAGE BAKELITE TELEVISION BOOSTER BOX-COMPLETE - $9.98
$10.00 1d 14h 24m
AMPEX MICRO 85 STEREO CASSETTE RECORDER-INTEGRATED AMP-
MADE IN AUSTRIA-VINTAGE HIGH END DECK w/120 VAC MOTOR-$
-
$24.99
$50.00
$20.00 1d 14h 24m
1930's WOODEN RADIO CATHEDRAL EXTERNAL SPEAKER-ANTIQUE- 1 $24.99
$20.00 1d 14h 24m
(6) RCA SOUNDTAPE MAGAZINE LOADED LARGE CASSETTE TAPES- -
$24.99
$125.00
$10.00 1d 14h 24m
LOT OF (14) OLD PLASTIC-BAKELITE-ANTIQUE TUBE RADIOS-$$ - $99.88
$100.00 1d 14h 24m
ANTIQUE WOODEN ASTATIC TV STATION CONTROLLER-1940-50's- - $9.98
$10.00 2d 12h 50m
VINTAGE RCA MODEL MI-12016G MICROPHONE w/CORD-rare-$$$$ 4 $20.50
$10.00 2d 14h 24m

(3) VINTAGE WALKIE-TALKIE CB RADIOS-ASSORTED MAKES-$$$$ - $9.98
$10.00 2d 14h 24m
VINTAGE LIONEL-MULTI CONTROL TRAINMASTER TRANSFORMER-$$
25 VOLT OUTPUT w/ WHISTLE, DIRECTION, SPEED CONTROLS-VG
- $24.99
$15.00 2d 14h 24m
STANDARD BRAND AM/FM STEREO TUNER-VINTAGE COMPONENT-$$$ - $9.98
$15.00 2d 14h 24m
STEWART-WARNER MOD 07-5R5 ANTIQUE TUBE WOODEN RADIO-old 1 $24.99
$20.00 2d 14h 24m
SPORTSMAN GREAT LAKES TRADE BAITCAST REEL-ANTIQUE-old-$ 1 $9.98
$10.00 2d 14h 24m
WIPER MOTOR LINKAGE-GTO-CHEVELLE-GRAN SPORT-442-SKYLARK
CUTLASS-F85-SPECIAL-JUDGE-GT37-T37-MALIBU-SS396-SS454-$
- $9.98
$10.00 2d 14h 24m
BENDIX SAPPHIRE II ANTIQUE CAR RADIO-WHITE BUTTONS-part 2 $10.98
$10.00 2d 14h 24m
VINTAGE ASTATIC D-104 MIC w/UG8 CHROME STAND-classic-$$ 2 $10.50
$10.00 2d 14h 24m
JULIETTE TOPPLAY CARTRIDGE PLAYER-2 TRACK ENDLESS LOOP-
SIMILAR TO PLAYTAPE-RARE VINTAGE AUDIO FORMAT PLAYER-$$
- $9.98
$10.00 2d 14h 24m
(2) 1964 DODGE DELUXE RADIOS w/PLASTIC DASH PLATE BEZEL
"ALL TRANSISTOR" PUSHBUTTON RADIOS-413-426HEMI-440-$$$$
- $24.99
$20.00 3d 14h 24m
VINTAGE DEVRY RF GENERATOR-P/N32000-SERIAL#105-vg cond. - $9.98
$25.00 3d 14h 24m
OLD LAFAYETTE COMSTAT-25 CITIZENS BAND TRANSCEIVER-TUBE - $24.99
$20.00 3d 14h 24m
ANTIQUE HAVANA HARBOR CIGAR BOX RADIO-UPMANN-DUNHILL-$$ - $9.98
$10.00 3d 14h 24m

1965-67 CHEVY CORVETTE VERTICAL PUSHBUTTON RADIO-$$$$$$ - $9.98
$10.00 3d 14h 21m
NUMARK HU-235R STUDIO MONITOR HEADPHONES-VINTAGE-parts- - $9.98
$10.00 3d 14h 21m
SHOTGUN/RIFLE ? FOREARM STOCK-CHECKERED-FINISHED-#04291 1 $9.98
$5.00 3d 14h 21m
HUGE PANASONIC RS-888S QUAD RECEIVER-8TRACK-CASSETTE-$$
RECORD/PLAY STEREO/QUAD 8TRACK/CASSETTE-120/220 VOLTS-$
- $49.98
$35.00 3d 14h 21m
1950s BUICK GM SONOMATIC TUBE AMPED DASH RADIO-fix/part - $9.98
$10.00 3d 14h 21m
RCA M1-12115-A VINTAGE AM/FM RECEIVER-MONO TUBE AMPED-$ - $9.98
$20.00 3d 14h 21m
(2) OEM GM CHEVROLET PUSHBUTTON RADIOS-1960's-CHROME-$$ - $9.98

$20.00 3d 14h 21m
SILVERTONE STEREO SINGLE ENDED TUBE AMP w/REVERB UNIT-$
2)12AX7's drive 2)6BQ5's w/FACEPLATE-KNOBS-CORDS-TUBES-
-
$149.88
$300.00
$40.00 8d 14h 21m
3 INTERNATIONAL SILVER CO FLAGSHIP ANGLED ANTIQUE FORKS - $9.98
$5.00 8d 14h 21m
MAGNAVOX COLLARO MODEL TP264C ANTIQUE TUBE PHONOGRAPH-$ - $24.99
$45.00 8d 14h 21m
CHRYSLER CARTER 4-BARREL AVS CARBURETOR 4682S 3548 95-$
SUPER BEE-ROADRUNNER-383 HP MAGNUM-750 CFM-MUSCLECARB-$
- $24.99
$15.00 9d 14h 21m
(2) VINTAGE CRAFTSMAN AIR PAINT SPRAY GUNS-pressurefeed - $9.98
$10.00 9d 14h 21m
ZENITH LONG DISTANCE WAVE MAGNET SUITCASE TUBE RADIO-$$ - $24.99
$25.00 1d 14h 21m
MUNTZ 4-TRACK CARTRIDGE STEREO TAPE DECK W/MOUNT-NICE-$ -
$24.99
$100.00
$30.00 1d 14h 21m
STEWART ANTIQUE PHONOGRAPH-EARLY 1900's-parts/restore-$ - $24.99
$35.00 1d 14h 21m
FIRESTONE MODEL S-7403-3 WOOD RADIO-TUBES-parts/fix-$$$ - $24.99
$25.00 1d 14h 21m
RCA SOUNDTAPE MAGAZINE LOADED CASSETTE RECORDER-SCP2-$$
STEREO SINGLE ENDED TUBE AMP INSIDE W/6V6'S-VINTAGE AMP
1 $99.88
$50.00 1d 14h 21m
LAFAYETTE MODEL HB-111 VINTAGE TUBE AMPED CB RADIO-$$$$ - $9.98
$25.00 2d 14h 21m
AIR KING MODEL 4602 WOODEN RADIO W/TUBES-parts/restore- - $24.99
$35.00 2d 14h 21m
RCA VICTOR MOD. 96T7 WOODEN RADIO W/TUBES-PARTS/RESTORE - $24.99
$35.00 2d 14h 21m
HEATHKIT VIBRATION TESTER MODEL VT-1 VINTAGE-antique-$$ 1 $9.98
$15.00 2d 14h 21m
SILVERTONE MODEL 7104 ANTIQUE WOOD RADIO w/tubes-NICE-$ - $24.99
$35.00 2d 14h 21m
ADMIRAL MOD.6RT43A-5B1A radio/phono-vintage-tubes-78rpm - $24.99
$35.00 2d 14h 21m
(2) MINIATURE VINTAGE RADIO/PHONOGRAPHS-VG CONDITION-$$ - $24.99
$25.00 2d 14h 21m
HEATHKIT PRECISION FIELD STRENGTH CRYSTAL TUNE WAVE-??
SOME SORT OF ANTENNA BOOSTER/HOMING DEVICE-L@@K-$$$$$$$
- $9.98
$25.00 3d 14h 21m

(2) AIWA PORTABLE 2-TRACK R2R RECORDERS-TP703-TP705-$$$ - $24.99
$35.00 3d 14h 20m
VINTAGE SONY MINI TRANSISTOR RADIO-CRAIG CASSETTE-MORE- - $9.98
$20.00 3d 14h 20m
VINTAGE RCA MODEL NINE CITIZENS BAND TRANSCEIVER-TUBES- 1 $9.98
$20.00 3d 17h 20m
WARDS AIRLINE 62-479, GRIGSBY-GRUNOW MAJESTIC 20-radios
PHILCO MODELS 48-1262, 46-1209-ANTIQUE AM/SW COLLECTION
-
$499.88
$900.00
Pickup only 8d 14h 20m
TEXTRON DUAL BEAM OSCILLOSCOPE MODEL N180 DUAL BEAM-$$$ - $24.99
$150.00 8d 14h 20m

699. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 11:52:37 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <2kZik.33111$Gb2.19933@newsfe29.ams2>
Source record: 23823

I have managed to make an mp3 up. The first 10 seconds is on the Cobwebb
followed by another 10 seconds on the MA5B beam pointed in there direction
and then back and forth every 10 seconds. The click is the antenna switch
clicking over.

It can be found here. http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b4.mp3

If anyone needs to here a clearer one let me know, but it will be best after
the contest has finished.

Andy

"Andy" <dx90@blueyounder.co.uk> wrote in message
news:Oynik.16244$9I1.2884@newsfe16.ams2...
>I also forgot to mention that the noise is on all bands from 10 - 20m, only
>on the MA5B.
>
>
> "Andy" <dx90@blueyounder.co.uk> wrote in message
> news:7Dlik.177$zA7.35@newsfe28.ams2...
>> The noise stays the same when I turn the beam.
>>
>> I will try to get a recording done this weekend if I can.
>>
>> I just pulled out the PL259, so just the canter pin on the PL259 on the
>> canter fed dipole was connected
>> and the noise increased with the signal and then dropped when the PL259
>> was
>> screwed back in. I had the same on the Cobwebb.
>>
>> When I did this on the MA5B the 10, 12, 15 and 17 meter bands did the
>> same ,
>> on 20 meters it was different. When I pulled out the PL259 so just the
>> canter pin of the PL259 was connected the noise dropped and with the
>> PL259 screwed in
>> fully the noise went up. The opposite to what I thought would happen
>> after
>> trying this out on my other antennas.
>>
>> Andy
>>
>>
>> "Jim Kelley" <jwkelley@uci.edu> wrote in message
>> news:g68jagnpp1@news.service.uci.edu...
>>> Andy wrote:

>>>> I've swapped the feed line over and its still the same.
>>>>
>>>> When I put the antenna together I made sure all connections where good
>>>> and the analyser gave a good match on the frequencies I want to use.
>>>>
>>>> I did use some conductive grease for the first time on the antenna.
>>>> Wonder if the grease is the problem or maybe this antenna just picks up
>>>> a
>>>> lot of background hiss.
>>>>
>>>> Andy
>>>
>>> The instruction manual for the antenna doesn't make it real obvious how
>>> the feedline attaches, but it looks to me like the antenna doesn't have
>>> a
>>> low DC resistance - like a loop would, for example. It's probably
>>> reasonable to expect this type of antenna to be noisier than a loop. I
>>> think Butternut attaches the feedline in a similar fashion on their
>>> HF6V,
>>> but puts an air core choke (from memory, 15-20 turns, 14 awg, approx 1"
>>> dia x 2.5" long) across the feedpoint. That may just be for noise
>>> because
>>> the antenna seems to have the same performance with, or without it.
>>> Perhaps you could try the same with the MA5V.
>>>
>>> I think what the OP was getting at is the noise should be a lot louder
>>> with just the center conductor attached to the radio, and then get
>>> quieter
>>> when you thread the barrel on. If it doesn't do that, then there may be
>>> a
>>> connectivity problem somewhere.
>>>
>>> ac6xg
>>>
>>>
>>
>>
>>
>>
>>
>
>
>

700. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 13:11:46 UTC
From: John Livingston <null@nospam.com>
Message-ID: <Gt6dnQV_6umP6RHVnZ2dnUVZ8tfinZ2d@bt.com>
Source record: 23824

Andy wrote:
> I have managed to make an mp3 up. The first 10 seconds is on the Cobwebb
> followed by another 10 seconds on the MA5B beam pointed in there direction
> and then back and forth every 10 seconds. The click is the antenna switch
> clicking over.
>
> It can be found here. http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b4.mp3
>
> If anyone needs to here a clearer one let me know, but it will be best after
> the contest has finished.
>
> Andy

This sounds to me as if the MA5B has a very high angle lobe which the
Cobwebb may not. More galactic noise in proportion to the wanted signal?

John

701. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 13:40:11 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <YU_ik.56086$oo.51300@newsfe09.ams2>
Source record: 23825

"Andy" <dx90@blueyounder.co.uk> wrote in message
news:2kZik.33111$Gb2.19933@newsfe29.ams2...
>I have managed to make an mp3 up. The first 10 seconds is on the Cobwebb
>followed by another 10 seconds on the MA5B beam pointed in there direction
>and then back and forth every 10 seconds. The click is the antenna switch
>clicking over.
>
> It can be found here. http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b4.mp3
>
> If anyone needs to here a clearer one let me know, but it will be best
> after the contest has finished.
>
> Andy
>
>
> "Andy" <dx90@blueyounder.co.uk> wrote in message
> news:Oynik.16244$9I1.2884@newsfe16.ams2...
>>I also forgot to mention that the noise is on all bands from 10 - 20m,
>>only on the MA5B.
>>
>>
>> "Andy" <dx90@blueyounder.co.uk> wrote in message
>> news:7Dlik.177$zA7.35@newsfe28.ams2...
>>> The noise stays the same when I turn the beam.
>>>
>>> I will try to get a recording done this weekend if I can.
>>>
>>> I just pulled out the PL259, so just the canter pin on the PL259 on the
>>> canter fed dipole was connected
>>> and the noise increased with the signal and then dropped when the PL259
>>> was
>>> screwed back in. I had the same on the Cobwebb.
>>>
>>> When I did this on the MA5B the 10, 12, 15 and 17 meter bands did the
>>> same ,
>>> on 20 meters it was different. When I pulled out the PL259 so just the
>>> canter pin of the PL259 was connected the noise dropped and with the
>>> PL259 screwed in
>>> fully the noise went up. The opposite to what I thought would happen
>>> after
>>> trying this out on my other antennas.
>>>
>>> Andy
>>>

>>>
>>> "Jim Kelley" <jwkelley@uci.edu> wrote in message
>>> news:g68jagnpp1@news.service.uci.edu...
>>>> Andy wrote:
>>>>> I've swapped the feed line over and its still the same.
>>>>>
>>>>> When I put the antenna together I made sure all connections where good
>>>>> and the analyser gave a good match on the frequencies I want to use.
>>>>>
>>>>> I did use some conductive grease for the first time on the antenna.
>>>>> Wonder if the grease is the problem or maybe this antenna just picks
>>>>> up a
>>>>> lot of background hiss.
>>>>>
>>>>> Andy
>>>>
>>>> The instruction manual for the antenna doesn't make it real obvious how
>>>> the feedline attaches, but it looks to me like the antenna doesn't have
>>>> a
>>>> low DC resistance - like a loop would, for example. It's probably
>>>> reasonable to expect this type of antenna to be noisier than a loop. I
>>>> think Butternut attaches the feedline in a similar fashion on their
>>>> HF6V,
>>>> but puts an air core choke (from memory, 15-20 turns, 14 awg, approx 1"
>>>> dia x 2.5" long) across the feedpoint. That may just be for noise
>>>> because
>>>> the antenna seems to have the same performance with, or without it.
>>>> Perhaps you could try the same with the MA5V.
>>>>
>>>> I think what the OP was getting at is the noise should be a lot louder
>>>> with just the center conductor attached to the radio, and then get
>>>> quieter
>>>> when you thread the barrel on. If it doesn't do that, then there may
>>>> be a
>>>> connectivity problem somewhere.
>>>>
>>>> ac6xg
>>>>
>>>>
>>>
>>>
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>
>
>

I forgot to mention before that the Cobwebb is 3 meters lower than the MA5B beam.
Here are some more recordings, as before 10 seconds from the Cobwebb followed by 10 seconds from the beam followed by the Cobwebb and then by the beam again and so on till the end of the recording. All recordings will be like this to save me explaining over each time. The beam is pointed in there direction. The noise and signal increases every time when switching to the beam.

http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b5.mp3

http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b6.mp3

702. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 13:47:00 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <i%_ik.56156$oo.44295@newsfe09.ams2>
Source record: 23826

"John Livingston" <null@nospam.com> wrote in message
news:Gt6dnQV_6umP6RHVnZ2dnUVZ8tfinZ2d@bt.com...
> Andy wrote:
>> I have managed to make an mp3 up. The first 10 seconds is on the Cobwebb
>> followed by another 10 seconds on the MA5B beam pointed in there
>> direction and then back and forth every 10 seconds. The click is the
>> antenna switch clicking over.
>>
>> It can be found here.
>> http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b4.mp3
>>
>> If anyone needs to here a clearer one let me know, but it will be best
>> after the contest has finished.
>>
>> Andy
>
> This sounds to me as if the MA5B has a very high angle lobe which the
> Cobwebb may not. More galactic noise in proportion to the wanted signal?
>
> John
>
>

Do you think the 2m/70cm collinear above the beam could cause this?

Andy

703. Re: Anybody where the find W4RNL's antenna-modelling series ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 15:04:44 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <3d3p845rodngcv3istcqc8gl04ajmnblb8@4ax.com>
Source record: 23827

On Wed, 23 Jul 2008 01:30:19 -0700 (PDT), 4nec2 <4nec2@gmx.net> wrote:

>Hello...,
>
>I was looking for LB Cebik's amod series (antenna modelling articles)
>ranging from amod1.html to somewhere around amod137.html
>
>Despite the fact that antennaX says that all of LB's articles are
>freely accessable, I only find amod91 to amod114 available on their
>website.
>
>Anybody who does have the whole range of LB's antenna modelling
>articles available ?
>
>Thanks in advance,
>Arie.

All of Cebik's articles were copyrighted and much of his work has
always been available only through AntennaX in book- or CD-form. No
real change there.

bob
k5qwg

704. Re: digital tv tx in europe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 15:25:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6i415adf1@news.schnuerpel.eu>
Source record: 23828

Jack Schitt wrote:

> ...
> You probably won't believe this, but that happens to me a lot.
>
> Jack
>

I BELIEVE!!! The truth is out there ... <X-Files theme music playing in background> LOL

Regards,
JS

705. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 15:46:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6i599adf3@news.schnuerpel.eu>
Source record: 23829

Richard Clark wrote:
>> I'd like to set up a "bait-bike"
> Cell phone left on, under the seat.
> When missing, call the cops and give them the phone number to track.

In my area, keeping a bicycle has always been difficult. Reporting a bicycle theft to the police provoked a response from them, similar to, "We probably won't find it."

Of course, stolen autos/motorcycles provoke a similar response. One is left with the opinion they have much better things to do ... like enforcing the laws which actually generate revenue for the city/county/state ...

The chain and lock I now carry in a bag on my bike weighs more than the bike itself ... some in my bike group first laughed. Now those who laughed, who still have a bike, carry something similar.

Heck, maybe I am fighting an uphill battle--perhaps "they" are right--and the wife and I don't need a bike. :-(

Anyway, I digress, I like your idea--but, what about a 1/2 pound of C4 under the seat, instead? <evil grin>

Regards,
JS

706. Re: HUGE lot estate clearance-antique radios-phonos-test equip-mics-Grigsby-Grunow, Philco, Majestic, Wards Airline, consoles, tabletops, cathedral, tombstone, bakelite, wooden, plastic-much more- over 50 items listed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 16:26:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hI1jk.16477$mh5.1169@nlpi067.nbdc.sbc.com>
Source record: 23830

Dwight D. Eisenhower wrote:
> HUGE lot antique radios-estate clearance

For those who don't know, for sale postings are a
violation of the charter for this newsgroup. The
proper newsgroup to use for selling stuff is:

rec.radio.swap
--
73, Cecil http://www.w5dxp.com

707. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 16:32:37 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Gq1jk.16478$mh5.4104@nlpi067.nbdc.sbc.com>
Source record: 23831

John Smith wrote:
> In my area, keeping a bicycle has always been difficult. Reporting a
> bicycle theft to the police provoked a response from them, similar to,
> "We probably won't find it."

I even recognized the thief who stole my bicycle.
The police refused to do anything because the thief
told them that he had "borrowed" it and returned it
by leaving it on my porch that same night and he
didn't know what happened to it after that.
--
73, Cecil http://www.w5dxp.com

708. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 16:44:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6i8kvdep2@news.schnuerpel.eu>
Source record: 23845

Cecil Moore wrote:
> John Smith wrote:
>> In my area, keeping a bicycle has always been difficult. Reporting a
>> bicycle theft to the police provoked a response from them, similar to,
>> "We probably won't find it."
>
> I even recognized the thief who stole my bicycle.
> The police refused to do anything because the thief
> told them that he had "borrowed" it and returned it
> by leaving it on my porch that same night and he
> didn't know what happened to it after that.

I am afraid, my response to "the cops", may have been along the lines:
"Oh YEAH! What was I ever thinking? That happens to me AND the
neighbors all the time!"

<Laughing-To-Keep-From-Crying> :-|

Regards,
JS

709. Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 18:46:40 UTC
From: Dave <foo@coo.com>
Message-ID: <488cc291@212.67.96.135>
Source record: 23832
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I wish to know if the reactance of a dipole that is physically 0.5000 wavelengths in length depends on the diameter of the wire or not.

I know a dipole 0.5 wavelength long is not resonate, but inductive so you need to shorten it a few percent to bring it to resonance. I know the length at resonance depends on wire diameter.

But I'm interested if the reactance does very with wire diameter when the antenna is physically 0.5 wavelengths long, which means it will be somewhat inductive.

A book published by the ARRL by the late Dr. Laswon (W2PV)

Lawson J. L., ï¿½Yagi Antenna Designï¿½, (1986), The American Radio Relay League. ISBN 0-87259-041-0

has a table of reactance vs the ratio K (K=lambda/a, where a is the radius) for antennas of 0.45 and 0.50 wavelengths in length. I've reproduced that table below.

The first column (K) is lambda/a

The second column (X05) is the reactance of a dipole 0.5 wavelengths in length.

The third column X045 is the reactance for a dipole 0.45 wavelengths in length.

K	X05	X045
10	34.2	23.1
30	36.7	6.4
100	38.2	-14.1
300	39	-33.6
1000	39.6	-55.5
3000	40	-75.7
10000	40.4	-98.1
30000	40.6	-118.6
100000	40.8	-141.1
300000	41.0	-161.8
1000000	41.1	-184.4

What one notices is:

1) Reactance for 0.45 lambda is very sensitive to radius, varying by more than 200 Ohms as K changes from 10 (fat elements) to 1000000 (thin elements).

2) The value for a dipole 0.5 lambda in length changes much less (only 6 Ohms), but it *does* change.

3) For infinitely thin elements (K very large), the reactance of a dipole 0.5 lambda in length looks as though it is never going to go much above 41.2 Ohms. Certainly not as high as 42 Ohms.

Now I compare that to a professional book I have:

Balanis C. A., ï¿½Antenna Theory ï¿½ Analysis and Designï¿½, (1982), Harper and Row. ISBN 0-06-0404458-2

There is a formula in Balanis' book for reactance of a dipole of arbitrary radius and length, in terms of sine and cosine integrals. It's hard to write out, but the best I can do gives:

Define:

eta=120 Pi
k=2/lambda

reactance = (eta/(4*Pi)) (2 SinIntegral[k l] +
Cos[k l]*(2 SinIntegral[k l] - SinIntegral[2 k l]) -
Sin[k l]*(2 CosIntegral[k l] - CosIntegral[2 k l] -
CosIntegral[(2 k a^2)/l]));

where 'a' is the radius.

(It's in Mathematica notation)

What is interesting about that is that for a length of 0.5 lambda, the reactance does not depend on wavelength at all - it is fixed at 42.5445 Ohms. So two different books give two quite different results.

Numerically evaluating the above formula gives this data.

K X05 X045
----
10 42.5 35.7183
30 42.5 15.5269
100 42.5 -6.79382
300 42.5 -27.1632
1000 42.5 -49.4861
3000 42.5 -69.8555
10000 42.5 -92.1784
30000 42.5 -112.548
100000 42.5 -134.871
300000 42.5 -155.24
1000000 42.5 -177.563

Does anyone have any comments? Any idea if Balanis's work is more accurate? It is more up to date, but perhaps its an approximation and the amateur radio book is more accurate. (The ham book seems quite well researched, and is not full of the voodoo that appears in a lot of ham books).

BTW, I'm also looking for an exact formula for input resistance of a dipole of arbitrary length. I know is 73.13 Ohms when 0.5 wavelengths long, but I'm not sure exactly how much it varies when the length changes (I believe it is not a lot).

Dave

david <dot> kirkby <at> onetel <dot> net

710. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 18:57:31 UTC
From: Dave <foo@coo.com>
Message-ID: <488cc51d@212.67.96.135>
Source record: 23833
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Oops, I made a couple of mistakes there:

Dave wrote:
> I wish to know if the reactance of a dipole that is physically 0.5000
> wavelengths in length depends on the diameter of the wire or not.
>
> I know a dipole 0.5 wavelength long is not resonate, but inductive so
> you need to shorten it a few percent to bring it to resonance. I know
> the length at resonance depends on wire diameter.
>
> But I'm interested if the reactance does very with wire diameter when
> the antenna is physically 0.5 wavelengths long, which means it will be
> somewhat inductive.
>
> A book published by the ARRL by the late Dr. Laswon (W2PV)
>
> Lawson J. L., ï¿½Yagi Antenna Designï¿½, (1986), The American Radio Relay
> League. ISBN 0-87259-041-0
>
> has a table of reactance vs the ratio K (K=lambda/a, where a is the
> radius) for antennas of 0.45 and 0.50 wavelengths in length. I've
> reproduced that table below.
>
> The first column (K) is lambda/a
>
> The second column (X05) is the reactance of a dipole 0.5 wavelengths in
> length.
>
> The third column X045 is the reactance for a dipole 0.45 wavelengths in
> length.
>
>
> K X05 X045
> -------------------------
> 10 34.2 23.1
> 30 36.7 6.4
> 100 38.2 -14.1
> 300 39 -33.6
> 1000 39.6 -55.5
> 3000 40 -75.7
> 10000 40.4 -98.1
> 30000 40.6 -118.6
> 100000 40.8 -141.1

> 300000 41.0 -161.8
> 1000000 41.1 -184.4
>
> What one notices is:
>
> 1) Reactance for 0.45 lambda is very sensitive to radius, varying by
> more than 200 Ohms as K changes from 10 (fat elements) to 1000000 (thin
> elements).
>
> 2) The value for a dipole 0.5 lambda in length changes much less (only 6
> Ohms), but it *does* change.
>
> 3) For infinitely thin elements (K very large), the reactance of a
> dipole 0.5 lambda in length looks as though it is never going to go much
> above 41.2 Ohms. Certainly not as high as 42 Ohms.
>
> Now I compare that to a professional book I have:
>
> Balanis C. A., ï¿½Antenna Theory ï¿½ Analysis and Designï¿½, (1982), Harper
> and Row. ISBN 0-06-0404458-2
>
> There is a formula in Balanis' book for reactance of a dipole of
> arbitrary radius and length, in terms of sine and cosine integrals. It's
> hard to write out, but the best I can do gives:
>
> Define:
>
> eta=120 Pi
> k=2/lambda

k = 2 Pi / lambda,

not 2 / lambda.

You can possibly see that when the length is 0.5 lambda, the sine term
in there is always zero, so the radius 'a' has no effect on the reactance.

> What is interesting about that is that for a length of 0.5 lambda, the
> reactance does not depend on wavelength at all - it is fixed at 42.5445
> Ohms. So two different books give two quite different results.

Sorry, I mean the reactance does not depend on radius when the dipole is
0.5 wavelengths in length.

711. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 19:55:04 UTC
From: Jim Higgins <invalid@invalid.invalid>
Message-ID: <8fjp849r2nbnmafbbilr77dtsb7iksen6o@4ax.com>
Source record: 23834

On Fri, 25 Jul 2008 18:44:46 +0100, "826" <methinks@nospam.com> wrote:

>Hi. Have a new Hustler 6 band vertical. Installed the radials and
>also buried 75 foot of RG213 coax between shack and antenna.
>I used a 6 foot peace of coax connected to adjust the antenna
>with a MFJ-259. Every band was tuned to the middle and SWR
>was lower than 1.7:1 at the edges. After the adjustments, I
>reconnected the buried coax to the antenna and on all bands
>everything had shift up by any where from 200 to 400 khz.
>Now the rig is seeing greater than 2:1 SWR.
>Should I retune the antenna with the MFJ 259 in the shack?
>Thanks Vern M0WQR

I have a 5BTV with buried radials. Works and tunes like crap without the radials. Tune the antenna with the 259 connected to it with the shortest piece of coax you can work with, like 1 foot. If you're a purist - which I advise - lie down so you're as much out of the antenna field as possible when taking readings. Or back way off and read with binoculars. (Just don't let your body affect the antenna tuning.) When that's done, coil the main coax or use a common mode choke where the coax connects to the antenna to prevent the coax shield from acting like a radial. Forget that nonsense of adjusting SWR by adjusting coax length unless you're prepared to use a different length for every band.

The MFJ 259 reads SWR with respect to it's own 50-ohm nominal impedance so if you can adjust to a very low SWR (and you can with a 5BTV or 6BTV), it should read the same at the radio end of a longer 50-ohm coax.

712. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 20:05:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <uPadnYFMO-mLSBHVnZ2dnUVZ_uGdnZ2d@posted.easystreetonline>
Source record: 23835
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Dave wrote:
> I wish to know if the reactance of a dipole that is physically 0.5000
> wavelengths in length depends on the diameter of the wire or not.

Yes, it does.
> . . .

> There is a formula in Balanis' book for reactance of a dipole of
> arbitrary radius and length, in terms of sine and cosine integrals. It's
> hard to write out, but the best I can do gives:
>
> Define:
>
> eta=120 Pi
> k=2/lambda
>
> reactance = (eta/(4*Pi)) (2 SinIntegral[k l] +
> Cos[k l]*(2 SinIntegral[k l] - SinIntegral[2 k l]) -
> Sin[k l]*(2 CosIntegral[k l] - CosIntegral[2 k l] -
> CosIntegral[(2 k a^2)/l]));
>
> where 'a' is the radius.
>

> . . .

This is the formulation by S.A. Schelkunoff, which is one of many approximations to the general problem of finding the reactance of a simple cylindrical dipole of arbitrary length and diameter. The general problem was attacked for decades by some very skilled mathematicians and engineers including R.W.P. King, David Middleton, Charles Harrison, G.H. Brown, D. D. King, F. G. Blake, M.C. Gray, and others. You'll find their works scattered about the IRE (now IEEE), British IEE, and various physics journals. The problem can't be solved in closed form, so all these people proposed various approximations, some of which work better in some situations and others in others. A good overview can be found in "The Thin Cylindrical Antenna: A Comparison of Theories, by David Middleton and Rolond King, in _J. of Applied Physics_, Vol. 17, April 1946.

> . . .

> Does anyone have any comments? Any idea if Balanis's work is more
> accurate? It is more up to date, but perhaps its an approximation and
> the amateur radio book is more accurate. (The ham book seems quite well
> researched, and is not full of the voodoo that appears in a lot of ham

> books).

As I mentioned above, some approximations are better in some circumstances (e.g., dipoles of moderate diameter near a half wave in length) and some in others (e.g. fat dipoles or ones near multiples of a half wave in length). I don't know which is better for your particular question. The easy way to find out is to get one of the readily available antenna modeling programs, any of which is capable of calculating the answer to very high accuracy, and compare this correct answer with the various approximations you find published.

> BTW, I'm also looking for an exact formula for input resistance of a
> dipole of arbitrary length. I know is 73.13 Ohms when 0.5 wavelengths
> long, but I'm not sure exactly how much it varies when the length
> changes (I believe it is not a lot).

There is no exact formula for that, either. Calculating an exact answer requires knowledge of the current distribution, which is a function of wire diameter. Assuming a sinusoidal distribution gets you very close for thin dipoles, but it's not exact. You'll find calculations based on this assumption in just about any antenna text such as Balanis or Kraus. But again, you can get extremely accurate results from readily available antenna modeling programs.

Roy Lewallen, W7EL

713. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 20:09:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pdjp84d1008ml3sr5qofg56si154tj5bks@4ax.com>
Source record: 23837
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sun, 27 Jul 2008 19:46:40 +0100, Dave <foo@coo.com> wrote:

>I wish to know if the reactance of a dipole that is physically 0.5000
>wavelengths in length depends on the diameter of the wire or not.

Hi Dave,

Yes, it does.

You are working with source material with conflicting agendas. One is simply interested in what is called a dipole for the sake of field studies and the characteristics of that dipole are a good first order approximation. This means thin-wire by and large. The other source is examining the antenna itself (or so it seems by both accounts).

The fatter the wire, the lower the inductance. Naturally the reactance must follow. The fatter the wire, the more wavelength it encompasses for a given length, hence the length can be shorter for resonance. This shorthand hardly matters for conventional wire antennas as "fat" is in the extreme, and wire is hardly the proper nomenclature when we get into these gross dimensions.

Approximations of "fat" come with cage structures that attempt to mimic a solid of revolution.

If you want to find the author who developed the first principles of thin vs. fat, that is Dr. Sergei Alexander Schelkunoff (with Friis).

In what has been decried in this forum as the failed metaphor of an antenna as transmission line, the antenna formulas from Schelkunoff were derived from (beat) a transmission line, albeit a special one.

To attempt to draw parallels between transmission lines and antennas is fraught with failures, true. Specifically, the traditional dipole in its thin-wire implementation has no linear Impedance relationship along its length. The wire separation is always growing with distance from the feed point and thus the Z varies with distance. This failure was anticipated by Schelkunoff, and folded into field theory through using conic sections for the dipole arms. Hence the biconical dipole, the conical monopole, and the discone. The transmission line analogy survives through this legacy.

All formulas that you have probably recited are the degenerative forms for his based on the conic sections.

Now as to that degeneration of the conic section into "thick" wire to "thin" wire. The conic section is certainly thick at the distal end,

no doubt there. It is also thin at the feed point. The advantage is lowered capacitance bridging the feedpoint compared to that if the thickness were constant from the distal end - for a given thickness/length/resonance. Also the conic sections most nearly approach the shape of the emerging wave's initial spherical front.

Well, the long and short of it is to seek:
"Antennas: Theory and Practice,"
Sergei A. Schelkunoff and Harald T. Friis,
Bell Telephone Laboratories, New York :
John Wiley & Sons, 1952.

73's
Richard Clark, KB7QHC

714. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 20:10:28 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <ieidnR1-bJO2SxHVnZ2dnUVZ_r_inZ2d@web-ster.com>
Source record: 23836
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Dave wrote:
> Oops, I made a couple of mistakes there:
>
>
> Dave wrote:
>> I wish to know if the reactance of a dipole that is physically 0.5000
>> wavelengths in length depends on the diameter of the wire or not.
>>
>> I know a dipole 0.5 wavelength long is not resonate, but inductive so
>> you need to shorten it a few percent to bring it to resonance. I know
>> the length at resonance depends on wire diameter.
>>
>> But I'm interested if the reactance does very with wire diameter when
>> the antenna is physically 0.5 wavelengths long, which means it will
>> be somewhat inductive.
>>
>> A book published by the ARRL by the late Dr. Laswon (W2PV)
>>
>> Lawson J. L., ï¿½Yagi Antenna Designï¿½, (1986), The American Radio Relay
>> League. ISBN 0-87259-041-0
>>
>> has a table of reactance vs the ratio K (K=lambda/a, where a is the
>> radius) for antennas of 0.45 and 0.50 wavelengths in length. I've
>> reproduced that table below.
>>
>> The first column (K) is lambda/a
>>
>> The second column (X05) is the reactance of a dipole 0.5 wavelengths
>> in length.
>>
>> The third column X045 is the reactance for a dipole 0.45 wavelengths
>> in length.
>>
>>
>> K X05 X045
>> -------------------------
>> 10 34.2 23.1
>> 30 36.7 6.4
>> 100 38.2 -14.1
>> 300 39 -33.6
>> 1000 39.6 -55.5
>> 3000 40 -75.7
>> 10000 40.4 -98.1

>> 30000 40.6 -118.6
>> 100000 40.8 -141.1
>> 300000 41.0 -161.8
>> 1000000 41.1 -184.4
>>
>> What one notices is:
>>
>> 1) Reactance for 0.45 lambda is very sensitive to radius, varying by
>> more than 200 Ohms as K changes from 10 (fat elements) to 1000000
>> (thin elements).
>>
>> 2) The value for a dipole 0.5 lambda in length changes much less (only
>> 6 Ohms), but it *does* change.
>>
>> 3) For infinitely thin elements (K very large), the reactance of a
>> dipole 0.5 lambda in length looks as though it is never going to go
>> much above 41.2 Ohms. Certainly not as high as 42 Ohms.
>>
>> Now I compare that to a professional book I have:
>>
>> Balanis C. A., ï¿½Antenna Theory ï¿½ Analysis and Designï¿½, (1982), Harper
>> and Row. ISBN 0-06-0404458-2
>>
>> There is a formula in Balanis' book for reactance of a dipole of
>> arbitrary radius and length, in terms of sine and cosine integrals.
>> It's hard to write out, but the best I can do gives:
>>
>> Define:
>>
>> eta=120 Pi
>> k=2/lambda
>
> k = 2 Pi / lambda,
>
> not 2 / lambda.
>
> You can possibly see that when the length is 0.5 lambda, the sine term
> in there is always zero, so the radius 'a' has no effect on the reactance.
>
>> What is interesting about that is that for a length of 0.5 lambda, the
>> reactance does not depend on wavelength at all - it is fixed at
>> 42.5445 Ohms. So two different books give two quite different results.
>
>
> Sorry, I mean the reactance does not depend on radius when the dipole is
> 0.5 wavelengths in length.

First, as you point out one book is using an approximation where the
other may be using calculated data. I believe the approximations start
by assuming a perfectly sinusoidal current distribution, which may not

be entirely correct, but does make the math easier. The ham radio book would be more likely to use output from an antenna modeler, since antennas are an area where theory gets damn complicated damn quick, but the modelers can do a pretty good job if you treat them right.

Second, check to see if they're both using the same equivalent circuit -- if one is looking at parallel equivalent reactance and the other serial, that would account for the difference.

Third, check to see if the ham book is giving you figures for a dipole way out in free space, or one that's mounted some known wavelength above some known ground, or that has some real resistivity in the wire, or some other 'real world' assumption that a pure theory book may not bother with.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Do you need to implement control loops in software?
"Applied Control Theory for Embedded Systems" gives you just what it says.
See details at http://www.wescottdesign.com/actfes/actfes.html

715. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 20:49:05 UTC
From: 826 <methinks@nospam.com>
Message-ID: <g6imvr$v03$1@news.albasani.net>
Source record: 23846

Hi, Thanks for all your input. Hustler recommended using 5-6 foot of coax in there manual. This I did follow and the antenna tuned very nice. When I connected the 75 ft buried coax it threw me because the resonance frequency on each band went higher. I do not have a balun at the base of the antenna. I thought that after connecting the buried coax the frequency would go down because of the capacitance of the longer coax. After rethinking this I can see that adding a balun may help. Thanks for your help and will let you know how things turn out.
Vern M0WQR

"Jim Higgins" <invalid@invalid.invalid> wrote in message news:8fjp849r2nbnmafbbilr77dtsb7iksen6o@4ax.com...
> On Fri, 25 Jul 2008 18:44:46 +0100, "826" <methinks@nospam.com> wrote:
>
>>Hi. Have a new Hustler 6 band vertical. Installed the radials and
>>also buried 75 foot of RG213 coax between shack and antenna.
>>I used a 6 foot peace of coax connected to adjust the antenna
>>with a MFJ-259. Every band was tuned to the middle and SWR
>>was lower than 1.7:1 at the edges. After the adjustments, I
>>reconnected the buried coax to the antenna and on all bands
>>everything had shift up by any where from 200 to 400 khz.
>>Now the rig is seeing greater than 2:1 SWR.
>>Should I retune the antenna with the MFJ 259 in the shack?
>>Thanks Vern M0WQR
>
> I have a 5BTV with buried radials. Works and tunes like crap without
> the radials. Tune the antenna with the 259 connected to it with the
> shortest piece of coax you can work with, like 1 foot. If you're a
> purist - which I advise - lie down so you're as much out of the
> antenna field as possible when taking readings. Or back way off and
> read with binoculars. (Just don't let your body affect the antenna
> tuning.) When that's done, coil the main coax or use a common mode
> choke where the coax connects to the antenna to prevent the coax
> shield from acting like a radial. Forget that nonsense of adjusting
> SWR by adjusting coax length unless you're prepared to use a different
> length for every band.
>
> The MFJ 259 reads SWR with respect to it's own 50-ohm nominal
> impedance so if you can adjust to a very low SWR (and you can with a
> 5BTV or 6BTV), it should read the same at the radio end of a longer
> 50-ohm coax.

716. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 22:04:02 UTC
From: Dave <foo@coo.com>
Message-ID: <488cf0d2@212.67.96.135>
Source record: 23838
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
> On Sun, 27 Jul 2008 19:46:40 +0100, Dave <foo@coo.com> wrote:
>
>> I wish to know if the reactance of a dipole that is physically 0.5000
>> wavelengths in length depends on the diameter of the wire or not.
>
> Hi Dave,
>
> Yes, it does.
>
> You are working with source material with conflicting agendas. One is
> simply interested in what is called a dipole for the sake of field
> studies and the characteristics of that dipole are a good first order
> approximation. This means thin-wire by and large. The other source
> is examining the antenna itself (or so it seems by both accounts).

I can't say I understand what you mean here.

> The fatter the wire, the lower the inductance. Naturally the
> reactance must follow. The fatter the wire, the more wavelength it
> encompasses for a given length, hence the length can be shorter for
> resonance. This shorthand hardly matters for conventional wire
> antennas as "fat" is in the extreme, and wire is hardly the proper
> nomenclature when we get into these gross dimensions.

True.

> Approximations of "fat" come with cage structures that attempt to
> mimic a solid of revolution.

OK

> If you want to find the author who developed the first principles of
> thin vs. fat, that is Dr. Sergei Alexander Schelkunoff (with Friis).

I've probably got some stuff on him here. I've got quite a few technical
books - including Krass, Balanis and a few more.

As someone else said, this stuff can get very complex very quickly.

> In what has been decried in this forum as the failed metaphor of an
> antenna as transmission line, the antenna formulas from Schelkunoff
> were derived from (beat) a transmission line, albeit a special one.
>
> To attempt to draw parallels between transmission lines and antennas
> is fraught with failures, true. Specifically, the traditional dipole

> in its thin-wire implementation has no linear Impedance relationship
> along its length. The wire separation is always growing with distance
> from the feed point and thus the Z varies with distance. This failure
> was anticipated by Schelkunoff, and folded into field theory through
> using conic sections for the dipole arms. Hence the biconical dipole,
> the conical monopole, and the discone. The transmission line analogy
> survives through this legacy.

> All formulas that you have probably recited are the degenerative forms
> for his based on the conic sections.

I'm not sure if the stuff in Lawsons book might be experimentally
measured. It references some stuff by Uda et al, but it was published in
a Tokyo University book - not exactly easy to trace, and I very much
doubt in English.

> Now as to that degeneration of the conic section into "thick" wire to
> "thin" wire. The conic section is certainly thick at the distal end,
> no doubt there. It is also thin at the feed point. The advantage is
> lowered capacitance bridging the feedpoint compared to that if the
> thickness were constant from the distal end - for a given
> thickness/length/resonance. Also the conic sections most nearly
> approach the shape of the emerging wave's initial spherical front.
>
> Well, the long and short of it is to seek:
> "Antennas: Theory and Practice,"
> Sergei A. Schelkunoff and Harald T. Friis,
> Bell Telephone Laboratories, New York :
> John Wiley & Sons, 1952.

That's not one I have. If I get involved in this work again, I might buy
a copy.

> 73's
> Richard Clark, KB7QHC

717. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 22:09:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6irnf$27d$1@news.albasani.net>
Source record: 23847
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Roy Lewallen wrote:

> ...
> Roy Lewallen, W7EL

This is just one more example of an anomaly which reminds one of "The Emperor's New Clothes--Hans Christian Anderson."

That, for some strange reason, science cannot explain the relationship of conductor diameter to length in an ABSOLUTELY predictable manner smacks of "charlatanism." This is proof, in my humble opinion, that gross errors exist on a very basic level of our understanding/formulas/equations of RF and light ...

Einstein suspected "the answers" in a "small equation", perhaps as short as an inch and a half long which would encompass "the theory of everything." After pages of complex calculus/algerba/geometric equations--we end up little better than "a guess." :-(

Surely there are some out there knowledgeable of a "hand-job!" <grin>

Obviously, something is amiss, and until that is corrected we do better than "guess."

Regards,
JS

718. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 22:13:07 UTC
From: Dave <foo@coo.com>
Message-ID: <488cf2f3@212.67.96.135>
Source record: 23839
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Roy Lewallen wrote:

>> Define:
>>
>> eta=120 Pi
>> k=2/lambda
>>
>> reactance = (eta/(4*Pi)) (2 SinIntegral[k l] +
>> Cos[k l]*(2 SinIntegral[k l] - SinIntegral[2 k l]) -
>> Sin[k l]*(2 CosIntegral[k l] - CosIntegral[2 k l] -
>> CosIntegral[(2 k a^2)/l]));
>>
>> where 'a' is the radius.
>>
>
> > . . .
>
> This is the formulation by S.A. Schelkunoff, which is one of many
> approximations to the general problem of finding the reactance of a
> simple cylindrical dipole of arbitrary length and diameter. The general
> problem was attacked for decades by some very skilled mathematicians and
> engineers including R.W.P. King, David Middleton, Charles Harrison, G.H.
> Brown, D. D. King, F. G. Blake, M.C. Gray, and others. You'll find their
> works scattered about the IRE (now IEEE), British IEE, and various
> physics journals. The problem can't be solved in closed form, so all
> these people proposed various approximations, some of which work better
> in some situations and others in others. A good overview can be found in
> "The Thin Cylindrical Antenna: A Comparison of Theories, by David
> Middleton and Rolond King, in _J. of Applied Physics_, Vol. 17, April 1946.

Thank you for that. If by chance you have that as a PDF, perhaps you can
mail it to me. But if not, I'll try to get it for interest sake. I
needed this for a piece of work, but the work will have finished by the
time I get much more done. But at least I have a better understanding now.

>
>> . . .
>
>> Does anyone have any comments? Any idea if Balanis's work is more
>> accurate? It is more up to date, but perhaps its an approximation and
>> the amateur radio book is more accurate. (The ham book seems quite
>> well researched, and is not full of the voodoo that appears in a lot
>> of ham books).
>

> As I mentioned above, some approximations are better in some
> circumstances (e.g., dipoles of moderate diameter near a half wave in
> length) and some in others (e.g. fat dipoles or ones near multiples of a
> half wave in length). I don't know which is better for your particular
> question. The easy way to find out is to get one of the readily
> available antenna modeling programs, any of which is capable of
> calculating the answer to very high accuracy, and compare this correct
> answer with the various approximations you find published.

OK. I'm just a bit suspicious of computer programs some times, as
someone will have to choose an algorithm of some sort. But I assume you
are talking of something like NEC which breaks antennas into segments.

>> BTW, I'm also looking for an exact formula for input resistance of a
>> dipole of arbitrary length. I know is 73.13 Ohms when 0.5 wavelengths
>> long, but I'm not sure exactly how much it varies when the length
>> changes (I believe it is not a lot).
>
> There is no exact formula for that, either. Calculating an exact answer
> requires knowledge of the current distribution, which is a function of
> wire diameter. Assuming a sinusoidal distribution gets you very close
> for thin dipoles, but it's not exact. You'll find calculations based on
> this assumption in just about any antenna text such as Balanis or Kraus.

Balanis has it, but leaves it as an integral, without simplifying like
he does for the real part. Yet the formuals for hte real and imaginary
parts look very similar. I might be able to attack it with a computer
algebra system - maths never was my strongest subject.

I thought I'd looked in Krauss and not found it, but perhaps it is
there. I think there is a relatively new version of Kraus, but my copy
is quite old.

> But again, you can get extremely accurate results from readily available
> antenna modeling programs.

OK, thank you for that.

> Roy Lewallen, W7EL

719. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 22:25:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0jsp84hid0j65sjdb07sjuu0hfp5sri8pg@4ax.com>
Source record: 23840
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sun, 27 Jul 2008 23:04:02 +0100, Dave <foo@coo.com> wrote:

>As someone else said, this stuff can get very complex very quickly.

Hi Dave,

Your kick-off was already complex. A thick-wire can be monstrously thick and not do much about the overall length at the principle resonance:
http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm
It does have its advantages higher in frequency.

When we look at cage conicals, the flare angle of the conical shows interesting relationships - not so much at resonance as for the continuum of reactance and resistance. What I describe as optimal bears upon an arbitrary 50 Ohm relationship, but others might mine significance from the steeper skirts of the discone.
http://www.qsl.net/kb7qhc/antenna/Discone/discone.htm

73's
Richard Clark, KB7QHC

720. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 22:35:13 UTC
From: John Livingston <null@nospam.com>
Message-ID: <oKGdnQgeztG_ZRHVnZ2dnUVZ8uSdnZ2d@bt.com>
Source record: 23841

Andy wrote:
> "John Livingston" <null@nospam.com> wrote in message
> news:Gt6dnQV_6umP6RHVnZ2dnUVZ8tfinZ2d@bt.com...
>> Andy wrote:
>>> I have managed to make an mp3 up. The first 10 seconds is on the Cobwebb
>>> followed by another 10 seconds on the MA5B beam pointed in there
>>> direction and then back and forth every 10 seconds. The click is the
>>> antenna switch clicking over.
>>>
>>> It can be found here.
>>> http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b4.mp3
>>>
>>> If anyone needs to here a clearer one let me know, but it will be best
>>> after the contest has finished.
>>>
>>> Andy
>> This sounds to me as if the MA5B has a very high angle lobe which the
>> Cobwebb may not. More galactic noise in proportion to the wanted signal?
>>
>> John
>>
>>
>
> Do you think the 2m/70cm collinear above the beam could cause this?
>
> Andy>

Quite possible. The influence of all large metallic objects in the near field of the antenna will have a marked effect on the polar diagram. Try removing the collinear to see what happens.

John

721. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 23:24:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <bOWdne3XS_tQnhDVnZ2dnUVZ_r3inZ2d@posted.easystreetonline>
Source record: 23842
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Dave wrote:
> . . .

> OK. I'm just a bit suspicious of computer programs some times, as
> someone will have to choose an algorithm of some sort.

. . .

> I might be able to attack it with a computer
> algebra system - maths never was my strongest subject.

I suppose it's natural to be more suspicious of others' work than your own. I've personally found the opposite to often be more appropriate.

> . . .

But I assume you
> are talking of something like NEC which breaks antennas into segments.

Yes. You can find a good description of the method of moments in the second and later editions of Kraus. The fundamental equation can only be solved numerically, and the method of moments, used by NEC and MININEC, is an efficient way to do it.

>>> BTW, I'm also looking for an exact formula for input resistance of a
>>> dipole of arbitrary length. I know is 73.13 Ohms when 0.5 wavelengths
>>> long, but I'm not sure exactly how much it varies when the length
>>> changes (I believe it is not a lot).
>>
>> There is no exact formula for that, either. Calculating an exact
>> answer requires knowledge of the current distribution, which is a
>> function of wire diameter. Assuming a sinusoidal distribution gets you
>> very close for thin dipoles, but it's not exact. You'll find
>> calculations based on this assumption in just about any antenna text
>> such as Balanis or Kraus.
>
> Balanis has it, but leaves it as an integral, without simplifying like
> he does for the real part. Yet the formuals for hte real and imaginary
> parts look very similar. I might be able to attack it with a computer
> algebra system - maths never was my strongest subject.

Hallen's integral equation is exact, but it's not a formula, since you can't plug numbers into one side and get a result on the other. Nor can it be solved in closed form at all. That's why so much work was done on approximate solutions and on developing numerical solution methods. Feel free to write your own program to solve it, but such programs have

existed for decades and have been verified countless times as well as being highly optimized.

> I thought I'd looked in Krauss and not found it, but perhaps it is
> there. I think there is a relatively new version of Kraus, but my copy
> is quite old.

Getting the resistance is pretty straightforward once you assume the shape of the current distribution. Assume some arbitrary current at the feedpoint which, along with the assumed current distribution, gives you the field strength in any direction. With the impedance of free space, this directly gives the power density. Integrate the power density over all space to get the total radiated power. Then you know how much power is radiated per ampere of current at the feedpoint, from which you can calculate the feedpoint resistance.

This calculation is done in all editions of Kraus, I'm sure; I have only the first and second, but I can't imagine it was deleted in later ones. Be careful when reading Kraus, however. Unlike many authors, he uses a uniform, rather than triangular, current distribution for his short elemental dipole examples. This is equivalent to a very short dipole with huge end hats, not just a plain short dipole. The half wavelength and other dipoles in his text are conventional.

> . . .

Roy Lewallen, W7EL

722. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-27 23:26:04 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AE8A7310FCBDHuckleberrybigvalley@198.186.192.196>
Source record: 23843

Funny, I've seen no one recommend addition of a 1:1 choke balun near the antenna feedpoint. If RF is flowing back down the shield of his feedline, that surely could cause some incorrect readings on SWR in the shack, wouldn't it?

Ed K7AAT

723. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 01:06:18 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrng8q6sa.13rr.bit-bucket@shell.config.com>
Source record: 23844

On 27 Jul 2008 23:26:04 GMT, Ed wrote:
>
>
> Funny, I've seen no one recommend addition of a 1:1 choke balun near the
> antenna feedpoint. If RF is flowing back down the shield of his feedline,
> that surely could cause some incorrect readings on SWR in the shack,
> wouldn't it?

And, how well would rf flow back down the shield of
"buried 75 foot of RG213..." ? :-)

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http://jonz.net/ng.htm>

724. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 04:03:29 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AE8D63A5EC50Huckleberrybigvalley@198.186.192.196>
Source record: 23848

>> Funny, I've seen no one recommend addition of a 1:1 choke balun
>> near the
>> antenna feedpoint. If RF is flowing back down the shield of his
>> feedline, that surely could cause some incorrect readings on SWR in
>> the shack, wouldn't it?

> And, how well would rf flow back down the shield of
> "buried 75 foot of RG213..." ? :-)

About as well as it flows up the center conductor, possibly. You
don't think that just because the cable is buried that RF flow on the
shield conductor is prevented, do you?

Ed

725. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 04:07:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6jgltesn1@news.albasani.net>
Source record: 23849

Ed wrote:

> ...
> About as well as it flows up the center conductor, possibly. You
> don't think that just because the cable is buried that RF flow on the
> shield conductor is prevented, do you?
>
> Ed

I sure can imagine one heck of a "capacitive load" on that outer
conductor to ground! What, thousands/tens-of-thousands of pf?

Regards,
JS

726. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 05:58:36 UTC
From: nm5k@wt.net
Message-ID: <2a211995-a3c1-422a-8f1f-1c3f85e55eb5@h17g2000prg.googlegroups.com>
Source record: 23850

On Jul 27, 8:40 am, "Andy" <d...@blueyounder.co.uk> wrote:
The beam is pointed in there
> direction. The noise and signal increases every time when switching to the
> beam.
>
> http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b5.mp3
>
> http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b6.mp3

I think your antenna system itself is probably normal for the
most part. I do hear some "whine" though on a couple of
them. Not sure what that is, could be puter/monitor related..
How is yours mounted? Flat horizontal? I had to look up a picture
to see what they are, and the one in the picture seemed to be
tilted. ? Maybe that was just to show up better in the picture..
As far as the static in the last one , it sounded like power line
noise for the most part. Either the antenna has a strong lobe
towards that noise source, or you have some noise around you
that is being piped up the shield. But almost sounded more
like it was received by the antenna to me. You should be
able to vary the level of the static, and maybe even find a
null of sorts if you turn the antenna. If not, I would look at a
possible ingress problem, and the noise coming from your
shack or house.
I checked the feed, and they seem to use a matching device,
feeding two elements. I assume they are probably feeding 10m
with a separate DE, or something along those lines.
I doubt this matching device deals with decoupling the feedline.
So the first thing I would do is make a choke out of coax.
You can use the feedline you have now, and just roll a
choke at the antenna end. 8 turns using a 6 inch diameter
coil. You can use tie wraps, tape, etc to secure the windings.
That should take care of most any ingress/common mode
problems, if you have any. At the least, should put a pretty
good dent anyway. If the noise is still strong with the choke,
it's probably normally received line noise, fence, etc in the
area. And other than turning the antenna, not much you
can do about that.
That you seem to have a normal match on all bands seems
to indicate to me that your elements, matching device, and
coax are all probably ok.
I strongly recommend adding the choke though, just to nip
the possibilities of noise ingress in the bud. Just one less
thing to worry about, and just that much less RF you will

have on your coax when transmitting.

727. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 06:00:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3mnq84h08a7pdm20j24li9nb345okaod0q@4ax.com>
Source record: 23851

On 28 Jul 2008 04:03:29 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

> About as well as it flows up the center conductor, possibly. You
>don't think that just because the cable is buried that RF flow on the
>shield conductor is prevented, do you?

Hi Ed,

I think Jonesy is fairly safe in his presumption. The classic work
performed by Brown, Lewis, and Epstein pretty conclusively reported
the nearly complete attenuation of direct driven RF currents in ground
radials at 3MHz.

75 feet of buried shield would seem to be quite snubbed by the
proximity of earth over much of the range of frequencies reliably
operated from a multi-band HF vertical.

Of course, adding a choke can't hurt.

73's
Richard Clark, KB7QHC

728. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 08:45:57 UTC
From: Dave <foo@coo.com>
Message-ID: <488d8745@212.67.96.135>
Source record: 23852
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Roy Lewallen wrote:

> But I assume you
>> are talking of something like NEC which breaks antennas into segments.
>
> Yes. You can find a good description of the method of moments in the
> second and later editions of Kraus. The fundamental equation can only be
> solved numerically, and the method of moments, used by NEC and MININEC,
> is an efficient way to do it.

Since you clearly know more about this stuff than me, do you know of the best freely available software for this which works under Unix? (I use Sun's Solaris for 99% of the things I do, including sending this message. I use Solaris on my laptop too, rather than Windows).

Hence I'm almost certainly looking for source code in either C, C++ or Fortran. Anything that works under Linux would almost certainly be able to be compiled for Solaris without too much effort.
I found this page:

http://www.si-list.net/swindex.html

which has some source. I downloaded one

http://www.si-list.net/NEC_Archives/necpp-1.1.1.tar.gz

It would not compile immediately on my Sun. gcc 4.3.1 complained about some ambiguous code. gcc 3.4.1 did not, so I got past that bit.

It then tries to link with the 'blas', 'atlas' and 'lapack_atlas' libraries, none of which my Sun has.

I then swapped to the Sun C/C++ and Fortran compilers, removed references to 'blas', 'atlas' and 'lapack_atlas' , and replaced them with 'sublibperf' which is the optimised library on Solaris. That worked ok, and I had an executable:

```
$ ./nec2++
usage: nec2++ [-i<input-file-name>] [-o<output-file-name>]
-g: print maximum gain to stdout.
-b: Perform NEC++ Benchmark.
-h: print this usage information and exit.
-v: print nec2++ version number and exit.
```

I've not done any more than that at this point, but proved it will compile on Solaris with little effort.

Anyway, if you have any recommendations for the best freely available Unix/Linux code, I would be interested.

> Hallen's integral equation is exact, but it's not a formula, since you
> can't plug numbers into one side and get a result on the other. Nor can
> it be solved in closed form at all. That's why so much work was done on
> approximate solutions and on developing numerical solution methods. Feel
> free to write your own program to solve it, but such programs have
> existed for decades and have been verified countless times as well as
> being highly optimized.

OK, I understand that.

> Getting the resistance is pretty straightforward once you assume the
> shape of the current distribution. Assume some arbitrary current at the
> feedpoint which, along with the assumed current distribution, gives you
> the field strength in any direction. With the impedance of free space,
> this directly gives the power density. Integrate the power density over
> all space to get the total radiated power. Then you know how much power
> is radiated per ampere of current at the feedpoint, from which you can
> calculate the feedpoint resistance.

> This calculation is done in all editions of Kraus, I'm sure; I have only
> the first and second, but I can't imagine it was deleted in later ones.
> Be careful when reading Kraus, however. Unlike many authors, he uses a
> uniform, rather than triangular, current distribution for his short
> elemental dipole examples. This is equivalent to a very short dipole
> with huge end hats, not just a plain short dipole. The half wavelength
> and other dipoles in his text are conventional.

I think I found what I was looking for in either Kraus or Balanis last night. The book is beside the bed, and as my wife is still asleep I'm not going to look for it.

729. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 09:02:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <uKKdnTR1I76DFhDVnZ2dnUVZ_jCdnZ2d@posted.easystreetonline>
Source record: 23853
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Dave wrote:
>
> Since you clearly know more about this stuff than me, do you know of the
> best freely available software for this which works under Unix? (I use
> Sun's Solaris for 99% of the things I do, including sending this
> message. I use Solaris on my laptop too, rather than Windows).
>
> Hence I'm almost certainly looking for source code in either C, C++ or
> Fortran. Anything that works under Linux would almost certainly be able
> to be compiled for Solaris without too much effort.
> I found this page:
>
> http://www.si-list.net/swindex.html
>
> which has some source. I downloaded one
>
> http://www.si-list.net/NEC_Archives/necpp-1.1.1.tar.gz
> . . .

Sorry, my knowledge doesn't extend to that of programs suitable for Unix
or Linux. The "Unofficial NEC archives" site is the best I know of for
various compilations. Hopefully some of the other readers can help you out.

My program, EZNEC, has been reported to run under Linux using some
versions of the wine Windows emulator, but not with others. You'll have
a lot more to choose from if you can emulate Windows.

Roy Lewallen, W7EL

730. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 09:11:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <KOqdnQPze42uEBDVnZ2dnUVZ_szinZ2d@posted.easystreetonline>
Source record: 23854

Richard Clark wrote:
> On 28 Jul 2008 04:03:29 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
> wrote:
>
>> About as well as it flows up the center conductor, possibly. You
>> don't think that just because the cable is buried that RF flow on the
>> shield conductor is prevented, do you?
>
> Hi Ed,
>
> I think Jonesy is fairly safe in his presumption. The classic work
> performed by Brown, Lewis, and Epstein pretty conclusively reported
> the nearly complete attenuation of direct driven RF currents in ground
> radials at 3MHz.
>
> 75 feet of buried shield would seem to be quite snubbed by the
> proximity of earth over much of the range of frequencies reliably
> operated from a multi-band HF vertical.
>
> Of course, adding a choke can't hurt.
>
> 73's
> Richard Clark, KB7QHC

What Richard neglected to specify is that the work of B, L, & E shows that there won't be significant current on the *outside* of the shield because of the burial. The current on the *inside* won't be affected.

What's unknown is whether there was significant current on the outside during the measurement with the shorter cable. If so, the cable and probably the person doing the measuring became part of the antenna and would therefore affect its impedance.

Roy Lewallen, W7EL

731. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 10:34:02 UTC
From: Dave <foo@coo.com>
Message-ID: <488da09a@212.67.96.135>
Source record: 23855
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Roy Lewallen wrote:
> Dave wrote:
>>
>> Since you clearly know more about this stuff than me, do you know of
>> the best freely available software for this which works under Unix? (I
>> use Sun's Solaris for 99% of the things I do, including sending this
>> message. I use Solaris on my laptop too, rather than Windows).
>>
>> Hence I'm almost certainly looking for source code in either C, C++ or
>> Fortran. Anything that works under Linux would almost certainly be
>> able to be compiled for Solaris without too much effort.
>> I found this page:
>>
>> http://www.si-list.net/swindex.html
>>
>> which has some source. I downloaded one
>>
>> http://www.si-list.net/NEC_Archives/necpp-1.1.1.tar.gz
>> . . .
>
> Sorry, my knowledge doesn't extend to that of programs suitable for Unix
> or Linux. The "Unofficial NEC archives" site is the best I know of for
> various compilations. Hopefully some of the other readers can help you out.

Thank you.

> My program, EZNEC, has been reported to run under Linux using some
> versions of the wine Windows emulator, but not with others. You'll have
> a lot more to choose from if you can emulate Windows.
>
> Roy Lewallen, W7EL

Thanks a lot. I'm just a bit anti-windows myself. Fed up with all the
hassle of viruses etc.

The CPUs in this machine are not even capable or running Windows, as
they are not AMD/Intel compatible.

I do of course have access to Windows machines, and might well check out
your code later. I assume analysing a simple dipole will be trivual and
not require a huge amount of work.

But you have helped me understand the differences in impedance between
the different sets of data I have seen, which was my main concern. For
the immediate future at least, I am not going to do any numerical

analysis, but I might well look at that for a later date.

Dave

732. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 14:26:32 UTC
From: Jim Higgins <invalid@invalid.invalid>
Message-ID: <0elr849v2nj3q6p794p0sjsstmig2fistq@4ax.com>
Source record: 23856

On Sun, 27 Jul 2008 21:49:05 +0100, "826" <methinks@nospam.com> wrote:

>Hi, Thanks for all your input. Hustler recommended using 5-6 foot of coax in
>there manual. This I did follow and the antenna tuned very nice.

I more than just suspect the length recommendation has a lot to do
with the effect of your body closer to the antenna and nothing to do
with the varying length of the coax as a matching network.

> When I
>connected the 75 ft buried coax it threw me because the resonance frequency
>on each band went higher. I do not have a balun at the base of the antenna.
>I thought that after connecting the buried coax the frequency would go down
>because of the capacitance of the longer coax. After rethinking this I can
>see that adding a balun may help. Thanks for your help and will let you know
>how things turn out.
>Vern M0WQR

You're welcome. Yes, I would be interested in hearing how it turns
out for you. Works well for me.

BTW, my coax lays on top of the ground. Shouldn't matter with the
choke at the feed point.

73, Jim KB3PU

>"Jim Higgins" <invalid@invalid.invalid> wrote in message
>news:8fjp849r2nbnmafbbilr77dtsb7iksen6o@4ax.com...
>> On Fri, 25 Jul 2008 18:44:46 +0100, "826" <methinks@nospam.com> wrote:
>>
>>>Hi. Have a new Hustler 6 band vertical. Installed the radials and
>>>also buried 75 foot of RG213 coax between shack and antenna.
>>>I used a 6 foot peace of coax connected to adjust the antenna
>>>with a MFJ-259. Every band was tuned to the middle and SWR
>>>was lower than 1.7:1 at the edges. After the adjustments, I
>>>reconnected the buried coax to the antenna and on all bands
>>>everything had shift up by any where from 200 to 400 khz.
>>>Now the rig is seeing greater than 2:1 SWR.
>>>Should I retune the antenna with the MFJ 259 in the shack?
>>>Thanks Vern M0WQR
>>
>> I have a 5BTV with buried radials. Works and tunes like crap without
>> the radials. Tune the antenna with the 259 connected to it with the
>> shortest piece of coax you can work with, like 1 foot. If you're a
>> purist - which I advise - lie down so you're as much out of the
>> antenna field as possible when taking readings. Or back way off and

>> read with binoculars. (Just don't let your body affect the antenna
>> tuning.) When that's done, coil the main coax or use a common mode
>> choke where the coax connects to the antenna to prevent the coax
>> shield from acting like a radial. Forget that nonsense of adjusting
>> SWR by adjusting coax length unless you're prepared to use a different
>> length for every band.
>>
>> The MFJ 259 reads SWR with respect to it's own 50-ohm nominal
>> impedance so if you can adjust to a very low SWR (and you can with a
>> 5BTV or 6BTV), it should read the same at the radio end of a longer
>> 50-ohm coax.
>

733. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 16:45:11 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AE9633B5CF9Huckleberrybigvalley@198.186.192.196>
Source record: 23857

>> ...
>> About as well as it flows up the center conductor, possibly. You
>> don't think that just because the cable is buried that RF flow on the
>> shield conductor is prevented, do you?
>>
>> Ed
>
> I sure can imagine one heck of a "capacitive load" on that outer
> conductor to ground! What, thousands/tens-of-thousands of pf?
>
> Regards,
> JS

I was not aware of the depth, length, and other specifics of the
buried coax installation as I jumped into the thread a bit late. Sorry.
Here where I'm located we have nothing but sand, which doesn't really
provide much of a ground. I forget other people have real dirt! :^)

Ed

734. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 18:55:16 UTC
From: 826 <methinks@nospam.com>
Message-ID: <g6l4mcsbs1@news.albasani.net>
Source record: 23858

Hi,
Here is some more info. The depth of the coax is 6". Its length is 75 foot of RG-213. The ground here is below sea level (3 ft). It was reclaimed from salt water by wind driven pumps in the 14th and 15th century. The conductivity of the ground is great for antennas. But not sure about buried feed lines.
I tested the antenna with the MFP-259 and 6 ft of cable on the ground. Yes the first thing I checked was if the reading changed if I backed off from the instrument and antenna.
I have tried buried coax one other time with a 2m vertical and thought the coax was bad because it was used before. It also gave bad reading but can remember the details. Do remember running another peace of coax back to the shack overhead and everything was OK.
Now I wondering if it is something to do with the installation. The coax is new and inside of a garden hose for protection. I did check the hose to make sure it was dry before it was used.
I know that the antenna is adjusted correctly and have taken an FT-817 and SWR meter to the antenna and it also indicated good readings.
Now something tells me not to tune the antenna with the instruments locate in the shack because it will not be curing the problem. It will just hid it until I start running some power. Then I would think something would start to get hot in the field. Like the traps.
Because the antenna no longer wants my power because its no longer tuned to the ham bands.
Regards
Vern

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9AE9633B5CF9Huckleberrybigvalley@198.186.192.196...
>>> ...
>>> About as well as it flows up the center conductor, possibly. You
>>> don't think that just because the cable is buried that RF flow on the
>>> shield conductor is prevented, do you?
>>>
>>> Ed
>>
>> I sure can imagine one heck of a "capacitive load" on that outer
>> conductor to ground! What, thousands/tens-of-thousands of pf?
>>
>> Regards,
>> JS
>
>
> I was not aware of the depth, length, and other specifics of the

> buried coax installation as I jumped into the thread a bit late. Sorry.
> Here where I'm located we have nothing but sand, which doesn't really
> provide much of a ground. I forget other people have real dirt! :^)
>
> Ed
>

735. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 19:15:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6l5s8$sh5$1@news.albasani.net>
Source record: 23859

826 wrote:
> Hi,
> Here is some more info. The depth of the coax is 6". Its length is 75 foot
> of RG-213. The ground here is below sea level (3 ft). It was reclaimed from
> salt water by wind driven pumps in the 14th and 15th century. The
> conductivity of the ground is great for antennas. But not sure about buried
> feed lines.
> ...

I, like Richard C., would like to encourage you to the use of a 1:1 current-choke/balun, either of a toroid core of proper material--or even a ferrite rod, beads, etc. -- and installed at the antenna feed point or both ends of the coax (xmitter also) ...

I would have to install software and check out a couple of things. But, I suspect, and especially at ~28+ mhz, that capacitive load on the outer conductor can't help look like anything other than/near a direct short. Even the rf down the inside of the braid/shield must be tempted to that path if it nears or is less than ~50 ohms (well, some possible/noticeable effect/affect.)

The coax I have buried, I always encased in ~1 inch PVC--possibly an overkill ... but hey, it was cheap when I bought it--I ran the UNUN (unbalanced-to-unbalanced current balun), just don't remember if I had to, or not ...

Just my two cents worth--feel free to disregard if someone ventures better/more-accurate data or proofs ... but then, you already knew that. ;-)

Regards,
JS

736. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 19:16:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <MpudnR8vEJC-hhPVnZ2dnUVZ_uLinZ2d@posted.easystreetonline>
Source record: 23860

One other thing comes to mind: When you measured the antenna through the short piece of coax, was the shield of the long buried piece connected to the antenna's ground system? If not, you might try that. It would act as an additional radial, which would have some affect on the antenna's impedance.

Roy Lewallen, W7EL

737. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 19:19:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bf6s84d8502eqqplpu2bp4fd9rnjd9d1bm@4ax.com>
Source record: 23861

On Mon, 28 Jul 2008 19:55:16 +0100, "826" <methinks@nospam.com> wrote:

>Now something tells me not to tune the antenna with the instruments locate
>in the shack because it will not be curing the problem. It will just hid it
>until I start running some power. Then I would think something would start
>to get hot in the field. Like the traps.

Hi Vern,

You DO want to tune the antenna with instruments located in the shack.
You are tuning an "antenna system" and the complete system should
appear to be resonate to both the instruments AND the transmitter.
More power (or less power) should have nothing to do with the state of
tune - unless you have an intermittent. If you have an intermittant,
this is a failure, not a mis-adjustment.

From other indications you have shared, your problem is a
comparatively subtle error, not a major failure.

73's
Richard Clark, KB7QHC

738. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 20:34:36 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g6lagp$l89$1@news.service.uci.edu>
Source record: 23862

Andy wrote:
> I have managed to make an mp3 up. The first 10 seconds is on the Cobwebb
> followed by another 10 seconds on the MA5B beam pointed in there direction
> and then back and forth every 10 seconds. The click is the antenna switch
> clicking over.
>
> It can be found here. http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b4.mp3
>
> If anyone needs to here a clearer one let me know, but it will be best after
> the contest has finished.
>
> Andy

Judging by the signal to noise ratio, it sounds like the beam is a
better antenna than the cobweb when it's pointed at the transmitting
station. You might be able to tell that more readily if you turned off
the AGC. You can even watch the AGC changing on the Windows Media
Player spectrum scope when you switch antennas.

Quieter antennas are usually quieter both ways.

ac6xg

739. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 21:17:09 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g6ld0lqen1@news.jpl.nasa.gov>
Source record: 23865
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Dave wrote:
> I wish to know if the reactance of a dipole that is physically 0.5000
> wavelengths in length depends on the diameter of the wire or not.

Yes, it does.

>
> I know a dipole 0.5 wavelength long is not resonate, but inductive so
> you need to shorten it a few percent to bring it to resonance. I know
> the length at resonance depends on wire diameter.
>
> But I'm interested if the reactance does very with wire diameter when
> the antenna is physically 0.5 wavelengths long, which means it will be
> somewhat inductive.

yes, it does vary
>
>
> K X05 X045
> -------------------------
>
> What one notices is:
>
> 1) Reactance for 0.45 lambda is very sensitive to radius, varying by
> more than 200 Ohms as K changes from 10 (fat elements) to 1000000 (thin
> elements).
>
> 2) The value for a dipole 0.5 lambda in length changes much less (only 6
> Ohms), but it *does* change.
>
> 3) For infinitely thin elements (K very large), the reactance of a
> dipole 0.5 lambda in length looks as though it is never going to go much
> above 41.2 Ohms. Certainly not as high as 42 Ohms.
>
> Now I compare that to a professional book I have:
>
> Balanis C. A., ï¿½Antenna Theory ï¿½ Analysis and Designï¿½, (1982), Harper
> and Row. ISBN 0-06-0404458-2
>
> There is a formula in Balanis' book for reactance of a dipole of
> arbitrary radius and length, in terms of sine and cosine integrals. It's
> hard to write out, but the best I can do gives:
>
> Define:

>
> eta=120 Pi
> k=2/lambda
>
> reactance = (eta/(4*Pi)) (2 SinIntegral[k l] +
> Cos[k l]*(2 SinIntegral[k l] - SinIntegral[2 k l]) -
> Sin[k l]*(2 CosIntegral[k l] - CosIntegral[2 k l] -
> CosIntegral[(2 k a^2)/l]));
>
> where 'a' is the radius.
>
> (It's in Mathematica notation)
>
> What is interesting about that is that for a length of 0.5 lambda, the
> reactance does not depend on wavelength at all - it is fixed at 42.5445
> Ohms. So two different books give two quite different results.
>
> Numerically evaluating the above formula gives this data.
>
>
> K X05 X045
> -------------------------
> 10 42.5 35.7183
> Does anyone have any comments? Any idea if Balanis's work is more
> accurate? It is more up to date, but perhaps its an approximation and
> the amateur radio book is more accurate. (The ham book seems quite well
> researched, and is not full of the voodoo that appears in a lot of ham
> books).

Balanis is giving the usual closed form expression for self Z.. I think the original is from Schelkunoff or King.. I don't have my copy of Kraus in front of me so I can't check.

Perhaps Lawson is using a different approximation?

Some formulas make the assumption of a sinusoidal current distribution, others are more refined.

>
> BTW, I'm also looking for an exact formula for input resistance of a
> dipole of arbitrary length. I know is 73.13 Ohms when 0.5 wavelengths
> long, but I'm not sure exactly how much it varies when the length
> changes (I believe it is not a lot).

73.1 +j42.5 to be more accurate..

"exact" as in analytical expression with no error? Or good to less than a percent? Accounting for resistance of the element?

As a practical matter, I use NEC for this kind of thing (which does take into account resistance, etc.) You can set it up to zap out a table that you can then interpolate into, for instance.

However, there are a variety of formulas that one can use. I suggest taking a look at Orfanidis's book
http://www.ece.rutgers.edu/~orfanidi/ewa/

Chapter 16 is probably the one you want. Figure 16.3.1 for instance. As you noted, X varies a lot more slowly for fat elements (which is to be expected..). Chapter 22 is also quite handy. Equation 22.2.10 is the expression for Z11, which is an integration of F(z), given in 22.2.11. The author makes the point "In evaluating the self impedance of an antenna with a small radius, the integrand F(z) varies rapidly around z = 0. To maintain accuracy in the integration, we split the integration interval into three subintervals, as we mentioned in Sec. 21.10"

He has matlab procedures and functions for most of them.. imped.m is probably the one you want.

740. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 21:24:35 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g6ldejqen2@news.jpl.nasa.gov>
Source record: 23864
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Dave wrote:
> Roy Lewallen wrote:
>
>
> Since you clearly know more about this stuff than me, do you know of the
> best freely available software for this which works under Unix? (I use
> Sun's Solaris for 99% of the things I do, including sending this
> message. I use Solaris on my laptop too, rather than Windows).
>
> Hence I'm almost certainly looking for source code in either C, C++ or
> Fortran. Anything that works under Linux would almost certainly be able
> to be compiled for Solaris without too much effort.

FORTRAN would be the language of choice (since that's what NEC was written *and validated* in.. one would be concerned about a C translation, although I'm sure there are C versions out there which have been validated)

> It then tries to link with the 'blas', 'atlas' and 'lapack_atlas'
> libraries, none of which my Sun has.

There should be versions out there that don't link with the matrix math packages.

>
> Anyway, if you have any recommendations for the best freely available
> Unix/Linux code, I would be interested.

What you've got is probably as good as anything else, especially if you're just looking for a table of Z vs length and diameter.

741. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-28 21:41:56 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AEA4E4AF468Dnonenowhere@61.9.191.5>
Source record: 23863

"826" <methinks@nospam.com> wrote in
news:g6d3ebrft1@news.albasani.net:

> Hi. Have a new Hustler 6 band vertical. Installed the radials and also
> buried 75 foot of RG213 coax between shack and antenna. I used a 6
> foot peace of coax connected to adjust the antenna with a MFJ-259.
> Every band was tuned to the middle and SWR was lower than 1.7:1 at the
> edges. After the adjustments, I reconnected the buried coax to the
> antenna and on all bands everything had shift up by any where from 200
> to 400 khz. Now the rig is seeing greater than 2:1 SWR.
> Should I retune the antenna with the MFJ 259 in the shack?

Vern,

An oft asked question, and there are usually emphatic answers readily
proffered.

You might find my article at http://www.vk1od.net/VSWR/displacement.htm
relevant to understanding what goes on 'within' the transmission line,
and the 'Traps for players' heading offers reasons why behaviour that is
inconsistent with transmission line behaviour may be observed.

In your case, one of the things you appear to have done is the change the
thing that was measured. You adjusted the antenna with the shield of the
main feedline disconnected. This is discussed under the heading
'Disturbing the thing being measured'.

Owen

742. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 01:02:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6lq75$af2$1@news.albasani.net>
Source record: 23866

Owen Duffy wrote:
> "826" <methinks@nospam.com> wrote in
> news:g6d3ebrft1@news.albasani.net:
>
>> Hi. Have a new Hustler 6 band vertical. Installed the radials and also
>> buried 75 foot of RG213 coax between shack and antenna. I used a 6
>> foot peace of coax connected to adjust the antenna with a MFJ-259.
>> Every band was tuned to the middle and SWR was lower than 1.7:1 at the
>> edges. After the adjustments, I reconnected the buried coax to the
>> antenna and on all bands everything had shift up by any where from 200
>> to 400 khz. Now the rig is seeing greater than 2:1 SWR.
>> Should I retune the antenna with the MFJ 259 in the shack?
>
> Vern,
>
> An oft asked question, and there are usually emphatic answers readily
> proffered.
>
> You might find my article at http://www.vk1od.net/VSWR/displacement.htm
> relevant to understanding what goes on 'within' the transmission line,
> and the 'Traps for players' heading offers reasons why behaviour that is
> inconsistent with transmission line behaviour may be observed.
>
> In your case, one of the things you appear to have done is the change the
> thing that was measured. You adjusted the antenna with the shield of the
> main feedline disconnected. This is discussed under the heading
> 'Disturbing the thing being measured'.
>
> Owen

But, if the choke/balun/unun suggested is implemented, shouldn't one
expect the transmission lines influence to measurements be expected to
drop to near zero effect/affect?--i.e., re-routing/lengthening/etc. that
xmission line (coax), opposed to measurements taken?

Or, in effect, your measurement(s) with a 1 ft. length of xmission line
will remain very stable if that length were lengthened to one-hundred
feet?; Given that the choke/balun is of proper construction to offer
HIGH impedance to the freq(s) in question on the outer braid/shield?

I certain have grown to expect this ... have I just been lucky?

Regards,
JS

743. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 02:19:16 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <2fvs84htin3ok0lmh21j5i5ps92v41j7v6@4ax.com>
Source record: 23867

On Wed, 16 Jul 2008 23:19:56 -0400, "Ed Cregger"
<ecregger@bellsouff.net> wrote:

>
>"John Smith" <assemblywizard@gmail.com> wrote in message
>news:g5lgrbigd1@news.albasani.net...
>> Ed Cregger wrote:
>>
>>> ...
<snip>
>---------
>
>The more people that want a piece of the pie, the smaller the pieces will
>be. Our main, number #1 problem is over population for the resources we have
>remaining and the lifestyle we wish to live. But you know that.
>
>Nature culls its creatures occasionally. Will it be by disease/plague? By
>wars? By things we cannot even imagine? No one knows. Enjoy the party while
>it is going on. Analyze later. Worrying hurts no one but you and those
>around you. I have given up worrying about it all. It is now in God's hands.
>I surrender.
>
>Ed, NM2K
>
>back to antennas
>

How about taking a look at a population density map.

744. Re: An all-in-one solution for the HF Turnstile antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 02:58:11 UTC
From: ltdoc@yahoo.com
Message-ID: <37850a2e-adee-475f-9376-3179620d2783@k13g2000hse.googlegroups.com>
Source record: 23868

Roughly $2000.00 USD for the turnstile thingy, or $300.00 USD for a balun, or was tha $400.00? Sorry, I'll have to pass. But thanks for the offer.
- 'Doc

745. Re: An all-in-one solution for the HF Turnstile antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 03:08:44 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <0Rvjk.23532$IK1.2701@news-server.bigpond.net.au>
Source record: 23869

So what does one get for $2,054.93 AUD plus shipping?

I think I will pass!
HH

"www.Radiondistics.com" <francesco.errante@tiscali.it> wrote in message
news:c2e47992-94f3-4c03-bdd0-3b06899ea0e4@27g2000hsf.googlegroups.com...
>I am proud to present our latest release. The HF Turnstile antenna
> broadband driver. An all in one solution for coupling, balancing and
> phasing the cross-dipole antennas.
>
> www.Radiondistics.com
>

746. Re: An all-in-one solution for the HF Turnstile antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 03:21:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6m2bm$f0g$1@news.albasani.net>
Source record: 23870

ltdoc@yahoo.com wrote:
>
>
> Roughly $2000.00 USD for the turnstile thingy, or $300.00 USD for a
> balun, or was tha $400.00? Sorry, I'll have to pass. But thanks for
> the offer.
> - 'Doc

A circular polarized antenna for half the am band up to 30mhz? Hey, the last contact I seen with the space shuttle was on VHF! No one told me.

Hey, is that gold wire and a silver chassis on the balun/feed-point? Does it use a yet unseen/generally-unknown, special, platinum-ferrite material in that balun?

My gawd, this man could on to something! ;-)

Frankly, I don't know if I can pass on this, or not ... I'll just have to "PLONK" on this, awhile. <grin>

Regards,
JS

747. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 03:38:31 UTC
From: Ed Cregger <ecregger@hotmale.com>
Message-ID: <Cfwjk.517$IB6.219@bignews8.bellsouth.net>
Source record: 23871

```
"JosephKK" <quiettechblue@yahoo.com> wrote in message
news:2fvs84htin3ok0lmh21j5i5ps92v41j7v6@4ax.com...
> On Wed, 16 Jul 2008 23:19:56 -0400, "Ed Cregger"
> <ecregger@bellsouff.net> wrote:
>
>>
>>"John Smith" <assemblywizard@gmail.com> wrote in message
>>news:g5lgrb$igd$1@news.albasani.net...
>>> Ed Cregger wrote:
>>>
>>>> ...
> <snip>
>>---------
>>
>>The more people that want a piece of the pie, the smaller the pieces will
>>be. Our main, number #1 problem is over population for the resources we
>>have
>>remaining and the lifestyle we wish to live. But you know that.
>>
>>Nature culls its creatures occasionally. Will it be by disease/plague? By
>>wars? By things we cannot even imagine? No one knows. Enjoy the party
>>while
>>it is going on. Analyze later. Worrying hurts no one but you and those
>>around you. I have given up worrying about it all. It is now in God's
>>hands.
>>I surrender.
>>
>>Ed, NM2K
>>
>>back to antennas
>>
>
> How about taking a look at a population density map.

---------------

How about giving me a clue? What is your point?

Ed Cregger
```

748. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 04:06:16 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <bp5t84de1g6c81vb22pu93u292d4ai86dj@4ax.com>
Source record: 23872

On Thu, 17 Jul 2008 18:11:58 -0700, "998cc" <hrd998cc@yahooo.com>
wrote:

>Stan, just go with what you like. I too am suspicious of claimed gain by
>manufacturers.
>
>I will also throw in a plug for getting your ham license. It costs very
>little to get your license, and it opens many new adventures far and above
>11 meters. You can work the world on 100 watts and a wire strung between a
>couple of trees.
>
>Try the practice tests on QRZ.com.
>
>73.
>Russ W6OHM
>
>"Stan Cooper" <Stan@nospam.com> wrote in message
>news:g5ohjn$ru7$1@news.albasani.net...
>> Hello I hope I'm not intruding by asking for advice on a CB antenna but I
>> figured this would be the group to ask about such things for the straight
>> scoop. At any rate I'm considering a store bought beam with both vertical
>> and horizontal polarization and my choices are limited to these two below.
>> (not many being manufactured anymore)
>>
>> The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the
>> JO GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there
>> is a lot of smoke and mirrors involved with advertised gains and so my
>> question is...is it possible for the JO GUNN to perform as well as the
>> Maco antenna?
>>
>> The GUNN is of much stronger construction and a smaller windload so I'd
>> rather put it up, but the short boom makes me wonder if the gain and
>> rejection numbers are suspect.
>>
>> Any help would be greatly appreciated, antenna choices, price tags and
>> urls below.
>>
>> 73
>> Stan
>>
>> MACO-Shooting Star $279.95
>> http://www.mpaudio1.com/Macobeamantennas2.html
>>
>> JO GUNN 3 + 3 STAR $382.00

>> http://tinyurl.com/6hzteu
>>
>> Oh btw, I'll be tower mounting it about 40' from the ground and turning it
>> with a hamIV rotator.
>>
>> Thanks again.
>>
>

749. Re: 11 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 04:07:30 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <tp5t841l562jp4tc3oc8un43h36ga1b491@4ax.com>
Source record: 23873

On Thu, 17 Jul 2008 18:11:58 -0700, "998cc" <hrd998cc@yahooo.com>
wrote:

>Stan, just go with what you like. I too am suspicious of claimed gain by
>manufacturers.
>
>I will also throw in a plug for getting your ham license. It costs very
>little to get your license, and it opens many new adventures far and above
>11 meters. You can work the world on 100 watts and a wire strung between a
>couple of trees.
>
>Try the practice tests on QRZ.com.
>
>73.
>Russ W6OHM
>
>"Stan Cooper" <Stan@nospam.com> wrote in message
>news:g5ohjn$ru7$1@news.albasani.net...
>> Hello I hope I'm not intruding by asking for advice on a CB antenna but I
>> figured this would be the group to ask about such things for the straight
>> scoop. At any rate I'm considering a store bought beam with both vertical
>> and horizontal polarization and my choices are limited to these two below.
>> (not many being manufactured anymore)
>>
>> The Maco has a 16 foot boom and an advertised gain of 12.5 db, while the
>> JO GUNN has an 8 foot boom and an advertised gain of 14.5 db. I know there
>> is a lot of smoke and mirrors involved with advertised gains and so my
>> question is...is it possible for the JO GUNN to perform as well as the
>> Maco antenna?
>>
>> The GUNN is of much stronger construction and a smaller windload so I'd
>> rather put it up, but the short boom makes me wonder if the gain and
>> rejection numbers are suspect.
>>
>> Any help would be greatly appreciated, antenna choices, price tags and
>> urls below.
>>
>> 73
>> Stan
>>
>> MACO-Shooting Star $279.95
>> http://www.mpaudio1.com/Macobeamantennas2.html
>>
>> JO GUNN 3 + 3 STAR $382.00

>> http://tinyurl.com/6hzteu
>>
>> Oh btw, I'll be tower mounting it about 40' from the ground and turning it
>> with a hamIV rotator.
>>
>> Thanks again.
>>
>

Sorry 'bout the blank.
I knew if i just kept reading i would find something like QRZ.com

750. Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 04:10:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6m59a$f0g$2@news.albasani.net>
Source record: 23874

If you ever think about posting to the moderated group, don't ...

Here is an example of a censored post, of mine:

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

A 5 KW amplifier is not lawful for use under Part 97. Please strike
reference on any resubmit. - K3FU

Your message has been rejected because it describes or advocates
activities that we reasonably believe to be in violation of United
States Law or Federal Communications Commission Regulations (or
similar laws and regulations in other countries, if you are not a
U.S. person).

Please read the charter of rec.radio.amateur.moderated at:

http://www.panix.com/~rram/usenet/rram/index.html

Please direct any queries to rec-radio-amateur-moderated-request@panix.com.

Thank you,

- Moderation Team.

========== Full text of your message
follows
> > From news@schnuerpel.eu Mon Jul 28 22:55:40 2008
> > Return-Path: <news@schnuerpel.eu>
> > X-Spam-Checker-Version: SpamAssassin 3.2.3 (2007-08-08) on
> > mailcrunch3.panix.com
> > X-Spam-Level:
> > X-Spam-Status: No, score=-4.0 required=5.0 tests=RCVD_IN_DNSWL_MED
> > autolearn=disabled version=3.2.3
> > X-Original-To: rram@panix.com
> > Delivered-To: rram@panix.com
> > Received: from mail2.panix.com (mail2.panix.com [166.84.1.73])
> > by mailbackend.panix.com (Postfix) with ESMTP id 64022DE2B
> > for <rram@panix.com>; Mon, 28 Jul 2008 22:55:40 -0400 (EDT)
> > Received: by mail2.panix.com (Postfix)
> > id 7942E3480F; Mon, 28 Jul 2008 22:55:40 -0400 (EDT)
> > Delivered-To: rec-radio-amateur-moderated@panix.com
> > Received: from pinatubo.switch.ch (pinatubo-2.switch.ch [130.59.1.10])
> > by mail2.panix.com (Postfix) with ESMTP id 35D8C3480D
> > for <rec-radio-amateur-moderated@panix.com>; Mon, 28 Jul 2008
22:55:40 -0400 (EDT)

> > Received: from [78.46.73.112] (helo=schnuerpel.eu)
> > by pinatubo.switch.ch with esmtp (Exim 4.63)
> > (envelope-from <news@schnuerpel.eu>)
> > id 1KNfND-0004GQ-Ae
> > for rec-radio-amateur-moderated@moderators.isc.org; Tue, 29 Jul
2008 04:55:39 +0200
> > Received: by schnuerpel.eu (Postfix, from userid 9)
> > id 2B82F3427E22; Tue, 29 Jul 2008 04:55:38 +0200 (CEST)
> > To: rec-radio-amateur-moderated@moderators.isc.org
> > Path: news.albasani.net!not-for-mail
> > From: John Smith <assemblywizard@gmail.com>
> > Newsgroups: rec.radio.amateur.moderated
> > Subject: Re: Another BPL?
> > Organization: albasani.net
> > Message-ID: <g6m0r9$af2$2@news.albasani.net>
> > References: <6LWdnV779ZZlBRXVnZ2dnUVZ_vWdnZ2d@deskmedia.com>
<g6f0ci$m0g$1@news.albasani.net>
<g6gq84l3ut0jinlr46djf267los74qqrtf@4ax.com>
<g6jj5jesn2@news.albasani.net>
<kars849mfsegvqm91la6kpnrddob1llnci@4ax.com>
> > Mime-Version: 1.0
> > Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> > Content-Transfer-Encoding: 7bit
> > X-Trace: news.albasani.net
kklDQD/EokIbDqwCEygRBiGoYjpTQTNy7Bnj34Wy+iKnJlTkAMQ4rP1Q6p2FTsmVNy9VODVGdwsV6qvMvxnW2OFCBA
xnVrjxCXzymgVbUYtcYC2EnBAIrN789QBMwd8w
> > X-Complaints-To: abuse@albasani.net
> > NNTP-Posting-Date: Tue, 29 Jul 2008 02:55:38 +0000 (UTC)
> > X-User-ID: P1Dd21pPhUfImVLH3p3zfBQAFZjMk3spjKWIj0WMKD4=
> > Cancel-Lock: sha1:NNzoW97xjmFZ1PA3aPy1LlXf9Aw=
> > User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
> > X-NNTP-Posting-Host: jD8wRQp2wU7nmUmpmuf4j3zmw7wvERBchG2KU87PgQk=
> > X-Virus-Status: No
> >
> > Phil Kane wrote:
> >
>> > > ...
>> > > There are still some of us who cling to the motto "When all else
>> > > fails...amateur radio". My concept of ham radio is to be free from
>> > > any non-ham intermediary transmission systems.
>> > > --
>> > >
>> > > 73 de K2ASP - Phil Kane
>> > >
>> > >>From a Clearing in the Silicon Forest
>> > > Beaverton (Washington County) Oregon
>> > >
>> > > e-mail: k2asp [at] arrl [dot] net
>> > >
> >

> > THAT is just too much of a romantics and dreamers vision for me. In
> > such times, where there is a "catastrophic failure of civilization" (I
> > mean, this is the only thing I can imagine which would hold the drama
> > you suggest)--trust me, if you can find someone to trade that rig
to for
> > a gun, a loaf of bread, some medicine for your family, shelter,
bedding,
> > etc., take them up on it! If you think food, medicine, fuel for
> > heat/cooling and shelter are going to be in demand--just try
hunting up
> > a hot 220V outlet ...
> >
> > Amateur radio did little to alleviate human suffering, pain, needs and
> > rescue in the New Orleans disaster--I suspect the highly specific
> > disaster you envision will never come, but if it does, temporary cell
> > towers on trailers (you know they have them, right) will be more
> > suited--or, as I have stated before--truckers with CB's (heck, solar
> > powered lowfers and QRP'ers may look good!) But hey, I have seen
> > Hollywood writers make a fortune selling this line, many books have
> > contained these ideas also--rescue by radio! ... a lot of scifi flicks
> > have an amateur radio in the background also--yep, I have read 'em and
> > watched 'em ... :-)
> >
> > But then, you never know, we could be invaded by Canada or Mexico
> > tomorrow and find we are fresh out of nukes!
> >
> > Now, all that said, I DO plan on keeping my KW+ and 5KW amps ... ya
> > never know, ya just never know ... but power for them, in such a
> > disaster? :-(
> >
> > I just hope a few feds/state-workers are left to see some temp cell
> > towers set up ...
> >
> > Regards,
> > JS
> >
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.9 (NetBSD)

iJwEAQECAAYFAkiOkfgACgkQSO8RITXCfvtKOgP/VjyuTPjh8Hu6KWvLUxdJiAge
1F0H2h3TtRz3Gw1asdb5AppCsKQPOrjAXhEgQ+OnKvV18HZpE7kANvD50AmZGLvj
+xrJJcJ08eF7/aU+hOSExXQ1wRxNm02iAr6X2NKkAs7ZDhygo4WBGN3w16eTIJoG
yIxj6dKe4346GF6N7NU=
=RU/f
-----END PGP SIGNATURE-----

It is none of K3FUs' business what equipment I own, or who I tell ...

That man, and I use that title VERY LIGHTLY, is beyond an idiot ...

JS

751. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 05:20:36 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AE9E34FEAC62Huckleberrybigvalley@198.186.192.196>
Source record: 23875

> If you ever think about posting to the moderated group, don't ...
>
> Here is an example of a censored post, of mine:
>
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> A 5 KW amplifier is not lawful for use under Part 97. Please strike
> reference on any resubmit. - K3FU
>

I'm pretty sure a ham CAN use a 5KW PA, as long as he limits the power out to the maximum allowed under our FCC rules. Its not the hardware that is not permited, its the actual power out that counts.

Ed K7AAT

752. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 08:39:52 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mvdypw0br.fsf@persaunet.uninett.no>
Source record: 23876

Dave <foo@coo.com> writes:

> Since you clearly know more about this stuff than me, do you know of
> the best freely available software for this which works under Unix? (I
> use Sun's Solaris for 99% of the things I do, including sending this
> message. I use Solaris on my laptop too, rather than Windows).
>
> Hence I'm almost certainly looking for source code in either C, C++ or
> Fortran. Anything that works under Linux would almost certainly be
> able to be compiled for Solaris without too much effort.
> I found this page:

NEC-2 can be built for Linux, and binaries are available for some
distributions. I am sure NEC-4 also can, if you get a license.

However, I have seen strange results come out of NEC-2 on Debian
Linux. Looked like numerical instability, and could be caused by a
problem in the toolchain. I don't think these binaries are used much,
so they don't receive the amount of tender loving care that they
deserve.

73
LA4RT Jon, Trondheim, Norway

753. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 09:06:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6mmilsop1@news.albasani.net>
Source record: 23877

Ed wrote:

> ...
> I'm pretty sure a ham CAN use a 5KW PA, as long as he limits the power
> out to the maximum allowed under our FCC rules. Its not the hardware
> that is not permited, its the actual power out that counts.
>
> Ed K7AAT
>

I am fairly confident that is true, and running such a rig at an "idle" would certainly guarantee a looooooong lifetime for the finals! ... but, with lawyers, you never know.

Anyway, a paranoid ham can certainly keep one in the basement for "The Big One!"

But, my post which started this thread was rather cryptic in its' intent; and, in my haste I failed to make that intent obvious. I meant to show what can be accomplished with censorship and why it is a most diabolical and evil weapon. Especially since the censor can "load the dice." A bully, a biased media, a pseudo-government entity--such as the arrl, etc., when, in the background, attempts to influence the public, that publics' options and access to ideas, well, this has always managed to get my blood to heat.

One thing I like about the r.r.a.antenna news thread is that we have "nuts" here, and sometimes that is exactly what is needed to seed new ideas, designs, etc. Or, to go where no mind has gone before (or is that StarTrek? <grin>)

Someone, somewhere, quite possibly from this group, will go to bed one night, much like John Kanzius. That someone will awake during the night, perhaps, and end up constructing the "new antenna" from his wifes pie plates. It may "change things."

Well, at least I think that much more plausible then someone from r.r.a.m (hey, is that a pseudonym for arrl? <wink>) awaking and saving the world with their rig and moderated newsgroup! ;-)

Regards,
JS

754. arrl antenna handbook for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 10:39:29 UTC
From: walt <wbelsito@juno.com>
Message-ID: <0cfa8552-8bd6-4a64-b9c8-20bb5b48921f@s50g2000hsb.googlegroups.com>
Source record: 23878

hello ;

i have a 1991 version of this for sale .

$ 10 plus postage & its yours .

cantact me at wbelsito at aol dot com

73 WALT / ex- K!RTS

755. Alternative-Energy Amateur Radio Picnic?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 12:55:38 UTC
From: Siyazini <scoles@isomedia.com>
Message-ID: <8060f602-6df9-4cfe-9479-7fb260c7c5a4@k37g2000hsf.googlegroups.com>
Source record: 23879

All,

Is anyone having a non-fossil powered amateur radio or homemade receiver picnic? Has anyone prepared a handout pointing to web sites describing historical and current solar, wind, earth battery, hand-cracked generator, etc. use in amateur, homemade, and emergency radio communications? I'd like to hear about activities and sites with just radio power-source facts—not explicit political content.

Thank you,

Steven, KD7YTE

756. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 13:34:27 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <E%Ejk.16657$mh5.1968@nlpi067.nbdc.sbc.com>
Source record: 23880

John Smith quoted someone:
> "A 5 KW amplifier is not lawful for use under Part 97."

Back in the 60's, a ham friend of mine ran a
surplus AM transmitter capable of 10KW output.
However, he never adjusted his input power to
more than the legal 1KW limit.
--
73, Cecil http://www.w5dxp.com

757. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 13:41:46 UTC
From: ltdoc@yahoo.com
Message-ID: <84c7846b-c8fd-4dc2-bf7d-70131ae759ef@27g2000hsf.googlegroups.com>
Source record: 23881

The rules stipulate how much power can be run. They do not stipulate
how much power could -possibly- be run. It's up to the user to stay
legal. Simple as that.
- 'Doc

758. Re: Alternative-Energy Amateur Radio Picnic?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 15:18:05 UTC
From: Siyazini <scoles@isomedia.com>
Message-ID: <ff500cde-25fb-4fb3-90bc-347f684e4083@27g2000hsf.googlegroups.com>
Source record: 23882

All,

In searching the web I found a few photovoltaic (sun battery) radio projects. I like the modest scale of the last link's solar-powered radio.

http://www.hobbyprojects.com/P/Photovoltaic_Circuits.html

www.newsociety.com/titleimages/pv_ch1.pdf

www.humboldt.edu/~serc/papers/WHECJune02.pdf

http://www.metacafe.com/watch/984846/how_to_convert_a_radio_to_solar_power/

http://www.arrl.org/news/features/2008/02/09/1/

Happy radio building,

Steven, KD7YTE

759. Re: Does reactance of dipole depend on diameter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 16:13:28 UTC
From: Dave <foo@coo.com>
Message-ID: <488f41ad@212.67.96.135>
Source record: 23883
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Jim Lux wrote:
> Dave wrote:
>> Roy Lewallen wrote:
>>
>>
>> Since you clearly know more about this stuff than me, do you know of
>> the best freely available software for this which works under Unix? (I
>> use Sun's Solaris for 99% of the things I do, including sending this
>> message. I use Solaris on my laptop too, rather than Windows).
>>
>> Hence I'm almost certainly looking for source code in either C, C++ or
>> Fortran. Anything that works under Linux would almost certainly be
>> able to be compiled for Solaris without too much effort.
>
> FORTRAN would be the language of choice (since that's what NEC was
> written *and validated* in.. one would be concerned about a C
> translation, although I'm sure there are C versions out there which have
> been validated)

Good point.

>> It then tries to link with the 'blas', 'atlas' and 'lapack_atlas'
>> libraries, none of which my Sun has.
>
> There should be versions out there that don't link with the matrix math
> packages.

The Sun library 'libsunperf' has all the functions of blas, atlas and
lapack_atlas (well at least alls those used by NEC). I simply needed to
link against that one library, rather than the other 3, and I soon had a
n executable. I've not used it yet, as I have more pressing things to do.

That sun library should be highly optimised for the UltraSPARC
processors in my workstation.

>>
>> Anyway, if you have any recommendations for the best freely available
>> Unix/Linux code, I would be interested.
>
> What you've got is probably as good as anything else, especially if
> you're just looking for a table of Z vs length and diameter.

Thank you for that.

760. How did I find out dear old dad was gay?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 16:34:31 UTC
From: "n8wwm mrbindwell (fatboy)" <dougay@nospam.com>
Message-ID: <g6ngr1$lg1$1@news.mixmin.net>
Source record: 23884
Cross-posted to:
rec.radio.amateur.policy,alt.sex.fetish.scat,alt.sex.scat,alt.ohio.toledo,alt.radio.antennas,rec.radio.amateur.antenna

I tasted feces on his peepee.

mrbindwell -The REAL N8WWM., not the trashy fake!
http://img167.imageshack.us/my.php?image=n8wwmpetroad2qg6.jpg

761. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 16:54:09 UTC
From: Ed Cregger <ecregger@hotmale.com>
Message-ID: <g6nhvl$6si$1@registered.motzarella.org>
Source record: 23885

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9AE9E34FEAC62Huckleberrybigvalley@198.186.192.196...
>
>> If you ever think about posting to the moderated group, don't ...
>>
>> Here is an example of a censored post, of mine:
>>
>> -----BEGIN PGP SIGNED MESSAGE-----
>> Hash: SHA1
>>
>> A 5 KW amplifier is not lawful for use under Part 97. Please strike
>> reference on any resubmit. - K3FU
>>
>
>
> I'm pretty sure a ham CAN use a 5KW PA, as long as he limits the power
> out to the maximum allowed under our FCC rules. Its not the hardware
> that is not permited, its the actual power out that counts.
>
> Ed K7AAT
>

Yep, you are right. We are regulated by emission standards. Not equipment
standards.

Ed, NM2K

762. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 17:07:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6ninritg1@news.albasani.net>
Source record: 23886

Ed Cregger wrote:

> ...
> Yep, you are right. We are regulated by emission standards. Not equipment
> standards.
>
> Ed, NM2K
>
>

But, we here, in r.r.a.a, can "cheat" that quite legally! It is called
high gain antennas ... (or, ERP)

However, those get more difficult with "distance" (i.e, meters) ... and
age. :-((not to mention rules/regulations.)

Regards,
JS

763. z

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 17:24:41 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <aec93596-41b4-4ce6-8d5e-2e867c051dc0@25g2000hsx.googlegroups.com>
Source record: 23887
Cross-posted to: rec.radio.amateur.policy,alt.sex.fetish.scat,alt.ohio.toledo,rec.radio.amateur.antenna

On Jul 29, 12:34 pm, "n8wwm mrbindwell \(fatboy\)" <dou...@nospam.com>
wrote:
> I
fake

764. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 19:03:30 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g6npi1naa1@f04n12.cac.psu.edu>
Source record: 23888

Ed Cregger wrote:
> "JosephKK" <quiettechblue@yahoo.com> wrote in message

>> How about taking a look at a population density map.
>
> ---------------
>
> How about giving me a clue? What is your point?

It's probably the old "How can there be too many people when there are so many empty spaces"? Chestnut, used by some to imply that we have alot of room to expand. The answer is simple.

If the land is crowded, you can't grow the crops.

If the land is in the middle of the Sahara, you can't have many people living on it.

Same goes for Death Vally, Antarctica, The Canadian Arctic, jungles and on and on.

In our area, Many farmers have sold off prime agricultural land for housing development. After all, "someone else" will grow the food. Problem is, the someone else sold off his land too.

When the places that are inhospitible to life are taken out of the picture, it doesn't look quite so happy.

- 73 de Mike N3LI -

765. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 19:09:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6nptn$k89$1@news.albasani.net>
Source record: 23889

Cecil Moore wrote:
> John Smith quoted someone:
>> "A 5 KW amplifier is not lawful for use under Part 97."
>
> Back in the 60's, a ham friend of mine ran a
> surplus AM transmitter capable of 10KW output.
> However, he never adjusted his input power to
> more than the legal 1KW limit.

Recently, over in r.r.a.m, the following exchange took place between me
and another:

EXCERPT FROM MY POST:

"> These freqs, being opened up for the net, is a very exciting development
> >... I believe the opportunities and access provided will greatly expand
> >the availability to the net under adverse circumstances, and make
> >greater speeds available to those who were lacking the same ..."

HIS RESPONSE:

"I do believe that the thrust of this group is to further Amateur
Radio, not "the 'net".

Then there are those of us who are professionals in spectrum
regulatory management who believe that this is a harebrained idea
from the get-go that violates good professional practice."

My NSHPO." [Not So Humble Personal Opinion? -- by JS]

MY ANALYSIS OF THE ABOVE EXCHANGE:

This individual, apparently/obviously, has no real respect for the
Scientific Method (i.e., Scientific Thinking.) He would have the
citizens suffer the will(s) of "us who are professionals." <snicker>
(Is that like alcoholics, they are, when they say they are one? <grin>)

And, I feel I could easily make a 1:1 replacement of "regulatory
management" with "religious devotion/doctorine."

And, his use of, "... from the get-go that violates good professional
practice" simply restates his preference to a "religious devotion" to
"arrl doctorine" over any REAL use of the scientific methods/thinking.

The "Coup De Grace" of his "thrust" being "NSHPO", indications of a
rather large ego, and usually held by an ego-manic!

Anyway, this "mans'" complete ramblings can be read over in r.r.a.m ...
it is well worth your trouble--if you need a laugh today; they are, now,
a matter of public record. ;-)

Regards,
JS

766. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 19:13:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6nq4u$k89$2@news.albasani.net>
Source record: 23890

Michael Coslo wrote:

> ...
> It's probably the old "How can there be too many people when there are
> so many empty spaces"? Chestnut, used by some to imply that we have alot
> of room to expand. The answer is simple.
>
> If the land is crowded, you can't grow the crops.
>
> If the land is in the middle of the Sahara, you can't have many people
> living on it.
>
> Same goes for Death Vally, Antarctica, The Canadian Arctic, jungles and
> on and on.
>
> In our area, Many farmers have sold off prime agricultural land for
> housing development. After all, "someone else" will grow the food.
> Problem is, the someone else sold off his land too.
>
> When the places that are inhospitible to life are taken out of the
> picture, it doesn't look quite so happy.
>
> - 73 de Mike N3LI -

"Gad Dummit Man"; get off that soap box, QUICK!

Next they will be demanding we depart from our "antenna farms" and begin raising vegetables! LOL!

Regards,
JS

767. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 19:45:19 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-9CEF6D.11451829072008@netnews.worldnet.att.net>
Source record: 23891

In article <E%Ejk.16657$mh5.1968@nlpi067.nbdc.sbc.com>,
Cecil Moore <nospam@w5dxp.com> wrote:

> John Smith quoted someone:
> > "A 5 KW amplifier is not lawful for use under Part 97."
>
> Back in the 60's, a ham friend of mine ran a
> surplus AM transmitter capable of 10KW output.
> However, he never adjusted his input power to
> more than the legal 1KW limit.

Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't understand, or can't comprehend, the actual Rule that Part 97 operations are REQUIRED to operate under. Specifically Part 97.313. I wonder if "Said Person" has ever actually READ 47CFR90.313? Apparently NOT......

--
Bruce in alaska
add <path> after <fast> to reply

768. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 19:56:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6nsm2$q6i$1@news.albasani.net>
Source record: 23892

Bruce in alaska wrote:

> ...
> Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
> understand, or can't comprehend, the actual Rule that Part 97
> operations are REQUIRED to operate under. Specifically Part
> 97.313. I wonder if "Said Person" has ever actually READ
> 47CFR90.313? Apparently NOT......
>

Your post is inspiring, and immediately brings a hypothetical question to mind:

If an amateur is near a QRP'er on a field-day, they both have made contact with the same ham, on the same freq/mode and within seconds of ones' QSO ending, the other began ... and the QRP'er did it with 5w the other ham with 100w ...

Is the 100w'er in violation of the law? <grin>

Or, and perhaps more importantly, do you know of any amateurs who would "turn him in?" Or, call for his license to be revoked? -- I mean other than those in r.r.a.m, apparently?

Or, who really enjoys contacts barely above the noise floor? Well, sometimes ...

ROFLOL!

Regards,
JS

769. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 20:10:23 UTC
From: Dave <noone@nowhere.com>
Message-ID: <POKjk.325$iM5.77@trnddc07>
Source record: 23893

"Bruce in alaska" <fast@btpost.net> wrote in message
news:fast-9CEF6D.11451829072008@netnews.worldnet.att.net...
> In article <E%Ejk.16657$mh5.1968@nlpi067.nbdc.sbc.com>,
> Cecil Moore <nospam@w5dxp.com> wrote:
>
>> John Smith quoted someone:
>> > "A 5 KW amplifier is not lawful for use under Part 97."
>>
>> Back in the 60's, a ham friend of mine ran a
>> surplus AM transmitter capable of 10KW output.
>> However, he never adjusted his input power to
>> more than the legal 1KW limit.
>
> Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
> understand, or can't comprehend, the actual Rule that Part 97
> operations are REQUIRED to operate under. Specifically Part
> 97.313. I wonder if "Said Person" has ever actually READ
> 47CFR90.313? Apparently NOT......
>

and how would you know that from the information stated?

770. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 20:12:29 UTC
From: Jim Kelley <jimkelleyamps@gmail.com>
Message-ID: <79488d5e-6fca-42ad-90bd-817aa2a6f705@u12g2000prd.googlegroups.com>
Source record: 23894

On Jul 28, 9:10 pm, John Smith <assemblywiz...@gmail.com> wrote:
> If you ever think about posting to the moderated group, don't ...
>
> Here is an example of a censored post, of mine:
>
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> A 5 KW amplifier is not lawful for use under Part 97. Please strike
> reference on any resubmit. - K3FU
>
> Your message has been rejected because it describes or advocates
> activities that we reasonably believe to be in violation of United
> States Law or Federal Communications Commission Regulations (or
> similar laws and regulations in other countries, if you are not a
> U.S. person).
>
> Please read the charter of rec.radio.amateur.moderated at:
>
>   http://www.panix.com/~rram/usenet/rram/index.html
>
> Please direct any queries to rec-radio-amateur-moderated-requ...@panix.com.
>
> Thank you,
>
>   - Moderation Team.
>
>
> It is none of K3FUs' business what equipment I own, or who I tell ...
>
> That man, and I use that title VERY LIGHTLY, is beyond an idiot ...
>
> JS

What they are doing over there is a blatent attempt to keep bozos off
the bus! It should be viewed as an affront to all bozos, and you are
well within your rights to be good and mad about it.

ac6xg
(actual callsign)

771. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 20:43:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6nvdb$sp7$1@news.albasani.net>
Source record: 23895

Dave wrote:

> ...
> and how would you know that from the information stated?
>
>

Oh now, imagine that; why didn't we/I think of that! There are "other possibilities" to his intentions/actions/words!

However, the alternatives bode poorly of the mans motives, intellect, reading comprehension abilities, trustworthiness, fitness for public position, etc. -- pick one or more at your own/his risk ... perhaps "manipulator" would be a compromise one could seek?

Regards,
JS

772. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 20:51:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6nvrt$sp7$2@news.albasani.net>
Source record: 23896

Jim Kelley wrote:

> ...
> What they are doing over there is a blatent attempt to keep bozos off
> the bus! It should be viewed as an affront to all bozos, and you are
> well within your rights to be good and mad about it.
>
> ac6xg
> (actual callsign)

If your appraisal of "their intentions/wishes" is correct, and you are a friend, would not it be appropriate to inform them they have failed?

Indeed, apparently, while "their" attention(s) were elsewhere, the bozos snuck on that bus and now guide that "vehicles" direction ... <frown>

But you do have a point! Their inability to recognize their plight and what has happened to them is rather strange; do you believe anyone is home? ... Or, you think it might be something in the water they are drinking? :-(

Regards,
JS

773. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 20:51:19 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g6nvs7$17ms$1@f04n12.cac.psu.edu>
Source record: 23897

John Smith wrote:
> Michael Coslo wrote:
>
>> ...
>> It's probably the old "How can there be too many people when there are
>> so many empty spaces"? Chestnut, used by some to imply that we have
>> alot of room to expand. The answer is simple.
>>
>> If the land is crowded, you can't grow the crops.
>>
>> If the land is in the middle of the Sahara, you can't have many people
>> living on it.
>>
>> Same goes for Death Vally, Antarctica, The Canadian Arctic, jungles
>> and on and on.
>>
>> In our area, Many farmers have sold off prime agricultural land for
>> housing development. After all, "someone else" will grow the food.
>> Problem is, the someone else sold off his land too.
>>
>> When the places that are inhospitible to life are taken out of the
>> picture, it doesn't look quite so happy.
>>
>> - 73 de Mike N3LI -
>
> "Gad Dummit Man"; get off that soap box, QUICK!
>
> Next they will be demanding we depart from our "antenna farms" and begin
> raising vegetables! LOL!

How about we propose some experiments in which we put up a tower, and
grow crops around it, to see if the radio waves promote the crop growth?

I'll try the experiment with Barley and hops.... ;^)

- 73 d eMike N3LI -

774. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 20:52:00 UTC
From: Robert Smits <bob@rsmits.ca>
Message-ID: <cddaf66f7388eeeef74546fc718682b2@grapevine.islandnet.com>
Source record: 23898

Cecil Moore wrote:

> John Smith wrote:
>> In my area, keeping a bicycle has always been difficult. Reporting a
>> bicycle theft to the police provoked a response from them, similar to,
>> "We probably won't find it."
>
> I even recognized the thief who stole my bicycle.
> The police refused to do anything because the thief
> told them that he had "borrowed" it and returned it
> by leaving it on my porch that same night and he
> didn't know what happened to it after that.

Take 'em to small claims court?
--
bob@rsmits.ca (Robert Smits, Ladysmith BC)

"I'm not one of those who think Bill Gates is the devil. I simply suspect
that if Microsoft ever met up with the devil, it wouldn't need an
interpreter." - Nicholas Petreley

775. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 21:13:14 UTC
From: Jim Kelley <jimkelleyamps@gmail.com>
Message-ID: <4d76f6ad-18c7-4121-8ff3-84ac824fe483@u6g2000prc.googlegroups.com>
Source record: 23899

On Jul 29, 1:51 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Jim Kelley wrote:
> > ...
> > What they are doing over there is a blatent attempt to keep bozos off
> > the bus! It should be viewed as an affront to all bozos, and you are
> > well within your rights to be good and mad about it.
>
> > ac6xg
> > (actual callsign)
>
> If your appraisal of "their intentions/wishes" is correct, and you are a
> friend, would not it be appropriate to inform them they have failed?

With all due respect, I wouldn't be surprised if your posts were used
as the calibration standard, "John".

ac6xg
(actual callsign)

776. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 21:29:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6o237tld1@news.albasani.net>
Source record: 23900

Jim Kelley wrote:

> ...
> With all due respect, I wouldn't be surprised if your posts were used
> as the calibration standard, "John".
>
> ac6xg
> (actual callsign)
>

Why Jim, and certainly with all due respect intended, I most willingly accept that as your NSHPO! (Yanno, that acronym is growing on me--at first I wasn't so taken with it!) ;-)

Regards,
JS

777. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 21:42:44 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <n9Mjk.15706$xZ.11230@nlpi070.nbdc.sbc.com>
Source record: 23751

Bruce in alaska wrote:
> Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
> understand, or can't comprehend, the actual Rule that Part 97
> operations are REQUIRED to operate under. Specifically Part
> 97.313. I wonder if "Said Person" has ever actually READ
> 47CFR90.313? Apparently NOT......

I fail to see how "never adjusting his input power to more
than the legal 1KW limit" violated 97.313.
--
73, Cecil http://www.w5dxp.com

778. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 21:46:54 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <gdMjk.15707$xZ.11207@nlpi070.nbdc.sbc.com>
Source record: 23752

Robert Smits wrote:
> Take 'em to small claims court?

Take a homeless meth addict, who begs for money
door to door, to court? Shirley, you jest.
--
73, Cecil http://www.w5dxp.com

779. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 23:09:30 UTC
From: Jim Kelley <jimkelleyamps@gmail.com>
Message-ID: <cfcafb59-bf8b-4a1b-a65f-97372686ac4b@w1g2000prk.googlegroups.com>
Source record: 23753

On Jul 29, 6:34 am, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith quoted someone:
>
> > "A 5 KW amplifier is not lawful for use under Part 97."
>
> Back in the 60's, a ham friend of mine ran a
> surplus AM transmitter capable of 10KW output.
> However, he never adjusted his input power to
> more than the legal 1KW limit.
> --
> 73, Cecil http://www.w5dxp.com

Like you, I'm just an observer in all this, but it appears that Phil Kane (the gentleman to whom "Mr. Smith" was lecturing) must have been referring to the practice of using a 5 KW amp at its rated output on the ham bands as being unlawful. You probably remember Phil from r.r.a.p. He made his living as a practicing communications attorney IIRC.

ac6xg

780. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-29 23:20:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6o8km$2sc$1@news.albasani.net>
Source record: 23754

Jim Kelley wrote:
> On Jul 29, 6:34 am, Cecil Moore <nos...@w5dxp.com> wrote:
>> ...
>> 73, Cecil http://www.w5dxp.com
>
> Like you, I'm just an observer in all this, but it appears that Phil
> Kane (the gentleman to whom "Mr. Smith" was lecturing) must have been
> referring to the practice of using a 5 KW amp at its rated output on
> the ham bands as being unlawful. You probably remember Phil from
> r.r.a.p. He made his living as a practicing communications attorney
> IIRC.
>
> ac6xg

Jim, I can possibly help clarify the situation, at this point.

The "gentleman" who took, apparently/NSHPO, responsibility for the censorship was Paul Schleck/K3FU (none other than a major player in the arrl wannabe political league) ... and, in my NSHPO, was stepping up to assist a friend (aiding an accomplice would just be too harsh of language) ...

Regards,
JS

781. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 00:10:44 UTC
From: Jim Kelley <jimkelleyamps@gmail.com>
Message-ID: <c59bf5c1-38c1-415f-b023-f53894dc2b27@v26g2000prm.googlegroups.com>
Source record: 23755

On Jul 29, 4:20 pm, John Smith <assemblywiz...@gmail.com> wrote:

> The "gentleman" who took, apparently/NSHPO, responsibility for the
> censorship was Paul Schleck/K3FU (none other than a major player in the
> arrl wannabe political league) ... and, in my NSHPO, was stepping up to
> assist a friend (aiding an accomplice would just be too harsh of
> language) ...

You bet.

But here's what I really need to know: how can I turn on a message
filter in google groups? That would really help a lot.

ac6xg
(actual callsign)

782. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 00:32:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6ocra$4a3$1@news.albasani.net>
Source record: 23756

Jim Kelley wrote:

> ...
> You bet.
>
> But here's what I really need to know: how can I turn on a message
> filter in google groups? That would really help a lot.
>
> ac6xg
> (actual callsign)
>

Well, I am not familiar with google groups; so, I posed the question to my son, who in turn, posed the question to a friend ...

Short answer is: "NewsProxy", possibly used in conjunction with "Hampster." (will give you "God-like powers on filtering.")

However, their long answer included the fact that it would be much easier to set up a real newsreader through a free news server ...

Sorry, best I could do ... I really didn't really understand all they were willing to explain ... you will excuse me for now wishing to ...

However, to the best of, even, their knowledge, there is "no easy way" to do what you want.

Regards,
JS

783. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 00:43:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6odfh$5e6$1@news.albasani.net>
Source record: 23757

John Smith wrote:
... you will excuse me for now wishing to ...

In the above, change now to not ... you probably already caught that ...

Regards,
JS

784. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 01:27:58 UTC
From: Ed Cregger <ecregger@hotmale.com>
Message-ID: <g6og32$1ub$1@aioe.org>
Source record: 23758

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:g6nvs7$17ms$1@f04n12.cac.psu.edu...
> John Smith wrote:
>> Michael Coslo wrote:
>>
>>> ...
>>> It's probably the old "How can there be too many people when there are
>>> so many empty spaces"? Chestnut, used by some to imply that we have alot
>>> of room to expand. The answer is simple.
>>>
>>> If the land is crowded, you can't grow the crops.
>>>
>>> If the land is in the middle of the Sahara, you can't have many people
>>> living on it.
>>>
>>> Same goes for Death Vally, Antarctica, The Canadian Arctic, jungles and
>>> on and on.
>>>
>>> In our area, Many farmers have sold off prime agricultural land for
>>> housing development. After all, "someone else" will grow the food.
>>> Problem is, the someone else sold off his land too.
>>>
>>> When the places that are inhospitible to life are taken out of the
>>> picture, it doesn't look quite so happy.
>>>
>>> - 73 de Mike N3LI -
>>
>> "Gad Dummit Man"; get off that soap box, QUICK!
>>
>> Next they will be demanding we depart from our "antenna farms" and begin
>> raising vegetables! LOL!
>
> How about we propose some experiments in which we put up a tower, and grow
> crops around it, to see if the radio waves promote the crop growth?
>
> I'll try the experiment with Barley and hops.... ;^)
>
>
> - 73 d eMike N3LI -

Or how about genetically engineering a tree to actually be an antenna tree?
Just for kicks, we could patch in some genes to apple, peach and pear trees
too, so it wouldn't be a total ecological loss.

Ed, NM2K

785. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 04:12:26 UTC
From: Clark Kent <kentc@daily-planet.com>
Message-ID: <LSRjk.3357$QX3.86@newsfe02.iad>
Source record: 23759

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9AE9E34FEAC62Huckleberrybigvalley@198.186.192.196...
>
> > If you ever think about posting to the moderated group, don't ...
> >
> > Here is an example of a censored post, of mine:
> >
> > -----BEGIN PGP SIGNED MESSAGE-----
> > Hash: SHA1
> >
> > A 5 KW amplifier is not lawful for use under Part 97. Please strike
> > reference on any resubmit. - K3FU
> >
>
>
> I'm pretty sure a ham CAN use a 5KW PA, as long as he limits the power
> out to the maximum allowed under our FCC rules. Its not the hardware
> that is not permited, its the actual power out that counts.
>
> Ed K7AAT
>

Ought to be obvious: An HF radio can transmit on all parts of its design
bands. License class determines the legality (or not) of the band
segment(s) the licensee accesses. Most hams elect to be straight-shooters
in this regard. Power should be the same.

786. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 04:14:56 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <4VRjk.3435$r55.1927@fe127.usenetserver.com>
Source record: 23760

John Smith wrote:
> Jim Kelley wrote:
>> On Jul 29, 6:34 am, Cecil Moore <nos...@w5dxp.com> wrote:
>>> ...
>>> 73, Cecil http://www.w5dxp.com
>>
>> Like you, I'm just an observer in all this, but it appears that Phil
>> Kane (the gentleman to whom "Mr. Smith" was lecturing) must have been
>> referring to the practice of using a 5 KW amp at its rated output on
>> the ham bands as being unlawful. You probably remember Phil from
>> r.r.a.p. He made his living as a practicing communications attorney
>> IIRC.
>>
>> ac6xg
>
> Jim, I can possibly help clarify the situation, at this point.
>
> The "gentleman" who took, apparently/NSHPO, responsibility for the
> censorship was Paul Schleck/K3FU (none other than a major player in the
> arrl wannabe political league) ... and, in my NSHPO, was stepping up to
> assist a friend (aiding an accomplice would just be too harsh of
> language) ...
>
> Regards,
> JS

You're too modest, "John". I've included a couple of your quotes for
balance.

From rec.radio.cb
Dec. 19, 2006

When I go shopping in walmart, I use maxon 49mhz headsets to communicate
with the wife. I use 5 watt cobra chicken band sets when camping.

I use a 1KW (1.5kw pep) rig for casual world chat.

5KW is just when I get serious ...

JS

From rec.radio.cb
Dec. 20, 2006

Jim:

Whether you are impressed or not is no concern of mine. Trash CB'ers? Naaa mate! My amateur equip covers the cb band quite nicely, don't mind chatting up truckers at all!

I was just asking you all if you would be joining me on the ham freqs, now that the CW requirement in the USA is being dropped ...

Regards,
JS

From rec.radio.cb
May 26, 2005
If one is smart enough to call it an "amateur amplifier" don't they let it be sold? Certainly every cb'er in the world is smart enough to know an amateur linear can be used on 11 meters with very little modification... Also, check out pages on russian linears, they have 3.5KW rigs which are very affordable... a friend going/living in canada can possibly grab one for you easily too... there are many ways around any roadblock they can throw up--retired engineers routinely build linears in their garages for "beer money."

Warmest regards,
John

From rec.radio.cb
May 26, 2005

Here is a guy which can help you out, or you can at least get ideas from his page...

A good 4KW to 5KW russian tube in a homebrew linear is just the ticket, especially if you just "idle" the tube at a 3.5 KW input... last you a lifetime and all the power you will ever need... someone should set up a home business building them...

Warmest regards,
John

From rec.radio.amateur.misc
May 25, 2005

I have a single russian tube (two tube in push-pull driving it--in the amp) which is outputting approx. 4.5KW... can you imagine what the transistor (mosfet) amp which could match it would look like--or cost!!!!

Warmest regards,
John

I'm certain that you're honest as the day is long and would never consider running illegal power.

Dave K8MN

787. Re: Bicycle frame as antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 04:43:50 UTC
From: Robert Smits <bob@rsmits.ca>
Message-ID: <14f4a1f21f7bbff60e11402bbcda1672@grapevine.islandnet.com>
Source record: 23761

Cecil Moore wrote:

> Robert Smits wrote:
>> Take 'em to small claims court?
>
> Take a homeless meth addict, who begs for money
> door to door, to court? Shirley, you jest.

I wouldn't either, but that part wasn't mentioned before.

Bob

--
bob@rsmits.ca (Robert Smits, VE7HS, Ladysmith BC)

"I'm not one of those who think Bill Gates is the devil. I simply suspect
that if Microsoft ever met up with the devil, it wouldn't need an
interpreter." - Nicholas Petreley

788. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 04:48:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6orq3$a51$1@news.albasani.net>
Source record: 23762

Dave Heil wrote:

> ...
> Dave K8MN

Ohh Dave, I am a real dangerous scoundrel alright--you sure have me pegged!

Got a "toy car" with the old 454 engine, and a 3/4 race cam, and various "mods", which can do 200+ mph ... I have only had it up to ~150mph on the freeway--2, maybe 3 times ... seems I value my life too much, at least these days, to really enjoy it as much as I had first thought. Can't really enjoy 'em now that I can freely afford 'em, a shame, really ... (well, afford 'em without dipping into the kids college monies.) "Toys" are that way ... can you imagine the cost of the ticket--if I'd been caught? :-(

Someone like you just can't understand that, I'd imagine ...

But, look on the bright side, someday you can "replay" this post to me! That would probably you a much bigger "jolt" than any of my "my notorious exploits!" -- To each his own ...

Someday I'll tell 'ya about some of my "college exploits", but then, that would probably bore you <smirk> ... really just did 'em to keep the girls attention ... ;-)

ROFLOL!!!

Regards,
JS

789. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 05:18:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6otjv$a51$2@news.albasani.net>
Source record: 23763

John Smith wrote:
> Dave Heil wrote:
> ...
> Regards,
> JS

Oh, and those 49mhz rigs--I gave 'em away and went to some ~460 FRS by
Cobra--remember that corp. from the 70's? Used to manufacture CB equip?
The preformance on the high power freqs is amazing ... and the roger
beep works well. <grin>

Regards,
JS

790. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 05:20:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6otn4$a51$3@news.albasani.net>
Source record: 23764

John Smith wrote:
> John Smith wrote:
>> Dave Heil wrote:
>> ...
>> Regards,
>> JS
>
> Oh, and those 49mhz rigs--I gave 'em away and went to some ~460 FRS by
> Cobra--remember that corp. from the 70's? Used to manufacture CB equip?
> The preformance on the high power freqs is amazing ... and the roger
> beep works well. <grin>
>
> Regards,
> JS

Yanno, I really regret this last post of mine, above, the XYL made me
throw it in ... after she read your post. :-(

Regards,
JS

791. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 15:16:13 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <1B%jk.140722$102.132159@bgtnsc05-news.ops.worldnet.att.net>
Source record: 23765

Bruce in alaska wrote:
> In article <E%Ejk.16657$mh5.1968@nlpi067.nbdc.sbc.com>,
> Cecil Moore <nospam@w5dxp.com> wrote:
>
>> John Smith quoted someone:
>>> "A 5 KW amplifier is not lawful for use under Part 97."
>> Back in the 60's, a ham friend of mine ran a
>> surplus AM transmitter capable of 10KW output.
>> However, he never adjusted his input power to
>> more than the legal 1KW limit.
>
> Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
> understand, or can't comprehend, the actual Rule that Part 97
> operations are REQUIRED to operate under. Specifically Part
> 97.313. I wonder if "Said Person" has ever actually READ
> 47CFR90.313? Apparently NOT......
>

Why stop at 97.313? Try 97.315 and 97.317 as well.

Unless "John Smith" has a "certificated for use in the amateur service"
5 kW amp (highly unlikely that one could find such a critter) or
"constructed or modified" the 5 kW amp then it is not legal for amateur
use at any power setting.

73,
Gene
W4SZ

792. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 15:44:56 UTC
From: Ed Cregger <ecregger@hotmale.com>
Message-ID: <g6q2l4$3i6$1@registered.motzarella.org>
Source record: 23766

"Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
news:1B%jk.140722$102.132159@bgtnsc05-news.ops.worldnet.att.net...
> Bruce in alaska wrote:
>> In article <E%Ejk.16657$mh5.1968@nlpi067.nbdc.sbc.com>,
>> Cecil Moore <nospam@w5dxp.com> wrote:
>>
>>> John Smith quoted someone:
>>>> "A 5 KW amplifier is not lawful for use under Part 97."
>>> Back in the 60's, a ham friend of mine ran a
>>> surplus AM transmitter capable of 10KW output.
>>> However, he never adjusted his input power to
>>> more than the legal 1KW limit.
>>
>> Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
>> understand, or can't comprehend, the actual Rule that Part 97
>> operations are REQUIRED to operate under. Specifically Part
>> 97.313. I wonder if "Said Person" has ever actually READ
>> 47CFR90.313? Apparently NOT......
>>
>
> Why stop at 97.313? Try 97.315 and 97.317 as well.
>
> Unless "John Smith" has a "certificated for use in the amateur service" 5
> kW amp (highly unlikely that one could find such a critter) or
> "constructed or modified" the 5 kW amp then it is not legal for amateur
> use at any power setting.
>
> 73,
> Gene
> W4SZ

No, friend Gene. It doesn't work that way.

You do not have to have type certification for legal operation in the amateur bands. You only have to have it if you SELL new amateur equipment in the USA.

Home made gear, or converted gear from other services, is completely legal in the USA. Always has been, hopefully always will be.

CB gear must be type certified for selling and for usage.

Again, amateurs are responsible for their RF emissions. The FCC could care less about the type of gear you are using. In fact, if brand new amateur gear that was compliant to type acceptance malfunctions and issues an out of spec emission, YOU as a duly licensed amateur radio operator are held

responsible. Not the manufacturer.

Ed, NM2K

793. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 16:30:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <PG0kk.16775$mh5.12876@nlpi067.nbdc.sbc.com>
Source record: 23767

Gene Fuller wrote:
> Unless "John Smith" has a "certificated for use in the amateur service"
> 5 kW amp (highly unlikely that one could find such a critter) or
> "constructed or modified" the 5 kW amp then it is not legal for amateur
> use at any power setting.

"Modifications" are trivially easy.
--
73, Cecil http://www.w5dxp.com

794. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 16:38:20 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <489098FC.1080005@jpl.nasa.gov>
Source record: 23769

Cecil Moore wrote:
> Gene Fuller wrote:
>> Unless "John Smith" has a "certificated for use in the amateur
>> service" 5 kW amp (highly unlikely that one could find such a critter)
>> or "constructed or modified" the 5 kW amp then it is not legal for
>> amateur use at any power setting.
>
> "Modifications" are trivially easy.

Like..

The front panel has been modified to add a placard indicating that operation at more than XXX plate current is not permitted when operating in amateur bands.

And that whole "offered for sale" kind of thing is a huge regulatory morass, with a lot of "guidance" from local FCC officials on what might or might not prompt more attention. It's one thing to have an obscure ham oriented website and sell widgets obviously intended only for hams.. another to have a big online-store and sell obviously commercial products with a "wink, wink" disclaimer about only selling to hams, when in actuality, anyone with a credit card can get it.

The FCC enforcement logs are full of things like folks are selling "experimenter" video transmitters, but doing no substantive validation of the buyer. Ditto the stores selling various and sundry CB equipment.

795. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 16:38:41 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g6q5ehbsk2@news.jpl.nasa.gov>
Source record: 23770

Cecil Moore wrote:
> Gene Fuller wrote:
>> Unless "John Smith" has a "certificated for use in the amateur
>> service" 5 kW amp (highly unlikely that one could find such a critter)
>> or "constructed or modified" the 5 kW amp then it is not legal for
>> amateur use at any power setting.
>
> "Modifications" are trivially easy.

Like..

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The FCC enforcement logs are full of things like folks are selling "experimenter" video transmitters, but doing no substantive validation of the buyer. Ditto the stores selling various and sundry CB equipment.

796. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 16:51:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6q663$7oc$1@news.albasani.net>
Source record: 23768

Gene Fuller wrote:

> ...
> Why stop at 97.313? Try 97.315 and 97.317 as well.
>
> Unless "John Smith" has a "certificated for use in the amateur service"
> 5 kW amp (highly unlikely that one could find such a critter) or
> "constructed or modified" the 5 kW amp then it is not legal for amateur
> use at any power setting.
>
> 73,
> Gene
> W4SZ

Gene:

Skeptical, confused ...

Perhaps I can help with this link:

http://www.assemblywizard.fr33webhost.com/

Those 8 x QB4/1100GA "JUGS" at ~5.6KV @ 1.6 AMPS, 200 Watts DRIVE,
OUTPUT = ~5KW

That is not max output, the amp could have an increase in PV and Drive
to a theortical max output of ~7KW ...

I have tapped down on the PV, drive and even the current to the
filaments which are at about 85-90% of specs ... this amp is not in
everyday use--but then, you already knew that.

My son now has the 5KW "factory made" russian amp I used to keep. At a
later date I may have him take some .jpg pictures and send them to me to
load up to the URL ...

Now, off to the doctor ...

Regards,
JS

797. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 17:08:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6q76s$8t0$1@news.albasani.net>
Source record: 23771

Jim Lux wrote:
>> ... It's one thing to have an obscure
> ham oriented website and sell widgets obviously intended only for hams..
> another to have a big online-store and sell obviously commercial
> products with a "wink, wink" disclaimer about only selling to hams, when
> in actuality, anyone with a credit card can get it.
>
> The FCC enforcement logs are full of things like folks are selling
> "experimenter" video transmitters, but doing no substantive validation
> of the buyer. Ditto the stores selling various and sundry CB equipment.

You forgot to mention purchasing it from outside our borders, perhaps
Russia, for example.

You forgot purchasing the parts and constructing it yourself, again,
Russian parts/plans are the cheapest ... (my city has the furtherest
inland seaport, yanno ...)

Now, what am I forgetting?

Really, I have a doctors appt. at 11 am ... gotta go ... bbl

Regards,
JS

798. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 18:14:09 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <Rb2kk.276170$SV4.155928@bgtnsc04-news.ops.worldnet.att.net>
Source record: 23772

```
Ed Cregger wrote:
> "Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
> news:1B%jk.140722$102.132159@bgtnsc05-news.ops.worldnet.att.net...
>> Bruce in alaska wrote:
>>> In article <E%Ejk.16657$mh5.1968@nlpi067.nbdc.sbc.com>,
>>> Cecil Moore <nospam@w5dxp.com> wrote:
>>>
>>>> John Smith quoted someone:
>>>>> "A 5 KW amplifier is not lawful for use under Part 97."
>>>> Back in the 60's, a ham friend of mine ran a
>>>> surplus AM transmitter capable of 10KW output.
>>>> However, he never adjusted his input power to
>>>> more than the legal 1KW limit.
>>> Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
>>> understand, or can't comprehend, the actual Rule that Part 97
>>> operations are REQUIRED to operate under. Specifically Part
>>> 97.313. I wonder if "Said Person" has ever actually READ
>>> 47CFR90.313? Apparently NOT......
>>>
>> Why stop at 97.313? Try 97.315 and 97.317 as well.
>>
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>> kW amp (highly unlikely that one could find such a critter) or
>> "constructed or modified" the 5 kW amp then it is not legal for amateur
>> use at any power setting.
>>
>> 73,
>> Gene
>> W4SZ
>
>
> No, friend Gene. It doesn't work that way.
>
> You do not have to have type certification for legal operation in the
> amateur bands. You only have to have it if you SELL new amateur equipment in
> the USA.
>
> Home made gear, or converted gear from other services, is completely legal
> in the USA. Always has been, hopefully always will be.
>
> CB gear must be type certified for selling and for usage.
>
> Again, amateurs are responsible for their RF emissions. The FCC could care
> less about the type of gear you are using. In fact, if brand new amateur
```

> gear that was compliant to type acceptance malfunctions and issues an out of
> spec emission, YOU as a duly licensed amateur radio operator are held
> responsible. Not the manufacturer.
>
> Ed, NM2K
>
>

Ed,

Sorry you have such a problem with basic literacy.

I stand by exactly what I said.

An unmodified manufactured amp that is not "certificated" is not legal
for use in the US Amateur Service, regardless of where it was
manufactured. A constructed or modified amp is potentially legal if
operated within the output power rules.

Did you read something else?

73,
Gene
W4SZ

799. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 18:42:44 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-B989E3.10423630072008@netnews.worldnet.att.net>
Source record: 23773

In article
<cfcafb59-bf8b-4a1b-a65f-97372686ac4b@w1g2000prk.googlegroups.com>,
Jim Kelley <jimkelleyamps@gmail.com> wrote:

> On Jul 29, 6:34 am, Cecil Moore <nos...@w5dxp.com> wrote:
> > John Smith quoted someone:
> >
> > > > "A 5 KW amplifier is not lawful for use under Part 97."
> >
> > > Back in the 60's, a ham friend of mine ran a
> > > surplus AM transmitter capable of 10KW output.
> > > However, he never adjusted his input power to
> > > more than the legal 1KW limit.
> > > --
> > > 73, Cecil http://www.w5dxp.com
>
> Like you, I'm just an observer in all this, but it appears that Phil
> Kane (the gentleman to whom "Mr. Smith" was lecturing) must have been
> referring to the practice of using a 5 KW amp at its rated output on
> the ham bands as being unlawful. You probably remember Phil from
> r.r.a.p. He made his living as a practicing communications attorney
> IIRC.
>
> ac6xg

Phil Kane is a reTired FCC Attorney, that worked out of one of the
California Field Offices.

--
Bruce in alaska
add <path> after <fast> to reply

800. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 19:04:32 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-1E8A74.11043130072008@netnews.worldnet.att.net>
Source record: 23774

In article
<Rb2kk.276170$SV4.155928@bgtnsc04-news.ops.worldnet.att.net>,
Gene Fuller <W4SZzzzzzz@att.net> wrote:

> Ed Cregger wrote:
> > "Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
> > news:1B%jk.140722$102.132159@bgtnsc05-news.ops.worldnet.att.net...
> >> Bruce in alaska wrote:
> >>> In article <E%Ejk.16657$mh5.1968@nlpi067.nbdc.sbc.com>,
> >>> Cecil Moore <nospam@w5dxp.com> wrote:
> >>>
> >>>> John Smith quoted someone:
> >>>>> "A 5 KW amplifier is not lawful for use under Part 97."
> >>>> Back in the 60's, a ham friend of mine ran a
> >>>> surplus AM transmitter capable of 10KW output.
> >>>> However, he never adjusted his input power to
> >>>> more than the legal 1KW limit.
> >>> Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
> >>> understand, or can't comprehend, the actual Rule that Part 97
> >>> operations are REQUIRED to operate under. Specifically Part
> >>> 97.313. I wonder if "Said Person" has ever actually READ
> >>> 47CFR90.313? Apparently NOT......
> >>>
> >> Why stop at 97.313? Try 97.315 and 97.317 as well.
> >>
> >> Unless "John Smith" has a "certificated for use in the amateur service" 5
> >> kW amp (highly unlikely that one could find such a critter) or
> >> "constructed or modified" the 5 kW amp then it is not legal for amateur
> >> use at any power setting.
> >>
> >> 73,
> >> Gene
> >> W4SZ
> >
> >
> > No, friend Gene. It doesn't work that way.
> >
> > You do not have to have type certification for legal operation in the
> > amateur bands. You only have to have it if you SELL new amateur equipment
> > in
> > the USA.
> >
> > Home made gear, or converted gear from other services, is completely legal
> > in the USA. Always has been, hopefully always will be.

> >
> > CB gear must be type certified for selling and for usage.
> >
> > Again, amateurs are responsible for their RF emissions. The FCC could care
> > less about the type of gear you are using. In fact, if brand new amateur
> > gear that was compliant to type acceptance malfunctions and issues an out
> > of
> > spec emission, YOU as a duly licensed amateur radio operator are held
> > responsible. Not the manufacturer.
> >
> > Ed, NM2K
> >
> >
>
> Ed,
>
> Sorry you have such a problem with basic literacy.
>
> I stand by exactly what I said.
>
> An unmodified manufactured amp that is not "certificated" is not legal
> for use in the US Amateur Service, regardless of where it was
> manufactured. A constructed or modified amp is potentially legal if
> operated within the output power rules.
>
> Did you read something else?
>
> 73,
> Gene
> W4SZ

Gene, It would depend on who you purchased your AMP from, and if it was NEW at the time of purchase. If it was not "NEW" at the time of your purchase, and you purchased it from another HAM, or another Ham owned it at some previous time, then it is waived under 47CFRPart97.315(b)4,& 5, and if you Modify your "NEW" Purchase, by drilling a hole somewhere in the AMP, to add it to YOUR Station (Modification) they it is waived under 47CFR97.315(b)3(ii), as long as you don't "Modify" more than one AMP per year, for your personal use. (47CFRPart97.315(a).

--
Bruce in alaska
add <path> after <fast> to reply

801. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 19:19:04 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g6qer8$a8o$1@news.jpl.nasa.gov>
Source record: 23776

> Sorry you have such a problem with basic literacy.
>
> I stand by exactly what I said.
>
> An unmodified manufactured amp that is not "certificated" is not legal
> for use in the US Amateur Service, regardless of where it was
> manufactured. A constructed or modified amp is potentially legal if
> operated within the output power rules.
>
> Did you read something else?
>

There might be some wiggle room here... the relevant regulation:
97.315(a) Any external RF power amplifier (see ï¿½ 2.815 of the FCC Rules) manufactured or imported for use at an amateur radio station must be certificated for use in the amateur service in accordance with subpart J of part 2 of the FCC Rules. No amplifier capable of operation below 144 MHz may be constructed or modified by a non-amateur service licensee without a grant of certification from the FCC.

OK.. parse it out..

"manufactured or imported for use at an amateur radio station" must

This means that it only applies for amplifiers intended for use at an amateur station. If one manufactured an amplifier for use, say, in a RF induction heating system, one wouldn't need to be certificated for that use. (one might need certification for other reasons...) See, e.g., http://www.manitousys.com/media/pb3_manual.pdf.. They have a photo of the back panel, and I don't see a FCC registration number there. (nor does manitou show up in the FCC databases for authorization or grantee)

But, it's pretty clear that if that amp has a switch on the front labeled, for instance, "80m band", then it has to be certificated for use in amateur service.

(and, it's mighty tough to get a "certification for amateur service" if it can do other things.

If one went to Amplifier Research (http://www.amplifiers.com/, for instance, one could buy a general purpose RF amplifier. That wouldn't be "manufactured or imported for use at an amateur station" so it wouldn't need to be "certificated foruse in the amateur service".

here's a nice little room heater for you
http://www.arww-rfmicro.com/post/2500L.pdf

802. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 19:43:44 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <Qv3kk.276338$SV4.224685@bgtnsc04-news.ops.worldnet.att.net>
Source record: 23775

Bruce in alaska wrote:

>
> Gene, It would depend on who you purchased your AMP from, and if it was
> NEW at the time of purchase. If it was not "NEW" at the time of your
> purchase, and you purchased it from another HAM, or another Ham owned it
> at some previous time, then it is waived under 47CFRPart97.315(b)4,& 5,
> and if you Modify your "NEW" Purchase, by drilling a hole somewhere in
> the AMP, to add it to YOUR Station (Modification) they it is waived under
> 47CFR97.315(b)3(ii), as long as you don't "Modify" more than one AMP
> per year, for your personal use. (47CFRPart97.315(a).
>

Bruce,

Yes, I understand that.

My initial comment was directed at the growing theme in the messages,
not specifically expressed by you, that amateurs could legally use *any*
transmitter as long as output power rules were not violated.

It ain't necessarily so.

73,
Gene
W4SZ

803. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 21:11:03 UTC
From: Dave <noone@nowhere.com>
Message-ID: <HN4kk.578$rb5.49@trnddc04>
Source record: 23777

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:g6qer8$a8o$1@news.jpl.nasa.gov...
>
>> Sorry you have such a problem with basic literacy.
>>
>> I stand by exactly what I said.
>>
>> An unmodified manufactured amp that is not "certificated" is not legal
>> for use in the US Amateur Service, regardless of where it was
>> manufactured. A constructed or modified amp is potentially legal if
>> operated within the output power rules.
>>
>> Did you read something else?
>>
>
> There might be some wiggle room here... the relevant regulation:
> 97.315(a) Any external RF power amplifier (see 2.815 of the FCC Rules)
> manufactured or imported for use at an amateur radio station must be
> certificated for use in the amateur service in accordance with subpart J
> of part 2 of the FCC Rules. No amplifier capable of operation below 144
> MHz may be constructed or modified by a non-amateur service licensee
> without a grant of certification from the FCC.
>
>
> OK.. parse it out..
>
> "manufactured or imported for use at an amateur radio station" must
>
> This means that it only applies for amplifiers intended for use at an
> amateur station. If one manufactured an amplifier for use, say, in a RF
> induction heating system, one wouldn't need to be certificated for that
> use. (one might need certification for other reasons...) See, e.g.,
> http://www.manitousys.com/media/pb3_manual.pdf.. They have a photo of the
> back panel, and I don't see a FCC registration number there. (nor does
> manitou show up in the FCC databases for authorization or grantee)
>
> But, it's pretty clear that if that amp has a switch on the front labeled,
> for instance, "80m band", then it has to be certificated for use in
> amateur service.
>
> (and, it's mighty tough to get a "certification for amateur service" if it
> can do other things.
>

>
>
> If one went to Amplifier Research (http://www.amplifiers.com/, for
> instance, one could buy a general purpose RF amplifier. That wouldn't be
> "manufactured or imported for use at an amateur station" so it wouldn't
> need to be "certificated foruse in the amateur service".
>
> here's a nice little room heater for you
> http://www.arww-rfmicro.com/post/2500L.pdf
>

want something to warm up your car... check out these little gems.
http://www.davemade.com/mobile.htm

804. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 21:17:14 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g6qloq$f4c$1@news.jpl.nasa.gov>
Source record: 23780

Gene Fuller wrote:
> Bruce in alaska wrote:
>
>>
>> Gene, It would depend on who you purchased your AMP from, and if it was
>> NEW at the time of purchase. If it was not "NEW" at the time of your
>> purchase, and you purchased it from another HAM, or another Ham owned
>> it at some previous time, then it is waived under
>> 47CFRPart97.315(b)4,& 5, and if you Modify your "NEW" Purchase, by
>> drilling a hole somewhere in
>> the AMP, to add it to YOUR Station (Modification) they it is waived under
>> 47CFR97.315(b)3(ii), as long as you don't "Modify" more than one AMP
>> per year, for your personal use. (47CFRPart97.315(a).
>>
>
> Bruce,
>
> Yes, I understand that.
>
> My initial comment was directed at the growing theme in the messages,
> not specifically expressed by you, that amateurs could legally use *any*
> transmitter as long as output power rules were not violated.
>
> It ain't necessarily so.

A small nit.. "any transmitter" is allowed.. the rules in 97.315 apply ONLY to external RF power amplifiers, and the class of "forbidden amplifiers" is actually quite small (a subset of those intended for use at an amateur station)

And this is in keeping with the concept in the regulation of Amateur radio: allowing basically everything and exclude a small fraction; which is different than the whole rest of radio, where it's: exclude most things, and allow only specific things.

805. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 21:19:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6qlsmkcr1@news.albasani.net>
Source record: 23778

Gene Fuller wrote:
>> ... A constructed or modified amp is potentially legal if
> operated within the output power rules.
>
> Did you read something else?
>
> 73,
> Gene
> W4SZ

Hmmm, a mod ...

I wonder; would re-painting the case hot-pink qualify? Custom knobs?
Installing a larger muffin fan? ...

LOL

Regards,
JS

806. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 21:46:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <W6OdnXN-yNHcfA3VnZ2dnUVZ_h-dnZ2d@posted.easystreetonline>
Source record: 23779

Dave wrote:
>
> want something to warm up your car... check out these little gems.
> http://www.davemade.com/mobile.htm

This guy's name, address, and telephone number are listed in the web registration database. All this fuss about what's legal and what isn't is purely academic considering the total lack of enforcement. The FCC is much too busy trying to bust the broadcasters for a few milliseconds of boob to bother with this sort of thing.

Roy Lewallen, W7EL

807. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 22:36:19 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g6qqd3$tc7$1@news.jpl.nasa.gov>
Source record: 23781

Roy Lewallen wrote:
> Dave wrote:
>>
>> want something to warm up your car... check out these little gems.
>> http://www.davemade.com/mobile.htm
>
> This guy's name, address, and telephone number are listed in the web
> registration database. All this fuss about what's legal and what isn't
> is purely academic considering the total lack of enforcement. The FCC is
> much too busy trying to bust the broadcasters for a few milliseconds of
> boob to bother with this sort of thing.
>
> Roy Lewallen, W7EL
http://www.fcc.gov/eb/FieldNotices/2003/DOC-270807A1.html
In the Matter of)
) File No.: EB-06-PO-169
Michael T. Kersnowski)
d/b/a RadioActive Radio) Citation No.: C20073292003
)
Salem, Oregon 97302)

)

808. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 23:04:57 UTC
From: Ed Cregger <ecregger@hotmale.com>
Message-ID: <g6qs2skli1@registered.motzarella.org>
Source record: 23782

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:489098FC.1080005@jpl.nasa.gov...
> Cecil Moore wrote:
>> Gene Fuller wrote:
>>> Unless "John Smith" has a "certificated for use in the amateur service"
>>> 5 kW amp (highly unlikely that one could find such a critter) or
>>> "constructed or modified" the 5 kW amp then it is not legal for amateur
>>> use at any power setting.
>>
>> "Modifications" are trivially easy.
>
> Like..
>
> The front panel has been modified to add a placard indicating that
> operation at more than XXX plate current is not permitted when operating
> in amateur bands.
>
> And that whole "offered for sale" kind of thing is a huge regulatory
> morass, with a lot of "guidance" from local FCC officials on what might or
> might not prompt more attention. It's one thing to have an obscure ham
> oriented website and sell widgets obviously intended only for hams..
> another to have a big online-store and sell obviously commercial products
> with a "wink, wink" disclaimer about only selling to hams, when in
> actuality, anyone with a credit card can get it.
>
> The FCC enforcement logs are full of things like folks are selling
> "experimenter" video transmitters, but doing no substantive validation of
> the buyer. Ditto the stores selling various and sundry CB equipment.

Anyone can own any piece of radio gear legally. Restrictions are on sales
and usage.

So, while it is not unlawful to own a 10kw AM transmitter, even by a CB
operator, or someone that doesn't operate radio at all, it IS
illegal/unlawful for a business to sell new equipment to those without legal
qualifications.

What about salvaged/junk transmitters? I don't know.

Much has changed over the years, but "presumed innocent until proven guilty"
still carries a little weight here and there.

Ed Cregger

809. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 23:09:55 UTC
From: Ed Cregger <ecregger@hotmale.com>
Message-ID: <g6qsc6$mn2$1@registered.motzarella.org>
Source record: 23783

"Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
news:Rb2kk.276170$SV4.155928@bgtnsc04-news.ops.worldnet.att.net...
> Ed Cregger wrote:
>> "Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
>> news:1B%jk.140722$102.132159@bgtnsc05-news.ops.worldnet.att.net...
>>> Bruce in alaska wrote:
>>>> In article <E%Ejk.16657$mh5.1968@nlpi067.nbdc.sbc.com>,
>>>> Cecil Moore <nospam@w5dxp.com> wrote:
>>>>
>>>>> John Smith quoted someone:
>>>>>> "A 5 KW amplifier is not lawful for use under Part 97."
>>>>> Back in the 60's, a ham friend of mine ran a
>>>>> surplus AM transmitter capable of 10KW output.
>>>>> However, he never adjusted his input power to
>>>>> more than the legal 1KW limit.
>>>> Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
>>>> understand, or can't comprehend, the actual Rule that Part 97
>>>> operations are REQUIRED to operate under. Specifically Part
>>>> 97.313. I wonder if "Said Person" has ever actually READ
>>>> 47CFR90.313? Apparently NOT......
>>>>
>>> Why stop at 97.313? Try 97.315 and 97.317 as well.
>>>
>>> Unless "John Smith" has a "certificated for use in the amateur service"
>>> 5 kW amp (highly unlikely that one could find such a critter) or
>>> "constructed or modified" the 5 kW amp then it is not legal for amateur
>>> use at any power setting.
>>>
>>> 73,
>>> Gene
>>> W4SZ
>>
>>
>> No, friend Gene. It doesn't work that way.
>>
>> You do not have to have type certification for legal operation in the
>> amateur bands. You only have to have it if you SELL new amateur equipment
>> in the USA.
>>
>> Home made gear, or converted gear from other services, is completely
>> legal in the USA. Always has been, hopefully always will be.
>>
>> CB gear must be type certified for selling and for usage.
>>

>> Again, amateurs are responsible for their RF emissions. The FCC could
>> care less about the type of gear you are using. In fact, if brand new
>> amateur gear that was compliant to type acceptance malfunctions and
>> issues an out of spec emission, YOU as a duly licensed amateur radio
>> operator are held responsible. Not the manufacturer.
>>
>> Ed, NM2K
>
> Ed,
>
> Sorry you have such a problem with basic literacy.
>
> I stand by exactly what I said.
>
> An unmodified manufactured amp that is not "certificated" is not legal for
> use in the US Amateur Service, regardless of where it was manufactured. A
> constructed or modified amp is potentially legal if operated within the
> output power rules.
>
> Did you read something else?
>
> 73,
> Gene
> W4SZ

And my point is that ANY amplifier is legal, as long as it is operated within the limits specified by the FCC for the particular amateur band and license class of the operator. No type acceptance is necessary at all. Am I missing something Gene?

Bear with me, please. I'm on a lot of medication these days and I make mistakes occasionally. Thank you.

Ed Cregger

810. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-30 23:34:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6qtqk$n5m$1@news.albasani.net>
Source record: 23784

Ed Cregger wrote:

> ...
> Bear with me, please. I'm on a lot of medication these days and I make
> mistakes occasionally. Thank you.
>
> Ed Cregger
>
>

Ed:

At least you have an excuse ...

How do you think us guys who aren't taking anything feel when we don't
have anything to blame it on? :-(

(well, there is always alzheimers' ... :-))

Regards,
JS

811. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 00:37:40 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <oP7kk.276842$SV4.160699@bgtnsc04-news.ops.worldnet.att.net>
Source record: 23785

Jim Lux wrote:
> Gene Fuller wrote:

>>
>> My initial comment was directed at the growing theme in the messages,
>> not specifically expressed by you, that amateurs could legally use
>> *any* transmitter as long as output power rules were not violated.
>>
>> It ain't necessarily so.
>
> A small nit.. "any transmitter" is allowed.. the rules in 97.315 apply
> ONLY to external RF power amplifiers, and the class of "forbidden
> amplifiers" is actually quite small (a subset of those intended for use
> at an amateur station)

Guilty as charged!

I was careless to say "transmitter".

812. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 00:48:41 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <JZ7kk.276862$SV4.216579@bgtnsc04-news.ops.worldnet.att.net>
Source record: 23786

Ed Cregger wrote:

>
> And my point is that ANY amplifier is legal, as long as it is operated
> within the limits specified by the FCC for the particular amateur band and
> license class of the operator. No type acceptance is necessary at all. Am I
> missing something Gene?

Ed,

I don't think that is correct. I don't believe it is legal to use an unmodified DaveMade or other such beast in amateur service, at any power level. I think that is the point of 97.315. It is about more than just "operation" within the rules.

I realize there are a million ways to get around any potential limitations resulting from these loosely worded and rarely enforced regulations. However, if for some reason the FCC wanted to go after someone I doubt that amateur "modifications" such as adding a placard or drilling a hole would carry much weight.

73,
Gene
W4SZ

813. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 02:27:25 UTC
From: Ed Cregger <ecregger@hotmale.com>
Message-ID: <Ln9kk.1455$XT1.1450@bignews5.bellsouth.net>
Source record: 23787

"Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
news:Qv3kk.276338$SV4.224685@bgtnsc04-news.ops.worldnet.att.net...
> Bruce in alaska wrote:
>
>>
>> Gene, It would depend on who you purchased your AMP from, and if it was
>> NEW at the time of purchase. If it was not "NEW" at the time of your
>> purchase, and you purchased it from another HAM, or another Ham owned it
>> at some previous time, then it is waived under 47CFRPart97.315(b)4,& 5,
>> and if you Modify your "NEW" Purchase, by drilling a hole somewhere in
>> the AMP, to add it to YOUR Station (Modification) they it is waived under
>> 47CFR97.315(b)3(ii), as long as you don't "Modify" more than one AMP
>> per year, for your personal use. (47CFRPart97.315(a).
>>
>
> Bruce,
>
> Yes, I understand that.
>
> My initial comment was directed at the growing theme in the messages, not
> specifically expressed by you, that amateurs could legally use *any*
> transmitter as long as output power rules were not violated.
>
> It ain't necessarily so.
>
> 73,
> Gene
> W4SZ

Now I see the point that you were making. Thanks for your patience.

Ed, NM2K

814. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 09:02:58 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <Ucfkk.21309$x66.18554@newsfe25.ams2>
Source record: 23788

I have taken down the beam and did a continuity test and re-checked that the beam is put together correct and all seems to be ok.
Interesting about is could be power line noise. There are some over heads street power cables close by that supplies power to the houses. Strange how its just the beam that is effected by this. I have had HF verticals up here before with no problem.
I have just laid my hands on a Timewave ANC-4. Using its own small antenna it can cut out 80% of the noise but also cuts down the received signal to less than being received on the Cobwebb. But at least its a good start in the right direction. There was no manual with it. Any ideas on how to get it working better would be appreciated.
I will let you all know how I get on.

73 Andy

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:g6lagp$l89$1@news.service.uci.edu...
> Andy wrote:
>> I have managed to make an mp3 up. The first 10 seconds is on the Cobwebb
>> followed by another 10 seconds on the MA5B beam pointed in there
>> direction and then back and forth every 10 seconds. The click is the
>> antenna switch clicking over.
>>
>> It can be found here.
>> http://www.hobby.pwp.blueyonder.co.uk/ma5b/ma5b4.mp3
>>
>> If anyone needs to here a clearer one let me know, but it will be best
>> after the contest has finished.
>>
>> Andy
>
> Judging by the signal to noise ratio, it sounds like the beam is a better
> antenna than the cobweb when it's pointed at the transmitting station.
> You might be able to tell that more readily if you turned off the AGC.
> You can even watch the AGC changing on the Windows Media Player spectrum
> scope when you switch antennas.
>
> Quieter antennas are usually quieter both ways.
>
> ac6xg
>
>
>

815. Traditional and Natural Beverage

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 11:14:31 UTC
From: Scott <sctttmbrmn8@gmail.com>
Message-ID: <d73ab738-3a53-41e6-8648-52d58c095b4e@w1g2000prk.googlegroups.com>
Source record: 23789

A documentary about the traditional herbal beverage of Gods own
country

Watch the video . . .

http://www.emalayalee.co.uk/getvideo.php?cat=5&article=339

816. Traditional and Natural Beverage

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 11:21:51 UTC
From: Scott <sctttmbrmn8@gmail.com>
Message-ID: <e5d3459a-08d9-48c9-b4ea-e6d00ecf3098@w1g2000prk.googlegroups.com>
Source record: 23790

A documentary about the traditional herbal beverage of Gods own country

Watch the video . . .

http://www.emalayalee.co.uk/getvideo.php?cat=5&article=339

817. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 11:44:11 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <fAhkk.3073$vu1.2484@fe99.usenetserver.com>
Source record: 23791

Gene Fuller wrote:
> Ed Cregger wrote:
>
>>
>> And my point is that ANY amplifier is legal, as long as it is operated
>> within the limits specified by the FCC for the particular amateur band
>> and license class of the operator. No type acceptance is necessary at
>> all. Am I missing something Gene?
>
>
> Ed,
>
> I don't think that is correct. I don't believe it is legal to use an
> unmodified DaveMade or other such beast in amateur service, at any power
> level. I think that is the point of 97.315.

We should all read 97.315 *in it's entirety*, and consider 97.315(b)(3),

(b) The requirement of paragraph (a) does not apply if one or more
of the following conditions are met:
(1) ...
(2) ...
(3) The amplifier is sold to an amateur radio operator or to a dealer,
the amplifier is purchased in used condition by a dealer,
or *the amplifier is sold to an amateur radio operator for use at that
operator's station*.

This (the emphasized) says to me that as an amateur licensee I can use
any amplifier as long as I observe amateur emission regulations.

Respectfully,
Galen, W8LNA

All of 97.315:

[Revised as of October 1, 2007]
From the U.S. Government Printing Office via GPO Access
[CITE: 47CFR97.315]
Sec. 97.315 Certification of external RF power amplifiers.

(a) Any external RF power amplifier (see Sec. 2.815 of the FCC
Rules) manufactured or imported for use at an amateur radio station must
be certificated for use in the amateur service in accordance with
subpart J of part 2 of the FCC Rules. No amplifier capable of operation
below 144 MHz may be constructed or modified by a non-amateur service
licensee without a grant of certification from the FCC.

(b) The requirement of paragraph (a) does not apply if one or more of the following conditions are met:
(1) The amplifier is constructed or modified by an amateur radio operator for use at an amateur station.
(2) The amplifier was manufactured before April 28, 1978, and has been issued a marketing waiver by the FCC, or the amplifier was purchased before April 28, 1978, by an amateur radio operator for use at that operator's station.
(3) The amplifier is sold to an amateur radio operator or to a dealer, the amplifier is purchased in used condition by a dealer, or the amplifier is sold to an amateur radio operator for use at that operator's station.
(c) Any external RF power amplifier appearing in the Commission's database as certificated for use in the amateur service may be marketed for use in the amateur service.

818. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 12:54:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <JBikk.17616$jl5.13644@flpi148.ffdc.sbc.com>
Source record: 23792

Andy wrote:
> Interesting about is could be power line noise.

At my last QTH, the culprit on 40m was a ~33 foot
ground wire running down my front yard power pole
from a transformer and capacitor. It caused my
vertical to have 2 S-units more noise than my
horizontal dipole.
--
73, Cecil http://www.w5dxp.com

819. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 14:48:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6sjchgap1@news.albasani.net>
Source record: 23793

gwatts wrote:
> Gene Fuller wrote:
>> Ed Cregger wrote:
>>
>>>
>>> And my point is that ANY amplifier is legal, as long as it is
>>> operated within the limits specified by the FCC for the particular
>>> amateur band and license class of the operator. No type acceptance is
>>> necessary at all. Am I missing something Gene?
>>
>>
>> Ed,
>>
>> I don't think that is correct. I don't believe it is legal to use an
>> unmodified DaveMade or other such beast in amateur service, at any
>> power level. I think that is the point of 97.315.
>
>
> We should all read 97.315 *in it's entirety*, and consider 97.315(b)(3),
>
> (b) The requirement of paragraph (a) does not apply if one or more
> of the following conditions are met:
> (1) ...
> (2) ...
> (3) The amplifier is sold to an amateur radio operator or to a dealer,
> the amplifier is purchased in used condition by a dealer,
> or *the amplifier is sold to an amateur radio operator for use at that
> operator's station*.
>
>
> This (the emphasized) says to me that as an amateur licensee I can use
> any amplifier as long as I observe amateur emission regulations.
>
> Respectfully,
> Galen, W8LNA

Common sense would dictate (but then, as you already know, that is rare
to find), if the amp was stable, harmonics suppressed to specs, etc. --
use it. (i.e., emission standards obeyed.)

DISCLAIMER:
Great care should be taken with any "broadband amp", as any "flaw" in
the xmitters output is only amplified, linearly/proportionally, to the
amps' gain, in the amps output!

ADDITIONAL DISCLAIMER:
BEWARE OF ATTORNEYS/LAWYERS and "HAREBRAINED BUREAUCRATS!"

Regards,
JS

820. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 15:05:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6skbogap2@news.albasani.net>
Source record: 23794

Cecil Moore wrote:
> Andy wrote:
>> Interesting about is could be power line noise.
>
> At my last QTH, the culprit on 40m was a ~33 foot
> ground wire running down my front yard power pole
> from a transformer and capacitor. It caused my
> vertical to have 2 S-units more noise than my
> horizontal dipole.

Cecil;

Don't quit there!

Did you ever manage to have it "fixed?"

How did you manage it? Who did you report it to?

Thanks in advance,
regards,
JS

821. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 15:21:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6sla6gap3@news.albasani.net>
Source record: 23795

John Smith wrote:

> ...
> ADDITIONAL DISCLAIMER:
> BEWARE OF ATTORNEYS/LAWYERS and "HAREBRAINED BUREAUCRATS!"
>
> Regards,
> JS

Thinking about the above, for a bit:

ADDITION TO THE ADDITIONAL DISCLAIMER:
If you should ever find a "HAREBRANED BUREAUCRATIC
ATTORNEY/LAWYER"--RUN! <chuckle>

Regards,
JS

822. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 16:10:26 UTC
From: 826 <methinks@nospam.com>
Message-ID: <g6so5iscv1@news.albasani.net>
Source record: 23796

"Owen Duffy" <none@no.where> wrote in message
news:Xns9AEA4E4AF468Dnonenowhere@61.9.191.5...
> "826" <methinks@nospam.com> wrote in
> news:g6d3ebrft1@news.albasani.net:
>
>> Hi. Have a new Hustler 6 band vertical. Installed the radials and also
>> buried 75 foot of RG213 coax between shack and antenna. I used a 6
>> foot peace of coax connected to adjust the antenna with a MFJ-259.
>> Every band was tuned to the middle and SWR was lower than 1.7:1 at the
>> edges. After the adjustments, I reconnected the buried coax to the
>> antenna and on all bands everything had shift up by any where from 200
>> to 400 khz. Now the rig is seeing greater than 2:1 SWR.
>> Should I retune the antenna with the MFJ 259 in the shack?
>
> Vern,
>
> An oft asked question, and there are usually emphatic answers readily
> proffered.
>
> You might find my article at http://www.vk1od.net/VSWR/displacement.htm
> relevant to understanding what goes on 'within' the transmission line,
> and the 'Traps for players' heading offers reasons why behaviour that is
> inconsistent with transmission line behaviour may be observed.
>
> In your case, one of the things you appear to have done is the change the
> thing that was measured. You adjusted the antenna with the shield of the
> main feedline disconnected. This is discussed under the heading
> 'Disturbing the thing being measured'.
>
> Owen

Hi,
Sorry I didn't rely sooner. The weather hasn't been too good hear. This
morning I disconnected the coax from the shack and measured the antenna with
the six foot length of coax. It looked OK. I then connected just the shield
of the long coax going to the shack and still measuring with the short coax
it shifted just like measured before in the shack. I have then made up a
choke balun and installed it at the base of the antenna and it improved
everything by about 60%. I will now make another one for the shack end. I
think everything is under control now. Thanks to all for heading me in the
right direction.
Vern M0WQR

823. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 16:32:31 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <zOlkk.142059$102.44474@bgtnsc05-news.ops.worldnet.att.net>
Source record: 23797

gwatts wrote:

>
> We should all read 97.315 *in it's entirety*, and consider 97.315(b)(3),
>
> (b) The requirement of paragraph (a) does not apply if one or more
> of the following conditions are met:
> (1) ...
> (2) ...
> (3) The amplifier is sold to an amateur radio operator or to a dealer,
> the amplifier is purchased in used condition by a dealer,
> or *the amplifier is sold to an amateur radio operator for use at that
> operator's station*.
>
>
> This (the emphasized) says to me that as an amateur licensee I can use
> any amplifier as long as I observe amateur emission regulations.
>
> Respectfully,
> Galen, W8LNA
>
>
>
>
> All of 97.315:
>
> [Revised as of October 1, 2007]
> From the U.S. Government Printing Office via GPO Access
> [CITE: 47CFR97.315]
> Sec. 97.315 Certification of external RF power amplifiers.
>
> (a) Any external RF power amplifier (see Sec. 2.815 of the FCC
> Rules) manufactured or imported for use at an amateur radio station must
> be certificated for use in the amateur service in accordance with
> subpart J of part 2 of the FCC Rules. No amplifier capable of operation
> below 144 MHz may be constructed or modified by a non-amateur service
> licensee without a grant of certification from the FCC.
> (b) The requirement of paragraph (a) does not apply if one or more
> of the following conditions are met:
> (1) The amplifier is constructed or modified by an amateur radio
> operator for use at an amateur station.
> (2) The amplifier was manufactured before April 28, 1978, and has
> been issued a marketing waiver by the FCC, or the amplifier was
> purchased before April 28, 1978, by an amateur radio operator for use at

> that operator's station.
> (3) The amplifier is sold to an amateur radio operator or to a
> dealer, the amplifier is purchased in used condition by a dealer, or the
> amplifier is sold to an amateur radio operator for use at that
> operator's station.
> (c) Any external RF power amplifier appearing in the Commission's
> database as certificated for use in the amateur service may be marketed
> for use in the amateur service.

OK, I think I got it now. The only things no longer allowed are:

1) Stealing an amp rather than buying it.

2) Direct sales from a manufacturer or importer to anyone other than an amateur or a dealer.

The dealer loophole means that 97.315 is a total waste of ink and paper.

73,
Gene
W4SZ

824. Re: Video clip from 60 minutes on K3TUP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 17:37:01 UTC
From: nopq528 <nopq528.2d7c15b@radiobanter.com>
Message-ID: <nopq528.2d7c15b@radiobanter.com>
Source record: 23799

Everyone has his inherent ability(power or capacity?) which is easily concealed by habbits, blurred by time, and eroded by laziness_____We assure you of our best 'wow gold' (http://www.wowgold1000.com/) service at all time. Don? be irresolute! Just place your order to buy Cheap 'cheap world of warcraft gold' (http://www.wowgold1000.com/cheap-world-of-warcraft-gold.html) here then your desired 'world of warcraft gold' (http://www.wowgold1000.com/world-of-warcraft-gold.html) will be in your mail box in wow game. 'world of warcraft gold' (http://www.wowgold1000.com/).In order to provide a quickly and easy way of 'buy cheap wow gold' (http://www.wowgold1000.com/buy-cheap-wow-gold.html) delivery

--
nopq528

825. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 18:05:20 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-C3AA0B.10051131072008@netnews.worldnet.att.net>
Source record: 23798

In article <g6skbogap2@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> Cecil Moore wrote:
> > Andy wrote:
> >> Interesting about is could be power line noise.
> >
> > At my last QTH, the culprit on 40m was a ~33 foot
> > ground wire running down my front yard power pole
> > from a transformer and capacitor. It caused my
> > vertical to have 2 S-units more noise than my
> > horizontal dipole.
>
> Cecil;
>
> Don't quit there!
>
> Did you ever manage to have it "fixed?"
>
> How did you manage it? Who did you report it to?
>
> Thanks in advance,
> regards,
> JS

Usually the your Electrical Utility, will have a supervisor in the
Distribution Department, that is responsible for dealing with
interference issues. Some utilities are more responsive than others.
When I lived down in the Flatlands, (Seattle, WA) Seattle City Light
had a guy that regularly meet with the local Interference Committee
which also included an FCC Engineer, the local ARRL Section Mgr, and
just about all the Marine and LMR Service Shops. He was also a Ham,
and used the information, developed by the committee, to track down
broken and failing insulators thru out their Distribution System.
The one outfit we could NEVER get to join the committee, was the
Cable TV Franshisee, and they generated MOST of the complaints.
Now I live out in the bush, and generate ALL my own power, so I am
the Utility, and I have to find and fix all the LF/MF/HF Noise if I want
to hear better. I usually have an MF/HF noise floor of less that 1.5
S-Units on my Kenwood TS690. I can hear, way farther than I can Talk,
due to the local Noise at the Receiving Station, masking out my
transmissions. It is frustrating to hear folks on 75 Meters with
S-7 Signals, but they can't hear me, due to S-9 noise at their end.

--
Bruce in alaska
add <path> after <fast> to reply

826. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 19:38:43 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <8xokk.32007$co7.11040@nlpi066.nbdc.sbc.com>
Source record: 23800

John Smith wrote:
> Did you ever manage to have it "fixed?"
> How did you manage it? Who did you report it to?

The power pole ground wire didn't appear to be
broken, just radiating like crazy. I managed
it by transmitting on the vertical and receiving
on the dipole. In the process of A/B comparisons,
I discovered that the vertical was never better
than the dipole and usually worse. The EZNEC
comparisons are on my web page at:

http://www.w5dxp.com/dipvsver.htm

To be fair, since receiving was limited to East/
West QSOs, the Extended Zepp beat the socks off
the vertical.
--
73, Cecil http://www.w5dxp.com

827. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 21:02:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6t98p$9ot$1@news.albasani.net>
Source record: 23701

Gene Fuller wrote:

> ...
> OK, I think I got it now. The only things no longer allowed are:
>
> 1) Stealing an amp rather than buying it.
>
> 2) Direct sales from a manufacturer or importer to anyone other than an
> amateur or a dealer.
>
> The dealer loophole means that 97.315 is a total waste of ink and paper.
>
> 73,
> Gene
> W4SZ
>

Now, while I think No. 1, "Stealing an amp rather than buying it", is, quite obviously, illegal, why in the world should one be required to be an amateur to purchase ANY, SPECIFIC, piece/module/system of electronic equipment??? There 'ya go, that "want for common sense" crops up once again!

Could you, EXACTLY, explain the logic in that to me? I am waiting ...
(or, No. 2, above)

Regards,
JS

828. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 21:20:52 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AED4AB91C7DEnonenowhere@61.9.191.5>
Source record: 23713

"826" <methinks@nospam.com> wrote in
news:g6so5iscv1@news.albasani.net:

> Hi,
> Sorry I didn't rely sooner. The weather hasn't been too good hear.
> This
> morning I disconnected the coax from the shack and measured the
> antenna with the six foot length of coax. It looked OK. I then
> connected just the shield of the long coax going to the shack and
> still measuring with the short coax it shifted just like measured
> before in the shack. I have then made up a choke balun and installed
> it at the base of the antenna and it improved everything by about 60%.
> I will now make another one for the shack end. I think everything is
> under control now. Thanks to all for heading me in the right
> direction. Vern M0WQR

Vern, whilst the choke made a difference, the fact that there remains a difference in the feedpoint impedance with the shield connected and disconnected, even when using the choke, indicates that there is some effects observable from common mode feed line current in your scenario.

If you want a measurement of the antenna as it would be used, measure it as it would be used... make sure the shield current path is as it would be used.

Owen

829. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 21:37:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6tba8$b1d$1@news.albasani.net>
Source record: 23702

John Smith wrote:

> ...
> Now, while I think No. 1, "Stealing an amp rather than buying it", is,
> quite obviously, illegal, why in the world should one be required to be
> an amateur to purchase ANY, SPECIFIC, piece/module/system of electronic
> equipment??? There 'ya go, that "want for common sense" crops up once
> again!
>
> Could you, EXACTLY, explain the logic in that to me? I am waiting ...
> (or, No. 2, above)
>
> Regards,
> JS

Well, hold on, just got in from a road trip to Sacto, CA, have had time
to "cool down."

I will exclude any mechanical/electrical/electronic/esoteric/etc.,
strategic/military/etc. equipment of importance from that question ...
amateur equipment is FREE of those restrictions, IMHO ...

Regards,
JS

830. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 22:05:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6tcvs$b1d$2@news.albasani.net>
Source record: 23703

John Smith wrote:

And, between:

mechanical/electrical/electronic/esoteric/etc.

and:

strategic/military/etc.

put an "of"

Geesh, I am getting old ... but the "spirit" ain't (or is that isn't)
getting tired, yet!

Regards,
JS

831. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 22:42:29 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <pdrkk.279036$SV4.103183@bgtnsc04-news.ops.worldnet.att.net>
Source record: 23704

John Smith wrote:
> Gene Fuller wrote:
>
>> ...
>> OK, I think I got it now. The only things no longer allowed are:
>>
>> 1) Stealing an amp rather than buying it.
>>
>> 2) Direct sales from a manufacturer or importer to anyone other than
>> an amateur or a dealer.
>>
>> The dealer loophole means that 97.315 is a total waste of ink and paper.
>>
>> 73,
>> Gene
>> W4SZ
>>
>
> Now, while I think No. 1, "Stealing an amp rather than buying it", is,
> quite obviously, illegal, why in the world should one be required to be
> an amateur to purchase ANY, SPECIFIC, piece/module/system of electronic
> equipment??? There 'ya go, that "want for common sense" crops up once
> again!
>
> Could you, EXACTLY, explain the logic in that to me? I am waiting ...
> (or, No. 2, above)
>
> Regards,
> JS

I have never made any comment about what "should" be the law.

What appears is that 97.315 is now totally useless for any purpose. It is no longer necessary for any manufacturer or importer to get a certification for external RF amps as long as they sell such items only to amateurs (OK) or "dealers". I don't know if the FCC defines the term "dealer" or if there are any restrictions on what "dealers" may sell.

This section of the law was originally intended to minimize the number of high powered amps available for CB use. It now appears that the only requirement for legal sale of such amps is that they pass through a "dealer". Usage is another question, but how many multi-kW CBers would worry about that?

73,
Gene
W4SZ

832. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 22:58:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6tg37$b1d$3@news.albasani.net>
Source record: 23705

Gene Fuller wrote:

> ...
> I have never made any comment about what "should" be the law.
>
> What appears is that 97.315 is now totally useless for any purpose. It
> is no longer necessary for any manufacturer or importer to get a
> certification for external RF amps as long as they sell such items only
> to amateurs (OK) or "dealers". I don't know if the FCC defines the term
> "dealer" or if there are any restrictions on what "dealers" may sell.
>
> This section of the law was originally intended to minimize the number
> of high powered amps available for CB use. It now appears that the only
> requirement for legal sale of such amps is that they pass through a
> "dealer". Usage is another question, but how many multi-kW CBers would
> worry about that?
>
> 73,
> Gene
> W4SZ

Gene;

Perhaps I have "had a bad day." Or, perhaps I was "too quick." Or,
perhaps my understanding was lacking, etc. ...

Well, I certainly see no reason that a CB'er exceeding 5w is NOT in
violation of the law.

But to your question, "... how many multi-kW CBers would worry about that?"

My answer:

Every damn one that is breaking that law! Either pay the fines, do the
time, or change that law! (or, "we" change it.)

I stand corrected, I did not have the "beef" with you, it seems, I had
imagined ... I crawl back to my hole ... I stand corrected ... please
accept my apologies.

Warm regards,
JS

833. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 23:02:17 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Zvrkk.740$wS4.350@trnddc03>
Source record: 23706

"Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
news:pdrkk.279036$SV4.103183@bgtnsc04-news.ops.worldnet.att.net...
> John Smith wrote:
>> Gene Fuller wrote:
>>
>>> ...
>>> OK, I think I got it now. The only things no longer allowed are:
>>>
>>> 1) Stealing an amp rather than buying it.
>>>
>>> 2) Direct sales from a manufacturer or importer to anyone other than an
>>> amateur or a dealer.
>>>
>>> The dealer loophole means that 97.315 is a total waste of ink and paper.
>>>
>>> 73,
>>> Gene
>>> W4SZ
>>>
>>
>> Now, while I think No. 1, "Stealing an amp rather than buying it", is,
>> quite obviously, illegal, why in the world should one be required to be
>> an amateur to purchase ANY, SPECIFIC, piece/module/system of electronic
>> equipment??? There 'ya go, that "want for common sense" crops up once
>> again!
>>
>> Could you, EXACTLY, explain the logic in that to me? I am waiting ...
>> (or, No. 2, above)
>>
>> Regards,
>> JS
>
> I have never made any comment about what "should" be the law.
>
> What appears is that 97.315 is now totally useless for any purpose. It is
> no longer necessary for any manufacturer or importer to get a
> certification for external RF amps as long as they sell such items only to
> amateurs (OK) or "dealers". I don't know if the FCC defines the term
> "dealer" or if there are any restrictions on what "dealers" may sell.
>
> This section of the law was originally intended to minimize the number of
> high powered amps available for CB use. It now appears that the only
> requirement for legal sale of such amps is that they pass through a
> "dealer". Usage is another question, but how many multi-kW CBers would

> worry about that?
>
> 73,
> Gene
> W4SZ

rules to limit non-amateur use of transmitters and amps should be other places anyway so its probably just as well that part 97 doesn't really limit what a ham can use. we are, after all, the ones who have to pass the technical exams and follow relatively technical rules. So we should be able to use whatever we can operate within our allocated frequencies, modes and powers. As opposed to fixed channel, power limited, appliances that are the legal radios for other services.

834. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-07-31 23:36:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g6tia8$fe3$1@news.albasani.net>
Source record: 23707

John Smith wrote:

> Gene;
>
> Perhaps I have "had a bad day." Or, perhaps I was "too quick." Or,
> perhaps my understanding was lacking, etc. ...
>
> Well, I certainly see no reason that a CB'er exceeding 5w is NOT in
> violation of the law.
>
> But to your question, "... how many multi-kW CBers would worry about
> that?"
>
> My answer:
>
> Every damn one that is breaking that law! Either pay the fines, do the
> time, or change that law! (or, "we" change it.)
>
> I stand corrected, I did not have the "beef" with you, it seems, I had
> imagined ... I crawl back to my hole ... I stand corrected ... please
> accept my apologies.
>
> Warm regards,
> JS

Uhhh, perhaps with some explanation ... darn that thinking ... although I used to be an Alter Boy, it didn't take ... :-(

I did drive truck, decades ago ... I have exceeded power levels/freqs (dates, freqs, power-levels and times withheld to protect "the innocent" ...)

What can I say?; some occupations come with "liabilities" ... ;-)

Regards,
JS

835. Mount for 4 band Vertical on Travel Trailer.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-01 03:36:38 UTC
From: "R.Scott" <w7psk@yahoo.com>
Message-ID: <08291abe-d2d1-4cf2-8ba7-970d9bb205fe@i20g2000prf.googlegroups.com>
Source record: 23708

Anyone mounted a 4 band (or 5 band) on a travel trailer or other RV.
Ive a 4BTV coming and want to just mount it easily on my trailer when
parked to work contacts while camping.

Scotty W7PSK

836. Re: Mount for 4 band Vertical on Travel Trailer.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-01 13:07:01 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <YJqdnX-I3Irolw7VnZ2dnUVZ_t7inZ2d@comcast.com>
Source record: 23709

"R.Scott" <w7psk@yahoo.com> wrote in message
news:08291abe-d2d1-4cf2-8ba7-970d9bb205fe@i20g2000prf.googlegroups.com...
> Anyone mounted a 4 band (or 5 band) on a travel trailer or other RV.
> Ive a 4BTV coming and want to just mount it easily on my trailer when
> parked to work contacts while camping.
>
>
> Scotty W7PSK

Build a mount to attach to the tongue of the trailer. 73's

837. Re: Mount for 4 band Vertical on Travel Trailer.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-01 14:28:10 UTC
From: JB <nospam@goofball.net>
Message-ID: <_3Fkk.4$ZV1.1@trnddc07>
Source record: 23710

Knowing the structure is important. Most TTs are flimsy without adding reinforcement. I added a mast and rotor for VHF+ ops. For HF, I have tended to stick with the mobile antenna and add a section of RG8 into the trailer via pass-through. For 40 and 80 I add a 25' length of wire from the tip to a nearby support and load up as an inverted L or put up a Multi band Fan dipole. I hate trap antennas. No-workie on MARS.

"W3CQH" <hsgorden@comcast.net> wrote in message
news:YJqdnX-I3Irolw7VnZ2dnUVZ_t7inZ2d@comcast.com...
>
> "R.Scott" <w7psk@yahoo.com> wrote in message
> news:08291abe-d2d1-4cf2-8ba7-970d9bb205fe@i20g2000prf.googlegroups.com...
> > Anyone mounted a 4 band (or 5 band) on a travel trailer or other RV.
> > Ive a 4BTV coming and want to just mount it easily on my trailer when
> > parked to work contacts while camping.
> >
> >
> > Scotty W7PSK
>
> Build a mount to attach to the tongue of the trailer. 73's
>
>

838. Re: Mount for 4 band Vertical on Travel Trailer.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-01 14:38:30 UTC
From: JB <nospam@goofball.net>
Message-ID: <GdFkk.1$mP.0@trnddc03>
Source record: 23711

Have used a 4btv on FD from my trailer but used a cement block to stand the antenna in the clear and added some counterpoise wires (grounds are hard to find in the mountains). The tongue mount probably works but will need to be carefully tuned and will put RF in the shack.

The inverted L extension to the mobile antenna gave good performance with the least setup hassle.

"W3CQH" <hsgorden@comcast.net> wrote in message
news:YJqdnX-I3Irolw7VnZ2dnUVZ_t7inZ2d@comcast.com...
>
> "R.Scott" <w7psk@yahoo.com> wrote in message
> news:08291abe-d2d1-4cf2-8ba7-970d9bb205fe@i20g2000prf.googlegroups.com...
> > Anyone mounted a 4 band (or 5 band) on a travel trailer or other RV.
> > Ive a 4BTV coming and want to just mount it easily on my trailer when
> > parked to work contacts while camping.
> >
> >
> > Scotty W7PSK
>
> Build a mount to attach to the tongue of the trailer. 73's
>
>

839. Re: Mount for 4 band Vertical on Travel Trailer.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-01 17:11:10 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AED67A0BAA4DHuckleberrybigvalley@198.186.192.196>
Source record: 23712

>> Anyone mounted a 4 band (or 5 band) on a travel trailer or other RV.
>> Ive a 4BTV coming and want to just mount it easily on my trailer when
>> parked to work contacts while camping.
>>
>>
>> Scotty W7PSK
>

A couple suggestios: Does your trailer have a ladder in the back? If so, consider fabricating a custom bracket, fastened to the ladder, and mount your vertical on that (off to the side so as not to impinge on use of the ladder). I used two heavy aluminum pieces u-bolted to the ladder about 4 feet apart to hold my vertical antenna support mast. I bonded the bottom of my ladder to the chassis underneath with wide tinned copper braid strap and it makes an excellent counterpoise for my HF vertical mounted on the ladder.

If the trailer has a square bumper on the rear, that is another possibility for locating a mounting bracket with readily available clamps.

If you can't do this, you might consider buying, of building a simple vertical support of a steel tube welded to a flat plate. Simply park the trailer tire on the flat plate, which will hold the antenna base very firmly in place.

Ed K7AAT

840. Re: Mount for 4 band Vertical on Travel Trailer.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-01 20:08:19 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <2b77d6ec-074f-4855-a2e4-514c4add68f8@d45g2000hsc.googlegroups.com>
Source record: 23714

On Jul 31, 11:36 pm, "R.Scott" <w7...@yahoo.com> wrote:
> Anyone mounted a 4 band (or 5 band) on a travel trailer or other RV.
> Ive a 4BTV coming and want to just mount it easily on my trailer when
> parked to work contacts while camping.
>
> Scotty W7PSK

Since you are going to install it when you set up and remove it when
you tear down why bother to put it on the trailer at all. You could
hang it from a tree limb or mount it on a stake in the ground then
roll out some ground wires.

Jimmie

841. [redacted] HELP DESK SOFTWARE REVIEW[redacted]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 07:10:13 UTC
From: aaronaa13@gmail.com
Message-ID: <3f8e193f-9337-43c0-8453-3e480b9d2673@w39g2000prb.googlegroups.com>
Source record: 23715

[redacted] HELP DESK SOFTWARE REVIEW[redacted]

---

http://helpdesksoftwaremanagement.blogspot.com

842. come join some radio discussions! free voiceovers!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 09:10:54 UTC
From: my987fm@gmail.com
Message-ID: <b6c42978-a7da-4b26-afd5-54567d980da7@v13g2000pro.googlegroups.com>
Source record: 23716

Hey guys

Im james, the admin from broadcastingworld.net

Just wondering if anyone would like to discuss a bit of radio at my site? Get a few free voiceovers, sfx and more!

http://forums.broadcastingworld.net/index.php

Hope to see you there!

843. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 13:43:33 UTC
From: ltdoc@yahoo.com
Message-ID: <511d481a-3abc-4935-b9c9-07ca1ab56e8b@t54g2000hsg.googlegroups.com>
Source record: 23717

Aw, come on Cecil. You just didn't have the vertical oriented right.
Sort of tilt it in the right direction... you know?
- 'Doc

(Yeah, I know I'm gonna regret that, but I couldn't resist.)

844. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 14:16:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g71q7a$545$1@news.albasani.net>
Source record: 23718

Cecil Moore wrote:
> John Smith wrote:
>> Did you ever manage to have it "fixed?"
>> How did you manage it? Who did you report it to?
>
> The power pole ground wire didn't appear to be
> broken, just radiating like crazy. I managed
> it by transmitting on the vertical and receiving
> on the dipole. In the process of A/B comparisons,
> I discovered that the vertical was never better
> than the dipole and usually worse. The EZNEC
> comparisons are on my web page at:
>
> http://www.w5dxp.com/dipvsver.htm
>
> To be fair, since receiving was limited to East/
> West QSOs, the Extended Zepp beat the socks off
> the vertical.

On 40m, most run horiz. Horiz-to-horiz is always going to beat
horiz-to-vert.

Knowing you and your strong personality (at least from the news group) I
thought you might had been able to secure a fix from the power
companies' noise emissions. Was just wondering, and probably wouldn't
have helped with my problem anyway ...

Right now, I have an issue with a noise source I cannot even pinpoint
and is very broadband (and no, it is not BPL -- already ruled that out,
lol.) Noise is for blocks and remains fairly constant in strength.
This would lead me to think it was powerlines; however, the powerlines
are all underground! Which leads me to believe some noise IS on the
powerlines and the radiation is coming from the wiring in each
individual home/business. However, a scope, properly isolated and
hooked to my wiring doesn't give me a picture I can correlate to ... :-(

If it ain't one thing, it is another ... keeps life interesting, I guess.

Regards,
JS

845. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 15:09:25 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <VK_kk.19033$Ri.8902@flpi146.ffdc.sbc.com>
Source record: 23719

John Smith wrote:
> On 40m, most run horiz. Horiz-to-horiz is always going to beat
> horiz-to-vert.

That would certainly be true for ground-wave. But the
effect is minimized by polarization getting scrambled
through ionospheric reflection.
--
73, Cecil http://www.w5dxp.com

846. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 15:10:11 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <BL_kk.19034$Ri.18782@flpi146.ffdc.sbc.com>
Source record: 23720

ltdoc@yahoo.com wrote:
> Aw, come on Cecil. You just didn't have the vertical oriented right.
> Sort of tilt it in the right direction... you know?

You're right, I should have tilted it horizontal. :-)
--
73, Cecil http://www.w5dxp.com

847. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 15:26:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g71ubr$8td$1@news.albasani.net>
Source record: 23721

Cecil Moore wrote:
> John Smith wrote:
>> On 40m, most run horiz. Horiz-to-horiz is always going to beat
>> horiz-to-vert.
>
> That would certainly be true for ground-wave. But the
> effect is minimized by polarization getting scrambled
> through ionospheric reflection.

True, but isn't the horiz better suited for placing more signal in a skywave which is, generally, more useful? i.e., a high vertical can put a whopping skywave signal into Australia--but is better suited for ground wave in USA--while a horiz does an acceptable ground wave and skywave here in the USA, and the world, of course ... ? (and of course, there are exceptions) Etc. It seems that way for me, anyway ... verticals are my main choice from necessity ... however, thank God I dumped that "big property" at the top of the market for this smaller place! <grinning-ear-to-ear> I'd imagine, by the end of the year, or middle of next, I can buy back the old place for 1/3 to 1/4 of what I sold it for, IMHO we are just at the beginning of the "downhill run!" <having-a-heart-attack-from-sheer-joy!>

Life is good ...

Regards,
JS

848. Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 19:01:18 UTC
From: me@privacy.net
Message-ID: <vmb99494agov50d3f0gbsml6keb21d3t60@4ax.com>
Source record: 23722

I'm in zip code 63401

This means that my local off air channels will revert
to high VHF next Feb..... channels 7 and 10.

Along with few channels that will stay on UHF mainly
PBS channel

Soooo..... I need a combo high VHF/UHF antenna

Compact would be nice for sure

I'm looking at these two diff antennas:

Channel Master 2016

http://www.summitsource.com/product_info.php?ref=1&products_id=7084

Or the Winegard HD 1080

http://www.summitsource.com/product_info.php?ref=1&products_id=7048

I'm gonna mount the antenna at the peak of my side of
the duplex I rent and the towers are all in same
direction and 20+ miles northeast of me. I will use a J
mast and mount like a satellite dish.

Which of these two antennas would YOU go for and why?
I'm undecided!!

849. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 19:57:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gbe994dqnbn9m0hitcovmq8dat1ejg3o3h@4ax.com>
Source record: 23723

On Sat, 02 Aug 2008 14:01:18 -0500, me@privacy.net wrote:

>Compact would be nice for sure

Even at the cost of not working? Compact is NOT an attribute that attends both multi-channel and HDTV.

>Channel Master 2016
>http://www.summitsource.com/product_info.php?ref=1&products_id=7084

22 Active Electronic Antenna Elements indeed. -whew- They may be counting the mast and the transmission line too for all that brings you in gain. Speaking of which, it isn't actually obvious what gain is coming your way with either of these. The quotes are "by gosh and by golly" sort of claims.

>Or the Winegard HD 1080
>http://www.summitsource.com/product_info.php?ref=1&products_id=7048

two bays, imagine!

These might receive your signals just fine as 20 miles is not that far away if both your antenna and the transmitter's are high enough. The transmitters probably are, even if they aren't trying very hard. You are lucky they are all in the same vicinity.

>Which of these two antennas would YOU go for and why?
>I'm undecided!!

Neither on the basis of the ad copy. It says nothing factual that can be a basis of comparison with rabbit ears in the living room.

Wait until you have real signals to see how bad things are. Then put your rabbit ears on the peak of your roof (with a good transmission line, not the $10 crap). Write back after this with results of this test IF you don't see what you like.

73's
Richard Clark, KB7QHC

850. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 20:26:10 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <dlg994l1an0chjguonu0lqa466oac4rbjs@4ax.com>
Source record: 23724

```
On Mon, 28 Jul 2008 23:38:31 -0400, "Ed Cregger"
<ecregger@hotmale.com> wrote:

>
>"JosephKK" <quiettechblue@yahoo.com> wrote in message
>news:2fvs84htin3ok0lmh21j5i5ps92v41j7v6@4ax.com...
>> On Wed, 16 Jul 2008 23:19:56 -0400, "Ed Cregger"
>> <ecregger@bellsouff.net> wrote:
>>
>>>
>>>"John Smith" <assemblywizard@gmail.com> wrote in message
>>>news:g5lgrb$igd$1@news.albasani.net...
>>>> Ed Cregger wrote:
>>>>
>>>>> ...
>> <snip>
>>>---------
>>>
>>>The more people that want a piece of the pie, the smaller the pieces will
>>>be. Our main, number #1 problem is over population for the resources we
>>>have
>>>remaining and the lifestyle we wish to live. But you know that.
>>>
>>>Nature culls its creatures occasionally. Will it be by disease/plague? By
>>>wars? By things we cannot even imagine? No one knows. Enjoy the party
>>>while
>>>it is going on. Analyze later. Worrying hurts no one but you and those
>>>around you. I have given up worrying about it all. It is now in God's
>>>hands.
>>>I surrender.
>>>
>>>Ed, NM2K
>>>
>>>back to antennas
>>>
>>
>> How about taking a look at a population density map.
>
>---------------
>
>How about giving me a clue? What is your point?
>
>Ed Cregger
>
```

Without looking any further, it is on the map Ed.

851. Re: Solar cycle: normal

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 20:46:14 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g72h2s$pq1$1@registered.motzarella.org>
Source record: 23725

```
"JosephKK" <quiettechblue@yahoo.com> wrote in message
news:dlg994l1an0chjguonu0lqa466oac4rbjs@4ax.com...
> On Mon, 28 Jul 2008 23:38:31 -0400, "Ed Cregger"
> <ecregger@hotmale.com> wrote:
>
>>
>>"JosephKK" <quiettechblue@yahoo.com> wrote in message
>>news:2fvs84htin3ok0lmh21j5i5ps92v41j7v6@4ax.com...
>>> On Wed, 16 Jul 2008 23:19:56 -0400, "Ed Cregger"
>>> <ecregger@bellsouff.net> wrote:
>>>
>>>>
>>>>"John Smith" <assemblywizard@gmail.com> wrote in message
>>>>news:g5lgrb$igd$1@news.albasani.net...
>>>>> Ed Cregger wrote:
>>>>>
>>>>>> ...
>>> <snip>
>>>>---------
>>>>
>>>>The more people that want a piece of the pie, the smaller the pieces
>>>>will
>>>>be. Our main, number #1 problem is over population for the resources we
>>>>have
>>>>remaining and the lifestyle we wish to live. But you know that.
>>>>
>>>>Nature culls its creatures occasionally. Will it be by disease/plague?
>>>>By
>>>>wars? By things we cannot even imagine? No one knows. Enjoy the party
>>>>while
>>>>it is going on. Analyze later. Worrying hurts no one but you and those
>>>>around you. I have given up worrying about it all. It is now in God's
>>>>hands.
>>>>I surrender.
>>>>
>>>>Ed, NM2K
>>>>
>>>>back to antennas
>>>>
>>>
>>> How about taking a look at a population density map.
>>
>>---------------
>>
```

>>How about giving me a clue? What is your point?
>>
>>Ed Cregger
>>
>
> Without looking any further, it is on the map Ed.
>

When I left home for the first time in 1966, I was headed for Lackland AFB in San Antonio, TX. It was my first passenger jet experience and was a direct flight from Philadelphia (yeah, I'm that old). I was astounded at all of the open land beneath the plane and as far as I could see. All thoughts of over population left my mind for a few decades.

Now a days, I have a little better idea of how much Earth it takes to support just one average American living our current average life styles. It takes a lot of land to support one of us when you factor in all of the things that we consume. Me, I don't want to give up a single damned thing. So, the answer seems obvious to me. We must put a halt to our expanding population until our technology advances more and provides us with some solutions. Is this written in stone? Of course not. Would I restrict anyone else's ability to procreate, based upon my impression? No, not at all. But I think it would be nice if we could at least talk it over on the net and on TV without the religious folks becoming rabid and incensed (sp?). As though that could ever happen...8>)

Ed Cregger

852. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 21:04:19 UTC
From: Dave <noone@nowhere.com>
Message-ID: <nZ3lk.78$_H1.42@trnddc05>
Source record: 23726

<me@privacy.net> wrote in message
news:vmb99494agov50d3f0gbsml6keb21d3t60@4ax.com...
> I'm in zip code 63401
>
> This means that my local off air channels will revert
> to high VHF next Feb..... channels 7 and 10.
>
>
> Along with few channels that will stay on UHF mainly
> PBS channel
>
> Soooo..... I need a combo high VHF/UHF antenna
>
> Compact would be nice for sure
>
> I'm looking at these two diff antennas:
>
> Channel Master 2016
>
> http://www.summitsource.com/product_info.php?ref=1&products_id=7084
>
> Or the Winegard HD 1080
>
> http://www.summitsource.com/product_info.php?ref=1&products_id=7048
>
> I'm gonna mount the antenna at the peak of my side of
> the duplex I rent and the towers are all in same
> direction and 20+ miles northeast of me. I will use a J
> mast and mount like a satellite dish.
>
> Which of these two antennas would YOU go for and why?
> I'm undecided!!

definitely the HD, anything with HD in the name has to be higher definition
than anything else and that must be better than non-HD.

853. Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-02 23:38:58 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AEEA95F934D1Huckleberrybigvalley@198.186.192.196>
Source record: 23727

I am considering putting up a ground mounted vertical antenna, based on using telescopic aluminum tubing such as is available from Texas Towers or DX Engineering. Tubing available ranges from .500 inch to 2.125" with corresponding increase in price as diameters increase.

My vertical should be limited to a maximum of 30 feet, but preferrably around 23 - 25 feet. I will feed it with an SGC coupler at the base and operate 80M - 10M.

My question: Using the 6' long aluminum pieces, what is the minimum diameter sizes I should start with to enable the antenna stand up to a 75mph wind UN-GUYED. Also, how much "overlap" should I use in the telescoping pieces?

I will consider alternative means of building the vertical, but I really wish it to be unguyed .

Any info or recommendations appreciated. TNX

Ed K7AAT

854. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 00:09:04 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <eet994h78dhi5ueh08etavn3hl25m59qlf@4ax.com>
Source record: 23728

On Sun, 27 Jul 2008 21:07:25 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Ed wrote:
>
>> ...
>> About as well as it flows up the center conductor, possibly. You
>> don't think that just because the cable is buried that RF flow on the
>> shield conductor is prevented, do you?
>>
>> Ed
>
>I sure can imagine one heck of a "capacitive load" on that outer
>conductor to ground! What, thousands/tens-of-thousands of pf?
>
>Regards,
>JS

95% plus of the transmitter or received energy is safely contained
between center conductor and shield. That is how the physics works
out. All of the feed line center conductor current is pretty well
matched by the same current in the shield. It is the closely coupled
concentric magnetic fields that make coax work so well.

855. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 00:14:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g72t8pupe1@news.albasani.net>
Source record: 23729

JosephKK wrote:

> ...
> 95% plus of the transmitter or received energy is safely contained
> between center conductor and shield. That is how the physics works
> out. All of the feed line center conductor current is pretty well
> matched by the same current in the shield. It is the closely coupled
> concentric magnetic fields that make coax work so well.
>

Or, simply put, for ever action, an equal and opposite reaction occurs
... yes, basic physics ... however, what is in question--since the other
braid has and "inside" and an "outside", where does that equal opposite
reaction occur ...

Regard,
JS

856. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 00:18:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g72thfupe2@news.albasani.net>
Source record: 23730

John Smith wrote:
> JosephKK wrote:
>
>> ...
>> 95% plus of the transmitter or received energy is safely contained
>> between center conductor and shield. That is how the physics works
>> out. All of the feed line center conductor current is pretty well
>> matched by the same current in the shield. It is the closely coupled
>> concentric magnetic fields that make coax work so well.
>>
>
> Or, simply put, for ever action, an equal and opposite reaction occurs
> ... yes, basic physics ... however, what is in question--since the other
> braid has and "inside" and an "outside", where does that equal opposite
> reaction occur ...
>
> Regard,
> JS

Gawd, I am getting hasty in my old age ...

No electrical field can occur without a magnet field, no magnetic field can occur with out a corresponding electrical component, again, basic physics; you are attempting to say the magnetic component of the current on the outside of the braid is NOT SEEN by the center conductor ... that may be in error ... but, I would be willing to listen how tinned copper (the braid) is some sort of shield to magnetic fields ...

Regards,
JS

857. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 00:22:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g72to2upe3@news.albasani.net>
Source record: 23731

John Smith wrote:
> John Smith wrote:
>> JosephKK wrote:
>>
>>> ...
>>> 95% plus of the transmitter or received energy is safely contained
>>> between center conductor and shield. That is how the physics works
>>> out. All of the feed line center conductor current is pretty well
>>> matched by the same current in the shield. It is the closely coupled
>>> concentric magnetic fields that make coax work so well.
>>>
>>
>> Or, simply put, for ever action, an equal and opposite reaction occurs
>> ... yes, basic physics ... however, what is in question--since the
>> other braid has and "inside" and an "outside", where does that equal
>> opposite reaction occur ...
>>
>> Regard,
>> JS
>
>
> Gawd, I am getting hasty in my old age ...
>
> No electrical field can occur without a magnet field, no magnetic field
> can occur with out a corresponding electrical component, again, basic
> physics; you are attempting to say the magnetic component of the
> current on the outside of the braid is NOT SEEN by the center conductor
> ... that may be in error ... but, I would be willing to listen how
> tinned copper (the braid) is some sort of shield to magnetic fields ...
>
> Regards,
> JS

Geesh, too old, I am telling you ...

Disregard "static fields", however, that is NOT what is in question here ...

Regards,
JS

858. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 01:28:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <HLKdnVI8VoFLIAjVnZ2dnUVZ_rrinZ2d@posted.easystreetonline>
Source record: 23732

Here's one data point:

I've had four unguyed verticals about 32' high in my back yard for over 20 years. They've survived gusts of at least 75 mph in a couple of storms, but we've never had sustained winds of that level while they've been up. They're made from 6061-T6 aluminum, 1-1/4, 1-1/8, and 1 inch diameter. The pieces are 12 feet each, so the overlap is about 2 feet. For mounting, I drove an 8 foot chain-link fence line post 4 feet into the ground, then clamped the antenna to it with muffler clamps -- long U bolts. Some pieces of 1/4" wall PVC pipe sawed lengthwise are used for insulation.

A 30 foot antenna will have a high angle of radiation -- about 40 degrees above the horizon at maximum -- on 10 meters. A 23 foot antenna will have a high lobe on 10, but decent radiation at lower angles also. A few minutes with any antenna modeling program including the free EZNEC demo program from http://eznec.com and the Vert1 example file will give you a good idea of what to expect.

Roy Lewallen, W7EL

Ed wrote:
> I am considering putting up a ground mounted vertical antenna, based
> on using telescopic aluminum tubing such as is available from Texas
> Towers or DX Engineering. Tubing available ranges from .500 inch to
> 2.125" with corresponding increase in price as diameters increase.
>
> My vertical should be limited to a maximum of 30 feet, but preferrably
> around 23 - 25 feet. I will feed it with an SGC coupler at the base and
> operate 80M - 10M.
>
> My question: Using the 6' long aluminum pieces, what is the minimum
> diameter sizes I should start with to enable the antenna stand up to a
> 75mph wind UN-GUYED. Also, how much "overlap" should I use in the
> telescoping pieces?
>
> I will consider alternative means of building the vertical, but I
> really wish it to be unguyed .
>
> Any info or recommendations appreciated. TNX
>
> Ed K7AAT

859. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 01:33:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <BOqdnRLX04t8lwjVnZ2dnUVZ_hOdnZ2d@posted.easystreetonline>
Source record: 23733

JosephKK wrote:
>
> 95% plus of the transmitter or received energy is safely contained
> between center conductor and shield. That is how the physics works
> out. All of the feed line center conductor current is pretty well
> matched by the same current in the shield. It is the closely coupled
> concentric magnetic fields that make coax work so well.
>

It's unfortunate that this isn't true. If it were, it would make our lives a lot easier. Anyone interested in learning more about this topic might take a look at http://eznec.com/Amateur/Articles/Baluns.pdf.

Roy Lewallen, W7EL

860. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 01:48:37 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <zO6dnR6p1tXtkwjVnZ2dnUVZ_s7inZ2d@comcast.com>
Source record: 23734

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:gbe994dqnbn9m0hitcovmq8dat1ejg3o3h@4ax.com...
> On Sat, 02 Aug 2008 14:01:18 -0500, me@privacy.net wrote:
>
>>Compact would be nice for sure
>
> Even at the cost of not working? Compact is NOT an attribute that
> attends both multi-channel and HDTV.
>
>>Channel Master 2016
>>http://www.summitsource.com/product_info.php?ref=1&products_id=7084
>
> 22 Active Electronic Antenna Elements indeed. -whew- They may be
> counting the mast and the transmission line too for all that brings
> you in gain. Speaking of which, it isn't actually obvious what gain
> is coming your way with either of these. The quotes are "by gosh and
> by golly" sort of claims.
> ....
They seem to be counting each half of a log periodit element as a separate
element. Ditto for each side of a corner reflector.

Tam/WB2TT

861. Re: Mount for 4 band Vertical on Travel Trailer.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 03:45:46 UTC
From: "R.Scott" <w7psk@yahoo.com>
Message-ID: <4e84aaf8-05db-48e5-870e-bd839bf997ea@p10g2000prf.googlegroups.com>
Source record: 23735

> Since you are going to install it when you set up and remove it when
> you tear down why bother to put it on the trailer at all. You could
> hang it from a tree limb or mount it on a stake in the ground then
> roll out some ground wires.
>
> Jimmie

That's the down side, Most places I go would preclude running ground
wires.

That's why I'm looking to tie something to the frame to give somewhat
of a good ground.

862. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 03:58:56 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AEED573F7838Huckleberrybigvalley@198.186.192.196>
Source record: 23736

Roy Lewallen <w7el@eznec.com> wrote in
news:HLKdnVI8VoFLlAjVnZ2dnUVZ_rrinZ2d@posted.easystreetonline:

> Here's one data point:
>
> I've had four unguyed verticals about 32' high in my back yard for
> over 20 years. They've survived gusts of at least 75 mph in a couple
> of storms, but we've never had sustained winds of that level while
> they've been up. They're made from 6061-T6 aluminum, 1-1/4, 1-1/8, and
> 1 inch diameter. The pieces are 12 feet each, so the overlap is about
> 2 feet. For mounting, I drove an 8 foot chain-link fence line post 4
> feet into the ground, then clamped the antenna to it with muffler
> clamps -- long U bolts. Some pieces of 1/4" wall PVC pipe sawed
> lengthwise are used for insulation.
>
> A 30 foot antenna will have a high angle of radiation -- about 40
> degrees above the horizon at maximum -- on 10 meters. A 23 foot
> antenna will have a high lobe on 10, but decent radiation at lower
> angles also. A few minutes with any antenna modeling program including
> the free EZNEC demo program from http://eznec.com and the Vert1
> example file will give you a good idea of what to expect.
>
> Roy Lewallen, W7EL
>

Thanks for that info, Roy. I will finally download that demo software
and try it within the next 24 hours. Also, I appreciate the comments on
the other. While I can't easily get 12 foot sections, I'm sure I'll do
ok with the 6 foot sections. Here on the Oregon Coast we get storms with
sustained winds exceeding 75MPH sometimes. I would lower any antenna if
NWS were to suggest such a storm was approaching, but I'd like to have
confidence with the antenna if some gusts reached that speed on rare
occasion.

The high takeoff for 75M would be fine as most of my work in that
band would be within the State of Oregon, anyway.

Ed K7AAT

863. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 04:35:05 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g73ci0snb1@registered.motzarella.org>
Source record: 23737

"Dave" <noone@nowhere.com> wrote in message news:nZ3lk.78$_H1.42@trnddc05...
>
> <me@privacy.net> wrote in message
> news:vmb99494agov50d3f0gbsml6keb21d3t60@4ax.com...
>> I'm in zip code 63401
>>
>> This means that my local off air channels will revert
>> to high VHF next Feb..... channels 7 and 10.
>>
>>
>> Along with few channels that will stay on UHF mainly
>> PBS channel
>>
>> Soooo..... I need a combo high VHF/UHF antenna
>>
>> Compact would be nice for sure
>>
>> I'm looking at these two diff antennas:
>>
>> Channel Master 2016
>>
>> http://www.summitsource.com/product_info.php?ref=1&products_id=7084
>>
>> Or the Winegard HD 1080
>>
>> http://www.summitsource.com/product_info.php?ref=1&products_id=7048
>>
>> I'm gonna mount the antenna at the peak of my side of
>> the duplex I rent and the towers are all in same
>> direction and 20+ miles northeast of me. I will use a J
>> mast and mount like a satellite dish.
>>
>> Which of these two antennas would YOU go for and why?
>> I'm undecided!!
>
> definitely the HD, anything with HD in the name has to be higher
> definition than anything else and that must be better than non-HD.

Remember the special antennas that were sold which were marked "color" TV
antennas?

Ed, NM2K

864. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 04:36:51 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g73cl8$ih3$1@registered.motzarella.org>
Source record: 23738

```
"John Smith" <assemblywizard@gmail.com> wrote in message
news:g72to2$upe$3@news.albasani.net...
> John Smith wrote:
>> John Smith wrote:
>>> JosephKK wrote:
>>>
>>>> ...
>>>> 95% plus of the transmitter or received energy is safely contained
>>>> between center conductor and shield. That is how the physics works
>>>> out. All of the feed line center conductor current is pretty well
>>>> matched by the same current in the shield. It is the closely coupled
>>>> concentric magnetic fields that make coax work so well.
>>>>
>>>
>>> Or, simply put, for ever action, an equal and opposite reaction occurs
>>> ... yes, basic physics ... however, what is in question--since the other
>>> braid has and "inside" and an "outside", where does that equal opposite
>>> reaction occur ...
>>>
>>> Regard,
>>> JS
>>
>>
>> Gawd, I am getting hasty in my old age ...
>>
>> No electrical field can occur without a magnet field, no magnetic field
>> can occur with out a corresponding electrical component, again, basic
>> physics; you are attempting to say the magnetic component of the current
>> on the outside of the braid is NOT SEEN by the center conductor ... that
>> may be in error ... but, I would be willing to listen how tinned copper
>> (the braid) is some sort of shield to magnetic fields ...
>>
>> Regards,
>> JS
>
> Geesh, too old, I am telling you ...
>
> Disregard "static fields", however, that is NOT what is in question here
> ...
>
> Regards,
> JS

---------
```

Rats! You beat me to it!

Ed, NM2K

865. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 04:56:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g73dqg$5bg$1@news.albasani.net>
Source record: 23739

Ed Cregger wrote:

> ...
> Rats! You beat me to it!
>
> Ed, NM2K
>
>

It's about time! Some of these guys have held my feet to the fire!

:-)

Regards,
JS

866. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 07:00:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <Q7idneTkH6gOygjVnZ2dnUVZ_jqdnZ2d@posted.easystreetonline>
Source record: 23740

Ed wrote:
>
> Thanks for that info, Roy. I will finally download that demo software
> and try it within the next 24 hours. Also, I appreciate the comments on
> the other. While I can't easily get 12 foot sections, I'm sure I'll do
> ok with the 6 foot sections. Here on the Oregon Coast we get storms with
> sustained winds exceeding 75MPH sometimes. I would lower any antenna if
> NWS were to suggest such a storm was approaching, but I'd like to have
> confidence with the antenna if some gusts reached that speed on rare
> occasion.
>
> The high takeoff for 75M would be fine as most of my work in that
> band would be within the State of Oregon, anyway.
>
> Ed K7AAT

Doesn't aluminum corrode pretty fast at the coast? My parents lived in Yachats, and aluminum didn't hold up very well at all -- although I'm sure that some alloys would be better than others. At best, you'll have to make heroic efforts to avoid electrolytic corrosion. I'll bet Danny, K6MHE could add a lot to this.

Roy Lewallen, W7EL

867. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 07:03:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <Q7idnefkH6i2xQjVnZ2dnUVZ_jqdnZ2d@posted.easystreetonline>
Source record: 23741

Basic physics is fine, but it's possible to reach all sorts of invalid conclusions if misapplied.

Roy Lewallen, W7EL

868. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 08:56:57 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <shsa9493lgs7vs4modo80hpuvb1b0pu0b8@4ax.com>
Source record: 23742

On 29 Jul 2008 05:20:36 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>
>> If you ever think about posting to the moderated group, don't ...
>>
>> Here is an example of a censored post, of mine:
>>
>> -----BEGIN PGP SIGNED MESSAGE-----
>> Hash: SHA1
>>
>> A 5 KW amplifier is not lawful for use under Part 97. Please strike
>> reference on any resubmit. - K3FU
>>
>
>
> I'm pretty sure a ham CAN use a 5KW PA, as long as he limits the power
>out to the maximum allowed under our FCC rules. Its not the hardware
>that is not permited, its the actual power out that counts.
>
> Ed K7AAT

The relevant language in part 97 is that the available power to the
final amplifier stage must not exceed 1 kW for armature use. Other
jurisdictions have their own rules.

869. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 09:28:06 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <jeua94plitu3qboruseq56s9abno5st32l@4ax.com>
Source record: 23743

On Tue, 29 Jul 2008 19:45:19 GMT, Bruce in alaska <fast@btpost.net>
wrote:

>In article <E%Ejk.16657$mh5.1968@nlpi067.nbdc.sbc.com>,
> Cecil Moore <nospam@w5dxp.com> wrote:
>
>> John Smith quoted someone:
>> > "A 5 KW amplifier is not lawful for use under Part 97."
>>
>> Back in the 60's, a ham friend of mine ran a
>> surplus AM transmitter capable of 10KW output.
>> However, he never adjusted his input power to
>> more than the legal 1KW limit.
>
>Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
>understand, or can't comprehend, the actual Rule that Part 97
>operations are REQUIRED to operate under. Specifically Part
>97.313. I wonder if "Said Person" has ever actually READ
>47CFR90.313? Apparently NOT......

For all you disinterested parties

http://edocket.access.gpo.gov/cfr_2007/octqtr/47cfr90.313.htm

[Code of Federal Regulations]
[Title 47, Volume 5]
[Revised as of October 1, 2007]
From the U.S. Government Printing Office via GPO Access
[CITE: 47CFR90.313]

[Page 390]

TITLE 47--TELECOMMUNICATION

CHAPTER I--FEDERAL COMMUNICATIONS COMMISSION (CONTINUED)

PART 90_PRIVATE LAND MOBILE RADIO SERVICES--Table of Contents

Subpart L_Authorization in the Band 470 512 MHz (UHF-TV Sharing)

Sec. 90.313 Frequency loading criteria.

(a) Except as provided for in paragraph (b) of this section, the
maximum channel loading on frequencies in the 470-512 MHz band is as
follows:
(1) 50 units for systems eligible in the Public Safety Pool (see
Sec. 90.20(a)).
(2) 90 units for systems eligible in the Industrial/Business Pool

(see Sec. 90.35(a)).
(b) If a licensee has exclusive use of a frequency, then the loading standards in paragraph (a) of this section, may be exceeded. If it is a shared channel, the loading standards can be exceeded upon submission of a signed statement by all those sharing the channel agreeing to the increase.
(c) A unit is defined as a mobile transmitter-receiver. Loading standards will be applied in terms of the number of units actually in use or to be placed in use within 8 months following authorization. A licensee will be required to show that an assigned frequency pair is at full capacity before it may be assigned a second or additional frequency pair. Channel capacity may be reached either by the requirements of a single licensee or by several users sharing a channel. Until a channel is loaded to capacity it will be available for assignment to other users in the same area. A frequency pair may be reassigned at distances 64 km. (40 mi.), 32 km. (20 mi.) for Channel 15, Chicago; Channel 20, Philadelphia; and Channel 17, Washington, or more from the location of base stations authorized on that pair without reference to loading at the point of original installation. Following authorization, the licensee shall notify the Commission either during or at the close of the 8 month period of the number of units in operation. In the Industrial Radio Services, if the base station facility is to be used by more than a single licensee, the frequency assigned to it will not be reassigned for use by another facility within 64 km. (40 mi.) or 32 km. (20 mi.) where applicable for a period of 12 months, Provided, That the facility is constructed within 90 days from the date of the first grant, meets the loading standards to at least 50 percent within 9 months, and meets all loading standards within 12 months.

[43 FR 54791, Nov. 22, 1978, as amended at 47 FR 36649, Aug. 23, 1982; 62 FR 18933, Apr. 17, 1997]

870. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 09:36:31 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <tvua94hkus8t41d6ffdq9nm1v3gsd52hct@4ax.com>
Source record: 23744

On Tue, 29 Jul 2008 16:42:44 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>Bruce in alaska wrote:
>> Whom, ever "Someone" is, he isn't versed in 47CFR97, and doesn't
>> understand, or can't comprehend, the actual Rule that Part 97
>> operations are REQUIRED to operate under. Specifically Part
>> 97.313. I wonder if "Said Person" has ever actually READ
>> 47CFR90.313? Apparently NOT......
>
>I fail to see how "never adjusting his input power to more
>than the legal 1KW limit" violated 97.313.

Oh 97 instead of 90, see:

http://edocket.access.gpo.gov/cfr_2007/octqtr/47cfr97.313.htm

871. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 13:44:16 UTC
From: ltdoc@yahoo.com
Message-ID: <fe23dca9-7118-429c-b434-fcea49526a96@e53g2000hsa.googlegroups.com>
Source record: 23745

Ed,
I'm certainly no expert on wind loading, so don't take any of this as 'gospel'. Having said that, I've found that winds in the 75 mph range can tear up almost anything, even if it is guyed. That's from living in "Tornado-Alley" and seeing things laying on the ground that shouldn't be. I figure guying is at least a sort of good insurance thingy.
If you get a lot of salt water where you live, I'd also take a few precautions about treating the antenna in some way to help prevent that corrosion. No ideas about that since I don't have much salt water where I live. There has to be something that will help at any rate.
And lastly, your vertical at 20-30 feet tall just ain't gonna work super-well on the lower bands where it's not going to be sort of close to 1/4 wave length (mobile 80 meter antennas come to mind). If you are happy with that performance, then big deal, who cares, it works.
- 'Doc

(None of these thoughts are all that 'fantastic', mostly just 'what-if's and 'common sense'. Also probably included in that list of mistakes I've made before.)

872. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 13:46:08 UTC
From: JB <nospam@goofball.net>
Message-ID: <AEilk.109$EL2.60@trnddc01>
Source record: 23746

Actually the 2016 has some advantages. Although the other will have higher UHF gain, it has no gain and no protection against multipath on the VHF frequencies. The 2016 will be flatter with a cleaner front to back pattern (although lower gain). If you have no hills or tall buildings and the source is on a single tower, then the other may be better.

Depending on your terrain. If there are hills or tall buildings you will want a sharper, higher gain antenna then add attenuators or tilt compensation to reduce the reflections. Saving $20 or $40 can wind up a waste of money.

As always, your mileage may vary due to terrain, location and ERP of the transmitters. The real answer is to look at what others are using and see what the picture is like. If they suck on Analog, you may have dropouts on DTV. Anyway, its all just commercial liberal commie brainwashing and propaganda. What channel has the Rifleman and Andy Griffith still?

"Ed Cregger" <ecregger@bellsouff.net> wrote in message
news:g73ci0snb1@registered.motzarella.org...
>
> "Dave" <noone@nowhere.com> wrote in message
news:nZ3lk.78$_H1.42@trnddc05...
> >
> > <me@privacy.net> wrote in message
> > news:vmb99494agov50d3f0gbsml6keb21d3t60@4ax.com...
> >> I'm in zip code 63401
> >>
> >> This means that my local off air channels will revert
> >> to high VHF next Feb..... channels 7 and 10.
> >>
> >>
> >> Along with few channels that will stay on UHF mainly
> >> PBS channel
> >>
> >> Soooo..... I need a combo high VHF/UHF antenna
> >>
> >> Compact would be nice for sure
> >>
> >> I'm looking at these two diff antennas:
> >>
> >> Channel Master 2016
> >>
> >> http://www.summitsource.com/product_info.php?ref=1&products_id=7084
> >>
> >> Or the Winegard HD 1080

> >>
> >> http://www.summitsource.com/product_info.php?ref=1&products_id=7048
> >>
> >> I'm gonna mount the antenna at the peak of my side of
> >> the duplex I rent and the towers are all in same
> >> direction and 20+ miles northeast of me. I will use a J
> >> mast and mount like a satellite dish.
> >>
> >> Which of these two antennas would YOU go for and why?
> >> I'm undecided!!
> >
> > definitely the HD, anything with HD in the name has to be higher
> > definition than anything else and that must be better than non-HD.
>
>
> Remember the special antennas that were sold which were marked "color" TV
> antennas?
>
> Ed, NM2K
>
>

873. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 17:49:30 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-164AA8.09492203082008@netnews.worldnet.att.net>
Source record: 23747

In article <Xns9AEEA95F934D1Huckleberrybigvalley@198.186.192.196>,
Ed <Huckleberry_REMOVE_@bigvalley.net> wrote:

> I am considering putting up a ground mounted vertical antenna, based
> on using telescopic aluminum tubing such as is available from Texas
> Towers or DX Engineering. Tubing available ranges from .500 inch to
> 2.125" with corresponding increase in price as diameters increase.
>
> My vertical should be limited to a maximum of 30 feet, but preferrably
> around 23 - 25 feet. I will feed it with an SGC coupler at the base and
> operate 80M - 10M.
>
> My question: Using the 6' long aluminum pieces, what is the minimum
> diameter sizes I should start with to enable the antenna stand up to a
> 75mph wind UN-GUYED. Also, how much "overlap" should I use in the
> telescoping pieces?
>
> I will consider alternative means of building the vertical, but I
> really wish it to be unguyed .
>
> Any info or recommendations appreciated. TNX
>
> Ed K7AAT

a couple of points come to mind here. First, Your not going to get much
out of a 30 Ft Radiator tied to an SGC Autotuner, UNLESS you have a
REALLY LOW Impedance RF Ground for you Antenna System. Radiator is just
to short. It would be a lot better is it were 70 Ft tall.
Second, there are, what is Known in the Marine Radio Trades,
"Pre-corroded Aluminum Alloys" that already have an Aluminum Oxide
coating on the interior and exterior surfaces. Then the trick is, to
get a good Metal to Metal Bond between the joints of the separate
tubing pieces. Usually done with Threaded Bolts, in Drilled and Taped
holes, and coated with &#65533;, or other such conductive substance.

--
Bruce in alaska
add <path> after <fast> to reply

874. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 18:12:48 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <MCEeK8fgUfIIFAzX@ifwtech.co.uk>
Source record: 23748

Ed wrote:
>
> Thanks for that info, Roy. I will finally download that demo
>software and try it within the next 24 hours. Also, I appreciate the
>comments on the other. While I can't easily get 12 foot sections, I'm
>sure I'll do ok with the 6 foot sections. Here on the Oregon Coast we
>get storms with sustained winds exceeding 75MPH sometimes. I would
>lower any antenna if NWS were to suggest such a storm was approaching,
>but I'd like to have confidence with the antenna if some gusts reached
>that speed on rare occasion.
>

We live in a similar situation, about two miles from the south-west coast of Scotland. After a period of strong winds, everything is plastered with salt spray.

In the two years since I started putting up antennas, experience with corrosion has been varied. The cast aluminum housing of the Hy-Gain rotor has become very heavily corroded. Antennas have fared better, and the Optibeam is immaculate.

Least corroded , of course, of all are my fiberglass poles with insulated wire taped up the outside. If corrosion is a worry, you might consider one of the Spiderbeam poles, which are made in Germany and are much stronger than regular fishing poles:
<http://www.shop.dx-is.com/product.sc?categoryId=5&productId=11>

A friend put up an 80m 4-square at about the same time, and at a similar distance from the sea. He found that although the tubing was OK along most of its length, there was extensive internal corrosion at the joints, due to the custom-made couplers that had been machined from a different grade of alloy. They wouldn't have lasted through a third winter, so he is changing to 40ft Spiderbeam poles mounted on 2in metal poles.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

875. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 18:35:05 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <j0ahm5-n33.ln1@mail.specsol.com>
Source record: 23749

Ed <Huckleberry_REMOVE_@bigvalley.net> wrote:

> I am considering putting up a ground mounted vertical antenna, based
> on using telescopic aluminum tubing such as is available from Texas
> Towers or DX Engineering. Tubing available ranges from .500 inch to
> 2.125" with corresponding increase in price as diameters increase.

> My vertical should be limited to a maximum of 30 feet, but preferrably
> around 23 - 25 feet. I will feed it with an SGC coupler at the base and
> operate 80M - 10M.

This is basically what I had.

The length is adjusted to be resonant on 40M.

It worked fine on 80M through 30M, OK on 20M (compared to a real 20M
vertical) and goes downhill from there, though it is usable all the
way to 10M.

I later modified it by adding a base loading coil switched in and out
with a relay that made it resonant on 80M with the coil in.

It now works pretty well on 160M and tunes up on 80M a lot faster,
though there doesn't seem to be any performance difference.

20M and above were not effected.

It is in the middle of a watered grassy area with radials.

When I first put it up I thought I could get away with not using
radials since the ground is allways moist; wrong thought.

--
Jim Pennino

Remove .spam.sux to reply.

876. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 18:36:17 UTC
From: me@privacy.net
Message-ID: <1bub94961d3pd4olhdhr93btunpb4ljm6m@4ax.com>
Source record: 23750

"JB" <nospam@goofball.net> wrote:

>Actually the 2016 has some advantages. Although the other will have higher
>UHF gain, it has no gain and no protection against multipath on the VHF
>frequencies. The 2016 will be flatter with a cleaner front to back pattern
>(although lower gain). If you have no hills or tall buildings and the
>source is on a single tower, then the other may be better.

Yeah I'm kinda leaning towards the 2016. But can you
explain why the 1080 has no protection from multi-path?
Are you saying that the 2016 is far more "directional"
than the 1080?

>Depending on your terrain. If there are hills or tall buildings you will
>want a sharper, higher gain antenna then add attenuators or tilt
>compensation to reduce the reflections. Saving $20 or $40 can wind up a
>waste of money.

Yes I do have on bi brick two story building right in
front of me in direction antenna must be pointed.
<sigh>

> Anyway, its all just commercial liberal commie brainwashing and
>propaganda. What channel has the Rifleman and Andy Griffith still?

Aint THAT the truth!!

I've seriously thought abt giving up broadcast TV and
just watching everything off the Internet such as
hulu.com. Serious!!

At least on hulu.com I can still watch Andy Griffith,
twilight zone, etc!!

877. Glass Mount Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 20:30:00 UTC
From: Richard <k5wor@verizon.net>
Message-ID: <g754g6$5qo$1@registered.motzarella.org>
Source record: 23651

I have a dual band glass mount antennas but did not get info to install. I have installed the antennas and it seems to work fine on 2m as far as SWR. However, 450 SWR is very high and I am not sure what the small stub is to do. Is it vert.,horiz.,up or down? I have NOT tried to tune with the cap in the box as the SWR on 2 m is OK and not sure if it has anything to do with 450.
HELP
K5WOR

878. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-03 22:38:34 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AF057E57BF94nonenowhere@61.9.191.5>
Source record: 23652

Ed <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns9AEEA95F934D1Huckleberrybigvalley@198.186.192.196:

> I am considering putting up a ground mounted vertical antenna,
> based
> on using telescopic aluminum tubing such as is available from Texas
> Towers or DX Engineering. Tubing available ranges from .500 inch to
> 2.125" with corresponding increase in price as diameters increase.
>
> My vertical should be limited to a maximum of 30 feet, but
> preferrably
> around 23 - 25 feet. I will feed it with an SGC coupler at the base
> and operate 80M - 10M.
>

I know you didn't ask about the radio performance of the proposed design.

Nevertheless...

It is challenging to achieve good efficiency from such an antenna (ground mounted unloaded vertical, earth system, impedance matching at the base) at less than about 17% of a wavelength in height. My article http://www.vk1od.net/multibandunloadedvertical/index.htm models an unloaded vertical of 10m (about 30') in height, and also considers a better configuration (13m).

The article may interest you because it questions whether a 30' vertical is a good antenna at 3.6MHz, or above 18MHz.

In any event, the bigger issue is what is under the ground rather than in the air.

Owen

879. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 00:11:56 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AEFAEF6A3447Huckleberrybigvalley@198.186.192.196>
Source record: 23653

My thanks to those who have responded so far. Much food for thought. Roy, I downloaded the demo program.... BUT.... I'm going to have to spend some time learning its operation... it appears to have a considerable learning curve, which I'm sure will be well worth the time.... when I get it.

Commets on salt water corrosion have been noted. I'm about 1/4 mile from the nearest salt water.... and down wind. My mobile RV vertical antenna has been parked here for about 3 months now and is already showing early signs of the corrosion.

My thoughts at the moment are I can either easily remove the aluminum elements and clean them every 6 months or so, OR perhaps I should use an insulated wire supported by a fibre glass support. I note someone mentioned the DX-IS poles out of Georgia. Although I swore I would stick to only the vertical I originally spoke of, the idea of a quality fibreglass mast does seem to have benefits for my location. If anyone else can recommend other sources, or their opinions of robust fibreglass masts, I'm receptive. Given the comments on projected poorer performance of a 30 foot vertical, I suppose I need consider one that is higher, but I have CC&R's, and while not enforced, I do not wish to draw attention to myself.

Thanks to all, so far.

Ed K7AAT

880. Re: Glass Mount Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 00:33:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2fjc94tha0e3gq3oe8ledgadps8cv262h7@4ax.com>
Source record: 23654

On Sun, 3 Aug 2008 15:30:00 -0500, "Richard" <k5wor@verizon.net>
wrote:

>I have a dual band glass mount antennas but did not get info to install. I
>have installed the antennas and it seems to work fine on 2m as far as SWR.
>However, 450 SWR is very high and I am not sure what the small stub is to
>do. Is it vert.,horiz.,up or down? I have NOT tried to tune with the cap in
>the box as the SWR on 2 m is OK and not sure if it has anything to do with
>450.
>HELP
>K5WOR

I presume by stub, you mean the single radial that comes as an
attachement to the feedpoint. First, it is probably anodized black -
scrape off the anodization. Second, twist the orientation for best
results. Third, run the feedline close to the chassis (sheet metal)
to decouple it.

73's
Richard Clark, KB7QHC

881. discount air jordan 1-23 shoes,coach dior prada sneakers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 11:44:24 UTC
From: bizsneakers3@yahoo.com.cn
Message-ID: <236912f0-4462-41b1-b22a-e2469302fbec@r15g2000prd.googlegroups.com>
Source record: 23655

--------(www.ebuycellphone.com) ---------

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882. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 14:03:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7727s$3fc$1@news.albasani.net>
Source record: 23656

Roy Lewallen wrote:
> Basic physics is fine, but it's possible to reach all sorts of invalid
> conclusions if misapplied.
>
> Roy Lewallen, W7EL

I have been thinking about this "comment."

And, absolutely!; Things only get more interesting when we can "bend"
the laws ... ;-)

Regards,
JS

883. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 14:54:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7757g$3fc$2@news.albasani.net>
Source record: 23657

John Smith wrote:
> Roy Lewallen wrote:
>> Basic physics is fine, but it's possible to reach all sorts of invalid
>> conclusions if misapplied.
>>
>> Roy Lewallen, W7EL
>
> I have been thinking about this "comment."
>
> And, absolutely!; Things only get more interesting when we can "bend"
> the laws ... ;-)
>
> Regards,
> JS

Again, gettin' old ...

Fortunate to have Roy, Cecil and others here ... I, certainly, would get bored without them ... someone I can have a "difference" with ... but then agree with.

Life is not just good, it is EXCELLENT ... ! and, when they are right, they are RIGHT!

Regards,
JS

884. eBay: Tokyo Hy Power HC-2000 antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 16:13:18 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <ZUFlk.15644$cW3.3190@nlpi064.nbdc.sbc.com>
Source record: 23658
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.swap

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=STRK:MESELX:IT&item=110276680780

885. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 16:48:57 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <onbe94tjbpdelohvolir9o7iv1pd2g8jqc@4ax.com>
Source record: 23659

On 04 Aug 2008 00:11:56 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>
>
> My thanks to those who have responded so far. Much food for thought.
>Roy, I downloaded the demo program.... BUT.... I'm going to have to
>spend some time learning its operation... it appears to have a
>considerable learning curve, which I'm sure will be well worth the
>time.... when I get it.
>
>
> Commets on salt water corrosion have been noted. I'm about 1/4 mile
>from the nearest salt water.... and down wind. My mobile RV vertical
>antenna has been parked here for about 3 months now and is already
>showing early signs of the corrosion.
>
> My thoughts at the moment are I can either easily remove the aluminum
>elements and clean them every 6 months or so, OR perhaps I should use
>an insulated wire supported by a fibre glass support. I note someone
>mentioned the DX-IS poles out of Georgia. Although I swore I would stick
>to only the vertical I originally spoke of, the idea of a quality
>fibreglass mast does seem to have benefits for my location. If anyone
>else can recommend other sources, or their opinions of robust fibreglass
>masts, I'm receptive. Given the comments on projected poorer
>performance of a 30 foot vertical, I suppose I need consider one that is
>higher, but I have CC&R's, and while not enforced, I do not wish to
>draw attention to myself.
>
> Thanks to all, so far.
>
> Ed K7AAT
>
>
My EZNEC models don't show much difference in radiator materials with
a diameter of of 1.5 inches. Why not steel TV masting?

It has been mentioned that 70 feet would be better but so would 140
feet! We all have some sort of limitations. The important thing is to
get a workable antenna up.

If a thirty foot radiator is what you can do that is it. Life is
simpler with a good antenna tuner (I love my SGC-237) and I am on the
air. I expect it would work well with a thirty foot wire as well.

The more important consideration is the ground issue. I bought 2000 feet of insulated wire on EBAY and it worked out to about 35 radials of up to 70 feet. They are stapled into the grass and hard to locate after a couple of years even though they are bright green.

I rarely use the vertical for anything other than 40-80 & 160 but it will load up to 10 meters for sure and probably the advertised 6 meters for the tuner.

You might find my primitive experiment interesting.....
http://dixienc.us/28FtVert/28FtVertical.htm

John Ferrell W8CCW

886. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 17:33:38 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <S3Hlk.17054$uE5.13875@flpi144.ffdc.sbc.com>
Source record: 23660

John Smith wrote:
> Things only get more interesting when we can "bend"
> the laws ... ;-)

"Whattaya mean 'we', White Man?" Every miracle performed
in "The Bible" can be performed by man today probably
including keeping a man technically dead for three
days and then reviving him (any volunteers?).

I suspect every technical "law" known to man will be broken
in the next 1000 years, if not in the next 100 years. We
have already eaten of the Tree of Knowledge. It will only
be a matter of time until we eat of the Tree of (Eternal)
Life, relatively speaking.
--
73, Cecil http://www.w5dxp.com

887. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 18:02:02 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g77g6qsdb1@news.jpl.nasa.gov>
Source record: 23665

Ed wrote:
> I am considering putting up a ground mounted vertical antenna, based
> on using telescopic aluminum tubing such as is available from Texas
> Towers or DX Engineering. Tubing available ranges from .500 inch to
> 2.125" with corresponding increase in price as diameters increase.
>
> My vertical should be limited to a maximum of 30 feet, but preferrably
> around 23 - 25 feet. I will feed it with an SGC coupler at the base and
> operate 80M - 10M.
>
> My question: Using the 6' long aluminum pieces, what is the minimum
> diameter sizes I should start with to enable the antenna stand up to a
> 75mph wind UN-GUYED. Also, how much "overlap" should I use in the
> telescoping pieces?

How much flex do you want to allow? You can make it pretty small, if you don't mind it bending a LOT in the wind.

Are you constrained to aluminum? i.e. what about a 15-20 foot length of chainlink fence top rail (aka galvanized pipe) with a standard mobile whip on top. If you're worried about conductivity, run some copper wire or a stripe of copper tape up the side.

888. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 18:06:50 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g77gfpvsa1@f04n12.cac.psu.edu>
Source record: 23661

Cecil Moore wrote:
> John Smith wrote:
>> Things only get more interesting when we can "bend" the laws ... ;-)
>
> "Whattaya mean 'we', White Man?" Every miracle performed
> in "The Bible" can be performed by man today probably
> including keeping a man technically dead for three
> days and then reviving him (any volunteers?).

Well, I don't think we can cover the entire earth with water past the height of the tallest mountains. Like that ever happened tho'.

> I suspect every technical "law" known to man will be broken
> in the next 1000 years, if not in the next 100 years. We
> have already eaten of the Tree of Knowledge. It will only
> be a matter of time until we eat of the Tree of (Eternal)
> Life, relatively speaking.

I agree, if we manage to survive that long. Which I do not find all that likely. Or at least if we do, our innate instincts will ensure that we are at nowhere near the technical level we are today. More likely our tendency to overpopulate, not plan ahead, and kill anyone who doesn't look or think as we do will probably leave the survivors to emulate a lifestyle more akin to the middle ages. There are even some nutters among us who don't have a problem with that.

- 73 de Mike N3LI -

889. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 18:20:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g77h9c$6n0$2@news.albasani.net>
Source record: 23662

Cecil Moore wrote:

> ...
> "Whattaya mean 'we', White Man?" Every miracle performed
> in "The Bible" can be performed by man today probably
> including keeping a man technically dead for three
> days and then reviving him (any volunteers?).
>
> I suspect every technical "law" known to man will be broken
> in the next 1000 years, if not in the next 100 years. We
> have already eaten of the Tree of Knowledge. It will only
> be a matter of time until we eat of the Tree of (Eternal)
> Life, relatively speaking.

Interesting "take" on things ... and again, more correct than in error.
:-)

I am thinking about sending ya' the wifes pie plates ... <grin>

Regards,
JS

890. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 18:21:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <LOHlk.6308$np7.1150@flpi149.ffdc.sbc.com>
Source record: 23663

Michael Coslo wrote:
> Well, I don't think we can cover the entire earth with water past
> the height of the tallest mountains. Like that ever happened tho'.

The original languages, like our own version of English,
had numerous definitions of "earth". I can cover the
"entire earth" in my handful of earth with a pint of water.

At the time of that original tale, man had absolutely no
concept of a 8000 mile diameter "planet earth". "Earth"
was as far (and as flat) as one could see and I have seen
Texas floods, in my lifetime, where nothing but water
could be seen. :-) Heck, I have been sailing on Clear
Lake, out by NASA, when I couldn't see anything but
water in all directions.
--
73, Cecil http://www.w5dxp.com

891. Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 18:49:12 UTC
From: Chris <CWShannon@gmail.com>
Message-ID: <7bfb8b84-6f5d-4ed1-8b9c-bfe986d675cf@f36g2000hsa.googlegroups.com>
Source record: 23664

I've been looking at a few satcom antennas for a project I'm working on. We were originally looking at parabolic dishes but have recently taken a look at slot arrays. A low profile solution is desirable which would lead to a small dish or a low (but very wide) slot array. Some of the people we've talked to have warned us that slot arrays are narrow bandwidth. I thought I understood this issue, but I'm beginning to doubt myself.

Suppose a slot array could transmit at Ka frequencies from 30 to 32 GHz at a bandwidth of 3%. If the center frequency of transmission is 31GHz a 3% bandwidth would be equal to 930MHz or 465MHz on each side of the center freq. This may be narrow to an antenna designer but this is more spectrum than we'd ever hope to get on the satellite anyway. I'm a little confused over why this is an "issue", which makes me think I have a misunderstanding of the terminology.

Can anyone clear this up for me?

892. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 19:24:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g77l1hnmt1@news.albasani.net>
Source record: 23666

Ed wrote:
> I am considering putting up a ground mounted vertical antenna, based
> on using telescopic aluminum tubing such as is available from Texas
> Towers or DX Engineering. Tubing available ranges from .500 inch to
> 2.125" with corresponding increase in price as diameters increase.
>
> My vertical should be limited to a maximum of 30 feet, but preferrably
> around 23 - 25 feet. I will feed it with an SGC coupler at the base and
> operate 80M - 10M.
>
> My question: Using the 6' long aluminum pieces, what is the minimum
> diameter sizes I should start with to enable the antenna stand up to a
> 75mph wind UN-GUYED. Also, how much "overlap" should I use in the
> telescoping pieces?
>
> I will consider alternative means of building the vertical, but I
> really wish it to be unguyed .
>
> Any info or recommendations appreciated. TNX
>
> Ed K7AAT

I use aluminum, a lot ...

Silicone, oils/grease has assisted me quite a bit ... as you already know the weight to mass ratio makes ones favorable to this route of antenna construction (aluminum) ...

In my meanderings about scape yards, I find titanium is becoming MUCH more available ... it is well worth the few available dollars ... and, of course, depending on availability, this is much more more desirable ...

It is possible to construct a MUCH more efficient antenna than can be purchased -- in theses cases, you are simply NOT constrained by the "costs of manufacturing."

Regards,
JS

893. Re: Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 19:37:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vame94dd8vii5n94apa4if08abo10549a2@4ax.com>
Source record: 23667

On Mon, 4 Aug 2008 11:49:12 -0700 (PDT), Chris <CWShannon@gmail.com>
wrote:

>Some of the people we've talked to have warned us that slot arrays are
>narrow bandwidth. I thought I understood this issue, but I'm
>beginning to doubt myself.

Hi Chris,

The best way to resolve this terminology problem is to ask the ones
with the objections - it was their term after all.

Barring that, they could be talking about directivity vs. frequency.

Either way, the enumeration of your required characteristics should
point out how useful any system would be as their own may aid or
conflict due to their own abilities to support your goal.

73's
Richard Clark, KB7QHC

894. eBay: HP 8411A

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 20:40:29 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <sPJlk.15688$cW3.5226@nlpi064.nbdc.sbc.com>
Source record: 23668
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,misc.industry.electronics.marketplace,sci.electronics.equipment,rec.radio.amateur.antenna

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=STRK:MESELX:IT&item=110276680571

895. Re: Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 21:19:29 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g77rp1ifj1@news.jpl.nasa.gov>
Source record: 23669

Chris wrote:
> I've been looking at a few satcom antennas for a project I'm working
> on. We were originally looking at parabolic dishes but have recently
> taken a look at slot arrays. A low profile solution is desirable
> which would lead to a small dish or a low (but very wide) slot array.
> Some of the people we've talked to have warned us that slot arrays are
> narrow bandwidth. I thought I understood this issue, but I'm
> beginning to doubt myself.
>
> Suppose a slot array could transmit at Ka frequencies from 30 to 32
> GHz at a bandwidth of 3%. If the center frequency of transmission is
> 31GHz a 3% bandwidth would be equal to 930MHz or 465MHz on each side
> of the center freq. This may be narrow to an antenna designer but
> this is more spectrum than we'd ever hope to get on the satellite
> anyway. I'm a little confused over why this is an "issue", which
> makes me think I have a misunderstanding of the terminology.
>
> Can anyone clear this up for me?

Well.. a parabolic reflector has exceedingly wide bandwidth, and,
furthermore, its beam direction and or focus doesn't change with frequency.

Arrays of dipoles (which is what a slot array is) are (relatively)
narrow band, and the boresight direction/sidelobes may change with
frequency. The mechanical tolerances may also be tighter.

That said, lots of people use flat slot arrays or printed dipole arrays..
See, e.g.,
http://descanso.jpl.nasa.gov/DPSummary/MER_article_cmp20051028.pdf

896. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 22:32:47 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AF156EA51316nonenowhere@61.9.191.5>
Source record: 23670

Ed <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns9AEFAEF6A3447Huckleberrybigvalley@198.186.192.196:

...
> robust fibreglass masts, I'm receptive. Given the comments on
> projected poorer performance of a 30 foot vertical, I suppose I need
> consider one that is higher, but I have CC&R's, and while not
> enforced, I do not wish to draw attention to myself.

Or one that is shorter and abandon 80m. A message you should take away is that a 6.5m unloaded vertical (~21') is about as short as will give good efficiency on 40m... given an adequate ground system and tuner at the feed point.

Owen

897. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 23:29:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g783cl$n19$1@news.albasani.net>
Source record: 23671

John Smith wrote:
> Cecil Moore wrote:
>> ...

Cecil:

There are few times in life when a "mind", such as you/yours CAN display an/multiple "interesting path(s)", as you do, to the likes of myself -- it comes to "the attention", so frequently, and so rightly so. I "feel good" about this ...

I only wish there were more of you ... hang it their man, God loves you! (for krists' sake, I notice!)

With the most warmest regards,
JS

898. SPAM -- Do NOT cross-post to non-forsale groups

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-04 23:30:10 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <8b743fe5-e98e-43c8-bcf5-ebefc4237f25@z72g2000hsb.googlegroups.com>
Source record: 23672
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,misc.industry.electronics.marketplace,sci.electronics.equipment,rec.radio.amateur.antenna

Henry Kolesnik wrote:
>cgi.ebay[SPAM]

899. Re: Glass Mount Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 01:38:12 UTC
From: Juan <nocontact@nowhere.net>
Message-ID: <aa845$4897af05$11717@news.teranews.com>
Source record: 23673

I have one in my truck and these antennas are tightly tunned for the amateur bands. On mine there is
a tiny set screw to fine tune the coupler. As you mentioned, it was almost dead on for 2m but off on
446 or 450 so I had to turn the screw and now it's fine.

The stub you mentioned is a counter poise for the stinger outside since there is no true metal ground
with these.

"Richard" <k5wor@verizon.net> wrote in message
news:g754g6$5qo$1@registered.motzarella.org...
>I have a dual band glass mount antennas but did not get info to install. I
>have installed the antennas and it seems to work fine on 2m as far as SWR.
>However, 450 SWR is very high and I am not sure what the small stub is to
>do. Is it vert.,horiz.,up or down? I have NOT tried to tune with the cap in
>the box as the SWR on 2 m is OK and not sure if it has anything to do with
>450.
> HELP
> K5WOR

** Posted from http://www.teranews.com **

900. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 02:05:57 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AF17B0E3D151nonenowhere@61.9.191.5>
Source record: 23674

John Ferrell <johnferrell@sprintmail.com> wrote in
news:onbe94tjbpdelohvolir9o7iv1pd2g8jqc@4ax.com:

...
> It has been mentioned that 70 feet would be better but so would 140
> feet! We all have some sort of limitations.

Ah, the bigger is better myth!

Owen

901. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 03:08:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g78g7i$n19$3@news.albasani.net>
Source record: 23675

Owen Duffy wrote:

>> ...
> Ah, the bigger is better myth!
>
> Owen

I won't even tell you the length of mine, but 70 feet! That hurts -- LOL!

Regards,
JS

902. Can I manually adjust my gain?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 07:28:34 UTC
From: Krys <krysalyss@yahoo.com>
Message-ID: <114781f6-896a-4309-896d-441aa31c94db@w1g2000prk.googlegroups.com>
Source record: 23676

I have a telemetry system set up so I can have radio collars on
animals (wombats) which transmits to a directional Yagi 3 antenna and
through to a TR-5 Telonics receiver. I am getting activity data now
directional data.
The wombats are zoo animals so the range isn't far (about 100m) but my
problem is that their dens are made of concrete and seem to block too
much of the signal. This system was used previously with no problems
so I can't figure out why it isn't now. The antenna is mounted on the
roof of my office building. Would it help to place it vertically
instead of horizontally?
What else can I manually do to boost this signal? Otherwise what is
the easiest and cheapest ways to boost the signal. There are twelve
frequencies that I am getting but about 6 of them aren't great, The
frequencies operate about 151.000
Help!

903. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 10:48:47 UTC
From: 826 <methinks@nospam.com>
Message-ID: <g79b67$s9b$1@news.albasani.net>
Source record: 23677

"Owen Duffy" <none@no.where> wrote in message
news:Xns9AED4AB91C7DEnonenowhere@61.9.191.5...
> "826" <methinks@nospam.com> wrote in
> news:g6so5iscv1@news.albasani.net:
>
>> Hi,
>> Sorry I didn't rely sooner. The weather hasn't been too good hear.
>> This
>> morning I disconnected the coax from the shack and measured the
>> antenna with the six foot length of coax. It looked OK. I then
>> connected just the shield of the long coax going to the shack and
>> still measuring with the short coax it shifted just like measured
>> before in the shack. I have then made up a choke balun and installed
>> it at the base of the antenna and it improved everything by about 60%.
>> I will now make another one for the shack end. I think everything is
>> under control now. Thanks to all for heading me in the right
>> direction. Vern M0WQR
>
> Vern, whilst the choke made a difference, the fact that there remains a
> difference in the feedpoint impedance with the shield connected and
> disconnected, even when using the choke, indicates that there is some
> effects observable from common mode feed line current in your scenario.
>
> If you want a measurement of the antenna as it would be used, measure it
> as it would be used... make sure the shield current path is as it would
> be used.
>
> Owen
Hi all,
The antenna is now working very well on all bands. After installing both
choke baluns at the antenna base and in the shack, the resonant points
measured from the shack end were the same as with the short coax at the
antenna without the longer coax shield connected. Everything is OK now. All
it needed was the two baluns.
Regards
Vern M0WQR

904. Re: Can I manually adjust my gain?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 11:10:07 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <g1plm5-4vn.ln1@p400bob.personal.cox.net>
Source record: 23679

Aghh, good old wombats!

I'd suggest that any adjustable gain isnt going to help much. I'd concentrate more on your statement "This system was used previously with no problems". Do you have a breakage somewhere? Are the troublesome systems on one receiver? (if you have more than one) Are you sharing the frequency with someone else and getting interference? Are there any other sources of interference that may be the problem?

I suggest that horizontally is the best orientation as the antennas on the animals are probably also horizontal.

In my situation I'd also tune the equipment for best output just in case the attached wombats have damaged them. You *could* put a preamp on the receiver but I think that will invite more problems than provide a viable solution

If you have a scanning receiver have a listen separately for each collar signal. If they are all there suspect the base anytenna/receiver as being faulty. You may also hear interference.

Hope this helps

Cheers Bob VK2YQA

Krys wrote:
> I have a telemetry system set up so I can have radio collars on
> animals (wombats) which transmits to a directional Yagi 3 antenna and
> through to a TR-5 Telonics receiver. I am getting activity data now
> directional data.

905. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 11:23:10 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-0508080723100001@jbw-mac.itd.nrl.navy.mil>
Source record: 23678

In article <S3Hlk.17054$uE5.13875@flpi144.ffdc.sbc.com>, Cecil Moore
<nospam@w5dxp.com> wrote:

> John Smith wrote:
> > Things only get more interesting when we can "bend"
> > the laws ... ;-)
>
> "Whattaya mean 'we', White Man?" Every miracle performed
> in "The Bible" can be performed by man today probably
> including keeping a man technically dead for three
> days and then reviving him (any volunteers?).
>

Hello, Cecil, and not quite. I don't know what you mean by "keeping a man technically dead" but I've haven't seen any reports on 5000 people being fed with a couple of fish, two people who were quite dead brought back to life or a person who was blind from birth given the capability of sight. Or the silly notion that a human being could be killed and, with assistance from a "higher authority", return to earth in physical form. Of course a lot of folks find the very idea that these events could have happened, let alone a couple of millenia ago, is a bunch of crap. Still one must concede in spite of one's spiritual beliefs that given a sufficient level of technology, one can indeed perform miraculous feats. Perhaps we will be able to do (some of) these things some day, but not today. Sincerely, 73s, and with apologies for injecting OT philosophy,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

906. Re: Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 12:58:17 UTC
From: Chris <CWShannon@gmail.com>
Message-ID: <d556a6b1-004a-4b39-bc80-d56ed1059f46@w1g2000prk.googlegroups.com>
Source record: 23680

On Aug 4, 5:19 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Chris wrote:
> > I've been looking at a few satcom antennas for a project I'm working
> > on. We were originally looking at parabolic dishes but have recently
> > taken a look at slot arrays. A low profile solution is desirable
> > which would lead to a small dish or a low (but very wide) slot array.
> > Some of the people we've talked to have warned us that slot arrays are
> > narrow bandwidth. I thought I understood this issue, but I'm
> > beginning to doubt myself.
>
> > Suppose a slot array could transmit at Ka frequencies from 30 to 32
> > GHz at a bandwidth of 3%. If the center frequency of transmission is
> > 31GHz a 3% bandwidth would be equal to 930MHz or 465MHz on each side
> > of the center freq. This may be narrow to an antenna designer but
> > this is more spectrum than we'd ever hope to get on the satellite
> > anyway. I'm a little confused over why this is an "issue", which
> > makes me think I have a misunderstanding of the terminology.
>
> > Can anyone clear this up for me?
>
> Well.. a parabolic reflector has exceedingly wide bandwidth, and,
> furthermore, its beam direction and or focus doesn't change with frequency.
>
> Arrays of dipoles (which is what a slot array is) are (relatively)
> narrow band, and the boresight direction/sidelobes may change with
> frequency. The mechanical tolerances may also be tighter.
>
> That said, lots of people use flat slot arrays or printed dipole arrays..
> See, e.g.,http://descanso.jpl.nasa.gov/DPSummary/MER_article_cmp20051028.pdf

So it appears the statement is true and technically accurate but in my
case it simply isn't relevant.

907. Re: Can I manually adjust my gain?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 16:19:11 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g79ui9guf1@registered.motzarella.org>
Source record: 23681

"Bob Bob" <bob3bob3@suddenlink.net> wrote in message
news:g1plm5-4vn.ln1@p400bob.personal.cox.net...
> Aghh, good old wombats!
>
> I'd suggest that any adjustable gain isnt going to help much. I'd
> concentrate more on your statement "This system was used previously with
> no problems". Do you have a breakage somewhere? Are the troublesome
> systems on one receiver? (if you have more than one) Are you sharing the
> frequency with someone else and getting interference? Are there any other
> sources of interference that may be the problem?
>
> I suggest that horizontally is the best orientation as the antennas on the
> animals are probably also horizontal.
>
> In my situation I'd also tune the equipment for best output just in case
> the attached wombats have damaged them. You *could* put a preamp on the
> receiver but I think that will invite more problems than provide a viable
> solution
>
> If you have a scanning receiver have a listen separately for each collar
> signal. If they are all there suspect the base anytenna/receiver as being
> faulty. You may also hear interference.
>
> Hope this helps
>
> Cheers Bob VK2YQA
>
> Krys wrote:
>> I have a telemetry system set up so I can have radio collars on
>> animals (wombats) which transmits to a directional Yagi 3 antenna and
>> through to a TR-5 Telonics receiver. I am getting activity data now
>> directional data.

All of what the respondent said, plus:

Was the coax leading to your base antenna weatherproofed using coax seal at the outside connector? If not, it is possible that rain water has contaminated the coax leading to your base radio. I've seen this type of problem cause folks to pull their hair out while trying to "fix" all of the remote units, when it was the base unit all the time.

What kind of connectors are used in your base system? If N-connectors it is unlikely that the above problem is the cause. However, it is also unlikely

that your system is using N-connectors because of price considerations.

A passive radiator system (antenna inside structure connected to an antenna outside of the structure the Wombats occupy connected by coax cable) could help. But I would find out why the system is not performing as it was before. As the respondent indicated, it could be something as simple as Tx detuning or increased traffic on the frequencies that you are using.

Ed, NM2K

908. Re: Can I manually adjust my gain?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 16:24:06 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AF15FA477553Huckleberrybigvalley@198.186.192.196>
Source record: 23682

Most likely your problem has already been covered here, but when was the last time the batteries were changed in the Wombat collars? Signals will go down as batteries fade. How the heck do you change the batteries on those Wombat collars, anyway? :^)

Ed K7AAT

909. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 16:25:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g79utnbec1@news.albasani.net>
Source record: 23683

J. B. Wood wrote:

>> ...
> Or the silly notion that a human being could be killed and, with
> assistance from a "higher authority", return to earth in physical form.
> ...
>
> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

I don't know about all that, I would look closer ... they are implanting stem cells in the retina and restoring sight and all that now ... I would at least do a complete search of the web first ...

However, you are quite correct "some people" do have some strange, quaint and bizarre beliefs ... for example: the belief I can take a handful of wood, glass, metal and plastic, toss 'em into a mud puddle and come back a couple of million years later and start digging up microwaves, cell phones, televisions, etc. (it is called, "evolution!")

Yep, you just can never tell what some people can be caused to believe!

Regards,
JS

910. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 16:28:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g79v3vbec2@news.albasani.net>
Source record: 23684

826 wrote:

>> ...
>> Owen
> Hi all,
> The antenna is now working very well on all bands. After installing both
> choke baluns at the antenna base and in the shack, the resonant points
> measured from the shack end were the same as with the short coax at the
> antenna without the longer coax shield connected. Everything is OK now. All
> it needed was the two baluns.
> Regards
> Vern M0WQR
>
>

Your path sounds very similar to mine. At first, unless the plans/specs called for a balun/choke, I ignored the need. Now I use one, or more, no matter what ... I picked up that knowledge here. At first, the loss of the balun/choke made me hesitant--I no longer worry about those trivial matters. :-)

Regards,
JS

911. Re: Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 17:06:02 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g7a19q$5on$1@news.jpl.nasa.gov>
Source record: 23687

Chris wrote:
> On Aug 4, 5:19 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>> Chris wrote:
>>> I've been looking at a few satcom antennas for a project I'm working
>>> on. We were originally looking at parabolic dishes but have recently
>>> taken a look at slot arrays. A low profile solution is desirable
>>> which would lead to a small dish or a low (but very wide) slot array.
>>> Some of the people we've talked to have warned us that slot arrays are
>>> narrow bandwidth. I thought I understood this issue, but I'm
>>> beginning to doubt myself.
>>> Suppose a slot array could transmit at Ka frequencies from 30 to 32
>>> GHz at a bandwidth of 3%. If the center frequency of transmission is
>>> 31GHz a 3% bandwidth would be equal to 930MHz or 465MHz on each side
>>> of the center freq. This may be narrow to an antenna designer but
>>> this is more spectrum than we'd ever hope to get on the satellite
>>> anyway. I'm a little confused over why this is an "issue", which
>>> makes me think I have a misunderstanding of the terminology.
>>> Can anyone clear this up for me?
>> Well.. a parabolic reflector has exceedingly wide bandwidth, and,
>> furthermore, its beam direction and or focus doesn't change with frequency.
>>
>> Arrays of dipoles (which is what a slot array is) are (relatively)
>> narrow band, and the boresight direction/sidelobes may change with
>> frequency. The mechanical tolerances may also be tighter.
>>
>> That said, lots of people use flat slot arrays or printed dipole arrays..
>> See, e.g.,http://descanso.jpl.nasa.gov/DPSummary/MER_article_cmp20051028.pdf
>
> So it appears the statement is true and technically accurate but in my
> case it simply isn't relevant.

Yep..

But check the tolerances on your slot array, particularly if you're
operating over a wide temperature range. Aluminum CTE is about 21
ppm/degree C, so over a 100 degree span, that's 0.2%. Probably not a
big deal for the spacing, but the slot size changing will change the
phase, etc. 0.2% isn't much, but you ARE talking about an antenna with
3% BW...

912. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 17:34:21 UTC
From: JB <nospam@goofball.net>
Message-ID: <xa0mk.309$mP.183@trnddc03>
Source record: 23685

> >Actually the 2016 has some advantages. Although the other will have
higher
> >UHF gain, it has no gain and no protection against multipath on the VHF
> >frequencies. The 2016 will be flatter with a cleaner front to back
pattern
> >(although lower gain). If you have no hills or tall buildings and the
> >source is on a single tower, then the other may be better.
>
> Yeah I'm kinda leaning towards the 2016. But can you
> explain why the 1080 has no protection from multi-path?
> Are you saying that the 2016 is far more "directional"
> than the 1080?

While the 1080 UHF is fairly sharp with some potential gain, the VHF elements seem to be little more than "rabbit ears" - In fact it is a swept dipole, so will be bi-directional and easily pick up reflections from behind and around you.. Sweeping the elements has the effect of allowing the elements to be better matched at odd multiples. The 2016 will have a broad front lobe (less directional) have good bandwidth, and signals from behind will be blockedfor UHF and VHF. It's drawback will be ice and wind loading. Still I would have really liked a 1080 with a few (like 2 or 3) more dipoles out behind for a better protection against reflections . I scratch my head to see a 15 db corner reflector UHF and 0db VHF dipole together. As if the VHF were so strong it was an afterthought. I have a wee bit more than that (same UHF but with 7 VHF dipoles) with some elevation looking at a mountain site about 75 miles away. My elevation just barely allows the signal to clear a pass 10 miles away and I have perfect Anolog reception while neighbors who are one stop closer struggle for signal.

In fact, I have used the antenna for 2m SSB with 10 watts.

Don't forget about good quality RG-6 for your feedline, and keep it as short as possible (but it is better to get the antenna higher to clear the next door building). This is more critical for UHF stations (perhaps why 1080 went that way).

> >Depending on your terrain. If there are hills or tall buildings you will
> >want a sharper, higher gain antenna then add attenuators or tilt
> >compensation to reduce the reflections. Saving $20 or $40 can wind up a
> >waste of money.
>
> Yes I do have on bi brick two story building right in
> front of me in direction antenna must be pointed.
> <sigh>

That is a complication but not if your antenna can just see across the roof of the other building, then it can actually help. If the main signal source is reduced, reflections will be more pronounced. The problem with digital, all you have is a bar graph. Reception problems are totally masked. The reception problems that degrade Analog still degrade Digital, you just can't see it. I have seen situations where there is lots of signal on the bar graph, but the picture still breaks up because of distortion of the signal. So while Analog is still there, get your antenna aligned and locked down and hope no one builds another building.

Sometiimes pointing the antenna at a tall building or mountain will give a better signal because all stations are bouncing from that building..

If you can stand on your roof with binocculars and see the broadcasting site, and there are no 12-100 story buildings or mountains around, put your antenna there and be done with it. Keep in mind that if you find yourself running 75 feet of coax, it would be like putting up an $80 antenna just to shorten the coax to 35 feet.

>
> > Anyway, its all just commercial liberal commie brainwashing and
> >propaganda. What channel has the Rifleman and Andy Griffith still?
>
> Aint THAT the truth!!
>
> I've seriously thought abt giving up broadcast TV and
> just watching everything off the Internet such as
> hulu.com. Serious!!
>
> At least on hulu.com I can still watch Andy Griffith,
> twilight zone, etc!!

913. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 17:46:03 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AF16D89B2BDBHuckleberrybigvalley@198.186.192.196>
Source record: 23686

>>
>> Funny, I've seen no one recommend addition of a 1:1 choke balun
>> near the
>> antenna feedpoint. If RF is flowing back down the shield of his
>> feedline, that surely could cause some incorrect readings on SWR in
>> the shack, wouldn't it? K7AAT

>
> And, how well would rf flow back down the shield of
> "buried 75 foot of RG213..." ? :-)
>
> Jonesy

Apparently well enough to cause a problem. Its now 9 days
later from the above comment, and I see today that the original poster
followed my suggestion to install a balun which has solved his problem.

Ed K7AAT

914. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 19:04:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <e_ednWSPId7YOQXVnZ2dnUVZ_gqdnZ2d@posted.easystreetonline>
Source record: 23688

JB wrote:
>
> While the 1080 UHF is fairly sharp with some potential gain, the VHF
> elements seem to be little more than "rabbit ears" - In fact it is a swept
> dipole, so will be bi-directional and easily pick up reflections from behind
> and around you.. Sweeping the elements has the effect of allowing the
> elements to be better matched at odd multiples. . .

What the bending of elements does is to align the lobes broadside at the frequencies at which the elements are approximately 3/2 wavelengths long (that is, at about three times the fundamental half wavelength frequency). Without bending, a 3/2 wave element has lobes which aren't broadside. Bending it brings these to point broadside, resulting in a an approximately bidirectional pattern. It's the shortest "vee beam" type antenna, which extends this idea by decreasing the angle to maintain alignment as the dipoles get longer.

The bending used in TV antennas has little effect on the impedance match.

Roy Lewallen, W7EL

915. Re: Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 19:22:41 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <5M1mk.296$T91.210@trnddc04>
Source record: 23689

"Chris" <CWShannon@gmail.com> wrote in message
news:7bfb8b84-6f5d-4ed1-8b9c-bfe986d675cf@f36g2000hsa.googlegroups.com...
> I've been looking at a few satcom antennas for a project I'm working
> on. We were originally looking at parabolic dishes but have recently
> taken a look at slot arrays. A low profile solution is desirable
> which would lead to a small dish or a low (but very wide) slot array.
> Some of the people we've talked to have warned us that slot arrays are
> narrow bandwidth. I thought I understood this issue, but I'm
> beginning to doubt myself.
>
> Suppose a slot array could transmit at Ka frequencies from 30 to 32
> GHz at a bandwidth of 3%. If the center frequency of transmission is
> 31GHz a 3% bandwidth would be equal to 930MHz or 465MHz on each side
> of the center freq. This may be narrow to an antenna designer but
> this is more spectrum than we'd ever hope to get on the satellite
> anyway. I'm a little confused over why this is an "issue", which
> makes me think I have a misunderstanding of the terminology.
>
> Can anyone clear this up for me?

Hi Chris

What directivity is required from this antenna?
Whats the limit of the budget available for the development of the design
of the slot array?

Jerry KD6JDJ

916. Re: Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 20:24:28 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <330ed2cb-bdc0-4b17-a811-e5e3236eb613@l64g2000hse.googlegroups.com>
Source record: 23690

On Aug 4, 11:49 am, Chris <CWShan...@gmail.com> wrote:
> I've been looking at a few satcom antennas for a project I'm working
> on. We were originally looking at parabolic dishes but have recently
> taken a look at slot arrays. A low profile solution is desirable
> which would lead to a small dish or a low (but very wide) slot array.
> Some of the people we've talked to have warned us that slot arrays are
> narrow bandwidth. I thought I understood this issue, but I'm
> beginning to doubt myself.
>
> Suppose a slot array could transmit at Ka frequencies from 30 to 32
> GHz at a bandwidth of 3%. If the center frequency of transmission is
> 31GHz a 3% bandwidth would be equal to 930MHz or 465MHz on each side
> of the center freq. This may be narrow to an antenna designer but
> this is more spectrum than we'd ever hope to get on the satellite
> anyway. I'm a little confused over why this is an "issue", which
> makes me think I have a misunderstanding of the terminology.
>
> Can anyone clear this up for me?

One of the things that occurs to me is that it can make a big
difference just how you feed the array. This is something I've
pondered with respect to linear arrays of dipoles at lower
frequencies. If I feed the array from one end and depend on the
length of transmission medium between the feedpoints, e.g. one
wavelength between each radiator so they're fed in-phase, the phasing
will change linearly with frequency. This is hardly noticeable if the
array is short and therefore has low gain; but if it's long so the
beamwidth is, say, 10 degrees, then a 3% change in frequency (.03*360
degrees) will tilt the pattern by about one beamwidth. In a waveguide-
fed system where the propagation velocity depends significantly on
frequency I suppose things could be even worse.

But an alternate way to feed such an array is with a tree of splitters
so that the propagation from the input port to each radiator is the
same time delay. In that case, the radiators will stay in phase and
yield a high gain over a considerable bandwidth. In such a case, you
do still have to account for the fact that the mutual impedance among
the antennas will cause the elements at different points along the
array to represent different loads to the transmission tree "leaves"
and therefore cause different phase shifts, but that's something you
can account for.

I recall once reading about a radar antenna that used a "geodesic
lens" to give equal time delay from the feedpoint to each radiating
element; it was basically a fan-shaped waveguide with a wrinkle in it,

deepest at the middle and flat on the outer edges, which caused the central transmission path to be the same electrical length as the outer paths (and all the others).

Cheers,
Tom

917. Re: Can I manually adjust my gain?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 20:48:22 UTC
From: Krys <krysalyss@yahoo.com>
Message-ID: <6b12d81f-0ab6-4181-b4cd-2965d496670a@v1g2000pra.googlegroups.com>
Source record: 23691

Thanks guys for your advice. The collars are a mix of new and old but it seems to be more location that is determining whether they work. (eg. some of the wombat collars are good no matter where while some are bad only in the dens). They are all new except one. I can hear them all really well when I scan them one by one but when I use them together I have the receiver in data acqiusition mode (to store all of the data for later download) which doesn't allow me to adjust gain or tuning. I guess that is why I assumed it was maybe not enough gain. The antenna outside is connected to the receiver by a RG58 cable. It is only covered in electrical tape at the connection. It was rusty but I have changed that all and the signal is the same. I can check the missing data on my video cameras and see that it is always when they are in their dens.
I think you are all probably right. Perhaps the antenna or receiver was damaged when it was stored or moved.

918. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 22:36:47 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AF25797F5C95nonenowhere@61.9.191.5>
Source record: 23692

Ed <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns9AF16D89B2BDBHuckleberrybigvalley@198.186.192.196:

...
> Apparently well enough to cause a problem. Its now 9 days
> later from the above comment, and I see today that the original poster
> followed my suggestion to install a balun which has solved his problem.

Ed, that defines how you define the problem.

If the problem was different measurements, that was caused by disturbing the thing that was measured.

The different measurements hints another possible problem, common mode feedline current. The baluns have changed the effect of those, and probably differently at different frequencies.

But fundamentally, it is wiser to preserve the common mode current path (even if you reckon the baluns help to reduce it) when making the measurments.

The whole exercise demonstrates that the measurements from shack were valid, it was disconnecting the feedline and making measurements at the feedpoint that was invalid. (BTW, the measurements in the shack should be done with the shield path connected as normal.)

A good example of the limited thinking in the proposition that you can only make valid measurements at the feedpoint.

Owen

919. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 23:04:39 UTC
From: me@privacy.net
Message-ID: <o2nh941l2ipf2imem64406dht19gqvb02q@4ax.com>
Source record: 23693

"JB" <nospam@goofball.net> wrote:

>While the 1080 UHF is fairly sharp with some potential gain, the VHF
>elements seem to be little more than "rabbit ears" - In fact it is a swept
>dipole, so will be bi-directional and easily pick up reflections from behind
>and around you.. Sweeping the elements has the effect of allowing the
>elements to be better matched at odd multiples. The 2016 will have a broad
>front lobe (less directional) have good bandwidth, and signals from behind
>will be blockedfor UHF and VHF. It's drawback will be ice and wind loading.
>Still I would have really liked a 1080 with a few (like 2 or 3) more dipoles
>out behind for a better protection against reflections . I scratch my head
>to see a 15 db corner reflector UHF and 0db VHF dipole together. As if the
>VHF were so strong it was an afterthought. I have a wee bit more than that
>(same UHF but with 7 VHF dipoles) with some elevation looking at a mountain
>site about 75 miles away. My elevation just barely allows the signal to
>clear a pass 10 miles away and I have perfect Anolog reception while
>neighbors who are one stop closer struggle for signal.

Ok thanks for that explanation! I am in fact a general
class ham but haven't operated for years....no equip
either. And am def not an antenna expert. So its nice
to get some "science" on why one antenna is better than
another when it comes to DTV! Thanks!

>Don't forget about good quality RG-6 for your feedline, and keep it as short
>as possible (but it is better to get the antenna higher to clear the next
>door building). This is more critical for UHF stations (perhaps why 1080
>went that way).

For sure! Matter of fact I see some good prices on
Philips RG6 at local Walmart

Now I just gotta find a J mount for a sat dish as that
is how I'm mounting the CM 2016 when I get one. I will
install on the SIDE of a roof peak.... the fascia....
just like you would a sat dish

Gotta figure some way to get up there tho as no ladders
big enough. Guess I can borrow one from a friend

920. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 23:08:41 UTC
From: me@privacy.net
Message-ID: <0bnh9452tc3m53iukhqmua4ab6q2pvlqk5@4ax.com>
Source record: 23694

"JB" <nospam@goofball.net> wrote:

>That is a complication but not if your antenna can just see across the roof
>of the other building, then it can actually help. If the main signal source
>is reduced, reflections will be more pronounced. The problem with digital,
>all you have is a bar graph. Reception problems are totally masked. The
>reception problems that degrade Analog still degrade Digital, you just can't
>see it. I have seen situations where there is lots of signal on the bar
>graph, but the picture still breaks up because of distortion of the signal.
>So while Analog is still there, get your antenna aligned and locked down and
>hope no one builds another building.

Well you have sure opened my eyes up to the importance
of a DIRECTIONAL antenna when it comes to DTV!! I'm
lucky in that all stations locally are broadcast from
same towers in same location..... so only one direction
to worry abt. Again my zip is 63401

Seems like the more directional the antenna the better
as it will be "blind" to multi-path. Yes?

>Sometiimes pointing the antenna at a tall building or mountain will give a
>better signal because all stations are bouncing from that building..
>
> If you can stand on your roof with binocculars and see the broadcasting
>site, and there are no 12-100 story buildings or mountains around, put your
>antenna there and be done with it. Keep in mind that if you find yourself
>running 75 feet of coax, it would be like putting up an $80 antenna just to
>shorten the coax to 35 feet.

Well I cant see the towers but they are there

921. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 23:15:50 UTC
From: me@privacy.net
Message-ID: <onnh94tp1jhff5m7cfmophvs6m2cslv03q@4ax.com>
Source record: 23695

"JB" <nospam@goofball.net> wrote:

>While the 1080 UHF is fairly sharp with some potential gain, the VHF
>elements seem to be little more than "rabbit ears" - In fact it is a swept
>dipole, so will be bi-directional and easily pick up reflections from behind
>and around you..

I'm a bit confused on your remark above.

Looks to me like the 1080 is perfectly flat antenna.
Where do you see any bending or sweeping of elements?

922. The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-05 23:55:05 UTC
From: javawizard <javawizard@aol.com>
Message-ID: <149f9f0e-86d6-40bb-971a-d763b5a35bb8@w24g2000prd.googlegroups.com>
Source record: 23696
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

In the 1920's a radio station in Schenectady, NY built a powerful transmitter. In those days before FCC regulations, not knowing just how big to make a transmitter in order for the signal to be received some distance away, the station set up to broadcast at 500,000 watts. It requires about one watt to be received four blocks away. A cell phone is three watts. This station broadcast at such tremendous power that they could be heard around the world. People in New York didn't even need radios. They could sometimes hear voices in their furnaces and coming off chain-link fences. Light bulbs lit up in people's houses even if they were switched off. - from www.clip-text.com

923. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 00:05:32 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g7apslovu1@registered.motzarella.org>
Source record: 23697
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"javawizard" <javawizard@aol.com> wrote in message
news:149f9f0e-86d6-40bb-971a-d763b5a35bb8@w24g2000prd.googlegroups.com...
> In the 1920's a radio station in Schenectady, NY built a powerful
> transmitter. In those days before FCC regulations, not knowing just
> how big to make a transmitter in order for the signal to be received
> some distance away, the station set up to broadcast at 500,000 watts.
> It requires about one watt to be received four blocks away. A cell
> phone is three watts. This station broadcast at such tremendous power
> that they could be heard around the world. People in New York didn't
> even need radios. They could sometimes hear voices in their furnaces
> and coming off chain-link fences. Light bulbs lit up in people's
> houses even if they were switched off. - from www.clip-text.com

---

Can you imagine the cost of their electric bill?

I used to pick up AM radio stations in my head. The theory back then was that it was due to dental work acting as a rectifier, etc.

I could tell you exactly which song was playing and where they were at in the song. All one had to do was turn on a radio and I would be singing in sync with it. The really weird part was that all I could hear was the music and the time announcements.

This was in the late 50's and early 60's when I lived in Carneys Point, NJ. The radio station that I heard the best was WAMS (1380kc) in Wilmington, DE. The second best was WFIL in Philadelphia, PA. The latter I heard after WAMS went off the air for the day.

Ed, NM2K

924. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 00:14:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <55rh949h53pa793m1fvr5jo993knenn3ba@4ax.com>
Source record: 23698

On Tue, 05 Aug 2008 18:15:50 -0500, me@privacy.net wrote:

>"JB" <nospam@goofball.net> wrote:
>
>>While the 1080 UHF is fairly sharp with some potential gain, the VHF
>>elements seem to be little more than "rabbit ears" - In fact it is a swept
>>dipole, so will be bi-directional and easily pick up reflections from behind
>>and around you..
>
>I'm a bit confused on your remark above.
>
>Looks to me like the 1080 is perfectly flat antenna.
>Where do you see any bending or sweeping of elements?

It would be even more informing if the "gain" attributed to it (not to
speak of lobe characteristics) were revealed through a link, as
certainly the vendor is wholly lacking in those substantives.

73's
Richard Clark, KB7QHC

925. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 00:36:55 UTC
From: i.punce@rocketmail.com
Message-ID: <7f48cee5-5c4e-41cc-bddc-1b5b5455c7cc@34g2000hsh.googlegroups.com>
Source record: 23699
Cross-posted to: alt.usenet.kooks,rec.radio.shortwave,rec.radio.amateur.policy,rec.radio.cb,rec.radio.amateur.antenna

On Aug 5, 7:05 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
> "javawizard" <javawiz...@aol.com> wrote in message
>
> news:149f9f0e-86d6-40bb-971a-d763b5a35bb8@w24g2000prd.googlegroups.com...
>
> > In the 1920's a radio station in Schenectady, NY built a powerful
> > transmitter. In those days before FCC regulations, not knowing just
> > how big to make a transmitter in order for the signal to be received
> > some distance away, the station set up to broadcast at 500,000 watts.
> > It requires about one watt to be received four blocks away. A cell
> > phone is three watts. This station broadcast at such tremendous power
> > that they could be heard around the world. People in New York didn't
> > even need radios. They could sometimes hear voices in their furnaces
> > and coming off chain-link fences. Light bulbs lit up in people's
> > houses even if they were switched off. - fromwww.clip-text.com
>
> ----------
>
> Can you imagine the cost of their electric bill?
>
> I used to pick up AM radio stations in my head. The theory back then was
> that it was due to dental work acting as a rectifier, etc.
>
> I could tell you exactly which song was playing and where they were at in
> the song. All one had to do was turn on a radio and I would be singing in
> sync with it. The really weird part was that all I could hear was the music
> and the time announcements.
>
> This was in the late 50's and early 60's when I lived in Carneys Point, NJ.
> The radio station that I heard the best was WAMS (1380kc) in Wilmington, DE.
> The second best was WFIL in Philadelphia, PA. The latter I heard after WAMS
> went off the air for the day.
>
> Ed, NM2K

Morkie, I will conceed that you know two things that I will never know...What it's like to lick my excrement off of another man's genitals, and the going welfare rates in Michigan.

926. Re: Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 00:37:01 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g7arndeft2@news.jpl.nasa.gov>
Source record: 23601

K7ITM wrote:
> On Aug 4, 11:49 am, Chris <CWShan...@gmail.com> wrote:
>> I've been looking at a few satcom antennas for a project I'm working
>> on. We were originally looking at parabolic dishes but have recently
>> taken a look at slot arrays. A low profile solution is desirable
>> which would lead to a small dish or a low (but very wide) slot array.
>> Some of the people we've talked to have warned us that slot arrays are
>> narrow bandwidth. I thought I understood this issue, but I'm
>> beginning to doubt myself.
>>
>> Suppose a slot array could transmit at Ka frequencies from 30 to 32
>> GHz at a bandwidth of 3%. If the center frequency of transmission is
>> 31GHz a 3% bandwidth would be equal to 930MHz or 465MHz on each side
>> of the center freq. This may be narrow to an antenna designer but
>> this is more spectrum than we'd ever hope to get on the satellite
>> anyway. I'm a little confused over why this is an "issue", which
>> makes me think I have a misunderstanding of the terminology.
>>
>> Can anyone clear this up for me?
>
> One of the things that occurs to me is that it can make a big
> difference just how you feed the array. This is something I've
> pondered with respect to linear arrays of dipoles at lower
> frequencies. If I feed the array from one end and depend on the
> length of transmission medium between the feedpoints, e.g. one
> wavelength between each radiator so they're fed in-phase, the phasing
> will change linearly with frequency. This is hardly noticeable if the
> array is short and therefore has low gain; but if it's long so the
> beamwidth is, say, 10 degrees, then a 3% change in frequency (.03*360
> degrees) will tilt the pattern by about one beamwidth. In a waveguide-
> fed system where the propagation velocity depends significantly on
> frequency I suppose things could be even worse.

This is actually used deliberately to steer a beam by changing the
frequency. Consider a radar with a magnetron that can be tuned...

>
> But an alternate way to feed such an array is with a tree of splitters
> so that the propagation from the input port to each radiator is the
> same time delay. In that case, the radiators will stay in phase and
> yield a high gain over a considerable bandwidth. In such a case, you
> do still have to account for the fact that the mutual impedance among
> the antennas will cause the elements at different points along the
> array to represent different loads to the transmission tree "leaves"
> and therefore cause different phase shifts, but that's something you

> can account for.

And for which phased array designers spend significant amount of time.
There are "sweet spots" that are easier than others, and if you have
lots and lots of elements, then the fact that edge elements have
different neighbors than all the ones in the middle might be ignored.
All depends on the sidelobe requirements, mostly.

>
> I recall once reading about a radar antenna that used a "geodesic
> lens" to give equal time delay from the feedpoint to each radiating
> element; it was basically a fan-shaped waveguide with a wrinkle in it,
> deepest at the middle and flat on the outer edges, which caused the
> central transmission path to be the same electrical length as the
> outer paths (and all the others).

There's about as many schemes for feeding a phased array as grains of
sand at the beach it seems.

927. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 00:38:51 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g7arqreft3@news.jpl.nasa.gov>
Source record: 23700

me@privacy.net wrote:
> "JB" <nospam@goofball.net> wrote:
>
>> That is a complication but not if your antenna can just see across the roof
>> of the other building, then it can actually help. If the main signal source
>> is reduced, reflections will be more pronounced. The problem with digital,
>> all you have is a bar graph. Reception problems are totally masked. The
>> reception problems that degrade Analog still degrade Digital, you just can't
>> see it. I have seen situations where there is lots of signal on the bar
>> graph, but the picture still breaks up because of distortion of the signal.
>> So while Analog is still there, get your antenna aligned and locked down and
>> hope no one builds another building.
>
> Well you have sure opened my eyes up to the importance
> of a DIRECTIONAL antenna when it comes to DTV!! I'm
> lucky in that all stations locally are broadcast from
> same towers in same location..... so only one direction
> to worry abt. Again my zip is 63401
>
> Seems like the more directional the antenna the better
> as it will be "blind" to multi-path. Yes?

Except that some receivers actually use the multipath signals to enhance
the overall SNR, by essentially delaying and recombining them in an
adaptive equalizer. So directivity, if it comes at the expense of gain,
might not be what you want.

928. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 01:02:07 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <YdydnYw8KOiTZQXVnZ2dnUVZ_oTinZ2d@bright.net>
Source record: 23602

I am looking at a 1080. It is being used in the computer room. All of the elements are in two, parallel planes that are each normal to earth. In other words, flat. On high-VHF (channel 12, here) there is little F/B ratio, but that has not been a problem. The chances of needing to reject a high-VHF station (at 180 degrees) on the same frequency is slim. The antenna is a stout, little, two-bay broadside array with reflector mostly effective on UHF.

I provided a detailed set of measurements in another message. 73, Mac N8TT

--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
<me@privacy.net> wrote in message
news:onnh94tp1jhff5m7cfmophvs6m2cslv03q@4ax.com...
> "JB" <nospam@goofball.net> wrote:
>
>>While the 1080 UHF is fairly sharp with some potential gain, the VHF
>>elements seem to be little more than "rabbit ears" - In fact it is a swept
>>dipole, so will be bi-directional and easily pick up reflections from
>>behind
>>and around you..
>
> I'm a bit confused on your remark above.
>
> Looks to me like the 1080 is perfectly flat antenna.
> Where do you see any bending or sweeping of elements?

929. zzzz

930. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 02:31:09 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <k28mk.5931$Zv3.78@newsfe01.iad>
Source record: 23604

Do really believe that there was a transmitter in the 1920's that could deliver 500 kw?. The first station that could come up with that amount of power was in the 1930's,W8XO, the experimental station of Powell Crosley, that became WLW again when the experimental period was over. Are you aware of the technical difficulties that obtained in just getting that monster to work? General Electric and Westinghouse supplied most of the parts, the rest by RCA, and RCA was the company that strived and strived before it was workable at that power level. I once worked for Harold Vance, the RCA engineer in charge of the project. Certainly this didn't happen in the 1920's, and not in Schenectady. Somebody's been
feeding you horse hockey.

Walt, W2DU

931. Re: zzzz

932. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 03:38:22 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <L8-dnfKjIaswgQTVnZ2dnUVZ_gCdnZ2d@comcast.com>
Source record: 23606

"Walter Maxwell" <walt@w2du.com> wrote in message
news:k28mk.5931$Zv3.78@newsfe01.iad...
> Do really believe that there was a transmitter in the 1920's that could
> deliver
> 500 kw?. The first station that could come up with that amount of power
> was in
> the 1930's,W8XO, the experimental station of Powell Crosley, that became
> WLW
> again when the experimental period was over. Are you aware of the
> technical
> difficulties that obtained in just getting that monster to work? General
> Electric and Westinghouse supplied most of the parts, the rest by RCA, and
> RCA
> was the company that strived and strived before it was workable at that
> power
> level. I once worked for Harold Vance, the RCA engineer in charge of the
> project. Certainly this didn't happen in the 1920's, and not in
> Schenectady.
> Somebody's been
> feeding you horse hockey.
>
> Walt, W2DU
>
>
You can see the whole WLW story at
http://www.hawkins.pair.com/wlw.shtml

Scroll part way down to see the 500 KW monster.

Tam/WB2TT

933. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 04:17:03 UTC
From: christopher <caveman@commspeed.net>
Message-ID: <II6dnTd4ScAiuATVnZ2dnUVZ_vzinZ2d@posted.commspeed>
Source record: 23607
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

On Tue, 05 Aug 2008 20:05:32 -0400, Ed Cregger wrote:

> "javawizard" <javawizard@aol.com> wrote in message
> news:149f9f0e-86d6-40bb-971a-
d763b5a35bb8@w24g2000prd.googlegroups.com...
>> In the 1920's a radio station in Schenectady, NY built a powerful
>> transmitter. In those days before FCC regulations, not knowing just how
>> big to make a transmitter in order for the signal to be received some
>> distance away, the station set up to broadcast at 500,000 watts. It
>> requires about one watt to be received four blocks away. A cell phone
>> is three watts. This station broadcast at such tremendous power that
>> they could be heard around the world. People in New York didn't even
>> need radios. They could sometimes hear voices in their furnaces and
>> coming off chain-link fences. Light bulbs lit up in people's houses
>> even if they were switched off. - from www.clip-text.com
>
> --------------
>
> Can you imagine the cost of their electric bill?
>
> I used to pick up AM radio stations in my head. The theory back then was
> that it was due to dental work acting as a rectifier, etc.
>
> I could tell you exactly which song was playing and where they were at
> in the song. All one had to do was turn on a radio and I would be
> singing in sync with it. The really weird part was that all I could hear
> was the music and the time announcements.
>
> This was in the late 50's and early 60's when I lived in Carneys Point,
> NJ. The radio station that I heard the best was WAMS (1380kc) in
> Wilmington, DE. The second best was WFIL in Philadelphia, PA. The latter
> I heard after WAMS went off the air for the day.
>
> Ed, NM2K

Lucille Ball picked up radio transmissions during the WWII. There was a German spy network working close to her home at the time. Apparently she had some dental work done and when she laid her arm against the metal bedpost at night she picked up the covert signals. She assisted the government in tracking and apprehending the miscreants.

In my wild and misspent youth when I was using 11 meters, I used a VERY large amp which would cause some neighbors to hear my voice coming from electric sockets, refrigerators, light bulbs, radios, TVs and such. I

would also voice over anyone close who was recording on tape.

My electric bill was rather large as I had to unplug the stove to use the 220 socket.

934. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 04:59:16 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <8b904b9a-975f-417a-815c-cffdc94df632@a8g2000prf.googlegroups.com>
Source record: 23608

On Aug 5, 7:31 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> Do really believe that there was a transmitter in the 1920's that could deliver
> 500 kw?. The first station that could come up with that amount of power was in
> the 1930's,W8XO, the experimental station of Powell Crosley, that became WLW
> again when the experimental period was over. Are you aware of the technical
> difficulties that obtained in just getting that monster to work? General
> Electric and Westinghouse supplied most of the parts, the rest by RCA, and RCA
> was the company that strived and strived before it was workable at that power
> level. I once worked for Harold Vance, the RCA engineer in charge of the
> project. Certainly this didn't happen in the 1920's, and not in Schenectady.
> Somebody's been
> feeding you horse hockey.
>
> Walt, W2DU

On the other hand, there were spark transmitters well before that in a similar power class. As I understand it, the powers actually achieved as output were often either not well known or were kept quiet for various reasons, but they were clearly in excess of 100kW. Apparently the Oct. 1920 issue of "General Electric Review has an article by Alexanderson about a 200kW alternator-driven transmitter. I understand that there were also some high-powered (Poulsen) arc transmitters (quite distinct from the shock-excitation of spark). I found one reference to a Poulsen arc transmitter that ran at 3.6 MW input power which was "still active in the early 1920s..." It ran on ~50kHz. Pretty much all this early stuff was below 100kHz, which of course yields very reliable propagation if you put enough power into it.

Our plant used to be less than a wavelength from a 1MW transmitting system, and I was always somewhat surprised that we weren't bothered more by them, as we made sensitive spectral analyzers that covered the frequency range on which they transmitted. We moved, and now we're a couple wavelengths away. We're more bothered by the 5kW AM broadcast station a few miles away, though that's easily filtered/shielded.

Cheers,
Tom

935. Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 06:01:32 UTC
From: News Features <news_features@newsfeatures.net>
Message-ID: <17bmk.18297$89.414@nlpi069.nbdc.sbc.com>
Source record: 23609

I'm not sure if this is the right newsgroup for this, but I wanted to get this information out there to help others.

Our electrician arrived with brand new fluorescent under-counter lights to install in our new kitchen. I told him, "Hey, I already bought lights at Expo! Can you simply install mine?"

For some reason he was very reluctant to install my lights. He insisted that his were just as good, if not better, than mine. I didn't have a strong preference so I let him install his lights.

When it was finally dark, my wife turned them on to get the full effect. To my horror, the AM radio two rooms away was instantly and completely obliterated with RFI. I ran out to the shack and confirmed noise all the way up to 20 meters.

The next day, I removed his lights and installed mine, and I was extremely pleased to note not a hint of noise on any frequency, unless the receiver was < 6 inches from the light.

His lights: Bright Inch by Elite Lighting.

Mine: SlimLite by Hera Lighting.
http://www.heralighting.com/hera/slimlite.html

They cost more, but they're worth every penny.

Regards,

Al W6LX

936. Re:ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 10:05:30 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <KHemk.25894$IK1.21166@news-server.bigpond.net.au>
Source record: 23610

I am wondering is anyone has a copy of an article on a multiband mobile helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.

I do have a copy but the majority of it is intelligible.

Thanks
HH

937. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 10:41:47 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-0608080641470001@jbw-mac.itd.nrl.navy.mil>
Source record: 23611

In article <k28mk.5931$Zv3.78@newsfe01.iad>, "Walter Maxwell"
<walt@w2du.com> wrote:

> Do really believe that there was a transmitter in the 1920's that could
deliver
> 500 kw?. The first station that could come up with that amount of power was in
> the 1930's,W8XO, the experimental station of Powell Crosley, that became WLW
> again when the experimental period was over.

Hello, and I grew up in Cincinnati where Crosley might well be regarded as
Cincinnati's equivalent to Pittsburgh's G. Westinghouse. Don't know if
Cincy had a Tesla, though ;-) The operations of WLW over the years are
well documented in technical journals and newspapers so I would ask of the
OP what is his information source(s). Sibncerely,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

938. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 12:45:18 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g7c6cuvoe1@f04n12.cac.psu.edu>
Source record: 23612

Cecil Moore wrote:
> Michael Coslo wrote:
>> Well, I don't think we can cover the entire earth with water past the
>> height of the tallest mountains. Like that ever happened tho'.
>
> The original languages, like our own version of English,
> had numerous definitions of "earth". I can cover the
> "entire earth" in my handful of earth with a pint of water.
>
> At the time of that original tale, man had absolutely no
> concept of a 8000 mile diameter "planet earth". "Earth"
> was as far (and as flat) as one could see and I have seen
> Texas floods, in my lifetime, where nothing but water
> could be seen. :-) Heck, I have been sailing on Clear
> Lake, out by NASA, when I couldn't see anything but
> water in all directions.

Absolutely. No question that the great flood was a localized phenom. I was just getting in my occasionall dig at those who would demand that since it says so in one book, it had to have been the world.

The bible is mostly enjoyable reading as long as we don't get tripped up on the whole literal thing.

- 73 de Mike N3LI -

939. Re: eBay: Tokyo Hy Power HC-2000 antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 14:35:06 UTC
From: wa2rqy <rlucch2098@aol.com>
Message-ID: <324a431b-1c40-4add-936a-e33aed3e51f0@i76g2000hsf.googlegroups.com>
Source record: 23613
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.swap

On Aug 4, 12:13 pm, "Henry Kolesnik" <koles...@nojunksbcglobal.net>
wrote:
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=STRK:MESELX:...

Thats a well made tuner!
I had one once, should have kept it.
GL........
Rich

940. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 15:10:02 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <Q9jmk.12260$KZ.4425@newsfe03.iad>
Source record: 23614

Quoting from the original post in this thread:

"People in New York didn't even need radios. They could sometimes hear voices in their furnaces
and coming off chain-link fences. Light bulbs lit up in people's houses even if they were switched off. "

These are the phenomena reported from WLW's 500 kw operation in the 1930's.

Some posters on this thread mention spark, Poulsen, Alexander alternators as sources of 500 kw and Mw power in the 1920's, which is true. On the contrary, from the quote above, I believe the original poster was referring only to a station broadcasting voice transmissions. This is what I believe to be untrue, as I don't believe 100 kw tubes were available in the 1920's. In addition, the WLW story indicates that WLW was the first station to transmit with 50 kw, and then the 500 kw transmitter with multiple 100 kw tubes was the first one to transmit AM BC at that power.

Walt, W2DU

941. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 15:10:45 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <LPSdnVkHnLVpIwTVnZ2dnUVZ_r7inZ2d@comcast.com>
Source record: 23615
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"christopher" <caveman@commspeed.net> wrote in message
news:II6dnTd4ScAiuATVnZ2dnUVZ_vzinZ2d@posted.commspeed...
> On Tue, 05 Aug 2008 20:05:32 -0400, Ed Cregger wrote:
>
> .....
> In my wild and misspent youth when I was using 11 meters, I used a VERY
> large amp which would cause some neighbors to hear my voice coming from
> electric sockets, refrigerators, light bulbs, radios, TVs and such. I
> would also voice over anyone close who was recording on tape.
>
> My electric bill was rather large as I had to unplug the stove to use the
> 220 socket.
> .....
>
The other day I was operating on 40 m SSB with 1KW+ output. Antenna is an
inverted V at 50 feet. My mother told me she could hear my voice coming out
of somewhere on the second floor. There was nothing with a speaker in it
that was turned on, not even a PC. I will have to repeat that with a ham
friend present.

Tam/WB2TT

942. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 15:21:08 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <aoCdnboXIuf-XATVnZ2dnUVZ_gKdnZ2d@comcast.com>
Source record: 23616

"K7ITM" <k7itm@msn.com> wrote in message
news:8b904b9a-975f-417a-815c-cffdc94df632@a8g2000prf.googlegroups.com...
> On Aug 5, 7:31 pm, "Walter Maxwell" <w...@w2du.com> wrote:
>> Do really believe that there was a transmitter in the 1920's that could
>> deliver
>> 500 kw?. The first station that could come up with that amount of power
>> was in
>> the 1930's,W8XO, the experimental station of Powell Crosley, that became
>> WLW
>> again when the experimental period was over. Are you aware of the
>> technical
>> difficulties that obtained in just getting that monster to work? General
>> Electric and Westinghouse supplied most of the parts, the rest by RCA,
>> and RCA
>> was the company that strived and strived before it was workable at that
>> power
>> level. I once worked for Harold Vance, the RCA engineer in charge of the
>> project. Certainly this didn't happen in the 1920's, and not in
>> Schenectady.
>> Somebody's been
>> feeding you horse hockey.
>>
>> Walt, W2DU
>
> On the other hand, there were spark transmitters well before that in a
> similar power class. As I understand it, the powers actually achieved
> as output were often either not well known or were kept quiet for
> various reasons, but they were clearly in excess of 100kW. Apparently
> the Oct. 1920 issue of "General Electric Review has an article by
> Alexanderson about a 200kW alternator-driven transmitter. I
> understand that there were also some high-powered (Poulsen) arc
> transmitters (quite distinct from the shock-excitation of spark). I
> found one reference to a Poulsen arc transmitter that ran at 3.6 MW
> input power which was "still active in the early 1920s..." It ran on
> ~50kHz. Pretty much all this early stuff was below 100kHz, which of
> course yields very reliable propagation if you put enough power into
> it.
>
But WLW ran 500KW of 100% AM modulation. I understand just the modulation
transformer was the size of a room in order to handle the 250 KW of audio. I
believe it was on 700 KHz. See the link I gave above.

Tam/WB2TT

> Our plant used to be less than a wavelength from a 1MW transmitting
> system, and I was always somewhat surprised that we weren't bothered
> more by them, as we made sensitive spectral analyzers that covered the
> frequency range on which they transmitted. We moved, and now we're a
> couple wavelengths away. We're more bothered by the 5kW AM broadcast
> station a few miles away, though that's easily filtered/shielded.
>
> Cheers,
> Tom

943. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 16:22:33 UTC
From: Robert Smits <bob@rsmits.ca>
Message-ID: <6b4449c9f629802ce8bc0737daf104bc@grapevine.islandnet.com>
Source record: 23617

News Features wrote:

> When it was finally dark, my wife turned them on to get the full effect.
> To my horror, the AM radio two rooms away was instantly and completely
> obliterated with RFI. I ran out to the shack and confirmed noise all the
> way up to 20 meters.
>
> The next day, I removed his lights and installed mine, and I was extremely
> pleased to note not a hint of noise on any frequency, unless the receiver
> was < 6 inches from the light.
>
> His lights: Bright Inch by Elite Lighting.
>
> Mine: SlimLite by Hera Lighting.
> http://www.heralighting.com/hera/slimlite.html

Thanks for posting this, Al. As we get into more and more expensive electricity, there's ever more pressure for all of us to reduce electrical consumption by using fluorescent lighting, much of which results in completely unacceptable rfi noise levels. Does anyone know of a database that rates various brands as to rfi?

Bob
--
bob@rsmits.ca (Robert Smits, Ladysmith BC)

"I'm not one of those who think Bill Gates is the devil. I simply suspect that if Microsoft ever met up with the devil, it wouldn't need an interpreter." - Nicholas Petreley

944. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 16:54:58 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <f02f1e32-1949-4726-bd49-fccd284caa28@d45g2000hsc.googlegroups.com>
Source record: 23618

On Aug 6, 8:21 am, "Tam" <t-tamm...@comcast.net> wrote:
> "K7ITM" <k7...@msn.com> wrote in message
>
> news:8b904b9a-975f-417a-815c-cffdc94df632@a8g2000prf.googlegroups.com...
>
> > On Aug 5, 7:31 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> >> Do really believe that there was a transmitter in the 1920's that could
> >> deliver
> >> 500 kw?. The first station that could come up with that amount of power
> >> was in
> >> the 1930's,W8XO, the experimental station of Powell Crosley, that became
> >> WLW
> >> again when the experimental period was over. Are you aware of the
> >> technical
> >> difficulties that obtained in just getting that monster to work? General
> >> Electric and Westinghouse supplied most of the parts, the rest by RCA,
> >> and RCA
> >> was the company that strived and strived before it was workable at that
> >> power
> >> level. I once worked for Harold Vance, the RCA engineer in charge of the
> >> project. Certainly this didn't happen in the 1920's, and not in
> >> Schenectady.
> >> Somebody's been
> >> feeding you horse hockey.
>
> >> Walt, W2DU
>
> > On the other hand, there were spark transmitters well before that in a
> > similar power class. As I understand it, the powers actually achieved
> > as output were often either not well known or were kept quiet for
> > various reasons, but they were clearly in excess of 100kW. Apparently
> > the Oct. 1920 issue of "General Electric Review has an article by
> > Alexanderson about a 200kW alternator-driven transmitter. I
> > understand that there were also some high-powered (Poulsen) arc
> > transmitters (quite distinct from the shock-excitation of spark). I
> > found one reference to a Poulsen arc transmitter that ran at 3.6 MW
> > input power which was "still active in the early 1920s..." It ran on
> > ~50kHz. Pretty much all this early stuff was below 100kHz, which of
> > course yields very reliable propagation if you put enough power into
> > it.
>
> But WLW ran 500KW of 100% AM modulation. I understand just the modulation
> transformer was the size of a room in order to handle the 250 KW of audio. I
> believe it was on 700 KHz. See the link I gave above.

Well, admittedly I was taking it a bit out of context, but my posting was a response to Walter's "Do really believe that there was a transmitter in the 1920's that could deliver
500 kw?" And the answer is, yes, I do. Maybe not valve-based, but more than one transmitter, and capable of modulation as well: apparently Poulsen arc transmitters were FSK, since they couldn't be keyed on and off. And apparently the alternator based transmitters could be keyed at up to 100wpm. I'm pretty impressed with what the radio engineers of that era were able to achieve.

Cheers,
Tom

945. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 18:35:09 UTC
From: terry <tsanford@nf.sympatico.ca>
Message-ID: <1dce650b-776a-4f01-8e32-6001e706aff4@y38g2000hsy.googlegroups.com>
Source record: 23619
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

On Aug 6, 1:10 pm, "Tam" <t-tamm...@comcast.net> wrote:
> "christopher" <cave...@commspeed.net> wrote in message
>
> news:II6dnTd4ScAiuATVnZ2dnUVZ_vzinZ2d@posted.commspeed...> On Tue, 05 Aug 2008 20:05:32
-0400, Ed Cregger wrote:
>
> > .....
> > In my wild and misspent youth when I was using 11 meters, I used a VERY
> > large amp which would cause some neighbors to hear my voice coming from
> > electric sockets, refrigerators, light bulbs, radios, TVs and such. I
> > would also voice over anyone close who was recording on tape.
>
> > My electric bill was rather large as I had to unplug the stove to use the
> > 220 socket.
> > .....
>
> The other day I was operating on 40 m SSB with 1KW+ output. Antenna is an
> inverted V at 50 feet. My mother told me she could hear my voice coming out
> of somewhere on the second floor. There was nothing with a speaker in it
> that was turned on, not even a PC. I will have to repeat that with a ham
> friend present.
>
> Tam/WB2TT

The UK back in the 1950s, post WWII.
They were investigating some complaints that a licensed amateur radio
transmitter was causing interference to some of the new fangled TV
sets (45 megahertz, AM sound, 405 line black and white system). The
fault was mainly the inabilities of the TV sets to reject strong
nearby signals in another band!
One elderly lady was asked if she was "Hearing anything" and replied.
"Oh yes. I hear him all the time" and was asked to show the
investigators her TV set.
"Oh no", she said, "I don't have a TV at all but I can hear him on my
electric heater whenever I switch it on or plug it in!".
Turned out that the heating coil of the heater was providing
inductance, there was a sufficiently high resistance (possibly where
the replaceable heating coil connected at each end) to act as
rectifier under the conditions present and the metal frame of the
heater provided a sound box.
The lady was not particularly concerned about having the heater fixed,
saying "She found his talking quite interesting!".
You never know do you?

Nowadays sort of wondering about cell phones and those bits of metal
that some people wear in their noses, faces and ears etc.

946. Re: Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 19:14:44 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-68D7B1.11144706082008@netnews.worldnet.att.net>
Source record: 23620

In article
<7bfb8b84-6f5d-4ed1-8b9c-bfe986d675cf@f36g2000hsa.googlegroups.com>,
Chris <CWShannon@gmail.com> wrote:

> I've been looking at a few satcom antennas for a project I'm working
> on. We were originally looking at parabolic dishes but have recently
> taken a look at slot arrays. A low profile solution is desirable
> which would lead to a small dish or a low (but very wide) slot array.
> Some of the people we've talked to have warned us that slot arrays are
> narrow bandwidth. I thought I understood this issue, but I'm
> beginning to doubt myself.
>
> Suppose a slot array could transmit at Ka frequencies from 30 to 32
> GHz at a bandwidth of 3%. If the center frequency of transmission is
> 31GHz a 3% bandwidth would be equal to 930MHz or 465MHz on each side
> of the center freq. This may be narrow to an antenna designer but
> this is more spectrum than we'd ever hope to get on the satellite
> anyway. I'm a little confused over why this is an "issue", which
> makes me think I have a misunderstanding of the terminology.
>
> Can anyone clear this up for me?

One thing that has not been mentioned IS that if your dealing with
GeoSync SATs, they are spaced VERY Close together, and sometimes
actually just a few miles apart, across the Clark Belt. This means
if you have a Transmitting Antenna that can't be directed at just
one SAT Position, (better than 2 Degrees) you will be illuminating
more than one SAT, AND consequently, if those multiple SATs have Inputs
in the same Band as your up-linking, you will be using other folk's
spectrum and transponder space, which is a GIANT NO NO. You are
REQUIRED to use an Uplink Antenna that will only illuminate just the SAT
your licensed to work, and that includes any Side-Lobes off your antenna
as well. This is why Parabolic Antennas are almost ALWAYS used in
Uplinking to GeoSync SATs. They tend to have very tight Beamwidths,
and few sidelobes that get in the way. Panel and Slot Arrays just don't
have the Beamwidth Control and Minimal Sidelobe specs for this type
of use, and that's why they aren't used in this application.

--
Bruce in alaska
add <path> after <fast> to reply

947. Re: Can I manually adjust my gain?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 19:21:09 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-655766.11211306082008@netnews.worldnet.att.net>
Source record: 23621

In article
<6b12d81f-0ab6-4181-b4cd-2965d496670a@v1g2000pra.googlegroups.com>,
Krys <krysalyss@yahoo.com> wrote:

> I guess that is why I assumed it was maybe not enough gain.
> The antenna outside is connected to the receiver by a RG58 cable. It
> is only covered in electrical tape at the connection. It was rusty but
> I have changed that all and the signal is the same.

There is your problem, right there.... RG-58 is not really very good at
VHF Frequencies in lengths longer than 25 Ft. You should get some good
cable, like Beldon 9913 or LMR400 and have someone who knows how to
install the proper connectors on it, do the work, of replacing the
Feedline. I suspect your losing over 50% of your signal in the Feedline
and connectors.

--
Bruce in alaska
add <path> after <fast> to reply

948. Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 19:37:22 UTC
From: HarryHydro <harryhydro@hotmail.com>
Message-ID: <82d0284e-bece-4572-9860-0ee36a42b80d@z72g2000hsb.googlegroups.com>
Source record: 23622

Hi Folks:
We've been having intermittent problems with 'interference' on
6.8 gig Alcatel radios and 5.8 gig (freeband) Proxim radios. I just
came into the radio shack, turned on the 'widow maker', a big heavy
spectrum analyzer, and instead of finding 5.8GHz internerence, I
found VERY strong pulses of RF around 4.9GHz. With my Blackberry about
5 feet away, the analyzer is showing a -10dbW (yes, 100mW) on a 2.4
gig antenna. It must be saturating the front ends. This Blackberry
comes through speakers with the preamps, and even televisions a good
10 feet away! It makes the computer monitor's screen shake almost
like the degauss! (when placed close). And, I suspect it does this
with it next to my head also, straight out the front and back of the
phone.
I was just looking at 4.9gig info and it seems to be allocated to
public safety. Is it also WiFi? The WiFi on this phone is off, at
least in the 'Connections', but that doesn't suprise me as laptops
seem to transmit on WiFi while connected to LAN. (Laptops' WiFi
knocks off the Proxim's, also)
Anyone ever scoped out the RF power from a Blackberry? Can this be
safe power levels?
Harry

949. Re: Can I manually adjust my gain?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 19:38:03 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9AF2807FECB7Ddoldridgsprintca@64.59.135.159>
Source record: 23623

Krys <krysalyss@yahoo.com> wrote in news:6b12d81f-0ab6-4181-b4cd-2965d496670a@v1g2000pra.googlegroups.com:

> Thanks guys for your advice. The collars are a mix of new and old but
> it seems to be more location that is determining whether they work.
> (eg. some of the wombat collars are good no matter where while some
> are bad only in the dens). They are all new except one. I can hear
> them all really well when I scan them one by one but when I use them
> together I have the receiver in data acqiusition mode (to store all of
> the data for later download) which doesn't allow me to adjust gain or
> tuning. I guess that is why I assumed it was maybe not enough gain.
> The antenna outside is connected to the receiver by a RG58 cable. It
> is only covered in electrical tape at the connection. It was rusty but
> I have changed that all and the signal is the same. I can check the
> missing data on my video cameras and see that it is always when they
> are in their dens.
> I think you are all probably right. Perhaps the antenna or receiver
> was damaged when it was stored or moved.

How long is the RG58 cable? Did water get into it? If so, consider replacing it with RG8X (same impedance, lower loss).

--
Dave Oldridge+
ICQ 1800667

950. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 19:40:37 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g7cunlcoo1@news.jpl.nasa.gov>
Source record: 23625

Robert Smits wrote:
> News Features wrote:
>
>
>> When it was finally dark, my wife turned them on to get the full effect.
>> To my horror, the AM radio two rooms away was instantly and completely
>> obliterated with RFI. I ran out to the shack and confirmed noise all the
>> way up to 20 meters.
>>
>> The next day, I removed his lights and installed mine, and I was extremely
>> pleased to note not a hint of noise on any frequency, unless the receiver
>> was < 6 inches from the light.
>>
>> His lights: Bright Inch by Elite Lighting.
>>
>> Mine: SlimLite by Hera Lighting.
>> http://www.heralighting.com/hera/slimlite.html
>
> Thanks for posting this, Al. As we get into more and more expensive
> electricity, there's ever more pressure for all of us to reduce electrical
> consumption by using fluorescent lighting, much of which results in
> completely unacceptable rfi noise levels. Does anyone know of a database
> that rates various brands as to rfi?
>

Not really antenna related, but...

They are ostensibly Part 15 compliant, so one could look at the
certification paperwork they supplied to the FCC.

I wouldn't count on huge amounts of item to item consistency, even
within the same brand and model. Based on my admittedly anecdotal data,
there's a fair amount of manufacturing variability, so unless someone is
going to go out and collect data on a statistically significant sample
(which practically means tens or hundreds of units tested), any set of
measurements is valid only for the item measured.

951. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 19:49:57 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g7cv95$i8n$1@news.jpl.nasa.gov>
Source record: 23626

K7ITM wrote:
. See the link I gave above.
>
> Well, admittedly I was taking it a bit out of context, but my posting
> was a response to Walter's "Do really believe that there was a
> transmitter in the 1920's that could deliver
> 500 kw?"

I think the operative word here is "deliver", by which I would mean
"radiated into the far field". Dissipating half a megawatt in the
system is impressive, but not necessarily as a transmitter.

And the answer is, yes, I do. Maybe not valve-based, but
> more than one transmitter, and capable of modulation as well:
> apparently Poulsen arc transmitters were FSK, since they couldn't be
> keyed on and off.

One scheme was to change the resonant frequency of the antenna (via taps
on a coil), which was the frequency determining part of the system, the
arc providing a negative resistance characteristic for making an oscillator.

And apparently the alternator based transmitters
> could be keyed at up to 100wpm. I'm pretty impressed with what the
> radio engineers of that era were able to achieve.

It IS very impressive, but whether they could *radiate* half a megawatt
is sort of a good question.

Consider for comparison the ELF transmitters in Michigan..several
Megawatts to radiate less than 10 Watts

Or Project Sanguine, which was soemthing like 800 MW to radiate a few watts.

I know of several Tesla coils that have average power inputs in the
hundreds of kW range, but they don't radiate a whole lot, even with 20+
meter sparks as an antenna.

>
> Cheers,
> Tom

952. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 19:57:05 UTC
From: an Old friend <kb9rqz@yahoo.net>
Message-ID: <g7cvmj$d41$1@news.albasani.net>
Source record: 23624
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"javawizard" <javawizard@aol.com> wrote in message
news:149f9f0e-86d6-40bb-971a-d763b5a35bb8@w24g2000prd.googlegroups.com...
> In the 1920's a radio station in Schenectady, NY built a powerful
> transmitter. In those days before FCC regulations, not knowing just
> how big to make a transmitter in order for the signal to be received
> some distance away, the station set up to broadcast at 500,000 watts.
> It requires about one watt to be received four blocks away. A cell
> phone is three watts. This station broadcast at such tremendous power
> that they could be heard around the world. People in New York didn't
> even need radios. They could sometimes hear voices in their furnaces
> and coming off chain-link fences. Light bulbs lit up in people's
> houses even if they were switched off. - from www.clip-text.com
>
>
congat four teh on topic poast

953. Re: Slot Array Antenna Narrow bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 20:05:24 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g7d064$r6e$1@news.jpl.nasa.gov>
Source record: 23627

Bruce in alaska wrote:
> In article
> <7bfb8b84-6f5d-4ed1-8b9c-bfe986d675cf@f36g2000hsa.googlegroups.com>,
> Chris <CWShannon@gmail.com> wrote:
>
>> I've been looking at a few satcom antennas for a project I'm working
>> on. We were originally looking at parabolic dishes but have recently
>> taken a look at slot arrays. A low profile solution is desirable
>> which would lead to a small dish or a low (but very wide) slot array.
>> Some of the people we've talked to have warned us that slot arrays are
>> narrow bandwidth. I thought I understood this issue, but I'm
>> beginning to doubt myself.
>>
>> Suppose a slot array could transmit at Ka frequencies from 30 to 32
>> GHz at a bandwidth of 3%. If the center frequency of transmission is
>> 31GHz a 3% bandwidth would be equal to 930MHz or 465MHz on each side
>> of the center freq. This may be narrow to an antenna designer but
>> this is more spectrum than we'd ever hope to get on the satellite
>> anyway. I'm a little confused over why this is an "issue", which
>> makes me think I have a misunderstanding of the terminology.
>>
>> Can anyone clear this up for me?
>
> One thing that has not been mentioned IS that if your dealing with
> GeoSync SATs, they are spaced VERY Close together, and sometimes
> actually just a few miles apart, across the Clark Belt. This means
> if you have a Transmitting Antenna that can't be directed at just
> one SAT Position, (better than 2 Degrees) you will be illuminating
> more than one SAT, AND consequently, if those multiple SATs have Inputs
> in the same Band as your up-linking, you will be using other folk's
> spectrum and transponder space, which is a GIANT NO NO. You are
> REQUIRED to use an Uplink Antenna that will only illuminate just the SAT
> your licensed to work, and that includes any Side-Lobes off your antenna
> as well. This is why Parabolic Antennas are almost ALWAYS used in
> Uplinking to GeoSync SATs. They tend to have very tight Beamwidths,
> and few sidelobes that get in the way. Panel and Slot Arrays just don't
> have the Beamwidth Control and Minimal Sidelobe specs for this type
> of use, and that's why they aren't used in this application.
>

1/2 degree kinds of beamwidth aren't that tough to get. (a meter or two
aperture at 10GHz gets you in the ballpark, a third that at 30GHz Ka-band).

beamwidth is almost entirely a function of the physical extent of the
antenna (that is, a 20 meter antenna will have comparable beamwidth,

regardless of whether it's a reflector or phased array)

Sidelobes are a function of the control over amplitude and phase across the aperture. You can use a smooth surface (as in a reflector) or good element and feed design (as in a low sidelobe phased array). There are phased arrays (electrically steerable no less) with sidelobe levels more than 50 dB down. That's an impressive number for ANY antenna (for a reflector, you're going to be paying a lot of attention to surface finish and even more to the feed design)

You might want more aperture on an uplink for the gain, as opposed to the beam properties. You could spend more on the fixed antenna and less on the power amplifier (e.g. use a 12m antenna instead of a 6m antenna and a PA that's 1/4 the size.. either one will have a beam that is substantially bigger than the satellite you're pointing at). There *IS* a limit.. cost starts to rise pretty quickly above a particular size, because the structure to hold mechanical tolerances is big and expensive. (e.g. the Deep Space Network 72 meter antennas cost a good chunk of a billion dollars back in the 60s)

It's more a cost thing. If you only need to point in one direction at one frequency, and it needs to have large physical aperture, then a fixed reflector is probably the cheapest solution (particularly over life).

Here's a relatively old design (1969) at 16 GHz with 3 degree beamwidth, pretty decent sidelobes, and steerable over 60 degrees

http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19700002178_1970002178.pdf

954. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 21:48:24 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <FNednURMtqu9gQfVnZ2dnUVZ_i2dnZ2d@giganews.com>
Source record: 23628
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"Tam" <t-tammaru@comcast.net> wrote in message
news:LPSdnVkHnLVpIwTVnZ2dnUVZ_r7inZ2d@comcast.com...
>>
> The other day I was operating on 40 m SSB with 1KW+ output. Antenna is an
> inverted V at 50 feet. My mother told me she could hear my voice coming
> out of somewhere on the second floor. There was nothing with a speaker in
> it that was turned on, not even a PC. I will have to repeat that with a
> ham friend present.
>
> Tam/WB2TT

I've had old solid state console stereos at the place I worked spew forth
the local CB'er w/linear even when not plugged in. We figured that the
output transistors were detecting the signal and feeding it to the speakers.

955. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 23:23:27 UTC
From: Jim Driscoll <jdriscoll@trentu.ca>
Message-ID: <484c$489a3270$d8a86d9d$7814@NEXICOM.NET>
Source record: 23629
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

Had the same phenomenon when the illegal, high-powered, CB transmitter next
door cut in--I picked it up through the magnetic cartridge on my turntable,

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:FNednURMtqu9gQfVnZ2dnUVZ_i2dnZ2d@giganews.com...
>
> "Tam" <t-tammaru@comcast.net> wrote in message
> news:LPSdnVkHnLVpIwTVnZ2dnUVZ_r7inZ2d@comcast.com...
>>>
>> The other day I was operating on 40 m SSB with 1KW+ output. Antenna is an
>> inverted V at 50 feet. My mother told me she could hear my voice coming
>> out of somewhere on the second floor. There was nothing with a speaker in
>> it that was turned on, not even a PC. I will have to repeat that with a
>> ham friend present.
>>
>> Tam/WB2TT
>
>
> I've had old solid state console stereos at the place I worked spew forth
> the local CB'er w/linear even when not plugged in. We figured that the
> output transistors were detecting the signal and feeding it to the
> speakers.
>
>
>

956. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 23:39:39 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <2Dqmk.29881$Wf4.432@fe127.usenetserver.com>
Source record: 23630

J. B. Wood wrote:
> In article <k28mk.5931$Zv3.78@newsfe01.iad>, "Walter Maxwell"
> <walt@w2du.com> wrote:
>
>> Do really believe that there was a transmitter in the 1920's that could
> deliver
>> 500 kw?. The first station that could come up with that amount of power was in
>> the 1930's,W8XO, the experimental station of Powell Crosley, that became WLW
>> again when the experimental period was over.
>
> Hello, and I grew up in Cincinnati where Crosley might well be regarded as
> Cincinnati's equivalent to Pittsburgh's G. Westinghouse. Don't know if
> Cincy had a Tesla, though ;-) The operations of WLW over the years are
> well documented in technical journals and newspapers so I would ask of the
> OP what is his information source(s). Sibncerely,
>
> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

From Joe Rice's (W4RHZ SK) book "Early Cincinnati Radio, 1910-1970":

The history of WLW presents a story of American enterprise and ingenuity
as colorful as any story in the world. It has the distinction of being
one of the few radio stations in all of American of running 500,000
watts of power. This is did from New Years Eve of 1934 until 1939.
From a modest beginning of about 20 watts power to the super power
range is a real success story of one man. Growth of WLW was constant
and it operated on different wavelengths until 1927 when it stabilised
at 700 kilocycles and then in 1928 it increased power to 50,000 watts."

Dave K8MN

957. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 23:41:16 UTC
From: m II <c@in.the.hat>
Message-ID: <wEqmk.4905$nu6.2381@edtnps83>
Source record: 23631
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

Jim Driscoll wrote:

> Had the same phenomenon when the illegal, high-powered, CB transmitter next
> door cut in--I picked it up through the magnetic cartridge on my turntable,
>

Same here. I got a 3 watt walkie talkie and and sent it all back to him.

mike
--

__ __ __ __ __ __ __ __
/ /\ / /\ / /\ / /\ / /\ / /\ / /\ / /
/ /\ \/ /\ \/This space for rent/\ \/ /\ \/ /
/_/ \/_/ \/_/ \/_/ \/_/ \/_/ \/_/ \/_/

Densa International©
'Think tanks cleaned cheap'

Due to the insane amount of spam and garbage,
I block all postings with a Gmail, Google Mail,
Google Groups or HOTMAIL address.
I also filter everything from a .cn server.

http://improve-usenet.org/

958. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 23:43:33 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <IGqmk.29882$Wf4.9686@fe127.usenetserver.com>
Source record: 23632

Walter Maxwell wrote:
> Quoting from the original post in this thread:
>
> "People in New York didn't even need radios. They could sometimes hear voices in
> their furnaces
> and coming off chain-link fences. Light bulbs lit up in people's houses even if
> they were switched off. "
>
> These are the phenomena reported from WLW's 500 kw operation in the 1930's.
>
> Some posters on this thread mention spark, Poulsen, Alexander alternators as
> sources of 500 kw and Mw power in the 1920's, which is true. On the contrary,
> from the quote above, I believe the original poster was referring only to a
> station broadcasting voice transmissions. This is what I believe to be untrue,
> as I don't believe 100 kw tubes were available in the 1920's. In addition, the
> WLW story indicates that WLW was the first station to transmit with 50 kw, and
> then the 500 kw transmitter with multiple 100 kw tubes was the first one to
> transmit AM BC at that power.

Right, Walt. Rice's book indicates that there were 31 tubes in the 500
KW transmitter, each costing $1,000 in 1934. The Cincinnati area
stories of people living near WLW's Mason, Ohio transmitter site being
able to hear the station on fences and down spouts were common.

Even at 50 KW, WLW caused problems for a number of hams who lived near
the transmitter site when they were operating on 160m.

Dave K8MN

959. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-06 23:47:10 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <5Kqmk.29883$Wf4.23602@fe127.usenetserver.com>
Source record: 23633

Tam wrote:

> But WLW ran 500KW of 100% AM modulation. I understand just the
> modulation transformer was the size of a room in order to handle the 250
> KW of audio. I believe it was on 700 KHz. See the link I gave above.

The modulation transformer at VOA's Bethany relay station (located quite near WLW's Mason, Ohio transmitter site) took up much of a very large room. If you stood in that room, you could hear the transmitted audio from the laminations. The sound was so loud that it was necessary to shout to be heard over it.

Dave K8MN

960. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 01:30:24 UTC
From: Bill Ogden <billogden@optonline.net>
Message-ID: <489a5031$0$29515$607ed4bc@cv.net>
Source record: 23634

Wow. We can learn something new every day. Joe Rice (W4RHZ) was one of my idols when I had my first licenses during 1959-61. He was a key member of NKARC (Northern Kentucky ARC). Google says his "Early Cincinnati Radio" was privately published, so I am unlikely to run across a copy. (Ebay and half.com, etc, have no hits for it.)

Bill
W2WO (Was K4DFO in those days)

961. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 01:33:36 UTC
From: News Features <news_features@newsfeatures.net>
Message-ID: <qhsmk.20724$N87.11974@nlpi068.nbdc.sbc.com>
Source record: 23635

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:g7cunlcoo1@news.jpl.nasa.gov...
> Based on my admittedly anecdotal data, there's a fair amount of
> manufacturing variability, so unless someone is going to go out and
> collect data on a statistically significant sample (which practically
> means tens or hundreds of units tested), any set of measurements is valid
> only for the item measured.

Well, my report is certainly anecdotal. No measurements beyond turning on the AM radio and bringing it up close to the lights were made. However, I can believe that perhaps the electrician got a bad batch of lights. Maybe the ground was missing or some filter or something like that. However, it is highly unlikely that the (good) Hera lights happened to be totally quiet due to some manufacturing variability. In other words, manufacturing variabilities can and frequently do result in really bad units, but rarely result in phenomenally better units than the norm. What this tells me is that the Heras have a better controlled manufacturing process. If that's all you got from my post, then I submit that that is a valuable data point.

(The web site of the "bad" lights says that they are California Title 24 compliant. I have no idea what that means.)

Let's put it this way: given my merely anecdotal experience, if you had to buy undercabinet lighting tomorrow, which would you buy? That's all you can get from anecdotal evidence.

962. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 02:38:20 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <Pbtmk.5313$XT1.4136@bignews5.bellsouth.net>
Source record: 23636

Interesting, but from past experience, the results may be just the opposite a few months later because the source of the components may change over time.
The components of fluorescent fixtures consists of
The ballast - which is usually outsourced by the fixture manufacturer. Ballast types vary - GE, Universal, Advance, and several other Ballast makers sell to fixture manufacturers.
The sockets - usually made by Leviton or Eagle or Rodale - but there are others.
The lamp (the fluorescent lamp). Usually are not provided by the fixture manufacturer. Made by Phillips, GE, Sylvania, etc.
Some even have a 'starter'.
--I expect the ballast is the critical component - some are magnetic, some are electronic - its probably the culprit

"News Features" <news_features@newsfeatures.net> wrote in message news:17bmk.18297$89.414@nlpi069.nbdc.sbc.com...
> I'm not sure if this is the right newsgroup for this, but I wanted to get
> this information out there to help others.
>
> Our electrician arrived with brand new fluorescent under-counter lights to
> install in our new kitchen. I told him, "Hey, I already bought lights at
> Expo! Can you simply install mine?"
>
> For some reason he was very reluctant to install my lights. He insisted
> that his were just as good, if not better, than mine. I didn't have a
> strong preference so I let him install his lights.
>
> When it was finally dark, my wife turned them on to get the full effect.
> To my horror, the AM radio two rooms away was instantly and completely
> obliterated with RFI. I ran out to the shack and confirmed noise all the
> way up to 20 meters.
>
> The next day, I removed his lights and installed mine, and I was extremely
> pleased to note not a hint of noise on any frequency, unless the receiver
> was < 6 inches from the light.
>
> His lights: Bright Inch by Elite Lighting.
>
> Mine: SlimLite by Hera Lighting.
> http://www.heralighting.com/hera/slimlite.html
>
> They cost more, but they're worth every penny.
>

> Regards,
>
> Al W6LX
>
>
>
>
>
>
>

963. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 03:17:17 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <5Ptmk.476$i15.86@newsfe01.iad>
Source record: 23637

"Walter Maxwell" <walt@w2du.com> wrote in message
news:Q9jmk.12260$KZ.4425@newsfe03.iad...
> Quoting from the original post in this thread:
>
> "People in New York didn't even need radios. They could sometimes hear
voices in
> their furnaces
> and coming off chain-link fences. Light bulbs lit up in people's houses
even if
> they were switched off. "
>
> These are the phenomena reported from WLW's 500 kw operation in the
1930's.

In the late 1950's White's Radio Log reported XEX (Mexico City) had a megawatt of power for a while -- several years, perhaps. Later reports gave their power as 500 KW. I never heard them in NY because there was always somebody else blocking them. Presently they're on 730 and listed at a featherweight 100 KW.
http://www.fcc.gov/fcc-bin/amq?list=0&facid=101201.

What's the record for max BCB power?

964. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 03:34:21 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <53umk.13192$Lb6.4828@fe99.usenetserver.com>
Source record: 23638

Bill Ogden wrote:
> Wow. We can learn something new every day. Joe Rice (W4RHZ) was one of my
> idols when I had my first licenses during 1959-61. He was a key member of
> NKARC (Northern Kentucky ARC). Google says his "Early Cincinnati Radio" was
> privately published, so I am unlikely to run across a copy. (Ebay and
> half.com, etc, have no hits for it.)
>
> Bill
> W2WO (Was K4DFO in those days)

Bill,

Yep, Joe was a Norwood boy who became a Northern Kentucky transplant.
I was WB4KTR when I moved from Miami to Fort Thomas in 1968. I didn't
meet Joe until coming back from the Air Force in 1972. He was my first
160m contact, good for about ten miles. :-)

I found the Early Cincinnati Radio at a used book store in downtown
Cincy in '73 or so. I have two other books by Joe which he inscribed to
me. One is called "Cincinnati's Powel Crosley". The other is entitled
"Early Norwood Radio"

Joe was a bit eccentric but he certainly knew his stuff about broadcast
radio. He was engineer at many of those Cincinnati area stations and
worked, at one time or another, for many of the electronic/radio
manufacturers in the area as well.

I, too, was an NKARC member until I moved across the river in 1977.

73,

Dave K8MN

965. Re:ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 04:06:48 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AF38F8B19AF6nonenowhere@61.9.191.5>
Source record: 23639

"Harry H" <harryharms@hotmail.com> wrote in news:KHemk.25894$IK1.21166
@news-server.bigpond.net.au:

> I am wondering is anyone has a copy of an article on a multiband mobile
> helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.
>
>
> I do have a copy but the majority of it is intelligible.

That shouldn't be a problem, it is not as if it was illegible!

Owen

966. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 04:13:38 UTC
From: News Features <news_features@newsfeatures.net>
Message-ID: <IDumk.35103$ZE5.11281@nlpi061.nbdc.sbc.com>
Source record: 23640

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:Pbtmk.5313$XT1.4136@bignews5.bellsouth.net...
> --I expect the ballast is the critical component - some are magnetic, some
> are electronic - its probably the culprit
>
Hello, Hal.

I suspected the electronic ballast in the "bad" light myself. They both use electronic ballasts. Perhaps it's an unfiltered ballast in the "bad" light or something like that. They both are supposedly made in the USofA so I can't blame it on the Chinese tendency to eliminate unnecessary items like filter capacitors to save 18 cents of the cost.

I hope you're wrong about the two lights switching places; somehow, I can't imagine the "bad" light gradually becoming RFI-quiet over time... by what mechanism could that happen?

I am judging the lights as they are... one is noisy, the other is quiet. It is somewhat amazing that we are trying to make excuses for this situation rather than accept that some lights are noisy and some are quiet! :^)

967. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 04:23:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <W82dnb5zXJFQ5QfVnZ2dnUVZ_gednZ2d@posted.easystreetonline>
Source record: 23641

Sal M. Onella wrote:
> . . .
> What's the record for max BCB power?

Dunno, but some of the SW BC stations sure are impressive. I had the opportunity to see the Deutsche Welle facility at Wertachtal, Germany a couple of years ago. It has, I believe, 12 ea. 500 kW transmitters, and the antenna consists of several miles of curtain array with reflector grids on both sides for reversibility, arranged in a pattern of three long radials from a central building. It can also be electronically steered to some degree. Modulation could be heard at about a half mile from the antenna, apparently from vibration of some of the antenna feed components. That facility leases time to many other international broadcasters.

Roy Lewallen, W7EL

968. Re: Re:ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 04:25:00 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <wOumk.26112$IK1.5857@news-server.bigpond.net.au>
Source record: 23642

Smart one!

Some of the text is impossible to read, happy now?
HH

"Owen Duffy" <none@no.where> wrote in message
news:Xns9AF38F8B19AF6nonenowhere@61.9.191.5...
> "Harry H" <harryharms@hotmail.com> wrote in news:KHemk.25894$IK1.21166
> @news-server.bigpond.net.au:
>
>> I am wondering is anyone has a copy of an article on a multiband mobile
>> helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.
>>
>>
>> I do have a copy but the majority of it is intelligible.
>
> That shouldn't be a problem, it is not as if it was illegible!
>
> Owen
>
>

969. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 06:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1218089100@panix.com>
Source record: 23643
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

970. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 06:05:12 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Egwmk.13125$KZ.11502@newsfe03.iad>
Source record: 23644

"News Features" <news_features@newsfeatures.net> wrote in message
news:lDumk.35103
>
> I hope you're wrong about the two lights switching places; somehow, I
can't
> imagine the "bad" light gradually becoming RFI-quiet over time... by what
> mechanism could that happen?

I can think of one, but it's obscure and unlikely. Some electrolytic
capacitors must be "formed" by application of voltage to develop their
rated characteristics. (However, it's applied DC that usually does such
forming, and I think all production flourescent lamps run exclusively on
AC.) If an unformed cap were installed as a filter and if it were later
formed by applied voltage, that is the mechanism that occurs to me.

Contradictions welcome.

971. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 08:18:02 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <q9ymk.6763$De7.5864@bignews7.bellsouth.net>
Source record: 23645

"HarryHydro" <harryhydro@hotmail.com> wrote in message
news:82d0284e-bece-4572-9860-0ee36a42b80d@z72g2000hsb.googlegroups.com...
> Hi Folks:
> We've been having intermittent problems with 'interference' on
> 6.8 gig Alcatel radios and 5.8 gig (freeband) Proxim radios. I just
> came into the radio shack, turned on the 'widow maker', a big heavy
> spectrum analyzer, and instead of finding 5.8GHz internerence, I
> found VERY strong pulses of RF around 4.9GHz. With my Blackberry about
> 5 feet away, the analyzer is showing a -10dbW (yes, 100mW) on a 2.4
> gig antenna. It must be saturating the front ends. This Blackberry
> comes through speakers with the preamps, and even televisions a good
> 10 feet away! It makes the computer monitor's screen shake almost
> like the degauss! (when placed close). And, I suspect it does this
> with it next to my head also, straight out the front and back of the
> phone.
> I was just looking at 4.9gig info and it seems to be allocated to
> public safety. Is it also WiFi? The WiFi on this phone is off, at
> least in the 'Connections', but that doesn't suprise me as laptops
> seem to transmit on WiFi while connected to LAN. (Laptops' WiFi
> knocks off the Proxim's, also)
> Anyone ever scoped out the RF power from a Blackberry? Can this be
> safe power levels?
> Harry

No power level is "safe". Safe enough is another matter and is subject to
one's beliefs. There is very little science behind the establishment of safe
levels.

Ed, NM2K

972. Re: Can I manually adjust my gain?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 09:32:07 UTC
From: Krys <krysalyss@yahoo.com>
Message-ID: <53dd0cef-cb3d-4ff3-b02e-edd4732c4639@p10g2000prf.googlegroups.com>
Source record: 23646

It turns out that I have too many transmitters in a small area so the frequencies are getting on top of each other. I can use half at any one time. At the moment I have 6 running and am adding them one by one to see how far I get before I start losing them. Hopefully I won't have to change the frequencies on too many. Fingers crossed :)

973. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 14:43:48 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <DSDmk.16515$xZ.2980@nlpi070.nbdc.sbc.com>
Source record: 23647

Sal M. Onella wrote:
> In the late 1950's White's Radio Log reported XEX (Mexico City) had a
> megawatt of power for a while -- several years, perhaps.

In 1953, XERF at 250 KW in Villa Acuna was the strongest
station on the dial in East Texas. Their studios were across
the Rio Grande River in Del Rio, TX. For some reason, I
remember the White Rose Petroleum Jelly commercials.
--
73, Cecil http://www.w5dxp.com

974. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 15:35:30 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g7f4o2$1h6c$2@f04n12.cac.psu.edu>
Source record: 23648

Ed Cregger wrote:
> "HarryHydro" <harryhydro@hotmail.com> wrote in message
> news:82d0284e-bece-4572-9860-0ee36a42b80d@z72g2000hsb.googlegroups.com...
>> Hi Folks:
>> We've been having intermittent problems with 'interference' on
>> 6.8 gig Alcatel radios and 5.8 gig (freeband) Proxim radios. I just
>> came into the radio shack, turned on the 'widow maker', a big heavy
>> spectrum analyzer, and instead of finding 5.8GHz internerence, I
>> found VERY strong pulses of RF around 4.9GHz. With my Blackberry about
>> 5 feet away, the analyzer is showing a -10dbW (yes, 100mW) on a 2.4
>> gig antenna. It must be saturating the front ends. This Blackberry
>> comes through speakers with the preamps, and even televisions a good
>> 10 feet away! It makes the computer monitor's screen shake almost
>> like the degauss! (when placed close). And, I suspect it does this
>> with it next to my head also, straight out the front and back of the
>> phone.
>> I was just looking at 4.9gig info and it seems to be allocated to
>> public safety. Is it also WiFi? The WiFi on this phone is off, at
>> least in the 'Connections', but that doesn't suprise me as laptops
>> seem to transmit on WiFi while connected to LAN. (Laptops' WiFi
>> knocks off the Proxim's, also)
>> Anyone ever scoped out the RF power from a Blackberry? Can this be
>> safe power levels?
>> Harry
>
> ------------
>
> No power level is "safe". Safe enough is another matter and is subject to
> one's beliefs. There is very little science behind the establishment of safe
> levels.

True enough, but for the naysayers, I always issue the challenge of
taping a wire from a 5 watt RF source to their temple.

- 73 de Mike N3LI -

975. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 16:00:30 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <2a979689-dca2-44d1-b771-6d4318220a31@d1g2000hsg.googlegroups.com>
Source record: 23649

On Aug 6, 9:23 pm, Roy Lewallen <w...@eznec.com> wrote:
> Sal M. Onella wrote:
> > . . .
> > What's the record for max BCB power?
>
> Dunno, but some of the SW BC stations sure are impressive. I had the
> opportunity to see the Deutsche Welle facility at Wertachtal, Germany a
> couple of years ago. It has, I believe, 12 ea. 500 kW transmitters, and
> the antenna consists of several miles of curtain array with reflector
> grids on both sides for reversibility, arranged in a pattern of three
> long radials from a central building. It can also be electronically
> steered to some degree. Modulation could be heard at about a half mile
> from the antenna, apparently from vibration of some of the antenna feed
> components. That facility leases time to many other international
> broadcasters.
>
> Roy Lewallen, W7EL

No wonder, then, that they can put a 0dBm signal into a decent ham
antenna on 7MHz on the US East Coast. Still, I'm always in awe of the
efficiency of propagation through the air, bouncing between the
ionosphere and the earth/oceans. On the same roughly 5000 km path
through a piece of dry air insulated minimum loss copper coax 1/3
meter diameter (a bit over a foot diameter; about 5 millidB/100feet
loss@7MHz), fed 6 megawatts at the input, you get an undetectable
signal out the other end, over 800dB loss yielding an output less than
-700dBm. [6 megawatts at 76 ohms is 21kV rms, so a line that large
should handle the voltage, but at the transmitter end, such a line
would dissipate about 60 watts per foot.]

Cheers,
Tom

976. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 16:27:07 UTC
From: "Jim, K7JEB" <k7jeb_2@yahoo.com>
Message-ID: <bnFmk.13617$LF2.9510@newsfe09.iad>
Source record: 23650

Sal M. Onella wrote:

> What's the record for max BCB power?

I don't think any of the "national" radio stations
in the Mideast run more than 1 Megawatt. Here's
some interesting stations from the Americas:

PJB3 800 kHz ND1 Daytime TRANSWORLD R 800.0 kW
ZYJ-457 800 kHz ND1 Daytime RIO DE JANEI 900.0 kW
YVTB 800 kHz ND1 Daytime MARACAIBO 5 900.0 kW
YVKY 710 kHz DA1 Daytime CARACAS 11 900.0 kW
YVKG 950 kHz DA1 Daytime CARACAS 2 400.0 kW
YVLL 670 kHz DA1 Daytime CARACAS 9 500.0 kW
ZYH-446 740 kHz ND1 Daytime SALVADOR BR 800.0 kW
ZYH-707 AM 980 kHz ND1 Nighttime BRASILIA 600.0 kW
ZYK537 AM 1040 kHz ND1 Nighttime SAO PAULO 900.0 kW
ZYJ-455 AM 1280 kHz DA1 Nighttime RIO DE JANEI 700.0 kW
HCXY1 AM 620 kHz ND1 Daytime LOJA EC 900.0 kW
HCJB1 AM 690 kHz ND1 Daytime QUITO EC 600.0 kW

Jim, K7JEB

977. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 17:52:05 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <9edm94l9je9t7cuc60mkfkijl2grgqts03@4ax.com>
Source record: 23551

On Wed, 6 Aug 2008 22:38:20 -0400, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>Interesting, but from past experience, the results may be just the opposite
>a few months later because the source of the components may change over
>time.
>The components of fluorescent fixtures consists of
>The ballast - which is usually outsourced by the fixture manufacturer.
>Ballast types vary - GE, Universal, Advance, and several other Ballast
>makers sell to fixture manufacturers.
>The sockets - usually made by Leviton or Eagle or Rodale - but there are
>others.
>The lamp (the fluorescent lamp). Usually are not provided by the fixture
>manufacturer. Made by Phillips, GE, Sylvania, etc.
>Some even have a 'starter'.
>--I expect the ballast is the critical component - some are magnetic, some
>are electronic - its probably the culprit

I'm curious, what does the ballast do? I see it referred to on light
fixtures I've installed, but I've never quite figured out what it is.

bob
k5qwg

>
>
>"News Features" <news_features@newsfeatures.net> wrote in message
>news:17bmk.18297$89.414@nlpi069.nbdc.sbc.com...
>> I'm not sure if this is the right newsgroup for this, but I wanted to get
>> this information out there to help others.
>>
>> Our electrician arrived with brand new fluorescent under-counter lights to
>> install in our new kitchen. I told him, "Hey, I already bought lights at
>> Expo! Can you simply install mine?"
>>
>> For some reason he was very reluctant to install my lights. He insisted
>> that his were just as good, if not better, than mine. I didn't have a
>> strong preference so I let him install his lights.
>>
>> When it was finally dark, my wife turned them on to get the full effect.
>> To my horror, the AM radio two rooms away was instantly and completely
>> obliterated with RFI. I ran out to the shack and confirmed noise all the
>> way up to 20 meters.
>>
>> The next day, I removed his lights and installed mine, and I was extremely

>> pleased to note not a hint of noise on any frequency, unless the receiver
>> was < 6 inches from the light.
>>
>> His lights: Bright Inch by Elite Lighting.
>>
>> Mine: SlimLite by Hera Lighting.
>> http://www.heralighting.com/hera/slimlite.html
>>
>> They cost more, but they're worth every penny.
>>
>> Regards,
>>
>> Al W6LX
>>
>>
>>
>>
>>
>>
>>
>

978. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 18:07:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7fdkm$m33$1@news.albasani.net>
Source record: 23552

http://home.howstuffworks.com/fluorescent-lamp6.htm

979. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 20:00:03 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-74BE34.11595607082008@netnews.worldnet.att.net>
Source record: 23553

In article <Pbtmk.5313$XT1.4136@bignews5.bellsouth.net>,
"Hal Rosser" <hmrosser@bellsouth.net> wrote:

> Interesting, but from past experience, the results may be just the opposite
> a few months later because the source of the components may change over
> time.
> The components of fluorescent fixtures consists of
> The ballast - which is usually outsourced by the fixture manufacturer.
> Ballast types vary - GE, Universal, Advance, and several other Ballast
> makers sell to fixture manufacturers.
> The sockets - usually made by Leviton or Eagle or Rodale - but there are
> others.
> The lamp (the fluorescent lamp). Usually are not provided by the fixture
> manufacturer. Made by Phillips, GE, Sylvania, etc.
> Some even have a 'starter'.
> --I expect the ballast is the critical component - some are magnetic, some
> are electronic - its probably the culprit

GE makes an RFI Filter that can be added to standard 4 Ft Tube Ballasts,
and that will eliminate MOST MF/HF Fixture Interference. I have been
using them in Alaska for years.

--
Bruce in alaska
add <path> after <fast> to reply

980. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 20:35:04 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g7fm9omrj1@news.jpl.nasa.gov>
Source record: 23555

Bob Miller wrote:
> On Wed, 6 Aug 2008 22:38:20 -0400, "Hal Rosser"
> <hmrosser@bellsouth.net> wrote:
>
>> Interesting, but from past experience, the results may be just the opposite
>> a few months later because the source of the components may change over
>> time.
>> The components of fluorescent fixtures consists of
>> The ballast - which is usually outsourced by the fixture manufacturer.
>> Ballast types vary - GE, Universal, Advance, and several other Ballast
>> makers sell to fixture manufacturers.
>> The sockets - usually made by Leviton or Eagle or Rodale - but there are
>> others.
>> The lamp (the fluorescent lamp). Usually are not provided by the fixture
>> manufacturer. Made by Phillips, GE, Sylvania, etc.
>> Some even have a 'starter'.
>> --I expect the ballast is the critical component - some are magnetic, some
>> are electronic - its probably the culprit
>
> I'm curious, what does the ballast do? I see it referred to on light
> fixtures I've installed, but I've never quite figured out what it is.
>

All these bulb work by passing current through an ionized gas. The
forward voltage drop across the tube goes down as current goes up (a
so-called negative resistance characteristic). If there weren't
something to limit the current, it would rise to the point of
destruction. You could use a resistor, but it's lossy. All you need is
some impedance, so an (almost lossless) inductor works fine. That is,
hook up an inductor with a reactance of 100 ohms to a 100Vac source, and
you'll get a current of 1 Amp, but no power is consumed because the
current is out of phase with the voltage.

You could also use a constant current regulator to do the same thing.
If the regulator is a variable duty cycle switcher, then the loss can be
quite low. That's what's in the electronic ballast... essentially a
constant current source.

In practice, there's some more aspects to getting a fluorescent lamp
started.. you have to ionize the gas inside, which you can do either
with a filament (gets things rolling, and once current is flowing, the
current in the gas keeps it ionized) or with a high voltage pulse (like
a flash tube).. (this is the difference between the "thermal starter"
where you see the tube glow reddish at the ends at the beginning, and
the "rapid start" types)

(This is also why fluorescent lamps are dimmer/harder to start in cold temperatures..)

Where the term "ballast" came from, I don't know.

981. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 21:00:27 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <OmJmk.5810$rD2.3445@bignews4.bellsouth.net>
Source record: 23554

No No - when I mentioned changing places - I'm talking about the brands at an arbitrary time in the future, should the same experiment be run at another time in the future - using new fixtures at the time *(not the ones you have now)* I would not expect the noisy one to fix itself, and I wouldn't expect the quiet one to become noisy out of the blue.
sorry if I was unclear.

"News Features" <news_features@newsfeatures.net> wrote in message news:lDumk.35103$ZE5.11281@nlpi061.nbdc.sbc.com...
>
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in message
> news:Pbtmk.5313$XT1.4136@bignews5.bellsouth.net...
>> --I expect the ballast is the critical component - some are magnetic,
>> some are electronic - its probably the culprit
>>
> Hello, Hal.
>
> I suspected the electronic ballast in the "bad" light myself. They both
> use electronic ballasts. Perhaps it's an unfiltered ballast in the "bad"
> light or something like that. They both are supposedly made in the USofA
> so I can't blame it on the Chinese tendency to eliminate unnecessary items
> like filter capacitors to save 18 cents of the cost.
>
> I hope you're wrong about the two lights switching places; somehow, I
> can't imagine the "bad" light gradually becoming RFI-quiet over time... by
> what mechanism could that happen?
>
> I am judging the lights as they are... one is noisy, the other is quiet.
> It is somewhat amazing that we are trying to make excuses for this
> situation rather than accept that some lights are noisy and some are
> quiet! :^)
>
>
>
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>
>
>
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>
>

982. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 21:35:50 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <wRJmk.6217$Ep1.1532@bignews2.bellsouth.net>
Source record: 23556

>
> I'm curious, what does the ballast do? I see it referred to on light
> fixtures I've installed, but I've never quite figured out what it is.
>
> bob
> k5qwg
>

The ballast serves two purposes -
it 'strikes the arc' (starts the current flow)
and it
Limits the current flow
(otherwise current would spike and destroy the fluorescent lamp)

The efficiency of a fluorescent fixture is dependent partly on the ballast -
and usually - electronic ballasts are the more efficient of the two. HPF
ballasts usually use less current than a standard ballast.
You Compare fixture efficiency by comparing the ballast specifications
assuming they use the same lamp.
The web site that John Smith posted a link to explains it pretty well.

983. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 22:26:01 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <%DKmk.4419$i15.3666@newsfe01.iad>
Source record: 23557

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:g7fm9omrj1@news.jpl.nasa.gov...

< snip

> Where the term "ballast" came from, I don't know.

Possibly from the meaning "imparting stability." A ship's or boat's ballast does that. Ballast around railroad ties does that. Ballast in a hot air balloon does that.

A ballast tube in the filament circuit of a certain radio of my acquaintance, the R-390A/URR, stabilizes the filament current for two oscillator tubes, the VFO and the BFO.

984. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 22:44:32 UTC
From: JB <nospam@goofball.net>
Message-ID: <kVKmk.524$7N1.236@trnddc06>
Source record: 23558

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:g7f4o2$1h6c$2@f04n12.cac.psu.edu...
> Ed Cregger wrote:
> > "HarryHydro" <harryhydro@hotmail.com> wrote in message
> >
news:82d0284e-bece-4572-9860-0ee36a42b80d@z72g2000hsb.googlegroups.com...
> >> Hi Folks:
> >> We've been having intermittent problems with 'interference' on
> >> 6.8 gig Alcatel radios and 5.8 gig (freeband) Proxim radios. I just
> >> came into the radio shack, turned on the 'widow maker', a big heavy
> >> spectrum analyzer, and instead of finding 5.8GHz internerence, I
> >> found VERY strong pulses of RF around 4.9GHz. With my Blackberry about
> >> 5 feet away, the analyzer is showing a -10dbW (yes, 100mW) on a 2.4
> >> gig antenna. It must be saturating the front ends. This Blackberry
> >> comes through speakers with the preamps, and even televisions a good
> >> 10 feet away! It makes the computer monitor's screen shake almost
> >> like the degauss! (when placed close). And, I suspect it does this
> >> with it next to my head also, straight out the front and back of the
> >> phone.
> >> I was just looking at 4.9gig info and it seems to be allocated to
> >> public safety. Is it also WiFi? The WiFi on this phone is off, at
> >> least in the 'Connections', but that doesn't suprise me as laptops
> >> seem to transmit on WiFi while connected to LAN. (Laptops' WiFi
> >> knocks off the Proxim's, also)
> >> Anyone ever scoped out the RF power from a Blackberry? Can this be
> >> safe power levels?
> >> Harry
> >
> > ------------
> >
> > No power level is "safe". Safe enough is another matter and is subject
to
> > one's beliefs. There is very little science behind the establishment of
safe
> > levels.
>
> True enough, but for the naysayers, I always issue the challenge of
> taping a wire from a 5 watt RF source to their temple.
>
> - 73 de Mike N3LI -

Why not go out in the sun without a hat?
Show me who has been harmed with a 5w Rf source taped to their head? (unless
they were sniffing exhaust or some other uncounted variable at the same

time)

Now stand in front of an XM terrestrial station - A bit too much I'd say,
but still can't prove it. Never gave the Blackberry sites a second thought.

985. Re: Can I manually adjust my gain?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-07 22:51:32 UTC
From: JB <nospam@goofball.net>
Message-ID: <U%Kmk.528$7N1.440@trnddc06>
Source record: 23559

"Krys" <krysalyss@yahoo.com> wrote in message
news:53dd0cef-cb3d-4ff3-b02e-edd4732c4639@p10g2000prf.googlegroups.com...
> It turns out that I have too many transmitters in a small area so the
> frequencies are getting on top of each other. I can use half at any
> one time. At the moment I have 6 running and am adding them one by one
> to see how far I get before I start losing them. Hopefully I won't
> have to change the frequencies on too many. Fingers crossed :)

If they are sending data at the same intervals some will walk on each other
every time.

986. Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 00:55:29 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <7QMmk.58$5p1.45@en-nntp-06.dc1.easynews.com>
Source record: 23560

I've taken college classes in antennas and hence have a pretty good feel for some of the mathematics behind it all, but I've found that at times I don't have good, intuitive explanations for various antenna behaviors -- and I'm not at all good at being able to look at some fancy antenna and start rattling off estimates of the directivity, front to back ratio, etc. -- so I wanted to ask a simple question on a two-element phased array:

First, start with one antenna. Feed it 1W, and assume that in some "preferred" direction at some particular location the (electric) field strength is 1mV/m.

Now, take two antennas, and space them and/or phase their feeds such that in the same preferred direction the individual antenna patterns add. I.e., we're expecting a 6dB gain over the single antenna (but only at that location). Since we start off by splitting the power to each antenna (1/2W to each), that initially seems impossible, since 1/2W+1/2W = 1W --> should imply the same 1mV/m field strength. But this is an incorrect analysis, in that powers don't add directly. Instead, the fields add... hence, each antenna alone will now produce 707uV/m (at the one particular location in question), so the two together produce 1.414mV/m which is the same as if the single antenna had been fed with 2W. Hence the 6dB gain we're after! (This analysis also implies there must be other locations that now receive <1mV/m in order to conserve energy.)

Is that correct? "Powers don't add, field strengths do" is obvious enough, but definitely leads to some slightly non-intuitvely-obvious (to me) results. By extension of the above, though, it becomes obvious that (in theory) one can build an array with any desired amount of gain, the beamwidth just has to become narrower and narrower, of course.

Thanks,
---Joel

987. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 01:13:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7g6ip$a7b$1@news.albasani.net>
Source record: 23561

News Features wrote:
>> ...
> They cost more, but they're worth every penny.
>
> Regards,
>
> Al W6LX

When the son was in his teens and our radio room was in the basement, we had fluorescents lighting that basement ...

He built filters for the two, double-40w-tubes, units. If I remember correctly, he use toroids out of old 8086-8088 IBM power supplies with--I think, a 100pf, .1 uf and 1 uf caps at the end of the "hot" ac lead right at the ballasts--to ground, and past the toroid coils. I do know he made sure the cases of the ballasts were grounded well also ...

It most all the noise from the general shortwave receivers in the room ... then we noticed the computers were generating a lot of noise ... and, we never did clear that up to our liking.

Today, my laptop generates no noise if only a couple feet away from any gear.

I do notice unacceptable noise from wifi switches/routers, and take great care where I locate them and how I route their wiring.

Regards,
JS

988. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 01:34:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <tc2dnTclNKcBPwbVnZ2dnUVZ_vqdnZ2d@posted.easystreetonline>
Source record: 23562

Joel Koltner wrote:
> I've taken college classes in antennas and hence have a pretty good feel for
> some of the mathematics behind it all, but I've found that at times I don't
> have good, intuitive explanations for various antenna behaviors -- and I'm not
> at all good at being able to look at some fancy antenna and start rattling off
> estimates of the directivity, front to back ratio, etc. -- so I wanted to ask
> a simple question on a two-element phased array:
>
> First, start with one antenna. Feed it 1W, and assume that in some
> "preferred" direction at some particular location the (electric) field
> strength is 1mV/m.
>
> Now, take two antennas, and space them and/or phase their feeds such that in
> the same preferred direction the individual antenna patterns add. I.e., we're
> expecting a 6dB gain over the single antenna (but only at that location).
> Since we start off by splitting the power to each antenna (1/2W to each), that
> initially seems impossible, since 1/2W+1/2W = 1W --> should imply the same
> 1mV/m field strength. But this is an incorrect analysis, in that powers don't
> add directly. Instead, the fields add... hence, each antenna alone will now
> produce 707uV/m (at the one particular location in question), so the two
> together produce 1.414mV/m which is the same as if the single antenna had been
> fed with 2W. Hence the 6dB gain we're after! (This analysis also implies
> there must be other locations that now receive <1mV/m in order to conserve
> energy.)
>
> Is that correct? "Powers don't add, field strengths do" is obvious enough,
> but definitely leads to some slightly non-intuitvely-obvious (to me) results.
> By extension of the above, though, it becomes obvious that (in theory) one can
> build an array with any desired amount of gain, the beamwidth just has to
> become narrower and narrower, of course.

There are two errors in your analysis. The first is that you've neglected mutual coupling between the elements. In some special cases, this will result in equal feedpoint impedances, so that equal powers will result in equal currents, which in turn result in equal field strengths. But that happens only in special cases and not by any means all cases. In the general case, splitting the power equally between elements won't result in equal fields from them.

Moving on, let's assume that you've got a special case where the equal power split results in equal field strength. Your analysis is then correct up until you calculate the dB gain. Your correct value of 1.414 mV/m is correct, but it represents a 3, not 6, dB gain relative to a single element (which produced 1 mV/m). In the absence of mutual coupling, and if the elements are spaced and phased such that there's

some direction in which the fields can completely reinforce, then the maximum pattern gain relative to a single element is 10 * log(N) where N is the number of elements, e.g., 3 dB for two elements, 6 dB for four elements, etc.

For a much more detailed explanation of these phenomena, I recommend reading the treatment of phased arrays in Chapter 8 of the _ARRL Antenna Book_. I'm admittedly a bit partial to this particular treatment, since I wrote it.

Roy Lewallen, W7EL

989. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 11:21:19 UTC
From: Dave <noone@nowhere.com>
Message-ID: <P_Vmk.546$xv.501@trnddc02>
Source record: 23563

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
news:7QMmk.58$5p1.45@en-nntp-06.dc1.easynews.com...
> I've taken college classes in antennas and hence have a pretty good feel
> for some of the mathematics behind it all, but I've found that at times I
> don't have good, intuitive explanations for various antenna behaviors --
> and I'm not at all good at being able to look at some fancy antenna and
> start rattling off estimates of the directivity, front to back ratio,
> etc. -- so I wanted to ask a simple question on a two-element phased
> array:
>
> First, start with one antenna. Feed it 1W, and assume that in some
> "preferred" direction at some particular location the (electric) field
> strength is 1mV/m.
>
> Now, take two antennas, and space them and/or phase their feeds such that
> in the same preferred direction the individual antenna patterns add.
> I.e., we're expecting a 6dB gain over the single antenna (but only at that
> location). Since we start off by splitting the power to each antenna (1/2W
> to each), that initially seems impossible, since 1/2W+1/2W = 1W --> should
> imply the same 1mV/m field strength. But this is an incorrect analysis,
> in that powers don't add directly. Instead, the fields add... hence, each
> antenna alone will now produce 707uV/m (at the one particular location in
> question), so the two together produce 1.414mV/m which is the same as if
> the single antenna had been fed with 2W. Hence the 6dB gain we're after!
> (This analysis also implies there must be other locations that now receive
> <1mV/m in order to conserve energy.)
>
> Is that correct? "Powers don't add, field strengths do" is obvious
> enough, but definitely leads to some slightly non-intuitvely-obvious (to
> me) results. By extension of the above, though, it becomes obvious that
> (in theory) one can build an array with any desired amount of gain, the
> beamwidth just has to become narrower and narrower, of course.
>
> Thanks,
> ---Joel
>
>

yes, all true. and that is where many of the arguments on here begin,
trying to add powers instead of fields, voltages, or currents. and yes,
theoretically you can keep making the beamwidth narrower and get more and
more gain, that is one reason lasers are so intense with such low power,
they have extremely narrow beamwidths.

990. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 14:16:22 UTC
From: ltdoc@yahoo.com
Message-ID: <d7c831e1-2408-48e3-b100-78320a668625@x41g2000hsb.googlegroups.com>
Source record: 23564

It's also 'true' that to get more gain in one direction you
typically have less gain in some other direction. You can't get
something for nothing, so you are only redirecting what you've already
got, so to speak (how directional antennas work).
- 'Doc

991. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 14:30:35 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <jMYmk.32849$co7.14819@nlpi066.nbdc.sbc.com>
Source record: 23565

Joel Koltner wrote:
> "Powers don't add, field strengths do"

"Add" is a rather loosely defined term. A more technically precise statement would be: "Powers don't superpose, field strengths do." When fields superpose, they still must obey the conservation of energy principle, i.e. the total energy before the superposition must equal the total energy after the superposition.

Given two RF waves in a transmission line and the phase angle, A, between the two electric fields, the following Power equation, published in QEX, gives us a valid method of "adding" two powers.

Ptotal = P1 + P2 + 2*SQRT(P1*P2)*cos(A)

Reference: "Wave Mechanics of Transmission Lines, Part 3", by Steven R. Best, VE9SRB, "QEX", Nov/Dec 2001, (Eq 13), page 4.

The last term is known in optics as the "interference" term, positive for constructive interference and negative for destructive interference. Angle A, the phase angle between the two electric fields, determines the sign of the last term and thus whether interference is destructive or constructive.

Reference: "Optics", by Hecht, 4th Edition:
Chapter 7: The Superposition of Waves
Chapter 9: Interference
--
73, Cecil http://www.w5dxp.com

992. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 14:57:11 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <4bno94t30tirg928eorp9knes77ncsqstf@4ax.com>
Source record: 23566

On Thu, 7 Aug 2008 17:55:29 -0700, "Joel Koltner"
<zapwireDASHgroups@yahoo.com> wrote:

>I've taken college classes in antennas and hence have a pretty good feel for
>some of the mathematics behind it all, but I've found that at times I don't
>have good, intuitive explanations for various antenna behaviors -- and I'm not
>at all good at being able to look at some fancy antenna and start rattling off
>estimates of the directivity, front to back ratio, etc. -- so I wanted to ask
>a simple question on a two-element phased array:
>
>First, start with one antenna. Feed it 1W, and assume that in some
>"preferred" direction at some particular location the (electric) field
>strength is 1mV/m.
>
>Now, take two antennas, and space them and/or phase their feeds such that in
>the same preferred direction the individual antenna patterns add. I.e., we're
>expecting a 6dB gain over the single antenna (but only at that location).
>Since we start off by splitting the power to each antenna (1/2W to each), that
>initially seems impossible, since 1/2W+1/2W = 1W --> should imply the same
>1mV/m field strength. But this is an incorrect analysis, in that powers don't
>add directly. Instead, the fields add... hence, each antenna alone will now
>produce 707uV/m (at the one particular location in question), so the two
>together produce 1.414mV/m which is the same as if the single antenna had been
>fed with 2W. Hence the 6dB gain we're after! (This analysis also implies
>there must be other locations that now receive <1mV/m in order to conserve
>energy.)
>
>Is that correct? "Powers don't add, field strengths do" is obvious enough,
>but definitely leads to some slightly non-intuitvely-obvious (to me) results.
>By extension of the above, though, it becomes obvious that (in theory) one can
>build an array with any desired amount of gain, the beamwidth just has to
>become narrower and narrower, of course.
>
>Thanks,
>---Joel
>
What Roy did not tell you is that his program has a free demo version
(http://eznec.com/) that will will provide quick answers. The learning
curve for EZNEC is pretty sharp for about 10 minutes and then it
shallows out.

John Ferrell W8CCW

993. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 15:00:22 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g7hn27$1662$1@f04n12.cac.psu.edu>
Source record: 23567

```
JB wrote:
> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:g7f4o2$1h6c$2@f04n12.cac.psu.edu...
>> Ed Cregger wrote:
>>> "HarryHydro" <harryhydro@hotmail.com> wrote in message
>>>
> news:82d0284e-bece-4572-9860-0ee36a42b80d@z72g2000hsb.googlegroups.com...
>>>> Hi Folks:
>>>> We've been having intermittent problems with 'interference' on
>>>> 6.8 gig Alcatel radios and 5.8 gig (freeband) Proxim radios. I just
>>>> came into the radio shack, turned on the 'widow maker', a big heavy
>>>> spectrum analyzer, and instead of finding 5.8GHz internerence, I
>>>> found VERY strong pulses of RF around 4.9GHz. With my Blackberry about
>>>> 5 feet away, the analyzer is showing a -10dbW (yes, 100mW) on a 2.4
>>>> gig antenna. It must be saturating the front ends. This Blackberry
>>>> comes through speakers with the preamps, and even televisions a good
>>>> 10 feet away! It makes the computer monitor's screen shake almost
>>>> like the degauss! (when placed close). And, I suspect it does this
>>>> with it next to my head also, straight out the front and back of the
>>>> phone.
>>>> I was just looking at 4.9gig info and it seems to be allocated to
>>>> public safety. Is it also WiFi? The WiFi on this phone is off, at
>>>> least in the 'Connections', but that doesn't suprise me as laptops
>>>> seem to transmit on WiFi while connected to LAN. (Laptops' WiFi
>>>> knocks off the Proxim's, also)
>>>> Anyone ever scoped out the RF power from a Blackberry? Can this be
>>>> safe power levels?
>>>> Harry
>>> ------------
>>>
>>> No power level is "safe". Safe enough is another matter and is subject
> to
>>> one's beliefs. There is very little science behind the establishment of
> safe
>>> levels.
>> True enough, but for the naysayers, I always issue the challenge of
>> taping a wire from a 5 watt RF source to their temple.
>>
>> - 73 de Mike N3LI -
>
> Why not go out in the sun without a hat?
> Show me who has been harmed with a 5w Rf source taped to their head? (unless
> they were sniffing exhaust or some other uncounted variable at the same
> time)
```

Nope, that isn't the question. I neither confirm nor deny that long term exposure to FR at frequencies near those used in microwave ovens is harmful. Heck near field exposure may even be beneficial. I'm not saying one way or the other.

The great irony is that people buy their children cell phones, and the kids spend every free minute with them pressed to their head, but if we were to run an experiment that exposed the kids to RF in an exact analog of what they are doing anyhow, they would go nuts - as well they should! Would you?

I'm looking for those who think it isn't dangerous to have the courage of their convictions.

Haven't found any yet. They actually might be on to something, they just don't know it.

- 73 de Mike N3LI -

994. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 16:17:40 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <lk_mk.30$3I2.12@en-nntp-02.dc1.easynews.com>
Source record: 23568

Hi Roy,

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:tc2dnTclNKcBPwbVnZ2dnUVZ_vqdnZ2d@posted.easystreetonline...
> There are two errors in your analysis. The first is that you've neglected
> mutual coupling between the elements.

Yes, I assumed it was negligible. When we analyzed arrays in class some years ago, the starting point was always, "assume each antenna has the pattern of a single dipole in isolation, is matched to the transmission lines, with input current 1A @ angle <whatever>." We did analyze the patterns for a couple of local Oregon TV & radio stations, BTW, including whichever radio? station it is up in Portland (very roughly) near you off of I-205 as you drive past Oregon City.

> But that happens only in special cases and not by any means all cases.

The phased arrays I had in mind were those that were usually separated by a "significant" fraction of a wavelength, e.g., lambda/8 or more. That's probably not far enough apart to neglect coupling?

> Your correct value of 1.414 mV/m is correct, but it represents a 3, not 6,
> dB gain relative to a single element (which produced 1 mV/m).

6dB vs. 3dB is a rather embarassing outright brain fart on my part. :-) (The usual case of confusing "twice the power = 3dB" with "twice the voltage = 6dB").

> For a much more detailed explanation of these phenomena, I recommend reading
> the treatment of phased arrays in Chapter 8 of the _ARRL Antenna Book_. I'm
> admittedly a bit partial to this particular treatment, since I wrote it.

Thanks Roy, I'll take a look!

---Joel

995. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 16:24:43 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <jr_mk.2344$4p1.162@en-nntp-09.dc1.easynews.com>
Source record: 23569

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:jMYmk.32849$co7.14819@nlpi066.nbdc.sbc.com...
> Ptotal = P1 + P2 + 2*SQRT(P1*P2)*cos(A)

So... let's see... my two 1/2W antennas now, in the "preferred" location, get you... 0.5+0.5+2*sqrt(0.5*0.5)*cos(0) = 2W... yep, same as the field strength analysis. Cool!

Presumably you could demonstrate all this with a "ripple tank" (the kind with water used back in high school physics) -- set things up so that, in a preferred direction, the wave height is 1.414 even though the wave height made by each "radiator" in isolation is 0.707.

Thanks Cecil,
---Joel

996. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 17:14:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gdso94t174l5tb6cavglh5qm2bp7boc55v@4ax.com>
Source record: 23570

On Fri, 08 Aug 2008 11:00:22 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>I'm looking for those who think it isn't dangerous to have the courage
>of their convictions.

Hi Mike,

Unfortunately, by your conjecture
>> I always issue the challenge of
>>taping a wire from a 5 watt RF source to their temple.
this implies a co-equivalent risk where neither activity have any data
to support that a risk exists. Merely having a fear does not create
that missing data or Saddam's WMD would have been on display in the
white house rose garden.

>Haven't found any yet. They actually might be on to something, they just
>don't know it.

They actually might be grossly ignorant is more appropriate. The
positive spin is that with great fortune in luck, desire, or hope that
they (there is nothing "actual" involved) might (the illusions of a
gambler betting against the house) be on to something (a fog of
correlation masquerading as causation).

Those with the courage of conviction have more self-assurance than to
drop their lives to join any contest in a flood of whim. What your
challenge would reveal is quite the opposite: those who lack
faculties, are insecure, and hopelessly embrace the latest
superstition. Some swing their banners here without needing an
inviting challenge.

Let's simply return to:
>>>With my Blackberry about
>>>5 feet away, the analyzer is showing a -10dbW (yes, 100mW) on a 2.4
>>>gig antenna.
and examine this from first principles.

5 feet away from an uncalibrated antenna (the emission is at twice the
"2.4 gig antenna" whatever that means) is also 15 wavelengths away
(probably more, but 15 is certainly instructive). Is this a gain
antenna? That would remove some of the hot-house steam from this
orchid's appeal. The breathless "yes, 100mW" is the dazzle of looking
at the sun through binoculars.

However, let's put the issue of gain aside and accept this valuation,
along with the only known facts - that same 15 wavelength separation.

A simple model performed using a free version of EZNEC, employing a clear path, no disturbing environment (like a skull), and perfect, lossless matching of source and load gives a path loss of 45dB. That report of "yes, 100mW" requires the Blackberry to source something closer to 5KW.

It is more likely that -10dbW was "actually" -10dBm; and I am tempting credulity to even allow that.

73's
Richard Clark, KB7QHC

997. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 18:04:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <O5ydnXOTZuABFwHVnZ2dnUVZ_sDinZ2d@posted.easystreetonline>
Source record: 23571

Joel Koltner wrote:
> Hi Roy,
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:tc2dnTclNKcBPwbVnZ2dnUVZ_vqdnZ2d@posted.easystreetonline...
>> There are two errors in your analysis. The first is that you've neglected
>> mutual coupling between the elements.
>
> Yes, I assumed it was negligible. When we analyzed arrays in class some years
> ago, the starting point was always, "assume each antenna has the pattern of a
> single dipole in isolation, is matched to the transmission lines, with input
> current 1A @ angle <whatever>." We did analyze the patterns for a couple of
> local Oregon TV & radio stations, BTW, including whichever radio? station it
> is up in Portland (very roughly) near you off of I-205 as you drive past
> Oregon City.
>
>> But that happens only in special cases and not by any means all cases.
>
> The phased arrays I had in mind were those that were usually separated by a
> "significant" fraction of a wavelength, e.g., lambda/8 or more. That's
> probably not far enough apart to neglect coupling?

Not by a long shot! Here's a simple example from the EZNEC demo program, using example file Cardioid.EZ. It's a two element array of quarter wavelength vertical elements spaced a quarter wavelength apart and fed with equal currents in quadrature to produce a cardioid pattern. The impedance of a single isolated element is 36.7 + j1.2 ohms. In the array, the impedances are 21.0 - j18.7 and 51.6 + j20.9 ohms, and the elements require 29 and 71 percent of the applied power respectively in order to produce equal fields. The deviation is due to mutual coupling. This particular array is a special case of another kind -- there is no net effect of the mutual coupling on the array gain, so it has 3.0 dB gain over a single element. This isn't true in the general case, however.

Neglecting the mutual coupling is convenient for the professors because it simplifies the problem and allows them to illustrate the simple addition of fields. The problem is that it leads some students to think they have the whole story.

In very large arrays such as those used for radar, the vast majority of elements are in essentially the same environment relative to each other so the mutual coupling has the same effect on all except the outer few elements. But it simply can't be ignored in arrays of a few elements.

>> Your correct value of 1.414 mV/m is correct, but it represents a 3, not 6,
>> dB gain relative to a single element (which produced 1 mV/m).
>
> 6dB vs. 3dB is a rather embarassing outright brain fart on my part. :-) (The
> usual case of confusing "twice the power = 3dB" with "twice the voltage =
> 6dB").
>
>> For a much more detailed explanation of these phenomena, I recommend reading
>> the treatment of phased arrays in Chapter 8 of the _ARRL Antenna Book_. I'm
>> admittedly a bit partial to this particular treatment, since I wrote it.
>
> Thanks Roy, I'll take a look!

Another source which has a good discussion of the topic is Johnson's _Antenna Engineering Handbook_, or earlier editions edited by Jasik. Be wary of amateur and hobbyist publications (other than the _ARRL Antenna Book_ -- very few authors understand the topic, and pass along their misconceptions.

Roy Lewallen, W7EL

998. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 19:51:02 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <Js1nk.2348$4p1.1426@en-nntp-09.dc1.easynews.com>
Source record: 23572

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:O5ydnXOTZuABFwHVnZ2dnUVZ_sDinZ2d@posted.easystreetonline...
> Not by a long shot! Here's a simple example from the EZNEC demo program,
> using example file Cardioid.EZ. It's a two element array of quarter
> wavelength vertical elements spaced a quarter wavelength apart and fed with
> equal currents in quadrature to produce a cardioid pattern. The impedance of
> a single isolated element is 36.7 + j1.2 ohms. In the array, the impedances
> are 21.0 - j18.7 and 51.6 + j20.9 ohms, and the elements require 29 and 71
> percent of the applied power respectively in order to produce equal fields.
> The deviation is due to mutual coupling.

That's a much, much greater difference than I would have guessed. Wow...

Isn't the input impedance of one element affected not only by the relative position of the other element, but also how it's driven? I.e., element #1 "sees" element #2 and couples to it, but how much coupling occurs depends on whether the input of element #2 is coming from a 50 ohm generator vs. a 1 ohm power amplifier (close to a voltage source), etc.? (Essentially viewing the antennas as loosely coupled transformers, where the transformer terminations get reflected back to the "primary.")

Thanks for the book links. Do you happen to have a copy of "Small Antenna Design" by Douglas Miron? And have an opinion about it? Or some other book on electrically small antennas? (Not phased arrays, though :-) -- more like octave bandwidth VHF or UHF antennas that are typically 1/10-1/40 lambda in physical size.)

---Joel

999. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 20:13:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <S66dnXjBAaZJNQHVnZ2dnUVZ_rHinZ2d@posted.easystreetonline>
Source record: 23573

Joel Koltner wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:O5ydnXOTZuABFwHVnZ2dnUVZ_sDinZ2d@posted.easystreetonline...
>> Not by a long shot! Here's a simple example from the EZNEC demo program,
>> using example file Cardioid.EZ. It's a two element array of quarter
>> wavelength vertical elements spaced a quarter wavelength apart and fed with
>> equal currents in quadrature to produce a cardioid pattern. The impedance of
>> a single isolated element is 36.7 + j1.2 ohms. In the array, the impedances
>> are 21.0 - j18.7 and 51.6 + j20.9 ohms, and the elements require 29 and 71
>> percent of the applied power respectively in order to produce equal fields.
>> The deviation is due to mutual coupling.
>
> That's a much, much greater difference than I would have guessed. Wow...
>
> Isn't the input impedance of one element affected not only by the relative
> position of the other element, but also how it's driven? I.e., element #1
> "sees" element #2 and couples to it, but how much coupling occurs depends on
> whether the input of element #2 is coming from a 50 ohm generator vs. a 1 ohm
> power amplifier (close to a voltage source), etc.? (Essentially viewing the
> antennas as loosely coupled transformers, where the transformer terminations
> get reflected back to the "primary.")

Not directly. What counts (considering the simple case of two elements)
is the magnitude and phase of the current in the other element, and
their spacing, orientation, and lengths. A good way to look at the
effect of mutual coupling is as "mutual impedance", i.e., the amount of
impedance change caused by mutual coupling. (Johnson/Jasik covers this
concept well.) If you were to feed two elements with constant current
sources (as in the Cardioid.EZ EZNEC example), mutual coupling doesn't
change the element currents, but only the feedpoint impedances. With any
other kind of feed system, the impedance change causes the currents to
change, which in turn affects the impedances. So the feed method
certainly does have an effect on the currents you get, which affects
both mutual coupling and pattern.

There's a lot more about this, and how to design feed systems which will
effect the desired currents, in the _ARRL Antenna Book_.

> Thanks for the book links. Do you happen to have a copy of "Small Antenna
> Design" by Douglas Miron? And have an opinion about it? Or some other book
> on electrically small antennas? (Not phased arrays, though :-) -- more like
> octave bandwidth VHF or UHF antennas that are typically 1/10-1/40 lambda in
> physical size.)

I just recently purchased Miron's book but haven't yet looked at it in any depth. It appears to be most interesting to anyone wanting a better understanding of method of moments numerical methods. If you can read German, you might be interested in _Kurze Antennen_ by Gerd Janzen. But your search for small, broadband antennas puts you bump-up against the principle "small - broadband - efficient, choose any two". They'll be inefficient, which will hurt you both receiving and transmitting at VHF and above. The book I'd go to for researching the possibilities would be Lo & Lee's _Antenna Handbook_. You might also get some ideas from Bailey, _TV and Other Receiving Antennas_, since TV antennas have to be pretty broadband.

Roy Lewallen, W7EL

1000. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 21:35:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7ie67$a4g$2@news.albasani.net>
Source record: 23574

Richard Clark wrote:

>> ...
> Unfortunately, by your conjecture
>>> I always issue the challenge of
>>> taping a wire from a 5 watt RF source to their temple.
> this implies a co-equivalent risk where neither activity have any data
> to support that a risk exists. Merely having a fear does not create
> that missing data or Saddam's WMD would have been on display in the
> white house rose garden.
> ...

Funny, didn't someone just mention how it was known tobacco was harmful to us--long before there was "proper proof."

This argument would hold much more water if microwave freqs from .9Ghz to 20+ Ghz were not so efficient at heating/affecting water and other polarized molecules. Now, didn't I read, somewhere, that the brain is mainly composed of "fat"--fat IS a polarized molecule, and the brain does contain water ...

I think most prudent men would be leery of holding a device emitting freqs capable of cooking food next to their brain ...

Ever heard of bluetooth?

Regards,
JS

1001. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 21:57:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t5gp94huqcuue847ihuieg5g9ep5di6ahi@4ax.com>
Source record: 23575

On Fri, 08 Aug 2008 14:35:10 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>I think

I'm not convinced. All I see is banner waving.

If you did think, you would be more worried about a 5KW cellphone in
your pocket than a blue LED in your ear.

73's
Richard Clark, KB7QHC

1002. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 22:59:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7ij57$23e$1@news.albasani.net>
Source record: 23576

Richard Clark wrote:
> On Fri, 08 Aug 2008 14:35:10 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> I think
>
> I'm not convinced. All I see is banner waving.
>
> If you did think, you would be more worried about a 5KW cellphone in
> your pocket than a blue LED in your ear.
>
> 73's
> Richard Clark, KB7QHC

Cryptic, but if reference is made to 30Mhz and below (however, John Kanzius DOES burn sea water with ~13.56Mhz--and, our blood DOES contain, roughly, the same concentration of salt as sea water) ... not much worry here; But then, for decades men have been exposed to TREMENDOUS fields of these freqs--indeed, hang a turkey on a 5kw antenna, you'll eat a cold dinner.

On power, my bluetooth is lucky to reach 30ft. I am amazed at how far my cell phone reaches out to contact a tower ... I do get dropouts (queued packets are dropped because they have timed out of their "place in line", loss-of-signal and garble-ing in the valleys in the foothills and behind hills/mountains.

An ear-set/mic would be the best, however, I always tear the cord loose ...

The phone is always on the console in the car ... when I am home/office, it forwards calls to the internet phone.

I never claimed I could limit my risks to an absolute zero ... only that prudent men would worry about this subject--perhaps even enough to take precautions, which they are capable of.

In summary, if I wish to heat a chicken leg, a burner on the stove is best (or microwave <grin>.) However, I DO believe I could accomplish the same thing with my cigarette lighter, it would just take longer.

Regards,
JS

1003. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 23:39:47 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <i9mp9416uuoirblp3lngvufltv6381oj3t@4ax.com>
Source record: 23577

On Sat, 02 Aug 2008 17:18:52 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>John Smith wrote:
>> JosephKK wrote:
>>
>>> ...
>>> 95% plus of the transmitter or received energy is safely contained
>>> between center conductor and shield. That is how the physics works
>>> out. All of the feed line center conductor current is pretty well
>>> matched by the same current in the shield. It is the closely coupled
>>> concentric magnetic fields that make coax work so well.
>>>
>>
>> Or, simply put, for ever action, an equal and opposite reaction occurs
>> ... yes, basic physics ... however, what is in question--since the other
>> braid has and "inside" and an "outside", where does that equal opposite
>> reaction occur ...
>>
>> Regard,
>> JS
>
>
>Gawd, I am getting hasty in my old age ...
>
>No electrical field can occur without a magnet field, no magnetic field
>can occur with out a corresponding electrical component, again, basic
>physics; you are attempting to say the magnetic component of the
>current on the outside of the braid is NOT SEEN by the center conductor
>... that may be in error ... but, I would be willing to listen how
>tinned copper (the braid) is some sort of shield to magnetic fields ...
>
>Regards,
>JS

Faraday cage.

1004. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 23:47:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7ilto$5tr$1@news.albasani.net>
Source record: 23578

JosephKK wrote:

> ...
> Faraday cage.
>

Form a wire loop inside a Faraday Cage; Wave a strong neodymium magnet
about, outside the cage; You WILL get a reading ...

http://en.wikipedia.org/wiki/Faraday_cage

... but, for electrostatic fields, they are dynamic.

Regards,
JS

1005. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 23:48:17 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <9dbc082e-24dc-4859-a341-f11f68febc99@79g2000hsk.googlegroups.com>
Source record: 23579

On Aug 6, 2:01 am, "News Features" <news_featu...@newsfeatures.net>
wrote:
> I'm not sure if this is the right newsgroup for this, but I wanted to get
> this information out there to help others.
>
> Our electrician arrived with brand new fluorescent under-counter lights to
> install in our new kitchen. I told him, "Hey, I already bought lights at
> Expo! Can you simply install mine?"
>
> For some reason he was very reluctant to install my lights. He insisted that
> his were just as good, if not better, than mine. I didn't have a strong
> preference so I let him install his lights.
>
> When it was finally dark, my wife turned them on to get the full effect. To
> my horror, the AM radio two rooms away was instantly and completely
> obliterated with RFI. I ran out to the shack and confirmed noise all the way
> up to 20 meters.
>
> The next day, I removed his lights and installed mine, and I was extremely
> pleased to note not a hint of noise on any frequency, unless the receiver
> was < 6 inches from the light.
>
> His lights: Bright Inch by Elite Lighting.
>
> Mine: SlimLite by Hera Lighting.http://www.heralighting.com/hera/slimlite.html
>
> They cost more, but they're worth every penny.
>
> Regards,
>
> Al W6LX

I had a similar problem but it was with just one light out of several.
I returned it for a new one of the same brand. Could it have been that
only one of the new lights was causing the problem. I have also had a
couple of the compact flourescent light bulb replacements cause
problems. They become noisy but still function.

Jimmie

1006. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 23:50:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <21mp94ltpaq4q8ailc2k0ffi3qchamigmn@4ax.com>
Source record: 23580

On Fri, 08 Aug 2008 15:59:58 -0700, John Smith
<assemblywizard@gmail.com> wrote:
>I never claimed
What you haven't claimed could fill that popular page-turner, the
Congressional Record.

73's
Richard Clark, KB7QHC

1007. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-08 23:57:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7imhf$668$1@news.albasani.net>
Source record: 23581

Richard Clark wrote:
> On Fri, 08 Aug 2008 15:59:58 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>> I never claimed
> What you haven't claimed could fill that popular page-turner, the
> Congressional Record.
>
> 73's
> Richard Clark, KB7QHC

LOL ...

Regards,
JS

1008. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 00:18:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7ino1$76r$1@news.albasani.net>
Source record: 23582

Richard Clark wrote:
> On Fri, 08 Aug 2008 15:59:58 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>> I never claimed
> What you haven't claimed could fill that popular page-turner, the
> Congressional Record.
>
> 73's
> Richard Clark, KB7QHC

Well, I did "stretch" the facts on one point, blood has about 1/3 the salt content of sea water (not meaning the content of "sodium chloride" specifically!--or, any other element ...)--however, the point was not being made on heating blood until it "burned"--but just to do "noticeable damage" ... I am sure you will grant me that "writers' license." <grin>

Regards,
JS

1009. Re: Vertical problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 01:53:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7itb8$c1l$1@news.albasani.net>
Source record: 23583

JosephKK wrote:

> ...
> Faraday cage.
>

Perhaps this will help:

http://www.lessemf.com/faq-shie.html#Lead-Copper

Regards,
JS

1010. Re: ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 12:46:31 UTC
From: no@spam.net
Message-ID: <hc4r949vhr7pudp0j62ron8i1qtnv8g0tj@4ax.com>
Source record: 23584

did you get your copy yet??

On Wed, 06 Aug 2008 10:05:30 GMT, "Harry H" <harryharms@hotmail.com>
wrote:

>I am wondering is anyone has a copy of an article on a multiband mobile
>helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.
>
>
>I do have a copy but the majority of it is intelligible.
>
>Thanks
>HH
>
>

1011. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 13:35:25 UTC
From: Alec <alec@e-hopley.fsnet.co.uk>
Message-ID: <2-mdnaWNcaiCAADVnZ2dnUVZ8g6dnZ2d@pipex.net>
Source record: 23585
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

Back at about the same time the BBC had (and still has) a powerful transmitter on 200khz (now198) a local farmer who lived close to the station built a large tuning coil in the loft and lit his house using fluorescent tubes.

He was successfully prosecuted for stealing electricity or something similar.

Alec

"javawizard" <javawizard@aol.com> wrote in message news:149f9f0e-86d6-40bb-971a-d763b5a35bb8@w24g2000prd.googlegroups.com...
> In the 1920's a radio station in Schenectady, NY built a powerful
> transmitter. In those days before FCC regulations, not knowing just
> how big to make a transmitter in order for the signal to be received
> some distance away, the station set up to broadcast at 500,000 watts.
> It requires about one watt to be received four blocks away. A cell
> phone is three watts. This station broadcast at such tremendous power
> that they could be heard around the world. People in New York didn't
> even need radios. They could sometimes hear voices in their furnaces
> and coming off chain-link fences. Light bulbs lit up in people's
> houses even if they were switched off. - from www.clip-text.com

1012. Re: Re:ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 15:06:40 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <4oink.610$7N1.233@trnddc06>
Source record: 23586

"Owen Duffy" <none@no.where> wrote in message
news:Xns9AF38F8B19AF6nonenowhere@61.9.191.5...
> "Harry H" <harryharms@hotmail.com> wrote in news:KHemk.25894$IK1.21166
> @news-server.bigpond.net.au:
>
>> I am wondering is anyone has a copy of an article on a multiband mobile
>> helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.
>>
>>
>> I do have a copy but the majority of it is intelligible.
>
> That shouldn't be a problem, it is not as if it was illegible!
>
> Owen

If we're going to pick nits, the correct phrasing is:

That shouldn't be a problem, it is not as if it were illegible!

Future subjunctive case.

Dale W4OP

1013. Re: ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 15:32:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7kd9p$qt6$1@news.albasani.net>
Source record: 23587

Dale Parfitt wrote:

> ...
> If we're going to pick nits, the correct phrasing is:
>
> That shouldn't be a problem, it is not as if it were illegible!
>
> Future subjunctive case.
>
> Dale W4OP
>
>

For those with little, or nothing, to do:

http://www.englishforums.com/English/IWishIWasWereThere/bzvrw/post.htm

... make sure you follow ALL the pages on this link! ;-)

Regards,
JS

1014. air max paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/145213415/)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 16:17:04 UTC
From: michael <cnbbiz032@gmail.com>
Message-ID: <7552d3cd-bf6c-4386-849e-4705a4455f08@r35g2000prm.googlegroups.com>
Source record: 23588

Please chat with me by www.cnbbiz.com to get the price and more photos, we take paypal payment $28/pairsas payment. please see the photo album below for our product list.

air max paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/145213415/)

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air max 91 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/141817959/)

air max 95 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/137245586/)

air max 97 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/zms2622616/101130256/)

air max 2003 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/huayuexiehang/109221017/)

air max 360 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/xf669988/145493820/)

air max 180 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/yihao-169/144903947/)

air max tn paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/120682035/)

air Max special design paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/153050958/)

1015. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 18:31:53 UTC
From: JB <nospam@goofball.net>
Message-ID: <tolnk.616$7N1.5@trnddc06>
Source record: 23589

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g7ino1$76r$1@news.albasani.net...
> Richard Clark wrote:
> > On Fri, 08 Aug 2008 15:59:58 -0700, John Smith
> > <assemblywizard@gmail.com> wrote:
> >> I never claimed
> > What you haven't claimed could fill that popular page-turner, the
> > Congressional Record.
> >
> > 73's
> > Richard Clark, KB7QHC
>
> Well, I did "stretch" the facts on one point, blood has about 1/3 the
> salt content of sea water (not meaning the content of "sodium chloride"
> specifically!--or, any other element ...)--however, the point was not
> being made on heating blood until it "burned"--but just to do
> "noticeable damage" ... I am sure you will grant me that "writers'
> license." <grin>
>
> Regards,
> JS

That's the trouble with you people. You insinuate by "asking a question" or making up a meaningless phrase like "noticeable damage" or "common sense laws" in such a way that it panics the ignorant or non thinking people into running over a cliff or voting, then you sit back and feign ignorance. Just beware you don't get caught in your own stampede. I submit that power tools should be rendered safe before exposing them to people with "artistic license" or who feel themselves "not responsible" for their actions because they are crazy.

We know that the human body can be harmed by just sitting in the sun too long. How much RF at what frequency has or has not caused damage to those who have been or are exposed, has been addressed only by FCC setting an arbitrary specification without supporting data other than that supplied by military microwave studies with respect to high powered radar. Nor do the studies support that there is noticable damage by observing the military safety standard or by the FCC standard that sets limits much lower, and even lower still for those who aren't knowlegable on the subject.. So then it is anything but an objective issue. I too have been exposed, but limited my exposure based on time averaging, so I have encountered field-densities thousands of times greater than a cell phone for a several minutes and hundreds of times, for as much as an hour with no discernible effect in the long or short term, but have encountered unknown intense fields with short term issues, such as headache in the evening after exposure, but gone in the

morning. I have certainly encountered the same thing more often from over exposure to "a day at the beach".

Case in point: As a nonsmoker, I have problems reworking PC boards because my employer has no plausible deniability that any respiratory ailment I might succumb to in later years wouldn't arguably be caused by a self-inflicted lifestyle condition rather than an employment hazard.

In the face of other more serious health risks such as sunstroke, falling off a tower or electrocution, RF exposure is a common sense issue for hams and those in the business, and a non-issue for those who will never enter restricted areas. In fact, there are far more daily hazardous things that we encounter, as to obliterate any test data. Your Petri dish and saltwater experiments have less credibility than the anecdotal.

It's like the illegal alien issue. Due to the lack of proper judgment and widespread hysteria, more housekeepers and migrant workers will suffer than gangbangers who find prison to be a climate-controlled mailing address with a few inconveniences, but "three hots and a cot". Deportation gives opportunity for those with plenty of drug money to do it again. All the hysteria does is help to polarize nationalism (and foreign nationalism).

With the population of foreign nationalist gringo haters in this country outnumbering those in Mexico, why do we need fences at all? Perhaps for a start, we might plant more businesses in Mexico rather than having everything shipped all the way from China.

1016. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 18:59:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <26pr949v1pa57o5ic5casedls0e5tg8ai4@4ax.com>
Source record: 23590

On Sat, 09 Aug 2008 18:31:53 GMT, "JB" <nospam@goofball.net> wrote:

>then you sit back and feign ignorance.

Oh to be sure it wasn't feigned. In fact, he entirely missed the
boat. After all, upon a succinct observation comparing two exposure
problems:
>>>If you did think, you would be more worried about a 5KW cellphone in
>>>your pocket than a blue LED in your ear.
Brett couldn't distinguish one as a source of heating from the other
as a source of ionization where his own off-topic and ill-understood
introduction of the problems of ionizing radiation were the primary
issues.

There's really no point in sustaining his illiteracy, and chastising
would be a sin of mocking the afflicted.

73's
Richard Clark, KB7QHC

1017. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 20:21:20 UTC
From: You <you@shadow.orgs>
Message-ID: <you-E9B103.12212409082008@netnews.worldnet.att.net>
Source record: 23591

In article <g7ino1$76r$1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> Richard Clark wrote:
> > On Fri, 08 Aug 2008 15:59:58 -0700, John Smith
> > <assemblywizard@gmail.com> wrote:
> >> I never claimed
> > What you haven't claimed could fill that popular page-turner, the
> > Congressional Record.
> >
> > 73's
> > Richard Clark, KB7QHC
>
> Well, I did "stretch" the facts on one point, blood has about 1/3 the
> salt content of sea water (not meaning the content of "sodium chloride"
> specifically!--or, any other element ...)--however, the point was not
> being made on heating blood until it "burned"--but just to do
> "noticeable damage" ... I am sure you will grant me that "writers'
> license." <grin>
>
> Regards,
> JS

Now all you need to prove, is that the RF Power Density of a 300
Milliwatt Cellphone, operating one one of 4 Bands in the 800-900
Mhz, and 1800 - 2000 Mhz, will cause ANY Measurable Heating in
Human Tissue, and therefore cause some sort of problem. So far,
NOBODY has shown that to be the case. Not even in the 2.4 Ghz
ISM Band where BlueTooth operates, with significantly LESS
Power Density. There are enough of these devices around that
should all this "Wild Speculation", actually have Observable Effects,
the researchers into this area wouldn't be needing to do Statistical
Analysis, to Magically try and prove some nebulous Causal Effect.

1018. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 21:38:48 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <OpKdnV5GmcfykwPVnZ2dnUVZ8tninZ2d@pipex.net>
Source record: 23592

> Now all you need to prove, is that the RF Power Density of a 300
> Milliwatt Cellphone, operating one one of 4 Bands in the 800-900
> Mhz, and 1800 - 2000 Mhz, will cause ANY Measurable Heating in
> Human Tissue, and therefore cause some sort of problem. So far,
> NOBODY has shown that to be the case. Not even in the 2.4 Ghz
> ISM Band where BlueTooth operates, with significantly LESS
> Power Density. There are enough of these devices around that
> should all this "Wild Speculation", actually have Observable Effects,
> the researchers into this area wouldn't be needing to do Statistical
> Analysis, to Magically try and prove some nebulous Causal Effect.
==========
It might be useful to know that the RF power radiated by any cellphone
is dependent on the distance between the device and the nearest base
station.
In a built-up area or along the highway with nearby base stations the
power can be very low ,whereas at remote locations it can be as high as
2 Watts (at least here in Europe).
Living away countryside ,when using my cellphone at home the battery
drains rather quickly compared when using the device in town.
When holding the cellphone near my HF transceiver I clearly hear the
digi-noise.
For this reason I avoid using the cellphone while at home or at other
locations away from a base station.
My home is approx 8 km (5miles) from the nearest base station.

Frank GM0CSZ / KN6WH in northern Scotland UK

1019. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 23:29:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7l98orgm1@news.albasani.net>
Source record: 23593

JB wrote:

> ...
> That's the trouble with you people. You insinuate by "asking a question" or
> making up a meaningless phrase like "noticeable damage" or "common sense
> laws" in such a way that it panics the ignorant or non thinking people into
> running over a cliff or voting, then you sit back and feign ignorance. Just
> beware you don't get caught in your own stampede. I submit that power tools
> should be rendered safe before exposing them to people with "artistic
> license" or who feel themselves "not responsible" for their actions because
> they are crazy.
> ...

Yes, I have heard that argument before, with tobacco ... Nicola Tesla
once said chewing gum was more damaging than alcohol ... This URL:

http://en.wikipedia.org/wiki/Thalidomide

This drug was once thought "safe" and marketed/sold in over 50
countries. It was thought so safe, it was given to pregnant women,
causing innumerable birth defects in children (children born without
hands/arms/feet/legs/etc.

Your argument against caution is simply ignorance such we have seen in
the past ... some of us learned. Even when the BEST AUTHORITIES say is
is "OK", use caution!

> We know that the human body can be harmed by just sitting in the sun too
> long. How much RF at what frequency has or has not caused damage to those
> who have been or are exposed, has been addressed only by FCC setting an
> arbitrary specification without supporting data other than that supplied by
> military microwave studies with respect to high powered radar. Nor do the
> studies support that there is noticable damage by observing the military
> safety standard or by the FCC standard that sets limits much lower, and even
> lower still for those who aren't knowlegable on the subject.. So then it is
> anything but an objective issue. I too have been exposed, but limited my
> exposure based on time averaging, so I have encountered field-densities
> thousands of times greater than a cell phone for a several minutes and
> hundreds of times, for as much as an hour with no discernible effect in the
> long or short term, but have encountered unknown intense fields with short
> term issues, such as headache in the evening after exposure, but gone in the
> morning. I have certainly encountered the same thing more often from over
> exposure to "a day at the beach".

OK, so do an experiment yourself to test the amount of damage!

1) Cut an opening in the door of your microwave.

2) Insert your hand.

3) Turn on the microwave for 5 seconds.

4) Repeat 1 - 3 until "noticeable damage" occurs.

5) Come up with a time you think it is "OK" to microwave your hand;
quite possibly, you may wish to consider a time MUCH LOWER (as a "test
standard", note that zero seconds will ALWAYS be safer) than the time to
do "noticeable damage."

(Disclaimer, the above is only meant as a warning to demonstrate the
ignorance of the previous posters logic -- i.e., IT SHOULD NEVER BE
ATTEMPTED FOR ANY LENGTH OF TIME!) Or, don't do this yourself, EVER!

>
> Case in point: As a nonsmoker, I have problems reworking PC boards because
> my employer has no plausible deniability that any respiratory ailment I
> might succumb to in later years wouldn't arguably be caused by a
> self-inflicted lifestyle condition rather than an employment hazard.

ABSOLUTELY! OTHER things cause cancer/illness, a search of the internet
will provide you with countless and proven substances/tasks/jobs/etc.
which you should provide. If you think there is a real danger with ANY
job you take--QUIT--IMMEDIATELY! But then, you can't protect some from
themselves, those will die for their occupation/job. :-(

>
> In the face of other more serious health risks such as sunstroke, falling
> off a tower or electrocution, RF exposure is a common sense issue for hams
> and those in the business, and a non-issue for those who will never enter
> restricted areas. In fact, there are far more daily hazardous things that
> we encounter, as to obliterate any test data. Your Petri dish and saltwater
> experiments have less credibility than the anecdotal.

Hey, some will make a trade off and face such serious consequences to
their health and safety in exchange for money -- I only hope their
compensation is justified, at least to them. Again, some people cannot
be saved from themselves ... and then, once they have made such a BAD
decision, they only wish to blame others.

If you are too stupid to protect yourself, am I required to do so? (I
mean I will, but then, I will not let you work at places injurious to
you! I mean, for God sakes man, you will raise insurance premiums
through the roof!)

>
> It's like the illegal alien issue. Due to the lack of proper judgment and
> widespread hysteria, more housekeepers and migrant workers will suffer than
> gangbangers who find prison to be a climate-controlled mailing address with
> a few inconveniences, but "three hots and a cot". Deportation gives
> opportunity for those with plenty of drug money to do it again. All the
> hysteria does is help to polarize nationalism (and foreign nationalism).

Well, I guess, declines in the American living standards, importation of 3rd world conditions here, lack of medical care for millions, untold people without home ownership, etc., is nice! -- if you like that sort of thing ... personally, I would seek other/more-positive solutions.

> With the population of foreign nationalist gringo haters in this country
> outnumbering those in Mexico, why do we need fences at all? Perhaps for a
> start, we might plant more businesses in Mexico rather than having
> everything shipped all the way from China.
>
>

Well, we could just give them everything, then hate them for having it and work for slave wages getting it back and just keeping fed, I guess; again, some people have different ideas.

Personally brother, I would move away from such conditions -- but that is just me ...

Regards,
JS

1020. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 23:34:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7l9irrgm2@news.albasani.net>
Source record: 23594

Richard Clark wrote:
> On Sat, 09 Aug 2008 18:31:53 GMT, "JB" <nospam@goofball.net> wrote:
>
>> then you sit back and feign ignorance.
>
> Oh to be sure it wasn't feigned. In fact, he entirely missed the
> boat. After all, upon a succinct observation comparing two exposure
> problems:
>>>> If you did think, you would be more worried about a 5KW cellphone in
>>>> your pocket than a blue LED in your ear.
> Brett couldn't distinguish one as a source of heating from the other
> as a source of ionization where his own off-topic and ill-understood
> introduction of the problems of ionizing radiation were the primary
> issues.
>
> There's really no point in sustaining his illiteracy, and chastising
> would be a sin of mocking the afflicted.
>
> 73's
> Richard Clark, KB7QHC

Ionizing radiation?

Sorry, I missed the point where that ever came into question ...
however, yes, chuck a neon tube in a microwave, the gases WILL ionize,
but then the bulb will probably explode, LOL!

Regards,
JS

1021. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-09 23:38:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7l9prrgm3@news.albasani.net>
Source record: 23595

John Smith wrote:
> Richard Clark wrote:
>> On Sat, 09 Aug 2008 18:31:53 GMT, "JB" <nospam@goofball.net> wrote:
>>
>>> then you sit back and feign ignorance.
>>
>> Oh to be sure it wasn't feigned. In fact, he entirely missed the
>> boat. After all, upon a succinct observation comparing two exposure
>> problems:
>>>>> If you did think, you would be more worried about a 5KW cellphone in
>>>>> your pocket than a blue LED in your ear.
>> Brett couldn't distinguish one as a source of heating from the other
>> as a source of ionization where his own off-topic and ill-understood
>> introduction of the problems of ionizing radiation were the primary
>> issues.
>>
>> There's really no point in sustaining his illiteracy, and chastising
>> would be a sin of mocking the afflicted.
>>
>> 73's
>> Richard Clark, KB7QHC

But then, perhaps you have a problem with some of data in this URL?:

http://en.wikipedia.org/wiki/Microwave_oven

Regards,
JS

1022. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 00:11:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7lbo2tso1@news.albasani.net>
Source record: 23596

You wrote:

> ...
> Now all you need to prove, is that the RF Power Density of a 300
> Milliwatt Cellphone, operating one one of 4 Bands in the 800-900
>> ...

Let's say just those figures are correct ...

My Motorola Razar V3 phone is approx. 6mm thick (when opened), and where the antenna is buried in the phone. This means the antenna can be no more than 6mm from my head if the phone lies against my head. Now, we assume the phone is emitting 300mw. This would be equivalent to 1.2w of power emanating from that same antenna at a distance of 12mm from my head. And, the latter would be equivalent to 4.8w emanating from the same antenna at a distance of 24mm from my head. And, the last would be equivalent to 19.2w emanating from the same antenna at a distance of 48mm from my head ... your higher figure, of two watts, is simply frightening ...

The lunacy is exposed ... correct any error you see in the above ...

Regards,
JS

1023. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 01:20:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7lfo2tso2@news.albasani.net>
Source record: 23597

John Smith wrote:
> You wrote:
>
>> ...
>> Now all you need to prove, is that the RF Power Density of a 300
>> Milliwatt Cellphone, operating one one of 4 Bands in the 800-900
> >> ...
>
> Let's say just those figures are correct ...
>
> My Motorola Razar V3 phone is approx. 6mm thick (when opened), and where
> the antenna is buried in the phone. This means the antenna can be no
> more than 6mm from my head if the phone lies against my head. Now, we
> assume the phone is emitting 300mw. This would be equivalent to 1.2w of
> power emanating from that same antenna at a distance of 12mm from my
> head. And, the latter would be equivalent to 4.8w emanating from the
> same antenna at a distance of 24mm from my head. And, the last would be
> equivalent to 19.2w emanating from the same antenna at a distance of
> 48mm from my head ... your higher figure, of two watts, is simply
> frightening ...
>
> The lunacy is exposed ... correct any error you see in the above ...
>
> Regards,
> JS

I should have clarified "the meaning" in the above ...

Or, to summarize, 300mw sounds both UNGODLY and IRRESPONSIBLE, IMHO ...
I would suspect it to be much nearer 50-100mw ... and I can logic this
by the size of the battery and the time it lasts between charges. (no,
I have NOT taken the time to get the battery specs and do the computations!)

However, doing the math, 50mw is too much. And, an equivalent of 1kw
emanating from the antenna comes at MUCH TOO CLOSE a distance ...

Sorry I had to take two posts to make that clear.

Regards,
JS

1024. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 02:12:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7lipgtso3@news.albasani.net>
Source record: 23506

John Smith wrote:

> ...
> However, doing the math, 50mw is too much. And, an equivalent of 1kw
> emanating from the antenna comes at MUCH TOO CLOSE a distance ...
>
> Sorry I had to take two posts to make that clear.
>
> Regards,
> JS

Well, the 3.7v, 900mah li-ion battery lasts ~2hrs of continuous "talk
time", I have verified this ...

It seems 300mw (actual output!) is NOT unimaginable ... :-(

Regards,
JS

1025. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 02:54:02 UTC
From: JB <nospam@goofball.net>
Message-ID: <eLsnk.537$_H1.403@trnddc05>
Source record: 23598

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g7l98orgm1@news.albasani.net...
> JB wrote:
>
> > ...
> > That's the trouble with you people. You insinuate by "asking a
question" or
> > making up a meaningless phrase like "noticeable damage" or "common sense
> > laws" in such a way that it panics the ignorant or non thinking people
into
> > running over a cliff or voting, then you sit back and feign ignorance.
Just
> > beware you don't get caught in your own stampede. I submit that power
tools
> > should be rendered safe before exposing them to people with "artistic
> > license" or who feel themselves "not responsible" for their actions
because
> > they are crazy.
> > ...
>
> Yes, I have heard that argument before, with tobacco ... Nicola Tesla
> once said chewing gum was more damaging than alcohol ... This URL:
>
> http://en.wikipedia.org/wiki/Thalidomide
>
> This drug was once thought "safe" and marketed/sold in over 50
> countries. It was thought so safe, it was given to pregnant women,
> causing innumerable birth defects in children (children born without
> hands/arms/feet/legs/etc.
>
> Your argument against caution is simply ignorance such we have seen in
> the past ... some of us learned. Even when the BEST AUTHORITIES say is
> is "OK", use caution!
>
> > We know that the human body can be harmed by just sitting in the sun too
> > long. How much RF at what frequency has or has not caused damage to
those
> > who have been or are exposed, has been addressed only by FCC setting an
> > arbitrary specification without supporting data other than that supplied
by
> > military microwave studies with respect to high powered radar. Nor do
the
> > studies support that there is noticable damage by observing the military
> > safety standard or by the FCC standard that sets limits much lower, and

even
> > lower still for those who aren't knowlegable on the subject.. So then
it is
> > anything but an objective issue. I too have been exposed, but limited
my
> > exposure based on time averaging, so I have encountered field-densities
> > thousands of times greater than a cell phone for a several minutes and
> > hundreds of times, for as much as an hour with no discernible effect in
the
> > long or short term, but have encountered unknown intense fields with
short
> > term issues, such as headache in the evening after exposure, but gone in
the
> > morning. I have certainly encountered the same thing more often from
over
> > exposure to "a day at the beach".
>
> OK, so do an experiment yourself to test the amount of damage!
>
> 1) Cut an opening in the door of your microwave.
>
> 2) Insert your hand.
>
> 3) Turn on the microwave for 5 seconds.
>
> 4) Repeat 1 - 3 until "noticeable damage" occurs.
>
> 5) Come up with a time you think it is "OK" to microwave your hand;
> quite possibly, you may wish to consider a time MUCH LOWER (as a "test
> standard", note that zero seconds will ALWAYS be safer) than the time to
> do "noticeable damage."
>
> (Disclaimer, the above is only meant as a warning to demonstrate the
> ignorance of the previous posters logic -- i.e., IT SHOULD NEVER BE
> ATTEMPTED FOR ANY LENGTH OF TIME!) Or, don't do this yourself, EVER!
>
> >
> > Case in point: As a nonsmoker, I have problems reworking PC boards
because
> > my employer has no plausible deniability that any respiratory ailment I
> > might succumb to in later years wouldn't arguably be caused by a
> > self-inflicted lifestyle condition rather than an employment hazard.
>
> ABSOLUTELY! OTHER things cause cancer/illness, a search of the internet
> will provide you with countless and proven substances/tasks/jobs/etc.
> which you should provide. If you think there is a real danger with ANY
> job you take--QUIT--IMMEDIATELY! But then, you can't protect some from
> themselves, those will die for their occupation/job. :-(
>
> >

> > In the face of other more serious health risks such as sunstroke,
falling
> > off a tower or electrocution, RF exposure is a common sense issue for
hams
> > and those in the business, and a non-issue for those who will never
enter
> > restricted areas. In fact, there are far more daily hazardous things
that
> > we encounter, as to obliterate any test data. Your Petri dish and
saltwater
> > experiments have less credibility than the anecdotal.
>
> Hey, some will make a trade off and face such serious consequences to
> their health and safety in exchange for money -- I only hope their
> compensation is justified, at least to them. Again, some people cannot
> be saved from themselves ... and then, once they have made such a BAD
> decision, they only wish to blame others.
>
> If you are too stupid to protect yourself, am I required to do so? (I
> mean I will, but then, I will not let you work at places injurious to
> you! I mean, for God sakes man, you will raise insurance premiums
> through the roof!)
>
> >
> > It's like the illegal alien issue. Due to the lack of proper judgment
and
> > widespread hysteria, more housekeepers and migrant workers will suffer
than
> > gangbangers who find prison to be a climate-controlled mailing address
with
> > a few inconveniences, but "three hots and a cot". Deportation gives
> > opportunity for those with plenty of drug money to do it again. All the
> > hysteria does is help to polarize nationalism (and foreign nationalism).
>
> Well, I guess, declines in the American living standards, importation of
> 3rd world conditions here, lack of medical care for millions, untold
> people without home ownership, etc., is nice! -- if you like that sort
> of thing ... personally, I would seek other/more-positive solutions.
>
> >
> > With the population of foreign nationalist gringo haters in this country
> > outnumbering those in Mexico, why do we need fences at all? Perhaps for
a
> > start, we might plant more businesses in Mexico rather than having
> > everything shipped all the way from China.
> >
> >
>
> Well, we could just give them everything, then hate them for having it
> and work for slave wages getting it back and just keeping fed, I guess;

> again, some people have different ideas.
>
> Personally brother, I would move away from such conditions -- but that
> is just me ...
>
> Regards,
> JS

You seem to have a real problem with reading comprehension too.

1026. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 03:58:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7lp0u$662$1@registered.motzarella.org>
Source record: 23599

John Smith wrote:
> ... (no,
> I have NOT taken the time to get the battery specs and do the
> computations!)
> ...
> Regards,
> JS

I am surprised, the BR60 li-ion battery is 3.7v @ 900mah ... the ~2hr talk time suggests 300mw is well within reason ... I am surprised the battery packs that kind of punch. :-(

Regards,
JS

1027. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 04:34:14 UTC
From: JB <nospam@goofball.net>
Message-ID: <adunk.609$T91.588@trnddc04>
Source record: 23600

Well, I can't explain anything rationaly to you because you are jumping wildly to conclusions like a cartoon character. All I'm saying, is that you need to objectively assess risks. If you can't do that you ought to be institutionalized for the safety of yourself and others.

The statistics of wireless devices causing harm are so off the radar there are none! And this is the smoking gun - if there were, they would have come forward by now from the 2 way and uwave industry with complaints, but I haven't heard of anyone in the business who HAS been harmed in my 30 years of experience. And that is 15 years under the old standards of RF exposure - NONE.

I invite anyone from the industry who reasonably thinks they have been harmed to respond. Particularly from the retired folks. I'm not talking about RF burns, as they are minor and pain has a way of causing you to limit that exposure.

You can eliminate the potential of risk entirely by throwing away all RF devices.

But don't stop there because of all the risks that you failed to account for, such as rolling out of bed in the morning or burning yourself making breakfast or tripping on the front steps or getting in a wreck on the way to work.

THAT is a major risk statistically, whereas the statistics of RF harm are unknown because no is so stupid, to cut their arm off or cut a hole in the uwave oven door AS YOU SUGGESTED just to get a chance to GET harmful exposure, which sort of proves my point about the general public having to try real hard in order to to be exposed to harmfull levels of energy.

Getting back to the cell phones and Blackberry's - and I thought that's what we were talking about - DON'T WORRY ABOUT IT! They really don't amount to squat! Honest!

BTW I put a mouse in a Litton uwave oven in 1983 for 10 seconds and removed him because I didn't want to push the little guys luck or see him suffer. NO noticeable or discernable damage or harm was done and he went on to sire several healthy normal litters.

1028. Re: ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 04:34:37 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <xdunk.26946$IK1.3147@news-server.bigpond.net.au>
Source record: 23501

No not yet, so far all I have had is Grammar lessons! LOLOL

Oh and the word I should have used was illegible, I humbly beg the pardon of
the grammatical police out there!
Thanks
HH
<no@spam.net> wrote in message
news:hc4r949vhr7pudp0j62ron8i1qtnv8g0tj@4ax.com...
> did you get your copy yet??
>
> On Wed, 06 Aug 2008 10:05:30 GMT, "Harry H" <harryharms@hotmail.com>
> wrote:
>
>>I am wondering is anyone has a copy of an article on a multiband mobile
>>helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.
>>
>>
>>I do have a copy but the majority of it is intelligible.
>>
>>Thanks
>>HH
>>
>>

1029. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 05:19:59 UTC
From: JB <nospam@goofball.net>
Message-ID: <3Uunk.641$7N1.291@trnddc06>
Source record: 23502

OOPS! I guess I got them backwards. I must be up past my bedtime.
<me@privacy.net> wrote in message
news:onnh94tp1jhff5m7cfmophvs6m2cslv03q@4ax.com...
> "JB" <nospam@goofball.net> wrote:
>
> >While the 1080 UHF is fairly sharp with some potential gain, the VHF
> >elements seem to be little more than "rabbit ears" - In fact it is a
swept
> >dipole, so will be bi-directional and easily pick up reflections from
behind
> >and around you..
>
> I'm a bit confused on your remark above.
>
> Looks to me like the 1080 is perfectly flat antenna.
> Where do you see any bending or sweeping of elements?

1030. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 05:36:37 UTC
From: JB <nospam@goofball.net>
Message-ID: <F7vnk.521$EL2.235@trnddc01>
Source record: 23503

Sorry about that. I did get them mixed up not having the photos in front of me when writing. Roy is also correct. All that is in the ARRL Antenna Handbook. I believe impedance is lowered though at the dipole elements apex. to some extent. The dipole vs. Inverted V comes to mind, but the feedpoint impedance of a LPDA is really about the spacing of the feeders and matching system. .

I'll shut up now

"J. Mc Laughlin" <jcm@power-net.net> wrote in message
news:YdydnYw8KOiTZQXVnZ2dnUVZ_oTinZ2d@bright.net...
> I am looking at a 1080. It is being used in the computer room. All of
the
> elements are in two, parallel planes that are each normal to earth. In
> other words, flat. On high-VHF (channel 12, here) there is little F/B
> ratio, but that has not been a problem. The chances of needing to reject
a
> high-VHF station (at 180 degrees) on the same frequency is slim. The
> antenna is a stout, little, two-bay broadside array with reflector mostly
> effective on UHF.
>
> I provided a detailed set of measurements in another message. 73, Mac
> N8TT
>
> --
> J. McLaughlin; Michigan, USA
> Home: JCM@power-net.net
> <me@privacy.net> wrote in message
> news:onnh94tp1jhff5m7cfmophvs6m2cslv03q@4ax.com...
> > "JB" <nospam@goofball.net> wrote:
> >
> >>While the 1080 UHF is fairly sharp with some potential gain, the VHF
> >>elements seem to be little more than "rabbit ears" - In fact it is a
swept
> >>dipole, so will be bi-directional and easily pick up reflections from
> >>behind
> >>and around you..
> >
> > I'm a bit confused on your remark above.
> >
> > Looks to me like the 1080 is perfectly flat antenna.
> > Where do you see any bending or sweeping of elements?
>
>

1031. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 06:09:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7m0n7jan1@registered.motzarella.org>
Source record: 23504

John Smith wrote:
> John Smith wrote:
>> ... (no, I have NOT taken the time to get the battery specs and do the
>> computations!)
>> ...
>> Regards,
>> JS
>
> I am surprised, the BR60 li-ion battery is 3.7v @ 900mah ... the ~2hr
> talk time suggests 300mw is well within reason ... I am surprised the
> battery packs that kind of punch. :-(
>
> Regards,
> JS

Of course, our "difference" could stem solely from differing definitions
of the word prudent, such as in "prudent man."

I am using this definition:

Source: Webster's Revised Unabridged Dictionary (1913)

Prudent \Pru"dent\, a. [L. prudens, -entis, contr. from
providens: cf. F. prudent. See Provident.]
1. Sagacious in adapting means to ends; circumspect in
action, or in determining any line of conduct; practically
wise; judicious; careful; discreet; sensible; -- opposed
to rash; as, a prudent man; dictated or directed by
prudence or wise forethought; evincing prudence; as,
prudent behavior.

Moses established a grave and prudent law. --Milton.

Regards,
JS

1032. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 06:23:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7m1hsobf1@registered.motzarella.org>
Source record: 23505

JB wrote:
> Well, I can't explain anything rationaly to you because you are jumping
> wildly to conclusions like a cartoon character. All I'm saying, is that you
> need to objectively assess risks. If you can't do that you ought to be
> institutionalized for the safety of yourself and others.
>
> The statistics of wireless devices causing harm are so off the radar there
> are none! And this is the smoking gun - if there were, they would have
> come forward by now from the 2 way and uwave industry with complaints, but I
> haven't heard of anyone in the business who HAS been harmed in my 30 years
> of experience. And that is 15 years under the old standards of RF
> exposure - NONE.
>
> I invite anyone from the industry who reasonably thinks they have been
> harmed to respond. Particularly from the retired folks. I'm not talking
> about RF burns, as they are minor and pain has a way of causing you to limit
> that exposure.
>
> You can eliminate the potential of risk entirely by throwing away all RF
> devices.
>
> But don't stop there because of all the risks that you failed to account
> for, such as rolling out of bed in the morning or burning yourself making
> breakfast or tripping on the front steps or getting in a wreck on the way to
> work.
>
> THAT is a major risk statistically, whereas the statistics of RF harm are
> unknown because no is so stupid, to cut their arm off or cut a hole in the
> uwave oven door AS YOU SUGGESTED just to get a chance to GET harmful
> exposure, which sort of proves my point about the general public having to
> try real hard in order to to be exposed to harmfull levels of energy.
>
> Getting back to the cell phones and Blackberry's - and I thought that's what
> we were talking about - DON'T WORRY ABOUT IT! They really don't amount to
> squat! Honest!
>
> BTW I put a mouse in a Litton uwave oven in 1983 for 10 seconds and removed
> him because I didn't want to push the little guys luck or see him suffer.
> NO noticeable or discernable damage or harm was done and he went on to sire
> several healthy normal litters.
>
>

That is a lot, and WAY overly complicated, IMHO ... and no, I don't need do all that ...

I need only "error on the side of caution." (If only I'd done that with smoking!) But then, that is keeping with the theme of "prudent man/men", which was my original statements intent.

Besides, Bluetooth improves the whole "phone experience", hands free digit dial and name dial are very handy. And, it is a law to be hands-free on the phone while driving an auto in California ... :-) A win-win situation which has few equals. Your particular mileage may vary ...

Regards,
JS

1033. Please chat with me by www.cnbbiz.com to get the price and more photos, we take paypal payment $28/pairsas payment. please see the photo album below for our product list.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 10:10:13 UTC
From: micahel <cnbbiz030@gmail.com>
Message-ID: <85b4c255-2a42-4d5d-aa37-df309261d8ea@i20g2000prf.googlegroups.com>
Source record: 23507

Please chat with me by www.cnbbiz.com to get the price and more photos, we take paypal payment $28/pairsas payment. please see the photo album below for our product list.

air max paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/145213415/)

air max 87 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/145213415/)

air max 90 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/128895464/)
air max 91 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/141817959/)

air max 95 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/137245586/)

air max 97 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/zms2622616/101130256/)

air max 2003 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/huayuexiehang/109221017/)

air max 360 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/xf669988/145493820/)

air max 180 paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/yihao-169/144903947/)

air max tn paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/120682035/)

air Max special design paypal payment $28/pairs www.cnbbiz.com (http://photo.163.com/photos/lirendao88/153050958/)

1034. WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 13:22:18 UTC
From: solid <solid@evidence.com>
Message-ID: <489eeb85@127.0.0.1>
Source record: 23508

http://uk.youtube.com/watch?v=5pgLbBfzObk

WHAT IS THE NAME OF THE SONG WHEN it comes to the end? I used to listen to this song when I was studying in canada?

1035. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 13:37:31 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <g7mqurpfo2@news.albasani.net>
Source record: 23509

JB wrote:
<SNIP>
>
> You seem to have a real problem with reading comprehension too.
>
>
And you with trimming posts!

--
M0WYM
www.radiowymsey.org

Wymsey - Ten years Old!
www.wymsey.co.uk

1036. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 13:39:12 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <g7mr20pfo3@news.albasani.net>
Source record: 23510

You wrote:

>
> Now all you need to prove, is that the RF Power Density of a 300
> Milliwatt Cellphone, operating one one of 4 Bands in the 800-900
> Mhz, and 1800 - 2000 Mhz, will cause ANY Measurable Heating in
> Human Tissue, and therefore cause some sort of problem.

No problem:

http://www.wymsey.co.uk/wymchron/cooking.htm

--
M0WYM
www.radiowymsey.org

Wymsey - Ten years Old!
www.wymsey.co.uk

1037. 600 ohm balun vs 200 ohm balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 15:24:54 UTC
From: Edward Feustel <efeustel@hughes.net>
Message-ID: <rh1u945om5288a5dvnqaobsmd2q64k8v7t@4ax.com>
Source record: 23511

I have a centerfed 220 foot dipole I am using on all bands from 160 -
10 meters. It is between 40 and 50 feet above silt soil and is fed
with W7FG open wire (600 ohm?) Currently I am using a 4:1 balun at the
output of the antenna tuner to transform impedances to an L-Network
that allows the transmitter to see a close match at 50 ohms.

I am interested in opinions on whether it would be better for me
to use a 450 or 600 ohm balun that might more closely match the
transmission line (in practice).

I believe that with the reactances involved, so theoretically it might
not make much difference. Anyone with actual actual experience
who would like to render an opinion?
Thanks,
Ed

1038. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 15:34:26 UTC
From: JB <nospam@goofball.net>
Message-ID: <6UDnk.550$_H1.130@trnddc05>
Source record: 23512

"M0WYM" <Sansspam@peartreegreen.org> wrote in message
news:g7mr20pfo3@news.albasani.net...
> You wrote:
>
> >
> > Now all you need to prove, is that the RF Power Density of a 300
> > Milliwatt Cellphone, operating one one of 4 Bands in the 800-900
> > Mhz, and 1800 - 2000 Mhz, will cause ANY Measurable Heating in
> > Human Tissue, and therefore cause some sort of problem.
>
> No problem:
>
> http://www.wymsey.co.uk/wymchron/cooking.htm
>
Check out Snopes on that. There are some Fake YouTubes on that too. It seems you can't even do that with a pile of phones. Nor can you receive police calls on your cell phone by spreading peanut butter on the SIM card. But if it is any consolation, I can grab on to a 50 watt 2m antenna and feel it get warm. Again, I can stand in the sun and get warm too. Aside from the known UV exposure problem, the tissue heating appears to have little negative impact over the long run when taken in moderation.

Still, people have been killed in their sleep by electric blankets. And I would question the sensibility of someone who stands in between two 10db 900 MHz 1kw ERP paging antennas just to get warm. But I've seen that done too.

Studies show that the penetration of RF heating into the body is tied quite a bit to the wavelength, and that the greatest penetration was somewhere between 400 and 2000 Mhz. The most worrisome issue was found to be the human eye at those frequencies. There is no blood flow in the Vitreous solution in the eyeball to cool it, nor in the Cornea tissue. Nor are you apt to notice if there is heating of that tissue. One of the long term results of the Military observations, were cataract formation in those who worked closely with microwave RADAR energy. You should be more concerned with the 5 watt 440 or 800 HT with the antenna right in your eye than your earlobe, which has blood flow.

If you notice your earlobe getting warm, reduce your talk time accordingly. And don't watch the food cook.

1039. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 15:54:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7n2vahaj1@registered.motzarella.org>
Source record: 23513

JB wrote:
> Well, I can't explain anything rationaly to you because you are jumping
> wildly to conclusions like a cartoon character. All I'm saying, is that you
> need to objectively assess risks. If you can't do that you ought to be
> institutionalized for the safety of yourself and others.
>
> The statistics of wireless devices causing harm are so off the radar there
> are none! And this is the smoking gun - if there were, they would have
> come forward by now from the 2 way and uwave industry with complaints, but I
> haven't heard of anyone in the business who HAS been harmed in my 30 years
> of experience. And that is 15 years under the old standards of RF
> exposure - NONE.
>
> I invite anyone from the industry who reasonably thinks they have been
> harmed to respond. Particularly from the retired folks. I'm not talking
> about RF burns, as they are minor and pain has a way of causing you to limit
> that exposure.
>
> You can eliminate the potential of risk entirely by throwing away all RF
> devices.
>
> But don't stop there because of all the risks that you failed to account
> for, such as rolling out of bed in the morning or burning yourself making
> breakfast or tripping on the front steps or getting in a wreck on the way to
> work.
>
> THAT is a major risk statistically, whereas the statistics of RF harm are
> unknown because no is so stupid, to cut their arm off or cut a hole in the
> uwave oven door AS YOU SUGGESTED just to get a chance to GET harmful
> exposure, which sort of proves my point about the general public having to
> try real hard in order to to be exposed to harmfull levels of energy.
>
> Getting back to the cell phones and Blackberry's - and I thought that's what
> we were talking about - DON'T WORRY ABOUT IT! They really don't amount to
> squat! Honest!
>
> BTW I put a mouse in a Litton uwave oven in 1983 for 10 seconds and removed
> him because I didn't want to push the little guys luck or see him suffer.
> NO noticeable or discernable damage or harm was done and he went on to sire
> several healthy normal litters.
>
>

Just to clarify, you seem to imply, a 1.2288KW, equivalent, source of freqs in the "cooking bands" and at a distance of 384mm/38.4cm/~15-inches from your head is "nothing to sweat." (and given, the sources antenna is omni-directional)

Surely you can see how some men would withhold agreement ... at least until a time in the future ...

Regards,
JS

1040. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 15:57:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7n351haj2@registered.motzarella.org>
Source record: 23514

M0WYM wrote:
> You wrote:
>
>>
>> Now all you need to prove, is that the RF Power Density of a 300
>> Milliwatt Cellphone, operating one one of 4 Bands in the 800-900
>> Mhz, and 1800 - 2000 Mhz, will cause ANY Measurable Heating in
>> Human Tissue, and therefore cause some sort of problem.
>
> No problem:
>
> http://www.wymsey.co.uk/wymchron/cooking.htm
>
>

M0WYM:

LOL!

Warm regards,
JS

1041. Re: 600 ohm balun vs 200 ohm balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 16:10:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uq3u941ollhpt667s1vrilos0idprpu4jt@4ax.com>
Source record: 23515

On Sun, 10 Aug 2008 11:24:54 -0400, Edward Feustel
<efeustel@hughes.net> wrote:

>I believe that with the reactances involved, so theoretically it might
>not make much difference. Anyone with actual actual experience
>who would like to render an opinion?

Hi Ed,

You can easily dismiss the theory and take the quick step up to the
bar of experience - your own (who better?).

Does it match on the bands you prefer? Changing things will not
improve what is already acceptable.

Are you worried about what you cannot see? Loss? Ah! Then we
migrate into the world of the skeptical and theoretical where there
are probably questions you cannot answer - which questions require
data to give you specific solutions.

You ask one of these questions (by inference) yourself: 400 Ohms or
600 Ohms? You don't know, but it "could" make a difference. Here,
the "could" is a question of degree. Yes, on paper it is significant,
but in practice the listener of your signal would never note any
improvement if you invested effort, equipment, and time in finding the
answer and implementing a change to correct the "problem."

Let's examine what is significant. Would you like to eliminate 1dB of
loss (make that 1dB available to the listener)? Do you know what 1dB
looks like on an S-Meter? I would suppose so: about the thickness of
the needle. Would you invest $1000 to do that? Which is significant:
1. 1dB;
2. $1000.

Feel free to adjust both numbers to more closely conform to your
situation and expectations and respond in that context.

73's
Richard Clark, KB7QHC

1042. Re: ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 16:20:19 UTC
From: no@spam.net
Message-ID: <n75u94hvabvoanchocee7kia81jbednmn8@4ax.com>
Source record: 23516

Well, you done gots male.

On Sun, 10 Aug 2008 04:34:37 GMT, "Harry H" <harryharms@hotmail.com>
wrote:

>No not yet, so far all I have had is Grammar lessons! LOLOL
>
>Oh and the word I should have used was illegible, I humbly beg the pardon of
>the grammatical police out there!
>Thanks
>HH
><no@spam.net> wrote in message
>news:hc4r949vhr7pudp0j62ron8i1qtnv8g0tj@4ax.com...
>> did you get your copy yet??
>>
>> On Wed, 06 Aug 2008 10:05:30 GMT, "Harry H" <harryharms@hotmail.com>
>> wrote:
>>
>>>I am wondering is anyone has a copy of an article on a multiband mobile
>>>helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.
>>>
>>>
>>>I do have a copy but the majority of it is intelligible.
>>>
>>>Thanks
>>>HH
>>>
>>>
>

1043. Re: 600 ohm balun vs 200 ohm balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 16:32:24 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <sKEnk.17389$uE5.7396@flpi144.ffdc.sbc.com>
Source record: 23517

Edward Feustel wrote:
> I am interested in opinions on whether it would be better for me
> to use a 450 or 600 ohm balun that might more closely match the
> transmission line (in practice).

450/50 = 9:1, 600/50 = 12:1 - Is that what you are thinking?

On a transmission line with standing waves, the impedance seen
by the balun will NEVER be the Z0 of the transmission line.

Let's say you are using Z0=600 ohm feedline with an SWR of 20:1.
Let's say a current maximum point exists at the balun. The balun
will see an impedance of 600/20 = 30 ohms.

Do you want to use a 4:1 balun and take it down to 7.5 ohms? Why?
Do you want to use a 9:1 balun and take it down to 3.3 ohms? Why?
Do you want to use a 12:1 balun and take it down to 2.5 ohms? Why?

Do you want to use a 1:1 balun and leave it at 30 ohms?

When the impedance being encountered by the balun is unknown,
a lot of experts recommend a 1:1 current-choke-balun.
--
73, Cecil http://www.w5dxp.com

1044. Re: Help me buy VHF/UHF television antenna? Can't decide!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 16:35:42 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <V6WdnWi9a_pGhQLVnZ2dnUVZ_v7inZ2d@bright.net>
Source record: 23518

Dear JB (no call sign): The objective was in no way intended to stifle,
only to describe.

Here is the essence of my message about the 1080 of about a month ago:

It is deceptive to put numbers on the size. The reflector consists of five
doublets each with a tip-to-top length of 26.5 inches and a total height of
a little over 16 inches. The twin "driven" elements are spaced about 6.6
inches in front of the reflectors (obviously the reflectors are only
effective for UHF). The tip-to-tip length of the driven elements is about
34.5 inches (giving a predicted 0.5 WL resonance towards the bottom of the
higher VHF TV band). Each driven element is coaxial with a fan dipole that
should have a resonance somewhere in the UHF band. Thus one expects a small
gain with a small F/B in the higher VHF band and fair gain with good F/B in
the UHF band.

Regards, Mac N8TT

--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
"JB" <nospam@goofball.net> wrote in message
news:F7vnk.521$EL2.235@trnddc01...
> Sorry about that. I did get them mixed up not having the photos in front
> of
> me when writing. Roy is also correct. All that is in the ARRL Antenna
> Handbook. I believe impedance is lowered though at the dipole elements
> apex. to some extent. The dipole vs. Inverted V comes to mind, but the
> feedpoint impedance of a LPDA is really about the spacing of the feeders
> and
> matching system. .
>
> I'll shut up now
>
> "J. Mc Laughlin" <jcm@power-net.net> wrote in message
> news:YdydnYw8KOiTZQXVnZ2dnUVZ_oTinZ2d@bright.net...
>> I am looking at a 1080. It is being used in the computer room. All of
> the
>> elements are in two, parallel planes that are each normal to earth. In
>> other words, flat. On high-VHF (channel 12, here) there is little F/B
>> ratio, but that has not been a problem. The chances of needing to reject
> a
>> high-VHF station (at 180 degrees) on the same frequency is slim. The
>> antenna is a stout, little, two-bay broadside array with reflector mostly
>> effective on UHF.

>>
>> I provided a detailed set of measurements in another message. 73, Mac
>> N8TT
>>
>> --
>> J. McLaughlin; Michigan, USA
>> Home: JCM@power-net.net
>> <me@privacy.net> wrote in message
>> news:onnh94tp1jhff5m7cfmophvs6m2cslv03q@4ax.com...
>> > "JB" <nospam@goofball.net> wrote:
>> >
>> >>While the 1080 UHF is fairly sharp with some potential gain, the VHF
>> >>elements seem to be little more than "rabbit ears" - In fact it is a
> swept
>> >>dipole, so will be bi-directional and easily pick up reflections from
>> >>behind
>> >>and around you..
>> >
>> > I'm a bit confused on your remark above.
>> >
>> > Looks to me like the 1080 is perfectly flat antenna.
>> > Where do you see any bending or sweeping of elements?
>>
>>
>
>

1045. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 16:37:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7n5fr$3m9$1@news.albasani.net>
Source record: 23519

John Smith wrote:

> ...
> Just to clarify, you seem to imply, a 1.2288KW, equivalent, source of
> freqs in the "cooking bands" and at a distance of ...
> Regards,
> JS

In the above, can we abbreviate "cooking bands" to just "CB?" <wink>

At first, I failed to catch the level of my own humor! LOL!

Regards,
JS

1046. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 18:51:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7ndc6$b2a$1@news.albasani.net>
Source record: 23520

HarryHydro wrote:
> Hi Folks:
> We've been having intermittent problems with 'interference' on
> 6.8 gig Alcatel radios and 5.8 gig (freeband) Proxim radios. I just
> came into the radio shack, turned on the 'widow maker', a big heavy
> spectrum analyzer, and instead of finding 5.8GHz internerence, I
> found VERY strong pulses of RF around 4.9GHz. With my Blackberry about
> 5 feet away, the analyzer is showing a -10dbW (yes, 100mW) on a 2.4
> gig antenna. It must be saturating the front ends. This Blackberry
> comes through speakers with the preamps, and even televisions a good
> 10 feet away! It makes the computer monitor's screen shake almost
> like the degauss! (when placed close). And, I suspect it does this
> with it next to my head also, straight out the front and back of the
> phone.
> I was just looking at 4.9gig info and it seems to be allocated to
> public safety. Is it also WiFi? The WiFi on this phone is off, at
> least in the 'Connections', but that doesn't suprise me as laptops
> seem to transmit on WiFi while connected to LAN. (Laptops' WiFi
> knocks off the Proxim's, also)
> Anyone ever scoped out the RF power from a Blackberry? Can this be
> safe power levels?
> Harry

HarryHydro:

Anyway, none of my previous posts have been directly made to you;
however, I am sure you can "intuit" my fears/worries/considerations and
cautions involving the subject(s) you have introduced here ...

In closing, "Keep On Cookin', Men!" (should be considered equiv. to
"Keep On Truckin', Men!") <WINK>

Regards,
JS

1047. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-10 23:48:41 UTC
From: HiTech RedNeck <hitechCOLOR-OF-BLOODneck@ameritech.net>
Message-ID: <09Lnk.18776$89.17214@nlpi069.nbdc.sbc.com>
Source record: 23521
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"Ed Cregger" <ecregger@bellsouff.net> wrote in message
news:g7apslovu1@registered.motzarella.org...

> I used to pick up AM radio stations in my head. The theory back then was
> that it was due to dental work acting as a rectifier, etc.

How on earth could you sleep. You'd need to make your bedroom into a
Faraday cage.

1048. Re: 600 ohm balun vs 200 ohm balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 00:19:19 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AF768F9488A0nonenowhere@61.9.191.5>
Source record: 23522

Edward Feustel <efeustel@hughes.net> wrote in
news:rh1u945om5288a5dvnqaobsmd2q64k8v7t@4ax.com:

> I have a centerfed 220 foot dipole I am using on all bands from 160 -
> 10 meters. It is between 40 and 50 feet above silt soil and is fed
> with W7FG open wire (600 ohm?) Currently I am using a 4:1 balun at the
> output of the antenna tuner to transform impedances to an L-Network
> that allows the transmitter to see a close match at 50 ohms.
>
> I am interested in opinions on whether it would be better for me
> to use a 450 or 600 ohm balun that might more closely match the
> transmission line (in practice).
>
> I believe that with the reactances involved, so theoretically it might
> not make much difference. Anyone with actual actual experience
> who would like to render an opinion?
> Thanks,
> Ed
>

Ed, you could come to an opinion on this if you treat the system as
comprising lumped constant components.

But, it isn't simply that.

If you were to use a common mode choke, and that is probably the best
choice, eg W2DU style balun, the balun acts on the common mode Zo rather
than the differential mode Zo (the 450 / 600 you are discussing), so I
as why is the differential mode Zo so important in selecting the balun.

I know there are rules of thumb (ROT) about the parameters of the balun
wrt the differential Zo.

It is true that such a balun does contain a short length of transmission
line, and that means some amount of impedance transformation for loads
other than Zo, but IMHO it is not very significant in your tuned feeders
multi band dipole.

Obtaining an adequate choking impedance is probably a more important
issue, but people are usually more concerned about the correct Zo for the
balun.

Owen

1049. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 02:09:57 UTC
From: Lee <lo012a4519@blueyonder.co.uk>
Message-ID: <WbNnk.39605$Gh7.15695@newsfe15.ams2>
Source record: 23523

"solid" <solid@evidence.com> wrote in message news:489eeb85@127.0.0.1...
>
>
> http://uk.youtube.com/watch?v=5pgLbBfzObk
>
> WHAT IS THE NAME OF THE SONG WHEN it comes to the end? I used to listen to
> this song when I was studying in canada?
>
>

I Wanna Make You A Star ??

Lee.

1050. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 02:45:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7o943$13q$1@news.albasani.net>
Source record: 23524

JB wrote:
> Well, I can't explain anything rationaly to you because you are jumping
> wildly to conclusions like a cartoon character. ...

I will be honest with you, I have been "dishonest by omission"--I know the general public is completely unaware of the REAL dangers (well, I am being kind, they are simply too ignorant to be concerned) ... I know there are few "experts" who are aware (and "those threats" are being extinguished with money/lawyers/"orchestrated-studies") ... and those few who do know are in the medical profession, a couple of them vocal on the subject ... most say/believe "the government will protect us"--others say ignorance is bliss (well, I do) ...

Back in the 1980's a "deal was brokered" with the FCC (Hmmm, isn't that when cell phones "came out?") ... cell phones fall though a "legal loophole"--they are considered a "low powered device" and unable to do the damage one needs to fear from a microwave oven--they are exempt, there really is no Maximum Permissible Levels established which manufacturers/engineers/industry can EFFECTIVELY be held to ... they suffer virtually no regulation ... perhaps SAR, but then that is like 4w per KG? You probably can cook an egg with that! (albeit slowly) LOL!

However, from this URL:

http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf

You will find within, "Table 1. FCC Limits for Maximum Permissible Exposure (MPE)" and "(B) Limits for General Population/Uncontrolled Exposure" ...

... you may draw your own conclusions about a 300mw source of cooking frequency within 6mm of your cranium (I have been thinking about that, the antenna is probably embedded in the middle of that case and ~3mm from my head :-( ) ... personally, I caution my wife from standing too close, let alone placing her forehead against the microwave door when in operation! (she does that yanno'!)

Funny, I just always assumed the people here (well, other than the idiots) would already be taking precautions (headsets--short exposures/calls.)

I only hope to be here when they hand out the "Darwin Awards" to those deserving--post mortem-ously for them, most likely ...

Regards,
JS

1051. Re: ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 03:06:36 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <01Onk.27224$IK1.9989@news-server.bigpond.net.au>
Source record: 23525

<no@spam.net> wrote in message
news:n75u94hvabvoanchocee7kia81jbednmn8@4ax.com...
> Well, you done gots male.
>

And the translation is??????

1052. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 03:46:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7ocml$13q$2@news.albasani.net>
Source record: 23526

John Smith wrote:
>> ...

Hate to leave that "hanging", like that ...

I found this:

"How can I obtain the Specific Absorption Rate (SAR) value for my wireless phone?

The FCC requires that wireless phones sold in the United States demonstrate compliance with human exposure limits adopted by the FCC in 1996. The relative amount of RF energy absorbed in the head of a wireless telephone-user is given by the Specific Absorption Rate (SAR), as explained above. The FCC requires wireless phones to comply with a safety limit of 1.6 watts per kilogram (1.6 W/kg) in terms of SAR.

Information on SAR for a specific phone model can be obtained for many recently manufactured phones using the FCC identification (ID) number for that model. The FCC ID number is usually printed somewhere on the case of the phone. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the ID number, go to the following Web address: www.fcc.gov/oet/fccid. On this page, you will see instructions for entering the FCC ID number. Type the FCC ID number exactly as requested (the Grantee Code is the first three characters, the Equipment Product Code is the rest of the FCC ID number). Then click on "Start Search." The "Grant of Equipment Authorization" for your telephone should appear. Read through the grant for the section on "SAR Compliance," "Certification of Compliance with FCC Rules for RF Exposure" or similar language. This section should contain the value(s) for typical or maximum SAR for your phone.

Phones and other products authorized since June 2, 2000, should have the maximum SAR levels noted directly on the "Grant of Equipment Authorization." For phones and products authorized between about mid-1998 and June 2000, detailed information on SAR levels is typically found in the exhibits associated with the grant. Once a grant is accessed, the exhibits can be viewed by clicking on "View Exhibit." Grants authorized prior to 1998 are not part of the electronic database but, rather, have been documented in the form of paper records.

The FCC database does not list phones by model number. However, consumers may find SAR information from other sources as well. Some wireless phone manufacturers make SAR information available on their own Web sites. In addition, some non-government Web sites provide SARs for specific models of wireless phones. However, the FCC has not reviewed

these sites and makes no guarantees of their accuracy. Finally, phones certified by the Cellular Telecommunications and Internet Association (CTIA) are required to provide SAR information to consumers in the instructional materials that come with the phones. "

Here:

http://www.fda.gov/cellphones/qa.html#4

Regards,
JS

1053. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 12:02:05 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g7p9o3$8gg$1@registered.motzarella.org>
Source record: 23527
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"HiTech RedNeck" <hitechCOLOR-OF-BLOODneck@ameritech.net> wrote in message
news:09Lnk.18776$89.17214@nlpi069.nbdc.sbc.com...
>
> "Ed Cregger" <ecregger@bellsouff.net> wrote in message
> news:g7apslovu1@registered.motzarella.org...
>
>> I used to pick up AM radio stations in my head. The theory back then was
>> that it was due to dental work acting as a rectifier, etc.
>
> How on earth could you sleep. You'd need to make your bedroom into a
> Faraday cage.
>
>

Truly, it didn't bother me at all. Of course, it could have been just a coincidence. I used to wonder if I had memorized their play sheet and then just applied that to the great sense of time that I had back then. I could come within a minute, twenty four hours a day, of giving the correct time each and every time someone asked.

The AM radio sense disappeared when I went into the USAF in 1965. When I came back from the USAF some four years later, the 1380 WAMS radio station was gone as was the use of the frequency. The USAF removed quite of a few teeth during my four year sojurn. I always figured that was the reason why radio reception stopped.

Ed, NM2K

1054. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 14:13:01 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g7phdc$1dt4$1@f04n12.cac.psu.edu>
Source record: 23528

John Smith wrote:
> JB wrote:
>> Well, I can't explain anything rationaly to you because you are jumping
>> wildly to conclusions like a cartoon character. ...
>
> I will be honest with you, I have been "dishonest by omission"--I know
> the general public is completely unaware of the REAL dangers (well, I am
> being kind, they are simply too ignorant to be concerned) ... I know
> there are few "experts" who are aware (and "those threats" are being
> extinguished with money/lawyers/"orchestrated-studies") ... and those
> few who do know are in the medical profession, a couple of them vocal on
> the subject ... most say/believe "the government will protect
> us"--others say ignorance is bliss (well, I do) ...
>
> Back in the 1980's a "deal was brokered" with the FCC (Hmmm, isn't that
> when cell phones "came out?") ... cell phones fall though a "legal
> loophole"--they are considered a "low powered device" and unable to do
> the damage one needs to fear from a microwave oven--they are exempt,
> there really is no Maximum Permissible Levels established which
> manufacturers/engineers/industry can EFFECTIVELY be held to ... they
> suffer virtually no regulation ... perhaps SAR, but then that is like 4w
> per KG? You probably can cook an egg with that! (albeit slowly) LOL!
>
> However, from this URL:
>
> http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf
>
>
> You will find within, "Table 1. FCC Limits for Maximum Permissible
> Exposure (MPE)" and "(B) Limits for General Population/Uncontrolled
> Exposure" ...
>
> ... you may draw your own conclusions about a 300mw source of cooking
> frequency within 6mm of your cranium (I have been thinking about that,
> the antenna is probably embedded in the middle of that case and ~3mm
> from my head :-( ) ... personally, I caution my wife from standing too
> close, let alone placing her forehead against the microwave door when in
> operation! (she does that yanno'!)
>
> Funny, I just always assumed the people here (well, other than the
> idiots) would already be taking precautions (headsets--short
> exposures/calls.)

Well I certainly do, although I might be still an idiot.

I don't find a thing wrong with your logic. Fact is, no one would ever just allow the same RF source to be applied to their temples. They would say we're crazy to suggest such a thing. And much less to attach such a thing to their children.

Who here would tape a wire to their child's head with up to a watt of power running through it at those freq's ? Child protective services would probably declare you unfit, take the kids away from you, and you'd probably have to register as something or another so you could be tracked down if needed.

And yet, millions of parents do essentially the same thing, buying their children cell phones - and doing it "to keep them safe".

> I only hope to be here when they hand out the "Darwin Awards" to those
> deserving--post mortem-ously for them, most likely ...

Well, I still don't think they are likely to cause cancer. The frequency seems a bit low, and it's not as likely to cause cellular (hehe) problems as the ionizing type radiation.

I would suspect that the effects might be more likely to be involved with heating, or perhaps a disruption of normal brain activity.

Empirically, I have noticed that a lot of cell phone users behind the wheel bear a scary resemblance to extremely drunken drivers. Driving though red lights, sitting in a daze at green lights. Weaving off the road, erratic driving in general.

I think it is quite possible that excessive cell phone usage (hours/day) will make a person stupid.

-73 de Mike N3LI -

1055. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 14:54:01 UTC
From: gsm@mendelson.com
Message-ID: <slrnga0kjk.dpc.gsm@cable.mendelson.com>
Source record: 23529

Michael Coslo wrote:
> And yet, millions of parents do essentially the same thing, buying
> their children cell phones - and doing it "to keep them safe".

I have a simple way of dealing with that. We gave our teenage son a
pay-as-you-go phone and monitor carefully how much money he gets.

Geoff.
--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

1056. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 16:25:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7pp4u$80g$1@news.albasani.net>
Source record: 23530

Michael Coslo wrote:

> ...
> I think it is quite possible that excessive cell phone usage
> (hours/day) will make a person stupid.
>
>
> -73 de Mike N3LI -

Michael:

My original, first post, only advised caution ... and suggested a "prudent man rule." I hardly seen it as such a statement that would require this amount of effort to "backup", but then ...

By the way, I do not consider you an "idiot" ... I actually hope my fears are unfounded and pumping this cooking frequencies into ones skull will actually provide a here-to-fore unknown benefit(s) ... Do you think I could really take any pleasure in people being harmed? We simply need to look out for our own best interests; unfortunately, no one will do that for us, and the ones being paid to do so are NOT doing their job(s.)

The tendrils of greed and corruption run deep and chant the mantra "Oh, he/she/they are just paranoid", it works too well ...

Regards,
JS

1057. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 16:39:24 UTC
From: JB <nospam@goofball.net>
Message-ID: <0XZnk.598$EL2.340@trnddc01>
Source record: 23531

> >
>
> Just to clarify, you seem to imply, a 1.2288KW, equivalent, source of
> freqs in the "cooking bands" and at a distance of
> 384mm/38.4cm/~15-inches from your head is "nothing to sweat." (and
> given, the sources antenna is omni-directional)
>
> Surely you can see how some men would withhold agreement ... at least
> until a time in the future ...
>
> Regards,
> JS

Just to clarify, I never said that, you did.

1058. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 16:58:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7pr2t$80g$2@news.albasani.net>
Source record: 23532

JB wrote:

> ...
> Just to clarify, I never said that, you did.
>
>

Then, let me clarify what I said, 300mw @ 6mm IS 1.2288KW at
~38cm/~15-inches ... if you think it "just slightly" dangerous to do
one, why would you EVER do the other?

I mean, I don't mean to "jump all over the place" or "act like a child";
and please excuse my past behavior ... ;-)

Regards,
JS

1059. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 17:26:05 UTC
From: News Features <news_features@newsfeatures.net>
Message-ID: <Ez_nk.7683$cn7.6297@flpi145.ffdc.sbc.com>
Source record: 23533

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:9dbc082e-24dc-4859-a341-f11f68febc99@79g2000hsk.googlegroups.com...

> Could it have been that only one of the new lights was causing the
> problem.
>
> Jimmie

I verified that each of the lights by itself was a problem. Bad manufacturing lot? Who knows? All I know is that they were unacceptably RFI-polluting. I got rid of them and replaced them with lights that were--right out of the box-- free of RFI. Problem solved. Hope this saves someone else the three hours of work it cost me.

There is no way I was going to go back to the store and buy four more of the bad lights on the basis of "Well, maybe four is too small of a sample size to draw any conclusions." Fool me once, shame on you; fool me twice, shame on me.

I reward companies that make RFI-friendly products and punish those that don't. Always have lived by that dictum. I also try at every turn to educate my neighbors to the same, so that we can all have as quiet an RF environment as possible. Hence, my purpose in posting the original post here.

Al W6LX

1060. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 17:42:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cft0a49vt0lk2uo6vce5vreaeo4v7aorvi@4ax.com>
Source record: 23534

On Mon, 11 Aug 2008 10:13:01 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>Who here would tape a wire to their child's head with up to a watt of
>power running through it at those freq's ? Child protective services
>would probably declare you unfit, take the kids away from you,

Hi Mike,

Child protective services probably would do that even if you NEVER put
ANY rf through the wire. They would react to the obvious issue of
abusive behavior. They haven't got a clue what RF would do, and they
wouldn't distinguish between 1W or 1ï¿½W as being good, bad, or
indifferent; and it would be the height of absurdity to expect them to
rummage through their car trunk for exposure meters to figure that out
when they are faced with a wacko and nothing more needs to be sorted
out.

Again, this sort of logic (sic) merely perpetuates the nonsense Brett
Gump loves to forward through these threads.

I can imagine the drift of topic would speculate they would idly stand
by and wait for proof positive that the adult had finally warmed up
the Henry and threw the switch before they were legally obligated to
do what was long obvious.

>and you'd
>probably have to register as something or another so you could be
>tracked down if needed.
Using an ankle cuff with an RF link. Now, apparently, what is
dangerous to the head is entirely benign to the foot - tell this to a
diabetic. Care to assume the liability for this suggestion? Does the
hint of cuffs pinching your wrists come to mind?

This is the absurdity of Brett's Yellow Journalism research and how
the topic has drifted from the technical to the superstitious. Mike,
do you care to respond to my technical comment of 3 days ago, or is
this deviant speculation really that more relevant to anything?

73's
Richard Clark, KB7QHC

1061. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 17:48:57 UTC
From: JB <nospam@goofball.net>
Message-ID: <dY_nk.765$T91.121@trnddc04>
Source record: 23535

"HarryHydro" <harryhydro@hotmail.com> wrote in message
news:82d0284e-bece-4572-9860-0ee36a42b80d@z72g2000hsb.googlegroups.com...
> Hi Folks:
> We've been having intermittent problems with 'interference' on
> 6.8 gig Alcatel radios and 5.8 gig (freeband) Proxim radios. I just
> came into the radio shack, turned on the 'widow maker', a big heavy
> spectrum analyzer, and instead of finding 5.8GHz internerence, I
> found VERY strong pulses of RF around 4.9GHz. With my Blackberry about
> 5 feet away, the analyzer is showing a -10dbW (yes, 100mW) on a 2.4
> gig antenna. It must be saturating the front ends. This Blackberry
> comes through speakers with the preamps, and even televisions a good
> 10 feet away! It makes the computer monitor's screen shake almost
> like the degauss! (when placed close). And, I suspect it does this
> with it next to my head also, straight out the front and back of the
> phone.
> I was just looking at 4.9gig info and it seems to be allocated to
> public safety. Is it also WiFi? The WiFi on this phone is off, at
> least in the 'Connections', but that doesn't suprise me as laptops
> seem to transmit on WiFi while connected to LAN. (Laptops' WiFi
> knocks off the Proxim's, also)
> Anyone ever scoped out the RF power from a Blackberry? Can this be
> safe power levels?
> Harry

First off, you need to use a proper setup and evaluation of the spectrum analyzer. A setup like you described can give wildly erroneous indications and even damage sensitive circuits. Just having multipath in the room can result in reinforcement of the signal. And you were standing where the signal was best? You aren't the only one caught by that. I never brought mine to work because "experts" had somehow convinced the powers that be that burnt out test equipment was a normal thing, so invariably only one or none might be working, being "in transit" to the depot.

A lot of devices are using modulation techniques that can be detected by analog devices, and nothing seems to more prone than amplified computer speakers. I can hear cell phone noise on mine even outside the building, even though they don't respond to my HF station with the linear on.

It doesn't make sense that energy 1 gig away would cause interference. I would be more suspicious of the audio circuits and switching transients. Consider that since RF power is on-off keyed, there is much less than 100% duty cycle of the On time, so heating effect are much lower than with FM.

1062. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 17:50:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7pu51$bc9$1@news.albasani.net>
Source record: 23536

News Features wrote:
> "JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message

> ...
> I reward companies that make RFI-friendly products and punish those that
> don't. Always have lived by that dictum. I also try at every turn to educate
> my neighbors to the same, so that we can all have as quiet an RF environment
> as possible. Hence, my purpose in posting the original post here.
>
> Al W6LX

Absolutely, to everything in your post! The data is much appreciated ... one thing I am still searching out is a transparent shield for the tubes themselves; I have considered a shield made of screen but have not acted on it (lazy/other-things-to-do.) I suspect rfi is using the plasma discharge in the tube itself as some type of inefficient antenna, as I have all shielded electronic ballasts ...

In addition, got any ideas here:

What do you do about wifi switches/routers/wireless-nics/etc?

It seems, to me, the frequencies which the Ghz signal(s) are modulated at, by the data stream of bits, is/are the real offender(s)? Other than the strategic placement of these devices and directional antennas, I have found little control over the RFI. I have found this to be a problem on AM/FM/SW/VHF/SHF; I have noticed, some devices/brand-names are less offensive than others ... I am, mostly all, Linksys with a couple of NetGear nics ...

Any ideas from anyone would be appreciated here ... and yes, any hard-cabling/power has been well choked with ferrite beads and filtered power-strips ...

I am asking because I have noticed, a person working to cure one form of RFI will, most likely, be working on "next one", next ... :-)

Regards,
JS

1063. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 17:53:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7puam$bc9$2@news.albasani.net>
Source record: 23537

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

It should be noted, those without a cell phone, or too old to desire/use
one need not worry ... but then, you already knew that!

Regards,
Brett :-)

1064. test

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 18:09:45 UTC
From: News Features <news_features@newsfeatures.net>
Message-ID: <ze%nk.17437$uE5.5155@flpi144.ffdc.sbc.com>
Source record: 23538

[No readable article body recovered]

1065. test

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 18:12:26 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <5h%nk.33139$co7.14387@nlpi066.nbdc.sbc.com>
Source record: 23539

[No readable article body recovered]

1066. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 18:19:13 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <sn%nk.33141$co7.20140@nlpi066.nbdc.sbc.com>
Source record: 23540

> What do you do about wifi switches/routers/wireless-nics/etc?
>
> It seems, to me, the frequencies which the Ghz signal(s) are modulated at,
> by the data stream of bits, is/are the real offender(s)? Other than the
> strategic placement of these devices and directional antennas, I have
> found little control over the RFI.

Hi, John,

I have found the exact same thing as you. The modulation rate on those wireless modems and such fall right in the HF band. You've already listed what I've tried: antenna orientation.

However, most of those things have a variable power output. You can "log in" to
them via a web interface; point your browser to their IP address and you can perform administrative functions including adjusting the output power.

One of two things will happen: Increasing the output power may cause the data rate between your computer and the router to increase, pushing the RFI higher in the HF spectrum. Or, you may find that using the minimum power possible you can reduce the interference level. I guess what I am saying is try changing it and see what happens.

The one I am using right now is an AT&T wireless DSL modem made by 2Wire.

Good luck,

Al W6LX

1067. Re: Fluorescent light RFI solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 18:29:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7q0dq$f6o$1@news.albasani.net>
Source record: 23541

Al Lorona wrote:

> Hi, John,
>
> I have found the exact same thing as you. The modulation rate on those
> wireless modems and such fall right in the HF band. You've already listed
> what I've tried: antenna orientation.
>
> However, most of those things have a variable power output. You can "log in"
> to
> them via a web interface; point your browser to their IP address and you can
> perform administrative functions including adjusting the output power.
>
> One of two things will happen: Increasing the output power may cause the
> data rate between your computer and the router to increase, pushing the RFI
> higher in the HF spectrum. Or, you may find that using the minimum power
> possible you can reduce the interference level. I guess what I am saying is
> try changing it and see what happens.
>
> The one I am using right now is an AT&T wireless DSL modem made by 2Wire.
>
> Good luck,
>
> Al W6LX

AL:

I was just "about" with a FSM and freq. meter ... the worst offender is
a Linksys "Wireless-N Home Router"--WRT150N ...

I am logging into 192.168.1.1 (the web interface to the router) to
search for the settings you mentioned, it has a TON of settings ... will
get back to you!

I cannot believe I didn't think of that, again, I claim Alzheimers'! ;-)

THANKS!

Regards,
JS AKA Brett :-)

1068. feedback requested from pickup truck owners on antenna brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 18:51:25 UTC
From: Radio_Dick <rspost@mail.com>
Message-ID: <cffb3cfa-946d-4fdb-8198-0dc8014da052@l64g2000hse.googlegroups.com>
Source record: 23542

Greetings,

I'm looking for pickup truck owners who would be willing to provide measurements for, and feedback on, three prototype heavy-duty brackets for mounting HF antennas to pickup truck beds.

The brackets are: (1) front bed wall bracket with lay-back feature for large screwdriver/motorized antennas; (2) stake pocket bracket for large antennas; and (3) long bracket for multiple antennas that extends across the entire width of the bed and is attached to two stake pockets.

Your input would help me to obtain information on a variety of makes and models of trucks, and to get feedback on what may work well, or not, on your particular truck. I've gotten some information from manufacturers' web sites, but additional "real world" information is important for good product design!

If I get sufficient measurement information, I'll post it on my web site Downloads page as it may be useful to others.

If you would be willing to provide information, please click on this link (http://www.repdesign.us/gpage8.html) to my web page which has the measurements I'm looking for and descriptions with diagrams of the three bracket designs. On this page I also have a link to an on-line Feedback Form that you can use to provide as much or little of the information as you like. You can also email or phone me with the information if so desired. My contact information is linked on this page as well.

Thanks in advance to those who would be willing to provide information, and it's much appreciated!

73,
Dick Post, N7EMW

1069. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 19:18:32 UTC
From: You <you@shadow.orgs>
Message-ID: <you-CA22D7.11183211082008@netnews.worldnet.att.net>
Source record: 23543

In article <g7lbo2tso1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> You wrote:
>
> > ...
> > Now all you need to prove, is that the RF Power Density of a 300
> > Milliwatt Cellphone, operating one one of 4 Bands in the 800-900
> >> ...
>
> Let's say just those figures are correct ...
>
> My Motorola Razar V3 phone is approx. 6mm thick (when opened), and where
> the antenna is buried in the phone. This means the antenna can be no
> more than 6mm from my head if the phone lies against my head. Now, we
> assume the phone is emitting 300mw. This would be equivalent to 1.2w of
> power emanating from that same antenna at a distance of 12mm from my
> head. And, the latter would be equivalent to 4.8w emanating from the
> same antenna at a distance of 24mm from my head. And, the last would be
> equivalent to 19.2w emanating from the same antenna at a distance of
> 48mm from my head ... your higher figure, of two watts, is simply
> frightening ...
>
> The lunacy is exposed ... correct any error you see in the above ...
>
> Regards,
> JS

Sonny, you seem to be using the Inverse, of the Inverse Square Law
here.... the Farther the source is from the receiver the LESS power
reaches the receiver, not MORE. It goes Down, by the SQUARE of the
distance, not up. You also don't get ALL of the 300 Milliwatts
going into your head as the antenna is semi Omni-directional and
only about 120 degrees of the 360 degree transmitted signal will
intersect with your head, and another maybe 10 degrees with you hand.
Better go back and do the Sums, AGAIN, or leave it to folks that
passed Jr. High School Math, and High School Physics.

1070. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 19:27:27 UTC
From: You <you@shadow.orgs>
Message-ID: <you-2BFAD0.11273511082008@netnews.worldnet.att.net>
Source record: 23544

In article <OpKdnV5GmcfykwPVnZ2dnUVZ8tninZ2d@pipex.net>,
Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

> In a built-up area or along the highway with nearby base stations the
> power can be very low ,whereas at remote locations it can be as high as
> 2 Watts (at least here in Europe).

BUT we were talking about Handheld Cellphones, and these typically have
a Maximum RF Power to the antenna of 300 Milliwatts, which is then
Telcommanded Lower by the Base Station, depending on Base Stations
Received Signal to Noise Ratio. There are a few, up to, 3 Watt Digital
Cellphone Subscriber Units, but they ALL have external Antennas, and
these antennas are NOT designed to be attached to your HEAD....
Apples and Oranges......

1071. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 19:34:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7q47ujll1@news.albasani.net>
Source record: 23545

You wrote:

> ...
> Sonny, you seem to be using the Inverse, of the Inverse Square Law
> here.... the Farther the source is from the receiver the LESS power
> reaches the receiver, not MORE. It goes Down, by the SQUARE of the
> distance, not up. You also don't get ALL of the 300 Milliwatts
> going into your head as the antenna is semi Omni-directional and
> only about 120 degrees of the 360 degree transmitted signal will
> intersect with your head, and another maybe 10 degrees with you hand.
> Better go back and do the Sums, AGAIN, or leave it to folks that
> passed Jr. High School Math, and High School Physics.

EXACTLY! That is why the further the source is from the
"receiver/your-skull" the further the sources power must be increased to
maintain the same field-density! You got it!

Inverse Square Law in action! Or, ~2:4 ratio--every doubling in
distance requires the fourfold increase of the sources output to
maintain field density -- what part of my posts must I "rewrite" for you
to obtain that meaning from them?

Regards,
JS

1072. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 20:12:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qq61a4l39dcga65hln8m3lqgafnvpm2cft@4ax.com>
Source record: 23546

On Mon, 11 Aug 2008 10:53:27 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>but then, you already knew that!

No, I anticipate with 3 more follow-ons by you to the same posting,
and then 2 more in response to yourself, it still won't be sorted out.
... not that anyone has ever confused that with an intellectual
aspiration.

Having said that, I will skip the bleeding obvious (sorry Reggie).

73's
Richard Clark, KB7QHC

1073. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 20:28:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7q7cu$k73$1@news.albasani.net>
Source record: 23547

You wrote:

> ...
> Sonny, you seem to be using the Inverse, of the Inverse Square Law
> here.... the Farther the source is from the receiver the LESS power
> reaches the receiver, not MORE. It goes Down, by the SQUARE of the
> distance, not up. You also don't get ALL of the 300 Milliwatts
> going into your head as the antenna is semi Omni-directional and
> only about 120 degrees of the 360 degree transmitted signal will
> intersect with your head, and another maybe 10 degrees with you hand.
> Better go back and do the Sums, AGAIN, or leave it to folks that
> passed Jr. High School Math, and High School Physics.

Or, to simplify, once again, 300mw@6mm ~= 1.288KW@38.4cm ... re-read my posts, you (that is your "name", right? <grin>) missed it!

However, I have rethought those distances, since, I now realize the antenna in the phone is much closer to my skull than I had first thought; here is the "new breakdown":

3mm@300mw = 6mm@1.2W
6mm@1.2W = 12mm@4.8W
12mm@4.8W = 24mm@19.2W
24mm@19.2W = 48mm@76.8W
48mm@76.8W = 96mm@307.2W
96mm@307.2W = 19.2cm@1.288KW

19.2cm ~= ~7.5-inches

Anyway, point is, when I use my cell phone without a headset, that spot on my head, directly under the cell phones' antenna, is getting the same exposure as it would get from a 1.2288KW source utilizing the same antenna, and at a distance of 7.5 to ~15 inches from my head! (realize the importance of that 19.2cm/7.5-inch vs. 1.2288KW figure!)

Anyway you cut that--it ain't pretty! My wife, frequently, makes 2+ hr calls to family! Did that help?

Now, anyone want to explain the "yellow journalism" in that to me?

Regards,
JS

1074. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 20:33:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7q7ms$k73$2@news.albasani.net>
Source record: 23548

Richard Clark wrote:

> ...
> No, I anticipate with 3 more follow-ons by you to the same posting,
> and then 2 more in response to yourself, it still won't be sorted out.
> ... not that anyone has ever confused that with an intellectual
> aspiration.
>
> Having said that, I will skip the bleeding obvious (sorry Reggie).
>
> 73's
> Richard Clark, KB7QHC

Three or more follow-ups, by me, heck, with you around, it will, most likely, take many more than that!

Some here are just "slow on the uptake", then some like you like tossing suspicion to hard data around and disinformation (even though cloaked as "cryptic comments.")

Pull up a chair, get a drink and relax--we may be in for that "ride" you are threatening ... (i.e., clarifying/defensive posts.)

Did I mention the fact that, those with few/or-no friends are not in danger, much, from cell phones either? <grin>

Regards,
JS

1075. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 21:31:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7qb2untj1@news.albasani.net>
Source record: 23549

John Smith wrote:

> ...
> Now, anyone want to explain the "yellow journalism" in that to me?
>
> Regards,
> JS

Here are complete disassembly instructions for my phone, the one in question. The antenna IS NOT where the "kid" (well, he was much younger than me <grin>) at "the cell phone place" told me it was ... indeed, it is UNDER MY HAND while I hold the phone! (actually, between head and hand!--nice for efficiency, huh?--probably drives it towards that 300mw all-the-more-quicker!) (so much for "placing the antenna logically!")

Now I am thinking the area of highest exposure, on my head, is my cheek/nose/upper-gum-area ... and, this makes the area of the phone containing the antenna further from my head; and the equivalent distance to a 1+KW source is much further, feet away instead of inches ... but, I would be hesitant to remain in my garage with I in one corner and an "omni-directional, Cooking Band(CB), frequency generator" of 1+KW in the other corner! -- But then, that is just me ... (and the phone is a MUCH closer danger than that ...)

That all changes little in my mind. Although I really do not sweat HF RF, much, I would still be hesitant to expose myself to levels of it of those intensities in question FOR the length of time(s), and that frequently, as is in question, however, if the need arouse, I'd probably do it ... at VHF/SHF I WOULD NOT! And, especially to those freqs in the CB Bands (Cooking Bands <grin>)

It would take "extreme motivation" for me to ignore the "prudent man rule"; but, even that is possible ...

I am sorry if this has been a source of "yellow journalism", to me, they seem honest mistakes/bad-data, but I admit, the mistakes do not help ... my original point seemed "so harmless", "be prudent/cautious" :-(

Tell you what, consider all this just "One Mans' Opinion", gather your data and then you decide ...

Regards,
JS

1076. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 21:45:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7qbt1ntj2@news.albasani.net>
Source record: 23550

John Smith wrote:

> ...
> Regards,
> JS

Oh yeah, the disassembly instructions:

http://uselessinfo.pwp.blueyonder.co.uk/dismantlev3.htm

Regards,
JS

1077. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-11 22:32:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7qel2rkh1@news.albasani.net>
Source record: 23351

Richard Clark wrote:
> On Mon, 11 Aug 2008 10:53:27 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> but then, you already knew that!
>
> No, I anticipate with 3 more follow-ons by you to the same posting,
> ...
> 73's
> Richard Clark, KB7QHC

I am correcting an error from previous postings, I suspect this to-be/might-be the "yellow journalism" you complain of ... I was in error on the antennas' placement within the phone ...

I now consider the "clear and present danger" of the cell phone, to my brain (frontal lobe(s) now), to be an equiv. to a 1.2288KW source at a distance of 448cm/~176-inches/~14-ft. from my frontal lobes ... a "distance error" of magnitudes!

But, IMHO, a still a REAL, CLEAR AND PRESENT, danger ... glad you made me improve the accuracy of the data I was offering ... THANKS!

I did not compute the dangers to my eyes, from an equiv. source ... the eyes are thought first to go, right? LOL!

However, the placement of the antenna has introduced a new high exposure areas, my nose/cheek/lips/upper-gum/hand ... and the placement means the phones antenna is completely engulfed in a "shield" of my body ... undoubtedly lowering that antennas' efficiency and forcing it towards max. power all the more quicker ...

If there are inaccuracies here, in this post, you will have to point them out to me so I can see them ... and this is only one phone ... where is the antenna in "all the others?"

Regards,
JS

1078. Re:ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-12 03:22:39 UTC
From: VK3XL <VK3XL.2e6ea81@radiobanter.com>
Message-ID: <VK3XL.2e6ea81@radiobanter.com>
Source record: 23353

So have you managed to get a copy of the article as yet?

I work at a university in Australia, and we have "Ham Radio" in our library way back to when Adam was a lad. It might take a bit of finding, but if all else fails let me know and I will have a look for it.

Best of luck
Mike VK3XL

--
VK3XL

1079. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-12 06:39:32 UTC
From: eric <eric@snelnet.nl>
Message-ID: <1854f$48a12fed$5469c636$9273@cache70.multikabel.net>
Source record: 23352

"Lee" <lo012a4519@blueyonder.co.uk> schreef in bericht
news:WbNnk.39605$Gh7.15695@newsfe15.ams2...
>
> "solid" <solid@evidence.com> wrote in message news:489eeb85@127.0.0.1...
>>
>>
>> http://uk.youtube.com/watch?v=5pgLbBfzObk
>>
>> WHAT IS THE NAME OF THE SONG WHEN it comes to the end? I used to listen
>> to this song when I was studying in canada?
>>
>>
>
> I Wanna Make You A Star ??
>
> Lee.
>
>
simply red (group) stars

look here http://www.youtube.com/watch?v=fpHRHSLWBMw
eric b te hhw (netherlands)
--

1080. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-12 13:49:09 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g7s4ck$166g$1@f04n12.cac.psu.edu>
Source record: 23354

Richard Clark wrote:
> On Mon, 11 Aug 2008 10:13:01 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> Who here would tape a wire to their child's head with up to a watt of
>> power running through it at those freq's ? Child protective services
>> would probably declare you unfit, take the kids away from you,
>
> Hi Mike,
>
> Child protective services probably would do that even if you NEVER put
> ANY rf through the wire. They would react to the obvious issue of
> abusive behavior. They haven't got a clue what RF would do, and they
> wouldn't distinguish between 1W or 1ï¿½W as being good, bad, or
> indifferent; and it would be the height of absurdity to expect them to
> rummage through their car trunk for exposure meters to figure that out
> when they are faced with a wacko and nothing more needs to be sorted
> out.

Perhaps I would be better served by my argument that a lot of people are selectively stupid. They pick and choose what they find dangerous. They hurtle towards each other on the highways often at relative speeds of 160 miles per hour, while carrying tanks of liquid so flammable as to be almost explosive. Yet not a thought is given to the gasoline in their tank, except perhaps to the cost.

> Again, this sort of logic (sic) merely perpetuates the nonsense Brett
> Gump loves to forward through these threads.

Perhaps a simplification of my argument is in order again.

People are very selective about what they fear. Sometimes they embrace a technology that is no less dangerous than another action that they would never do.

>> and you'd
>> probably have to register as something or another so you could be
>> tracked down if needed.
> Using an ankle cuff with an RF link. Now, apparently, what is
> dangerous to the head is entirely benign to the foot - tell this to a
> diabetic. Care to assume the liability for this suggestion? Does the
> hint of cuffs pinching your wrists come to mind?

Strictly speaking there is a difference in the tissue between the exposed areas. Is there a difference? I don't know. That's another test.

> This is the absurdity of Brett's Yellow Journalism research and how
> the topic has drifted from the technical to the superstitious. Mike,
> do you care to respond to my technical comment of 3 days ago, or is
> this deviant speculation really that more relevant to anything?

Sorry Richard, I didn't see that post. I might google it up when I get a chance.

But I detect an interesting drift to your reply. How much of your disagreement with me is due to my speculation on how people are remarkably inconsistent in their acceptance of risk, and how much is the disagreement because for once, I am in agreement with Mr. Smith?

This is in no way an argument for elimination of cell phones. It is an argument that we should not have them hanging off the side of our heads for hours. Even my XYL will chat with a friend for an hour plus on her cell. Makes me cringe. My own personal rule is no more than a minute, and I stick to it.

My arguments for exposing one's offspring are specifically designed to be ridiculous upon reception. No one in their right mind would ever expose their children like that, nor their husbands, wives, etc. But to the brain tissue, an exact analog could be delivered. Yet why would we not do it? The answer is because we shouldn't.

My point has been proven. I'm a little surprised that it was you who provided the proof.

- 73 de Mike N3LI -

1081. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-12 14:29:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9h73a4lpp0s3iaqm3upl8bhv4nml7pv84j@4ax.com>
Source record: 23355

On Tue, 12 Aug 2008 09:49:09 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>My point has been proven. I'm a little surprised that it was you who
>provided the proof.

Hi Mike,

Make that two posts you need to re-read.

73's
Richard Clark, KB7QHC

1082. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-12 19:57:31 UTC
From: kb9rqz@yahoo.com
Message-ID: <9pq3a45tp594090c3eqhm2mhpmq8de8oso@4ax.com>
Source record: 23397
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

1083. Re: Re:ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-12 22:56:33 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <Byook.27700$IK1.23455@news-server.bigpond.net.au>
Source record: 23356

Hello Mike and the group,

Yes I have just managed to get a better and readable copy of the article,
many thanks to Ed Griffin.

I do appreciate your offer of help too Mike!

If anyone wants a copy let me know.

HH

"VK3XL" <VK3XL.2e6ea81@radiobanter.com> wrote in message
news:VK3XL.2e6ea81@radiobanter.com...
>
> So have you managed to get a copy of the article as yet?
>
> I work at a university in Australia, and we have "Ham Radio" in our
> library way back to when Adam was a lad. It might take a bit of
> finding, but if all else fails let me know and I will have a look for
> it.
>
> Best of luck
> Mike VK3XL
>
>
>
>
> --
> VK3XL
>

1084. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 01:49:24 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g7tej1cte1@news.service.uci.edu>
Source record: 23357

Cecil Moore wrote:
> Joel Koltner wrote:
>> "Powers don't add, field strengths do"
>
> "Add" is a rather loosely defined term. A more technically
> precise statement would be: "Powers don't superpose, field
> strengths do."

Fields superpose, numbers add, and power is the rate of change in energy.

> When fields superpose, they still must obey
> the conservation of energy principle, i.e. the total energy
> before the superposition must equal the total energy after
> the superposition.

It's almost as if you think that if you don't always point it out,
energy won't be conserved! :-)

> Given two RF waves in a transmission line and the phase angle,
> A, between the two electric fields, the following Power equation,
> published in QEX, gives us a valid method of "adding" two powers.
>
> Ptotal = P1 + P2 + 2*SQRT(P1*P2)*cos(A)

According to fig. 7.1 in Born and Wolf, that's useful for showing how
light intensity varies as a function of phase, and hence position. It's
just that there's no valid way to multiply by the cosine of the angle
between two scalars.

Maybe wave problems are best solved using waves.

> The last term is known in optics as the "interference"
> term, positive for constructive interference and negative
> for destructive interference. Angle A, the phase angle
> between the two electric fields, determines the sign
> of the last term and thus whether interference is
> destructive or constructive.

(A+B)*(A+B) = A^2 + B^2 + 2AB

Must the first order term (2AB) in such equations always be referred to
as "The Interference Term", Cecil? Doing so seems to impart a greater
level of importance to it than to the other, unnamed terms in the
equation. The factored form must then be least important of all.

Beats, interference, and modulation are fundamentally the same
phenomenon. There's no need to get all worked up about one of them in

deference to the others, just as there's no need to worry about there being a node for every antinode.

73, ac6xg

1085. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 02:53:45 UTC
From: KJ4DIY <KJ4DIY.2e83bfc@radiobanter.com>
Message-ID: <KJ4DIY.2e83bfc@radiobanter.com>
Source record: 23360

solid;641965 Wrote:
> http://uk.youtube.com/watch?v=5pgLbBfzObk
>
> WHAT IS THE NAME OF THE SONG WHEN it comes to the end? I used to listen
> to
> this song when I was studying in canada?

What do songs have to do with Ham Radio Antennae.
Dosen't this belong in "Radio Banter General Forum".

--
KJ4DIY

1086. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 03:10:53 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <1hsok.18439$jl5.7321@flpi148.ffdc.sbc.com>
Source record: 23358

Jim Kelley wrote:
> Cecil Moore wrote:
>> Ptotal = P1 + P2 + 2*SQRT(P1*P2)*cos(A)
>
> According to fig. 7.1 in Born and Wolf, that's useful for showing how
> light intensity varies as a function of phase, and hence position. It's
> just that there's no valid way to multiply by the cosine of the angle
> between two scalars.

You are pretty confused. The angle is between the electric
field intensities of the two waves being superposed.

> Must the first order term (2AB) in such equations always be referred to
> as "The Interference Term", Cecil?

From "Optics", by Hecht, 4th Edition, page 387 & 388:

"I12 = 2<E1*E2> ... and is known as the interference term."
E1 and E2 are electric field intensities. * is the dot product.
<> indicates a time average value.

"The interference term becomes I12 = 2*SQRT(I1*I2)cos(delta)"

Hecht calls it the "interference term" and I am only quoting
him.
--
73, Cecil http://www.w5dxp.com

1087. Re: ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 03:14:25 UTC
From: RUKidding@nospam.net
Message-ID: <8ck4a4hijr98dkukal67f5kcj6do6v5gvc@4ax.com>
Source record: 23359

On Wed, 06 Aug 2008 10:05:30 GMT, "Harry H" <harryharms@hotmail.com>
wrote:

>I am wondering is anyone has a copy of an article on a multiband mobile
>helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.
>
>
>I do have a copy but the majority of it is intelligible.
>
>Thanks
>HH
>
>

1088. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 12:41:28 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g7ukpo$19ek$1@f04n12.cac.psu.edu>
Source record: 23361

KJ4DIY wrote:
> solid;641965 Wrote:
>> http://uk.youtube.com/watch?v=5pgLbBfzObk
>>
>> WHAT IS THE NAME OF THE SONG WHEN it comes to the end? I used to listen
>> to
>> this song when I was studying in canada?
>
> What do songs have to do with Ham Radio Antennae.
> Dosen't this belong in "Radio Banter General Forum".

What do radio antennae have to do with radio antennas?

- 73 de Mike N3LI -

1089. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 13:36:55 UTC
From: KJ4DIY <KJ4DIY.2e8e4c0@radiobanter.com>
Message-ID: <KJ4DIY.2e8e4c0@radiobanter.com>
Source record: 23364

Michael Coslo;642276 Wrote:
> KJ4DIY wrote:-
> solid;641965 Wrote: -
> http://uk.youtube.com/watch?v=5pgLbBfzObk
>
> WHAT IS THE NAME OF THE SONG WHEN it comes to the end? I used to
> listen
> to
> this song when I was studying in canada?-
>
> What do songs have to do with Ham Radio Antennae.
> Dosen't this belong in "Radio Banter General Forum".-
>
>
> What do radio antennae have to do with radio antennas?
>
>
> - 73 de Mike N3LI -

The correct plural form of Antenna is Antennae.
I you prefer Antennas fine I have been told recently by an Elmer that
this was the correct term.
The question here is not grammar but staying on topic for this forum.
I'm not trying to cause an argument we have different forums so
everyone can have there say.
Let's just stay on the topics of each forum.
73's :)

--
KJ4DIY

1090. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 14:42:41 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <9ls5a41jbmafcl57ah3g5qnqd2vh8kni6u@4ax.com>
Source record: 23362

On Thu, 07 Aug 2008 09:43:48 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>Sal M. Onella wrote:
>> In the late 1950's White's Radio Log reported XEX (Mexico City) had a
>> megawatt of power for a while -- several years, perhaps.
>
>In 1953, XERF at 250 KW in Villa Acuna was the strongest
>station on the dial in East Texas. Their studios were across
>the Rio Grande River in Del Rio, TX. For some reason, I
>remember the White Rose Petroleum Jelly commercials.

Wolfman Jack... 100 baby chicks for $2.98, shipped to your door!

bob
k5qwg

1091. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 14:57:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7usppgge1@news.albasani.net>
Source record: 23363

Michael Coslo wrote:

> ...
> What do radio antennae have to do with radio antennas?
>
>
> - 73 de Mike N3LI -

Aye Captain ... do antennas exist as an island?

What antenna can function without parameters?; A feed-line, a rig to drive it, a media to propagate through, an operator to operate it, inherent dangers, neighbors to complain of it, etc.? <grin>

Regards,
JS

1092. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 19:11:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7vbmevdd1@news.albasani.net>
Source record: 23365

KJ4DIY wrote:

> ...
> The correct plural form of Antenna is Antennae.
> I you prefer Antennas fine I have been told recently by an Elmer that
> this was the correct term.
> The question here is not grammar but staying on topic for this forum.
> I'm not trying to cause an argument we have different forums so
> everyone can have there say.
> Letï¿½s just stay on the topics of each forum.
> 73's :)

I would be willing to accept that; and no, I don't feel like researching
it ...

However, ants' have antennae, moths do, butterflies do, beetles, etc.

I tend to have antennas ... ;-)

Regards,
JS

1093. LOT #2 old antique radios for sale-Majestic-Wards Airline-Philco-Silvertone-more

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 19:53:04 UTC
From: ANTIQUE AUDIO <matthew.bunney@yahoo.com>
Message-ID: <17a1c880-b2b4-48eb-a784-1ee0916d56a9@e53g2000hsa.googlegroups.com>
Source record: 23366

http://search.ebay.com/_W0QQsassZ66-catalina

2 VINTAGE JENSEN AMP/LOUDSPEAKER SPEAKERS-P12T & A12PM- 2 $9.98
$30.00 5h 49m
LOT OF (21) OLD LICENSE PLATES-PENNSYLVANIA-NEW YORK-$$
CAR-TRUCK-TRAILER-MOTORCYCLE-BICENTENNIAL-ETC
2 $9.98
$10.00 1d 05h 49m
TOYOTA TERCEL 1987-1994 STARTER-NEW IN BOX-NIB-NOS-$$$$ - $9.98
$25.00 1d 05h 49m
ROTATING HAM-SW-CB-TV-RADIO ANTENNA ?-HAM/CB SHOP ITEM- - $9.98
$15.00 5d 05h 49m
(2) VINTAGE U.S. ARMY WWII GAS CANS-METAL-COMPLETE-$$$$ - $9.98
$20.00 5d 05h 49m
PHILCO MODEL 66 WOODEN TOMBSTONE ANTIQUE RADIO-TUBES-$$ 2 $11.50
$20.00 5d 05h 49m
SILVERTONE MODEL 7104 ANTIQUE WOOD RADIO w/tubes-NICE-$ - $9.98
$20.00 5d 05h 49m
WWII SIGNAL CORPS LANTERN-U.S.ARMY-MX290GV-VINTAGE-$$$$ - $9.98
$10.00 5d 05h 49m
AUTOMATIC RADIO STEREO 4-TRACK CARTRIDGE PLAYER-1960's- - $9.98
$25.00 5d 05h 49m
RCA VICTOR MOD. 96T7 WOODEN RADIO W/TUBES-PARTS/RESTORE - $9.98
$20.00 5d 05h 49m
MUNTZ 4-TRACK CARTRIDGE STEREO TAPE DECK W/MOUNT-NICE-$ - $9.98
$20.00 5d 05h 49m
PINK ADMIRAL MODEL 4L24N 1950's "AMERICANA" RADIO-works 1 $9.98
$10.00 5d 05h 49m
OLYMPIC ANTIQUE WHITE BAKELITE RADIO-w/TUBES-POWERS UP- - $9.98
$10.00 5d 05h 49m
ANTIQUE GE HOTPOINT CALROD A-C-MATIC IRON-MODEL 149F86- - $9.98
$15.00 5d 05h 49m
ANTIQUE COLLECTIBLE WESTERN ELECTRIC OLD TELEGRAPH KEY- 2 $13.00
$10.00 5d 05h 49m
(20) BUCKET FULL OLD TUBE RADIO POWER SUPPLY VIBRATORS- - $9.98
$10.00 5d 05h 49m
HEYER SYSTEM BEAM POWER CANDLE GAUGE-TEST METER-old-$$$ 1 $9.98
$10.00 5d 05h 49m
CARRON MODEL 2000 PORTABLE VICTROLA-ACOUSTIC REPRODUCER - $9.98
$20.00 5d 05h 49m
1950-60's RCA MAGAZINE LOADED CASSETTE PS TRANSFORMER-$ - $9.98
$10.00 5d 05h 49m
1968 FORD THUNDERBIRD HEADLIGHT BEZELS-GRILL SIDE TRIM- - $9.98

$10.00 6d 05h 49m
SILVERTONE STEREO SINGLE ENDED TUBE AMP w/REVERB UNIT-$ - $99.88
Free 6d 05h 49m
BOXFULL (6) VINTAGE AM/FM/CASSETTE DECKS-DELCO-PIONEER- - $9.98
$20.00 6d 05h 49m
4 ATARI 5200 GAMES-MARIO BROS-FROGGER-VANGUARD-FOOTBALL - $9.98
Free 6d 05h 49m
SIGNAL CORPS U.S. ARMY ANTENNA AT-340/PRC PHOENIX ELECT - $24.99
$15.00 6d 05h 49m
(3) SPARE AMP-VOLTMETER GAUGES w/GLASS-GE-WESTINGHOUSE- - $9.98
$10.00 6d 05h 49m
WARDS AIRLINE 62; GRIGSBY-GRUNOW MAJESTIC 20-2 PHILCOS- - $99.88
Pickup only: Free 6d 05h 49m

1094. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 20:23:01 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g7vfr7$k3j$1@news.service.uci.edu>
Source record: 23367

Cecil Moore wrote:
> Jim Kelley wrote:
>> Cecil Moore wrote:
>>> Ptotal = P1 + P2 + 2*SQRT(P1*P2)*cos(A)
>>
>> According to fig. 7.1 in Born and Wolf, that's useful for showing how
>> light intensity varies as a function of phase, and hence position.
>> It's just that there's no valid way to multiply by the cosine of the
>> angle between two scalars.
>
> You are pretty confused.

I think you know that I'm just pointing out the problem inherent in using a valid equation in the way you describe without considering the many assumptions being made. It led you, for example, to write that there is a 4th mechanism of reflection - even in violation of Maxwell's equations! Do you still believe that interference actually moves power from one place to another? It is that kind of nonsense that amateur radio would be better off without.

> Hecht calls it the "interference term" and I am only quoting
> him.

I'll bet he'd prefer that you didn't. :-)

73, ac6xg

1095. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 21:19:22 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <tdIok.18160$mh5.7122@nlpi067.nbdc.sbc.com>
Source record: 23368

KJ4DIY wrote:
> The correct plural form of Antenna is Antennae. ...
> I have been told recently by an Elmer that
> this was the correct term.

For the members of the amateur radio community who are
insects, your Elmer is correct. :-)
--
73, Cecil http://www.w5dxp.com

1096. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 22:00:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g7vlk7$8if$1@news.albasani.net>
Source record: 23369

Cecil Moore wrote:

> ...
> For the members of the amateur radio community who are
> insects, your Elmer is correct. :-)

I can tell you HAVE been doing your research! <grin>

THIS:

* (pl., antennae). Pair of segmented appendages (feelers) located on
head and sensory in function (Fig. 1).
www.sidney.ars.usda.gov/grasshopper/ID_Tools/F_Guide/Glossary.htm

* One of a pair of sensory appendages on each side of an insect's head.
www.frankstehno.com/sagemesa/guide/terms/aterms.htm

* (plural antennae) The sensory organs on the head. Stag beetles have
two antennae or 'feelers' with a characteristic shape at the end, which
is the same for all the beetles that belong to the Lucanidae family. It
is with their antennae that stag beetles pick up important pheromone
signals.
maria.fremlin.de/stagbeetles/glossary.html

* Antennae (singular antenna) are paired appendages connected to the
front-most segments of arthropods. In crustaceans, they are biramous and
present on the first two segments of the head, with the smaller pair
known as antennules. ...
en.wikipedia.org/wiki/Antenna (biology)

* A feeler organ on the head of an insect, crab, or other animal; A
device to receive or transmit radio-frequency signal by converting
electromagnetic radiation into electrical signal; The faculty of
intuitive astuteness
en.wiktionary.org/wiki/antenna

THESE FOUND HERE:

http://www.google.com/search?hl=en&q=define%3Aantenna&btnG=Search

AND, THAT PAGE FOUND WITH THIS GOOGLE SEARCH TERM:

define:antenna

Gawd I had it when we get bored ... ;-)

Regards,
JS

1097. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 22:45:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ptJok.4245$zv7.2384@flpi143.ffdc.sbc.com>
Source record: 23370

Jim Kelley wrote:
> I think you know that I'm just pointing out the problem inherent in
> using a valid equation in the way you describe without considering the
> many assumptions being made. It led you, for example, to write that
> there is a 4th mechanism of reflection -

Here's a quote from my energy article:

"Note that the author previously used the word "reflection" for both
actions involving a single wave and the interaction between two waves.
Now the word "reflected" is being used only for single waves and the
word "redistributed" is being used for the two wave interference scenario."

Nowhere in my present article do I say there is a 4th mechanism
of reflection. Why do you continue to incessantly harp on past
semantic blunders that were corrected years ago?

> Do you still believe that interference actually moves power
> from one place to another?

Do you ever stop beating dead horses? :-)

Since I stated in my article that power doesn't flow, you are just
once more bearing false witness. Maybe you should have that burr
under your blanket looked at by a competent veterinarian. :-)

I said that the redistribution of energy, which necessarily obeys
the conservation of energy principle, is associated with a wave
cancellation interference event. I never uttered your false
statement that "interference moves power". Here's what I said:

"The term "power flow" has been avoided in favor of "energy flow".
Power is a measure of that energy flow per unit time through a
plane. Likewise, the EM fields in the waves do the interfering.
Powers, treated as scalars, are incapable of interference."

Yet, a couple of times a year just like clockwork, you accuse
me of saying that power moves (which I have never said). One
wonders what drives your never-ending vendetta obsession.

Here is the definition that I am using for RF "interference"
adopted from "Optics", by Hecht:

RF wave interference corresponds to the interaction of two
(or more) RF waves yielding a resultant power density for
the total wave that deviates from the sum of the two power
densities in the superposed component waves.

It is simple physics to realize that (V1+V2)^2 is not usually equal to (V1^2 + V2^2). When they are not equal, interference has occurred. Why do you have such a problem with such a simple concept?

In a transmission line, the power equation indicates exactly by how much the resultant power deviates from the sum of the component powers. The magnitude of that deviation from the sum of the component powers is called the "interference term" according to Hecht.

Ptotal = P1 + P2 + 2*SQRT(P1*P2)cos(A)

'A' is the angle between the V1 and V2 voltage phasors.
--
73, Cecil http://www.w5dxp.com

1098. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-13 23:10:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3-idnZcE0utv9D7VnZ2dnUVZ_gOdnZ2d@posted.easystreetonline>
Source record: 23371

KJ4DIY wrote:
>
> The correct plural form of Antenna is Antennae.
> I you prefer Antennas fine I have been told recently by an Elmer that
> this was the correct term.
> The question here is not grammar but staying on topic for this forum.
> I'm not trying to cause an argument we have different forums so
> everyone can have there say.
> Letï¿½s just stay on the topics of each forum.
> 73's :)

I'm curious how you arrived at the "correctness" of antennae.

Miriam Webster's Collegiate Dictionary, Eleventh Ed., lists both plural forms. Random House Webster's Unabridged Dictionary, Second Ed., explicitly states that antennae is plural for the appendages on insects, and antennas is plural for the electromagnetic device. These different plural usages are by far the most common in my experience. I only occasionally see "antennae" to describe radio antennas, mostly in very old texts or when used by an academic -- or rraa poster -- trying to emphasize his distance from the hoi polloi.

Your reference for "correctness" didn't happen to be a zoology text, did it?

Roy Lewallen, W7EL

1099. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 00:33:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <qIKdnXMU6vHR4D7VnZ2dnUVZ_uidnZ2d@posted.easystreetonline>
Source record: 23372

One additional point.

On my bookshelf are:

Antennas (Kraus), _Physical Design of Yagi Antennas_ (Leeson), _HF Antennas for All Locations_ (Moxon), _Antennas and Transmission Lines_ (Kuecken), _Radiowave Propagation and Antennas for Personal Communcations_ (Siwak), _Lines, Waves, and Antennas_ (Brown et al), _Antennas and Waves_ (King and Harrison), _Transmission Lines, Antennas, and Wave Guides_ (King et al), _Directional Broadcast Antennas_ (Layton), and _TV and Other Receiving Antennas_ (Bailey).

Other books have "Antennas" in chapter titles, e.g., in _Antenna Engineering Handbook_ (Johnson) we find "Loop Antennas", "Small Antennas", "Microstrip Antennas", "Leaky-Wave Antennas", and so forth.

I don't have a single text with "Antennae" in the title, chapter heading, or body. But then, I don't have any entomology texts at all.

If "antennae" is to be the "correct" plural for radio antenna, an awful lot of very well known authors and publishers need to be made aware of it.

Roy Lewallen, W7EL

1100. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 02:02:45 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g803o8$28g$1@news.service.uci.edu>
Source record: 23373

Cecil Moore wrote:
> Jim Kelley wrote:

>> Do you still believe that interference actually moves power
>> from one place to another?

> Since I stated in my article that power doesn't flow, you are just
> once more bearing false witness.

Let me try this then: Do you still think that interference is what
moves ENERGY from one place to another?

> "The term "power flow" has been avoided in favor of "energy flow".

> Yet, a couple of times a year just like clockwork, you accuse
> me of saying that power moves (which I have never said). One
> wonders what drives your never-ending vendetta obsession.

Note that the reason the author included the disclaimer about "power
flow" was because the term "power flow" had not been avoided by said
author in this newsgroup, in an argument which must have gone on for 6
weeks. In fact, it was a point that was never actually conceded.
Rather, thusly, he "avoided" conceding it. (Reminder: Now you come back
by mentioning how Poynting vectors show how much and in which direction
the power is flowing.)

> It is simple physics to realize that (V1+V2)^2 is not usually
> equal to (V1^2 + V2^2). When they are not equal, interference
> has occurred.

Well, 8th grade algebra is supposed to help us realize that (V1+V2)^2 is
not equal to (V1^2 + V2^2). But the fact that (V1+V2)^2 is equal to
V1^2 + V2^2 + 2V1*V2 doesn't depend in the least on whether
"interference has occurred", Cecil. That was the whole point of my
comment about it.

> In a transmission line, the power equation indicates exactly
> by how much the resultant power deviates from the sum of the
> component powers. The magnitude of that deviation from the
> sum of the component powers is called the "interference term"
> according to Hecht.

You'd think it would be enough for someone to throw out the whole idea
of "the sum of the powers" once and for all. But no. The inclination
instead is apparently to keep refining one's epicycle formulary. Hecht
makes no such connection between 'power' and 'interference', Cecil. And
why would he? There isn't one.....except in certain amateur radio

articles and newsgroup postings.

> Ptotal = P1 + P2 + 2*SQRT(P1*P2)cos(A)
>
> 'A' is the angle between the V1 and V2 voltage phasors.

...and NOT between the two 'powers'. Still, it's a very useful expression for finding a quick, albeit simplified solution. That is after all its intended purpose.

73, ac6xg

1101. Re: Censored post ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 03:29:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g808sa$l8i$1@news.albasani.net>
Source record: 23374

John Smith wrote:

> ...
> JS
>

Hey, the good ole' boys sent me another, unsolicited, email <YEA!> ;-)

I guess they expected me to post it here, as a follow-up; OK, I will:

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

As a routine procedure, significant numbers of article rejections by a
given submitter are reviewed by our Appeals Board, and a determination
is made whether that individual requires administrative action. Such
actions could include warnings, suspensions, or in extreme cases such as
uncooperative repeat offenders, a permanent ban from our newsgroup.

Our Appeals Board has decided to assign a temporary suspension from the
rec.radio.amateur.moderated newsgroup for a period of 60 days from the
date of your last article rejection (July 29th, 2008). During this
time, your article submissions will be automatically rejected without
moderator review. We may also choose to report continued rejected
submissions to our newsgroup to your ISP as unsolicited, harassing,
communications with our team. Your suspension will be lifted on or
about September 27, 2008. We caution you to take our feedback under
consideration, and incorporate it into any future submissions after the
suspension is lifted.

Your rejected articles, and rejection reasons, are given below. We have
also considered a message that was sent to our administrative contact
address, also included below. Our recommendations to you going forward
include:

- There is no need to test the moderation system, or the moderators.
We are in positive control of the newsgroup, and are willing and able
to reject any articles that do not meet our charter and posting
guidelines. A couple of the articles that you have submitted, and
were rejected, were obviously rejectable by the standards of nearly
any moderated newsgroup, so we see no reason why they were submitted
except as a test or provocation.

- Our newsgroup is about amateur radio, not about off-topic discussions
of individual personalities, nor complaints or criticisms or
speculation about moderators and moderation decisions. To allow this
off-topic content would reduce our newsgroup to the state of some of

the presently-ruined and unusable unmoderated newsgroups (newsgroups which we notice that you will not even post to anymore).

- The moderation team is willing to positively recognize acts of good faith, and consider mitigating circumstances when evaluating histories of article rejections. These include submitters making recommended edits and resubmitting articles, as well as utilizing our appeals process. The Appeals Board, a team of moderators separate and independent from the team that reviews article submissions, is always willing to fairly consider civilly-stated, original appeals and complaints sent to our administrative contact E-mail address (given below). We are not impressed or swayed by uncivil, bad-faith, methods of complaint, including public ad-hominem attacks against the moderation team in other forums, and E-mailed ASCII-art representations of obscene hand gestures.

- We ask that any submitter to our newsgroup engage in some reasonable amount of self-reflection as to the purpose and end-goals of their participation. Are you truly engaging in honest, good-faith efforts to convince others of your point-of-view, possibly to help make the world (or our small part of it) a better place? Or is the newsgroup merely a target of convenience for your abuse, anger, grudges, prejudices, and attempts at retribution that would be socially unacceptable, and punishable, elsewhere? Are you seeking to use public forums such as ours for personal entertainment from "stirring the pot" with obvious trolling and flame-baiting? Unmoderated newsgroups may have to tolerate such behavior, but moderated newsgroups such as ours do not. We will take decisive action to protect our newsgroup for the benefit of those who do wish to participate constructively, and not be insulted, harassed, threatened, or otherwise abused by individuals who are apparently not interested in constructive participation.

We do sincerely hope that after the suspension is lifted, you will have either chosen to break bad habits by leaving the newsgroup permanently, or be able to moderate your habit and participate productively in on-line forums such as ours. If not, the next likely action of ours will be either a much longer suspension, or possibly even a permanent ban.

- --
rec.radio.amateur.moderated Admin
rec-radio-amateur-moderated-request@panix.com

>From news@alpha826.server4you.de Sat Mar 17 01:23:00 2007
> >Return-Path: <news@alpha826.server4you.de>
> >X-Spam-Checker-Version: SpamAssassin 3.1.6 (2006-10-03) on
> > mailcrunch3.panix.com
> >X-Spam-Level:
> >X-Spam-Status: No, score=0.0 required=5.0 tests=none autolearn=disabled
> > version=3.1.6
> >X-Original-To: rram@panix.com

> >Delivered-To: rram@panix.com
> >Received: from mail1.panix.com (mail1.panix.com [166.84.1.72])
> > by mailproc1.panix.com (Postfix) with ESMTP id 544DF2490D6
> > for <rram@panix.com>; Sat, 17 Mar 2007 00:58:18 -0400 (EDT)
> >Received: by mail1.panix.com (Postfix)
> > id 64D2358836; Sat, 17 Mar 2007 00:58:18 -0400 (EDT)
> >Delivered-To: rec-radio-amateur-moderated@panix.com
> >Received: from pinatubo.switch.ch (pinatubo-2.switch.ch [130.59.1.10])
> > by mail1.panix.com (Postfix) with ESMTP id 236645881F
> > for <rec-radio-amateur-moderated@panix.com>; Sat, 17 Mar 2007
00:58:18 -0400 (EDT)
> >Received: from [85.25.133.70] (helo=alpha826.server4you.de)
> > by pinatubo.switch.ch with esmtp (Exim 4.50)
> > id 1HSQzh-0000s4-Kb
> > for rec-radio-amateur-moderated@moderators.isc.org; Sat, 17 Mar
2007 05:58:17 +0100
> >Received: from news by alpha826.server4you.de with local (Exim 4.50)
> > id 1HSQzh-0006Bs-13
> > for rec-radio-amateur-moderated@moderators.isc.org; Sat, 17 Mar
2007 05:58:17 +0100
> >To: rec-radio-amateur-moderated@moderators.isc.org
> >Path: news.albasani.net!not-for-mail
> >From: John Smith I <assemblywizard@gmail.com>
> >Newsgroups: rec.radio.amateur.moderated
> >Subject: Re: Extension of PSK segment
> >Organization: albasani.net
> >Message-ID: <etfsh5$n7i$1@news.albasani.net>
> >References: <et6e82mfa1@f04n12.cac.psu.edu>
<1173844574.093656.301430@y66g2000hsf.googlegroups.com>
<et9i5spqm1@f04n12.cac.psu.edu>
<1173911033.784721.224810@n59g2000hsh.googlegroups.com>
<etc3nqrvk1@f04n12.cac.psu.edu>
<1174002199.409582.231660@o5g2000hsb.googlegroups.com>
<etcq96vcd1@nnrp.linuxfan.it> <ete4q6ome1@f04n12.cac.psu.edu>
> >Mime-Version: 1.0
> >Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >Content-Transfer-Encoding: 7bit
> >X-Trace: news.albasani.net
Hn0yvoYH4GZ3jeTsND6KL36Wpv7+4TRY7XL1UI+8Dk4frAhB+IkcczbCUj3ILA72ViqQX9NPwJKBakxsb/K7AGLns+
EfAIGYF0T4FrA5nVyyVbs5942gHzanj9iDsfCE
> >X-Complaints-To: abuse@albasani.net
> >NNTP-Posting-Date: Sat, 17 Mar 2007 04:58:17 +0000 (UTC)
> >X-User-ID: LRzeZYMYAf+ouxpN5zsxz19663McN+TxsBdyj2+8RH4=
> >User-Agent: Thunderbird 1.5.0.9 (Windows/20061207)
> >X-NNTP-Posting-Host:
zVVpnzvSzEDe38OrYiNOoGMlAuaA0ybZIe1q/SY80IsesmeRBDySyNDEc/09G4+6I6WxnPj9BgZlnqMHdA6pZg==
> >X-Virus-Status: No
> >Status: OR
> >
> >Michael Coslo wrote:

>> >> John Smith I wrote:
>>> >>> N2EY@AOL.COM wrote:
>>> >>>
>>> >>> > ...
>>>> >>>> "The market" spoke very clearly, in the form of comments
>>>> >>>> to FCC. The CTT proposal was overwhelmingly
>>>> >>>> opposed. About 7 out of 8 comments on it clearly said NO.
>>>> >>>> Sounds like a clear message from the market to me!
>>>> >>>>
>>>> >>>> 73 de Jim, N2EY
>>>> >>>>
>>> >>>
>>> >>> However, if a new market comes forth, one composed of amateurs
with
>>> >>> little or no knowledge of CW and only using digital voice and
digital
>>> >>> data transmission--it would be market controlled also, and one
would
>>> >>> suspect it would self-correct and frown on the use of the bands
for
>>> >>> wasteful analog and cw communications.
>> >>
>> >> I would disagree. Those modes are not wasteful. On the other
hand, a
>> >> vision of using the HF bands for data transmission would indeed
be a way
>> >> of filling up our bands pretty quickly, and for not a lot of
gain. If
>> >> I'm interested in Data Transmission, I would design a system for
>> >> frequencies where there is less natural noise - VHF and up. Then
>> >> bandwidth issues would be less of a problem too.
>> >>
>> >>
>>> >>> Let's face it, digital voice is the only way to go.
>> >>
>> >> I would disagree. What I have seen in digital voice so far
offers no
>> >> particular advantage over SSB, unless we are talking about
digital for
>> >> it's own sake. Most schemes that I have seen have some fatal
flaws, such
>> >> as the received transmission must be received in toto - IOW if
you don't
>> >> catch the beginning, you don't catch anything. The solution to that
>> >> would be channelizing HF, or assigning specific frequencies to
Digital
>> >> voice. In addition, unless there have been some big advances
recently,
>> >> Digital voice does not have any particular bandwidth advantages.
>> >>

>> >> Give me a Digital voice mode that I can tune across the band and
pick up
>> >> a conversation at any point in the transmission, and a 1 KHz or less
>> >> bandwidth signal, and then I'll be interested. And of course,
I'll need
>> >> to see that some other folks are buying the digital radios too,
so I'll
>> >> have people to talk to.
>> >>
>> >> > PSK is too slow for
>> >> > data transmission of LARGE and multi-megabyte amounts of data,
end of
>> >> > story.
>> >>
>> >> As for PSK, you are correct that it is too slow for data
>> >> transmission. But that little 31 baud signal was never intended
for Data
>> >> transmission. It was intended for correctable text at a rate that a
>> >> reasonably proficient typist could tap away at the keyboard in real
>> >> time. Also a mode that can be efficiently operated at QRP and lover
>> >> levels. And for that, it is an excellent mode.
>> >>
>> >> - 73 de Mike KB3EIA -
>> >>
> >
> >Really?
> >
> >I see many QSO's taking place on ONE FREQ. The packets would contain a
> >crc number AND a serial no. denoting the conversation they pertain too,
> >as well as a no. indicating their logical place in decoding ...
> >
> >Presently, only one QSO can take place on a single freq ...
> >
> >NO, wasteful is MOST ACCURATE, only the ignorant need respond without
> >fully educating themselves ...
> >
> >JS
> >
> >==
> >Reason: rewrite: "ignorant" is a little... borderline. Could you
reword that. Thanks. VK2CJC.

>From news@alpha826.server4you.de Fri Mar 16 14:28:15 2007
> >Return-Path: <news@alpha826.server4you.de>
> >X-Spam-Checker-Version: SpamAssassin 3.1.6 (2006-10-03) on
> > mailcrunch2.panix.com
> >X-Spam-Level:
> >X-Spam-Status: No, score=0.0 required=5.0 tests=none autolearn=disabled
> > version=3.1.6
> >X-Original-To: rram@panix.com

> >Delivered-To: rram@panix.com
> >Received: from mail2.panix.com (mail2.panix.com [166.84.1.73])
> > by mailproc1.panix.com (Postfix) with ESMTP id 98C7A7EDCB
> > for <rram@panix.com>; Fri, 16 Mar 2007 13:46:44 -0400 (EDT)
> >Received: by mail2.panix.com (Postfix)
> > id BF37BCACF1; Fri, 16 Mar 2007 13:46:44 -0400 (EDT)
> >Delivered-To: rec-radio-amateur-moderated@panix.com
> >Received: from pinatubo.switch.ch (pinatubo-2.switch.ch [130.59.1.10])
> > by mail2.panix.com (Postfix) with ESMTP id A1BACCACED
> > for <rec-radio-amateur-moderated@panix.com>; Fri, 16 Mar 2007
13:46:44 -0400 (EDT)
> >Received: from [85.25.133.70] (helo=alpha826.server4you.de)
> > by pinatubo.switch.ch with esmtp (Exim 4.50)
> > id 1HSGVX-00032D-NB
> > for rec-radio-amateur-moderated@moderators.isc.org; Fri, 16 Mar
2007 18:46:27 +0100
> >Received: from news by alpha826.server4you.de with local (Exim 4.50)
> > id 1HSGVW-0004jR-Ed
> > for rec-radio-amateur-moderated@moderators.isc.org; Fri, 16 Mar
2007 18:46:26 +0100
> >To: rec-radio-amateur-moderated@moderators.isc.org
> >Path: news.albasani.net!not-for-mail
> >From: John Smith I <assemblywizard@gmail.com>
> >Newsgroups: rec.radio.amateur.moderated
> >Subject: Re: PRB-1 and CCNR's
> >Organization: albasani.net
> >Message-ID: <etel5fhbv1@news.albasani.net>
> >References: <1173494973.507929.53550@j27g2000cwj.googlegroups.com>
<KTyIh.2893$uo3.2071@newssvr14.news.prodigy.net>
<1174064484.732450.54560@b75g2000hsg.googlegroups.com>
<bkAKh.9112$FG1.3787@newssvr27.news.prodigy.net>
> >Mime-Version: 1.0
> >Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >Content-Transfer-Encoding: 7bit
> >X-Trace: news.albasani.net
B1trX12ebOQbBbwPbv1Z6qFJ3cPnNdnAgGPk3uzrKJKS8GjZA+I9+9bN9Rxdd9Gis/+O2yfjx9JJYFIpArUPQte8I5
QRvASxNnz511Ey1hMDEkFLWpPGfLBD83EZDrQh
> >X-Complaints-To: abuse@albasani.net
> >NNTP-Posting-Date: Fri, 16 Mar 2007 17:46:26 +0000 (UTC)
> >X-User-ID: PeiIQ0s50Kx8tUQkoOLa99SPpx/E3fvPrifN3rd2FAk=
> >User-Agent: Thunderbird 1.5.0.9 (Windows/20061207)
> >X-NNTP-Posting-Host:
IfhgqsQb65afI8fKmDSv/K5Upt00pCx+WNDaMFgyNEZNn/53YIvAvSaUpgtGbwvatWt/En/vPOlUetJkKmCGnA==
> >X-Virus-Status: No
> >Status: OR
> >
> >Cecil Moore wrote:
> >
>> > > ...
>> >> Legally, it is not a contract unless you agree to it.

>> >> What would happen if you simply crossed out the antenna
>> >> restrictions clause before signing the contract?
>> >> --
>> >> 73, Cecil, w5dxp.com
>> >>
> >
> >Wouldn't ya' rather stab the person who drafted it with a pen?
<evil grin>
> >
> >Regards,
> >JS
> >
> >==
> >Reason: rewrite: Borderline inappropriate (advocacy of violence,
even if joking, and not much more). - K3FU

>From usenet@linuxfan.it Sun Apr 8 11:12:23 2007
> >Return-Path: <usenet@linuxfan.it>
> >X-Spam-Checker-Version: SpamAssassin 3.1.6 (2006-10-03) on
> > mailcrunch2.panix.com
> >X-Spam-Level:
> >X-Spam-Status: No, score=0.0 required=5.0 tests=none autolearn=disabled
> > version=3.1.6
> >X-Original-To: rram@panix.com
> >Delivered-To: rram@panix.com
> >Received: from mail2.panix.com (mail2.panix.com [166.84.1.73])
> > by mailproc1.panix.com (Postfix) with ESMTP id B626C58C21
> > for <rram@panix.com>; Sun, 8 Apr 2007 11:00:25 -0400 (EDT)
> >Received: by mail2.panix.com (Postfix)
> > id F304CCA9CA; Sun, 8 Apr 2007 11:00:25 -0400 (EDT)
> >Delivered-To: rec-radio-amateur-moderated@panix.com
> >Received: from pinatubo.switch.ch (pinatubo-2.switch.ch [130.59.1.10])
> > by mail2.panix.com (Postfix) with ESMTP id B522DCA98F
> > for <rec-radio-amateur-moderated@panix.com>; Sun, 8 Apr 2007
11:00:11 -0400 (EDT)
> >Received: from [2001:4c90:2::6] (helo=pegasus.linuxfan.it)
> > by pinatubo.switch.ch with esmtp (Exim 4.50)
> > id 1HaYsE-00006V-Bh
> > for rec-radio-amateur-moderated@moderators.isc.org; Sun, 08 Apr
2007 17:00:10 +0200
> >Received: from localhost (localhost [127.0.0.1])
> > by pegasus.linuxfan.it (Postfix) with ESMTP id 13AE59B163
> > for <rec-radio-amateur-moderated@moderators.isc.org>; Sun, 8 Apr
2007 16:37:12 +0200 (CEST)
> >Received: from pegasus.linuxfan.it ([127.0.0.1])
> > by localhost (pegasus.linuxfan.it [127.0.0.1]) (amavisd-new, port
10024)
> > with ESMTP id 17385-06
> > for <rec-radio-amateur-moderated@moderators.isc.org>;
> > Sun, 8 Apr 2007 16:37:11 +0200 (CEST)

> >Received: by pegasus.linuxfan.it (Postfix, from userid 9)
> > id C579C9B162; Sun, 8 Apr 2007 16:37:11 +0200 (CEST)
> >To: rec-radio-amateur-moderated@moderators.isc.org
> >Path: nnrp.linuxfan.it!not-for-mail
> >From: John Smith I <assemblywizard@gmail.com>
> >Newsgroups: rec.radio.amateur.moderated
> >Subject: Re: QRO 2500DX MOD
> >Organization: linuxfan.it News Server
> >Message-ID: <evaummvna2@nnrp.linuxfan.it>
> >References: <eab17$461848df$4e0b13e$14426@DIALUPUSA.NET>
> >NNTP-Posting-Host: 66-81-63-226.nocal.dialup.o1.com
> >Mime-Version: 1.0
> >Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >Content-Transfer-Encoding: 7bit
> >X-Trace: nnrp.linuxfan.it 1176043031 32490 66.81.63.226 (8 Apr 2007
14:37:11 GMT)
> >X-Complaints-To: abuse@linuxfan.it
> >NNTP-Posting-Date: Sun, 8 Apr 2007 14:37:11 +0000 (UTC)
> >User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US;
rv:1.8.0.10) Gecko/20070221 Thunderbird/1.5.0.10 Mnenhy/0.7.5.0
> >X-Virus-Scanned: by amavisd-new-20030616-p10 (Debian) at linuxfan.it
> >X-Virus-Status: No
> >Status: OR
> >
> >Dr.Ace wrote:
>> >> Does anyone know how to modify a QRO 2500DX amplifier to work on
the 10
>> >> meter band ?
>> >>
>> >> Thanks , Ace - WH2T
>> >>
>> >>
>> >> .
> >
> >
> >It should already cover 10:
> >
> >http://www.qrotec.com/spec25m3.html
> >
> >If it doesn't cover 11 meters, it probably has some type of "notch
> >filter" which needs removing ...
> >
> >--
> >JS
> >
> >*Enter a long URL to make tiny <http://tinyurl.com>:*
> >
> >==
> >Reason: unlawful:

>From news@alpha826.server4you.de Sun Aug 12 18:28:24 2007
> >Return-Path: <news@alpha826.server4you.de>
> >X-Spam-Checker-Version: SpamAssassin 3.1.6 (2006-10-03) on
> > mailcrunch1.panix.com
> >X-Spam-Level:
> >X-Spam-Status: No, score=0.0 required=5.0 tests=none autolearn=disabled
> > version=3.1.6
> >X-Original-To: rram@panix.com
> >Delivered-To: rram@panix.com
> >Received: from mail1.panix.com (mail1.panix.com [166.84.1.72])
> > by mailproc1.panix.com (Postfix) with ESMTP id 169C6844A20
> > for <rram@panix.com>; Sun, 12 Aug 2007 18:28:22 -0400 (EDT)
> >Received: by mail1.panix.com (Postfix)
> > id 105CE29409; Sun, 12 Aug 2007 18:28:22 -0400 (EDT)
> >Delivered-To: rec-radio-amateur-moderated@panix.com
> >Received: from moderators.individual.net (moderators.individual.net
[130.133.4.7])
> > by mail1.panix.com (Postfix) with ESMTP id E31B529410
> > for <rec-radio-amateur-moderated@panix.com>; Sun, 12 Aug 2007
18:28:21 -0400 (EDT)
> >Received: from alpha826.server4you.de ([85.25.133.70])
> > by moderators.individual.net (Exim 4.67)
> > for rec-radio-amateur-moderated@moderators.isc.org with esmtp
> > (envelope-from <news@alpha826.server4you.de>)
> > id <1IKLv3-0006Mr-C9>; Mon, 13 Aug 2007 00:28:21 +0200
> >Received: from news by alpha826.server4you.de with local (Exim 4.50)
> > id 1IKLv2-0004En-9N
> > for rec-radio-amateur-moderated@moderators.isc.org; Mon, 13 Aug
2007 00:28:20 +0200
> >To: rec-radio-amateur-moderated@moderators.isc.org
> >Path: news.albasani.net!not-for-mail
> >From: John Smith I <assemblywizard@gmail.com>
> >Newsgroups: rec.radio.amateur.moderated
> >Subject: Re: Whatever Happened to the Electronics Hobbyist?
> >Date: Sun, 12 Aug 2007 15:28:19 -0700
> >Organization: albasani.net
> >Lines: 7
> >Message-ID: <f9o1i3flh1@news.albasani.net>
> >References: <46b4d0e3$0$313$540ea2cf@novia.net>
> >Mime-Version: 1.0
> >Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >Content-Transfer-Encoding: 7bit
> >X-Trace: news.albasani.net
6R0GAHRZ37rTVcb4Zdg/BJNLUZpvaObmAfx/kgvSo+Fxw5cFwJ/RKY0eG+owwr5cW3LUlsQumBrfWPyS3JRAHM/3V+
19ljdViBNKgNaInNGVFii3dL/JMr6O3baoB5An
> >X-Complaints-To: abuse@albasani.net
> >NNTP-Posting-Date: Sun, 12 Aug 2007 22:28:20 +0000 (UTC)
> >X-User-ID: 5eazRs1kth+6JERPBlIDkHe7SsgGnLtRwGrP+nbG2os=
> >In-Reply-To: <46b4d0e3$0$313$540ea2cf@novia.net>
> >Cancel-Lock: sha1:lntTa5iHIikEQBiq8/pRdv6ob2Y=
> >User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)

> >X-NNTP-Posting-Host:
1Z/jLeDz1XZpzTV2cCV3yfEGVxWMW2KEQ8OtlylYzxGXMKTpux+Lt3Xdz10Ld4RoN66zEbT08PzcEEA08JFbQw==
> >X-Virus-Status: No
> >Status: OR
> >
> >Paul W. Schleck wrote:
> >
>> > > ...
> >
> >Paul Schlock moderated the projects they can build?
> >
> >JS
> >
> >==
> >Reason: harassing:

>From news@alpha826.server4you.de Sun Aug 12 20:32:21 2007
> >Return-Path: <news@alpha826.server4you.de>
> >X-Spam-Checker-Version: SpamAssassin 3.1.6 (2006-10-03) on
> > mailcrunch2.panix.com
> >X-Spam-Level:
> >X-Spam-Status: No, score=0.0 required=5.0 tests=none autolearn=disabled
> > version=3.1.6
> >X-Original-To: rram@panix.com
> >Delivered-To: rram@panix.com
> >Received: from mail2.panix.com (mail2.panix.com [166.84.1.73])
> > by mailproc1.panix.com (Postfix) with ESMTP id 7F404732CA6
> > for <rram@panix.com>; Sun, 12 Aug 2007 20:32:18 -0400 (EDT)
> >Received: by mail2.panix.com (Postfix)
> > id 731A134812; Sun, 12 Aug 2007 20:32:18 -0400 (EDT)
> >Delivered-To: rec-radio-amateur-moderated@panix.com
> >Received: from moderators.individual.net (moderators.individual.net
[130.133.4.7])
> > by mail2.panix.com (Postfix) with ESMTP id 4CB3A34811
> > for <rec-radio-amateur-moderated@panix.com>; Sun, 12 Aug 2007
20:32:18 -0400 (EDT)
> >Received: from alpha826.server4you.de ([85.25.133.70])
> > by moderators.individual.net (Exim 4.67)
> > for rec-radio-amateur-moderated@moderators.isc.org with esmtp
> > (envelope-from <news@alpha826.server4you.de>)
> > id <1IKNqz-0000EC-Hj>; Mon, 13 Aug 2007 02:32:17 +0200
> >Received: from news by alpha826.server4you.de with local (Exim 4.50)
> > id 1IKNqy-0008Jo-38
> > for rec-radio-amateur-moderated@moderators.isc.org; Mon, 13 Aug
2007 02:32:16 +0200
> >To: rec-radio-amateur-moderated@moderators.isc.org
> >Path: news.albasani.net!not-for-mail
> >From: John Smith I <assemblywizard@gmail.com>
> >Newsgroups: rec.radio.amateur.moderated
> >Subject: I think my messages will always be rejected, it has to do

with the
> > idiots attempting group mind control!
> >Date: Sun, 12 Aug 2007 17:32:12 -0700
> >Organization: albasani.net
> >Lines: 3
> >Message-ID: <f9o8qf$v1q$1@news.albasani.net>
> >Mime-Version: 1.0
> >Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >Content-Transfer-Encoding: 7bit
> >X-Trace: news.albasani.net
v+ZKh0D/9uyQy0NPzTlqMYBe6x9lMQmod2QtVtCl1B9+iDKGII8xb/rgSXZx3KZfW+aOJ2a0M4YctNcW0Ivxv+51JS
3gUb/xp1S+j5NaafeBoiqJ9QjhIQEIchEK3Er8
> >X-Complaints-To: abuse@albasani.net
> >NNTP-Posting-Date: Mon, 13 Aug 2007 00:32:16 +0000 (UTC)
> >X-User-ID: pWhBsOZsovrHGy5Up7W3gOs3YDOD/pMd8h68u/3bU68=
> >Cancel-Lock: sha1:h7j5L854BBEoymWL8ZW2Lvdtiho=
> >User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)
> >X-NNTP-Posting-Host:
d5s0Zo9EaSTbb3hds4pEmWhStd4iAquEI515brVPBojaYcBmisOHtkITz2UH5H0dRF6bGGaWaPjAarWcK6Xw8Q==
> >X-Virus-Status: No
> >Status: OR
> >
> >DUH!!!
> >
> >JS
> >
> >==
> >Reason: rewrite: Ace - WH2T

>From assemblywizard@gmail.com Tue Jan 15 04:04:28 2008
> >X-Spam-Checker-Version: SpamAssassin 3.2.3 (2007-08-08) on
> > mailbackend.panix.com
> >X-Spam-Level:
> >X-Spam-Status: No, score=0.0 required=5.0 tests=none autolearn=disabled
> > version=3.2.3
> >Lines: 11
> >Return-Path: <assemblywizard@gmail.com>
> >X-Original-To: rram@panix.com
> >Delivered-To: rram@panix.com
> >Received: from mail1.panix.com (mail1.panix.com [166.84.1.72])
> > by mailbackend.panix.com (Postfix) with ESMTP id 168FF1D8E6
> > for <rram@panix.com>; Tue, 15 Jan 2008 04:04:28 -0500 (EST)
> >Received: by mail1.panix.com (Postfix)
> > id E9EA329410; Tue, 15 Jan 2008 04:04:27 -0500 (EST)
> >Delivered-To: rec-radio-amateur-moderated-request@panix.com
> >Received: from wa-out-1112.google.com (wa-out-1112.google.com
[209.85.146.180])
> > by mail1.panix.com (Postfix) with ESMTP id B626629406
> > for <rec-radio-amateur-moderated-request@panix.com>; Tue, 15 Jan
2008 04:04:27 -0500 (EST)

> >Received: by wa-out-1112.google.com with SMTP id m28so4319385wag.13
> > for <rec-radio-amateur-moderated-request@panix.com>; Tue, 15
Jan 2008 01:04:27 -0800 (PST)
> >DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;
> > d=gmail.com; s=gamma;
> >
h=domainkey-signature:received:received:message-id:date:from:user-agent:mime-version:to:su
bject:references:in-reply-to:content-type:content-transfer-encoding;
> > bh=uymkBtNCeeZu7vJ9vz6wHxdMWNEv7477P44woCi1njo=;
> >
b=w6di+FiaYfN2Y/iSxRzvBiE4Q0efS8Bj2tI2ZheVGX1JM8GnfX1Szqa/P6cLDZPx3sFYDUT52OIt1hZDwK4GxVdG
ZzbhC8WRYwNQzMl/Q70mGOpZNVMqhfFa5wg53nwDCF0W1QisrxZDOzxtHQ1CVpwnObu8VXstYgQCDeoE0XM=
> >DomainKey-Signature: a=rsa-sha1; c=nofws;
> > d=gmail.com; s=gamma;
> >
h=message-id:date:from:user-agent:mime-version:to:subject:references:in-reply-to:content-t
ype:content-transfer-encoding;
> >
b=siKmWoxdHGxLvXA0HsZc0mSsjp+VWiY54r6uGtde99ZJu3LikFwhOJz3mK5nBtJlBgQPM1AXWsotg/T0XVugBpZJ
Aiw+OJxktGMDpsfGdNrF6Rsi2KL51r1Fr1Sq4Va/VEoyxqHbF9uldQ6Wl5Ko0wR2OfIBeKO9DTJFCIN051Y=
> >Received: by 10.115.92.2 with SMTP id u2mr1435582wal.139.1200387867246;
> > Tue, 15 Jan 2008 01:04:27 -0800 (PST)
> >Received: from ?192.168.0.5? ([66.233.18.167])
> > by mx.google.com with ESMTPS id
k39sm19210934wah.4.2008.01.15.01.04.25
> > (version=TLSv1/SSLv3 cipher=RC4-MD5);
> > Tue, 15 Jan 2008 01:04:25 -0800 (PST)
> >Message-ID: <478C7711.9020402@gmail.com>
> >Date: Tue, 15 Jan 2008 01:04:17 -0800
> >From: John Smith <assemblywizard@gmail.com>
> >User-Agent: Thunderbird 2.0.0.9 (Windows/20071031)
> >MIME-Version: 1.0
> >To: "rec.radio.amateur.moderated Admin"
<rec-radio-amateur-moderated-request@panix.com>
> >Subject: Re: rec.radio.amateur.moderated Posting Guidelines
> >References:
<radio/ham-radio/moderated/guidelines-1-1200380401@panix.com>
> >In-Reply-To:
<radio/ham-radio/moderated/guidelines-1-1200380401@panix.com>
> >Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >Content-Transfer-Encoding: 7bit
> >X-Virus-Status: Unknown
> >
> > rec.radio.amateur.moderated Admin wrote:
> >
>> > > ...
> >
> > oOoo
> >
> > If you get my drift ...

> >
> > JS
> >

>From news@schnuerpel.eu Mon Jul 28 02:40:52 2008
> >Return-Path: <news@schnuerpel.eu>
> >X-Spam-Checker-Version: SpamAssassin 3.2.3 (2007-08-08) on
> > mailcrunch3.panix.com
> >X-Spam-Level:
> >X-Spam-Status: No, score=0.0 required=5.0 tests=none autolearn=disabled
> > version=3.2.3
> >X-Original-To: rram@panix.com
> >Delivered-To: rram@panix.com
> >Received: from mail2.panix.com (mail2.panix.com [166.84.1.73])
> > by mailbackend.panix.com (Postfix) with ESMTP id 5F76011619
> > for <rram@panix.com>; Sun, 27 Jul 2008 23:36:07 -0400 (EDT)
> >Received: by mail2.panix.com (Postfix)
> > id 2D97F3480B; Sun, 27 Jul 2008 23:36:07 -0400 (EDT)
> >Delivered-To: rec-radio-amateur-moderated@panix.com
> >Received: from moderators.individual.net (moderators.individual.net
[130.133.4.7])
> > by mail2.panix.com (Postfix) with ESMTP id DBA5034807
> > for <rec-radio-amateur-moderated@panix.com>; Sun, 27 Jul 2008
23:36:06 -0400 (EDT)
> >Received: from albasani.net ([78.46.73.112] helo=schnuerpel.eu)
> > by moderators.individual.net (Exim 4.69)
> > for rec-radio-amateur-moderated@moderators.isc.org with esmtp
> > (envelope-from <news@schnuerpel.eu>)
> > id <1KNJWo-0003qX-6e>; Mon, 28 Jul 2008 05:36:06 +0200
> >Received: by schnuerpel.eu (Postfix, from userid 9)
> > id B6A333427E24; Mon, 28 Jul 2008 05:36:05 +0200 (CEST)
> >To: rec-radio-amateur-moderated@moderators.isc.org
> >Path: news.albasani.net!not-for-mail
> >From: John Smith <assemblywizard@gmail.com>
> >Newsgroups: rec.radio.amateur.moderated
> >Subject: Re: Another BPL?
> >Organization: albasani.net
> >Message-ID: <g6jer4$dt7$1@news.albasani.net>
> >References: <6LWdnV779ZZlBRXVnZ2dnUVZ_vWdnZ2d@deskmedia.com>
<g6f0ci$m0g$1@news.albasani.net>
<Xns9AE7D42637E7Cmcoslocomcastnet@216.196.97.136>
<d7e2966c-1f78-4b35-9a0f-7bedbd11c66c@p25g2000hsf.googlegroups.com>
<Xns9AE8E340CD3ACmcoslocomcastnet@216.196.97.136>
> >Mime-Version: 1.0
> >Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >Content-Transfer-Encoding: 7bit
> >X-Trace: news.albasani.net
TtvjyJ2Z14LV9GkkUVJzpQtVm3Oj5NxsECxTtkyLClChFCjrGB6m5PIVx69u016Dlnqi5255NPXbDszBkuDj6Y/cmi
NPqUHTb2HQElnjdAaWGloRDZZLEXh2nF8VnrlU
> >X-Complaints-To: abuse@albasani.net

> >NNTP-Posting-Date: Mon, 28 Jul 2008 03:36:05 +0000 (UTC)
> >X-User-ID: 6T/IQeNveBbJO8svC0iyoT3FU1CsBrPAcFMSCJwbSKc=
> >Cancel-Lock: sha1:NJR+Wwj72pFASf9aEcoU5cJi7tU=
> >User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
> >X-NNTP-Posting-Host: D/sSSKgK16cnC6PfY+FOQxr1UIOj7dIPejlyuiHzTdY=
> >X-Virus-Status: No
> >
> >Mike Coslo wrote:
> >
> > ...
>> >> The idea that various unlicensed users can "overlay" on top of
>> >> licensed ones, and that the whole business of licensing and
regulation
>> >> can be relaxed, sounds pretty good at first.
> >
> > It only sounds good to those who believe in ideology based physics.
> >
> > ...
> > - 73 d eMike N3LI -
> >
> >
> >One mans' science is another mans' "magic", I guess ...
> >
> >Increasing the data which a band of freqs, or even bands of freqs, can
> >send/receive by 10x?, 100x?, 1000x? or ???x is not a good thing?
> >
> >The future is compressed data/voice/video/etc. packets--the present use
> >of the amateur bands stands in vivid contrast, when efficiency is
> >considered, to most all other forms of communications these days--this
> >condition will only worsen with time. (analog am/fm radio will, most
> >likely, fall within the next decade.)
> >
> >Certainly amateur radio will not be able to justify another decade of
> >its present "modes." And, certainly no more freqs will be granted
> >amateurs until the efficient use of the present bands is maximized
and a
> >real need demonstrated.
> >
> >Resistance is futile. -- The Borg.
> >
> >P.S. I hear they kill the bearer of bad news here ...
> >
> >Regards,
> >JS
> >
> >==
> >Reason: rewrite: While discussion of modern technology and future
concepts is very much encouraged, your borg quote and PS is bordering on
deliberate antagonism. Perhaps a re-edit to remove any doubt would be in
order. vk2cjc.

>From news@schnuerpel.eu Mon Jul 28 11:39:33 2008
> >Return-Path: <news@schnuerpel.eu>
> >X-Spam-Checker-Version: SpamAssassin 3.2.3 (2007-08-08) on
> > mailcrunch1.panix.com
> >X-Spam-Level:
> >X-Spam-Status: No, score=-4.0 required=5.0 tests=RCVD_IN_DNSWL_MED
> > autolearn=disabled version=3.2.3
> >X-Original-To: rram@panix.com
> >Delivered-To: rram@panix.com
> >Received: from mail2.panix.com (mail2.panix.com [166.84.1.73])
> > by mailbackend.panix.com (Postfix) with ESMTP id 7AA90175F0
> > for <rram@panix.com>; Mon, 28 Jul 2008 11:32:20 -0400 (EDT)
> >Received: by mail2.panix.com (Postfix)
> > id 82D1634801; Mon, 28 Jul 2008 11:32:20 -0400 (EDT)
> >Delivered-To: rec-radio-amateur-moderated@panix.com
> >Received: from pinatubo.switch.ch (pinatubo-2.switch.ch [130.59.1.10])
> > by mail2.panix.com (Postfix) with ESMTP id 4A6CC3481B
> > for <rec-radio-amateur-moderated@panix.com>; Mon, 28 Jul 2008
11:32:19 -0400 (EDT)
> >Received: from [78.46.73.112] (helo=schnuerpel.eu)
> > by pinatubo.switch.ch with esmtp (Exim 4.63)
> > (envelope-from <news@schnuerpel.eu>)
> > id 1KNUhv-0007Be-8x
> > for rec-radio-amateur-moderated@moderators.isc.org; Mon, 28 Jul
2008 17:32:19 +0200
> >Received: by schnuerpel.eu (Postfix, from userid 9)
> > id C5FCC3427E24; Mon, 28 Jul 2008 17:32:18 +0200 (CEST)
> >To: rec-radio-amateur-moderated@moderators.isc.org
> >Path: news.albasani.net!not-for-mail
> >From: John Smith <assemblywizard@gmail.com>
> >Newsgroups: rec.radio.amateur.moderated
> >Subject: Re: Another BPL?
> >Organization: albasani.net
> >Message-ID: <g6koq2goi1@news.albasani.net>
> >References: <6LWdnV779ZZlBRXVnZ2dnUVZ_vWdnZ2d@deskmedia.com>
<g6f0ci$m0g$1@news.albasani.net>
<g6gq84l3ut0jinlr46djf267los74qqrtf@4ax.com>
<g6jj5jesn2@news.albasani.net>
<2cdfea4c-fde2-4b53-9efb-bdbd99e22893@m44g2000hsc.googlegroups.com>
> >Mime-Version: 1.0
> >Content-Type: text/plain; charset=UTF-8; format=flowed
> >Content-Transfer-Encoding: 7bit
> >X-Trace: news.albasani.net
TBPJak0BPP52j+QKtpUZx2hQ/HX5jnScZQ+Eg8TAJHDOC0y3JNfX3xmsAEUJyePPi5mJMUhMFI6QWiNyDVwAfl/XOL
HrEPutG9AXOLuHiA+U8dhcVFh/4KpsAzsKTIKT
> >X-Complaints-To: abuse@albasani.net
> >NNTP-Posting-Date: Mon, 28 Jul 2008 15:32:18 +0000 (UTC)
> >X-User-ID: gN1Bzp618QOKv4B4QJfDZFaKDcKRpXRHG/EFnrPBqs8=
> >Cancel-Lock: sha1:49itH5UctIJV1+PatEFwZ6HayWg=
> >User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
> >X-NNTP-Posting-Host: Jfo5Y/dW5hMclZMRy64tNRtqkGqCd6QRwfu9m0K88lE=

> >X-Virus-Status: No
> >
> >N2EY@aol.com wrote:
> >
>> >> ...
>> >> None of this means Amateur Radio must never ever connect to the 'net
>> >> or to other communications systems. What it does mean is that such
>> >> connections are an enhancement and/or interface, not a
replacement for
>> >> "A Boy And His Radio" (to use K0HB's phrase).
>> >>
>> >> 73 de Jim, N2EY
>> >>
> >
> >N2EY/Jim:
> >
> >Well, perhaps this will be classified as a, "Yes; I agree post" and be
> >banned from posting. But, here goes ...
> >
> >Your post was simply eloquent. It drew a complete picture for
> >me--krist, I will be honest with you, for a minute there, you took me
> >back to 12 years old and I remembered the promise of discovery! ... I
> >can really appreciate that!
> >
> >Yes. I too was led to this path by the "romance" and "mysticism" of
> >radio and the lure of speaking to individuals in far away
> >places--constructions and experiments with electronic
> >parts/gear/techniques/army-surplus/etc. and antenna hardware, etc.
> >There is nothing wrong in enjoying these things.
> >
> >You don't just have a right to enjoy such things, nor do you JUST enjoy
> >a right to explain them to others so they may find and enjoy them--you
> >have a GOD GIVEN RIGHT to these things!
> >
> >I can only support you in your endeavors and exercise(s) of your
> >pursuit(s.) Don't be surprised if I am fond of your enjoyment of
radio,
> >and also can realize such enjoyments--still, even at my age ...
> >
> >However, I also enjoy other paths/uses of such a remarkable pastime as
> >radio ... in short, the net can add to these enjoyments; your
statement,
> >above, affirms our agreement to that ... remember the three blind men
> >and the elephant--we are SO different, perhaps, in our views, but also
> >SO alike ...
> >
> >Perhaps, you Phil and I--and others, should see ourselves as simply
> >travelers upon the same path--everyone is simply enjoying the view of
> >different "things" along our walkabout ... I suspect, I might miss what
> >you find--unless you discuss them with me, thanks for taking the time

> >and reminding me!
> >
> >Warm regards,
> >JS
> >
> >==
> >Reason: rewrite: Please leave criticism/speculation about
moderation policies and decisions out of article submissions. Use
rec-radio-amateur-moderated-request@panix.com for
queries/complaints/clarifications about moderation decisions and
policies. - K3FU

>From news@schnuerpel.eu Mon Jul 28 23:43:52 2008
> >Return-Path: <news@schnuerpel.eu>
> >X-Spam-Checker-Version: SpamAssassin 3.2.3 (2007-08-08) on
> > mailcrunch3.panix.com
> >X-Spam-Level:
> >X-Spam-Status: No, score=-4.0 required=5.0 tests=RCVD_IN_DNSWL_MED
> > autolearn=disabled version=3.2.3
> >X-Original-To: rram@panix.com
> >Delivered-To: rram@panix.com
> >Received: from mail2.panix.com (mail2.panix.com [166.84.1.73])
> > by mailbackend.panix.com (Postfix) with ESMTP id 64022DE2B
> > for <rram@panix.com>; Mon, 28 Jul 2008 22:55:40 -0400 (EDT)
> >Received: by mail2.panix.com (Postfix)
> > id 7942E3480F; Mon, 28 Jul 2008 22:55:40 -0400 (EDT)
> >Delivered-To: rec-radio-amateur-moderated@panix.com
> >Received: from pinatubo.switch.ch (pinatubo-2.switch.ch [130.59.1.10])
> > by mail2.panix.com (Postfix) with ESMTP id 35D8C3480D
> > for <rec-radio-amateur-moderated@panix.com>; Mon, 28 Jul 2008
22:55:40 -0400 (EDT)
> >Received: from [78.46.73.112] (helo=schnuerpel.eu)
> > by pinatubo.switch.ch with esmtp (Exim 4.63)
> > (envelope-from <news@schnuerpel.eu>)
> > id 1KNfND-0004GQ-Ae
> > for rec-radio-amateur-moderated@moderators.isc.org; Tue, 29 Jul
2008 04:55:39 +0200
> >Received: by schnuerpel.eu (Postfix, from userid 9)
> > id 2B82F3427E22; Tue, 29 Jul 2008 04:55:38 +0200 (CEST)
> >To: rec-radio-amateur-moderated@moderators.isc.org
> >Path: news.albasani.net!not-for-mail
> >From: John Smith <assemblywizard@gmail.com>
> >Newsgroups: rec.radio.amateur.moderated
> >Subject: Re: Another BPL?
> >Organization: albasani.net
> >Message-ID: <g6m0r9$af2$2@news.albasani.net>
> >References: <6LWdnV779ZZlBRXVnZ2dnUVZ_vWdnZ2d@deskmedia.com>
<g6f0ci$m0g$1@news.albasani.net>
<g6gq84l3ut0jinlr46djf267los74qqrtf@4ax.com>
<g6jj5jesn2@news.albasani.net>

<kars849mfsegvqm91la6kpnrddob1llnci@4ax.com>
> >Mime-Version: 1.0
> >Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >Content-Transfer-Encoding: 7bit
> >X-Trace: news.albasani.net
kklDQD/EokIbDqwCEygRBiGoYjpTQTNy7Bnj34Wy+iKnJlTkAMQ4rP1Q6p2FTsmVNy9VODVGdwsV6qvMvxnW2OFCBA
xnVrjxCXzymgVbUYtcYC2EnBAIrN789QBMwd8w
> >X-Complaints-To: abuse@albasani.net
> >NNTP-Posting-Date: Tue, 29 Jul 2008 02:55:38 +0000 (UTC)
> >X-User-ID: P1Dd21pPhUfImVLH3p3zfBQAFZjMk3spjKWIj0WMKD4=
> >Cancel-Lock: sha1:NNzoW97xjmFZ1PA3aPy1LlXf9Aw=
> >User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
> >X-NNTP-Posting-Host: jD8wRQp2wU7nmUmpmuf4j3zmw7wvERBchG2KU87PgQk=
> >X-Virus-Status: No
> >
> >Phil Kane wrote:
> >
>> >> ...
>> >> There are still some of us who cling to the motto "When all else
>> >> fails...amateur radio". My concept of ham radio is to be free from
>> >> any non-ham intermediary transmission systems.
>> >> --
>> >>
>> >> 73 de K2ASP - Phil Kane
>> >>
>> >>>From a Clearing in the Silicon Forest
>> >> Beaverton (Washington County) Oregon
>> >>
>> >> e-mail: k2asp [at] arrl [dot] net
>> >>
> >
> >THAT is just too much of a romantics and dreamers vision for me. In
> >such times, where there is a "catastrophic failure of civilization" (I
> >mean, this is the only thing I can imagine which would hold the drama
> >you suggest)--trust me, if you can find someone to trade that rig to
for
> >a gun, a loaf of bread, some medicine for your family, shelter,
bedding,
> >etc., take them up on it! If you think food, medicine, fuel for
> >heat/cooling and shelter are going to be in demand--just try hunting up
> >a hot 220V outlet ...
> >
> >Amateur radio did little to alleviate human suffering, pain, needs and
> >rescue in the New Orleans disaster--I suspect the highly specific
> >disaster you envision will never come, but if it does, temporary cell
> >towers on trailers (you know they have them, right) will be more
> >suited--or, as I have stated before--truckers with CB's (heck, solar
> >powered lowfers and QRP'ers may look good!) But hey, I have seen
> >Hollywood writers make a fortune selling this line, many books have
> >contained these ideas also--rescue by radio! ... a lot of scifi flicks

> >have an amateur radio in the background also--yep, I have read 'em and
> >watched 'em ... :-)
> >
> >But then, you never know, we could be invaded by Canada or Mexico
> >tomorrow and find we are fresh out of nukes!
> >
> >Now, all that said, I DO plan on keeping my KW+ and 5KW amps ... ya
> >never know, ya just never know ... but power for them, in such a
> >disaster? :-(
> >
> >I just hope a few feds/state-workers are left to see some temp cell
> >towers set up ...
> >
> >Regards,
> >JS
> >
> >==
> >Reason: unlawful: A 5 KW amplifier is not lawful for use under Part
97. Please strike reference on any resubmit. - K3FU

-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.9 (NetBSD)

iJwEAQECAAYFAkiiWigACgkQSO8RITXCfvsAuQP+KuXOEEhpD0oz46kHQtCsyIv1
ZUiK1Pc0/l5WMDRlZoUf9SOCTYpQqLjJv3qhHtSfaTtKutjXCw5zpakzLxv1zcSV
TvveMhmRWlj/TUtgNWcE+CgdFETjUCrCX7PnGLncJUfTuxjXzpQu81rIWPOORu9r
9bgoL8h8sUDMwmql/1c=
=FK3e
-----END PGP SIGNATURE-----

Regards,
JS

1102. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 08:36:14 UTC
From: Jeff <jeff@local.host>
Message-ID: <48a3eed5$0$19370$834e42db@reader.greatnowhere.com>
Source record: 23375

The OED lists 'antennas' as an acceptable plural for radio aerials, (but not insect feelers)

Jeff

"Roy Lewallen" <w7el@eznec.com> wrote in message news:qIKdnXMU6vHR4D7VnZ2dnUVZ_uidnZ2d@posted.easystreetonline...
> One additional point.
>
> On my bookshelf are:
>
> _Antennas_ (Kraus), _Physical Design of Yagi Antennas_ (Leeson), _HF Antennas for All Locations_ (Moxon), _Antennas and Transmission Lines_ (Kuecken), _Radiowave Propagation and Antennas for Personal Communcations_ (Siwak), _Lines, Waves, and Antennas_ (Brown et al), _Antennas and Waves_ (King and Harrison), _Transmission Lines, Antennas, and Wave Guides_ (King et al), _Directional Broadcast Antennas_ (Layton), and _TV and Other Receiving Antennas_ (Bailey).
>
> Other books have "Antennas" in chapter titles, e.g., in _Antenna Engineering Handbook_ (Johnson) we find "Loop Antennas", "Small Antennas", "Microstrip Antennas", "Leaky-Wave Antennas", and so forth.
>
> I don't have a single text with "Antennae" in the title, chapter heading, or body. But then, I don't have any entomology texts at all.
>
> If "antennae" is to be the "correct" plural for radio antenna, an awful lot of very well known authors and publishers need to be made aware of it.
>
> Roy Lewallen, W7EL

1103. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 13:44:45 UTC
From: KJ4DIY <KJ4DIY.2ea3640@radiobanter.com>
Message-ID: <KJ4DIY.2ea3640@radiobanter.com>
Source record: 23377

John Smith;642320 Wrote:
> Cecil Moore wrote:
> -
> ...
> For the members of the amateur radio community who are
> insects, your Elmer is correct. :-)-
>
> I can tell you HAVE been doing your research! grin
>
> THIS:
>
> * (pl., antennae). Pair of segmented appendages (feelers) located on
> head and sensory in function (Fig. 1).
> www.sidney.ars.usda.gov/grasshopper/ID_Tools/F_Guide/Glossary.htm
>
> * One of a pair of sensory appendages on each side of an insect's
> head.
> www.frankstehno.com/sagemesa/guide/terms/aterms.htm
>
> * (plural antennae) The sensory organs on the head. Stag beetles have
> two antennae or 'feelers' with a characteristic shape at the end, which
>
> is the same for all the beetles that belong to the Lucanidae family. It
>
> is with their antennae that stag beetles pick up important pheromone
> signals.
> maria.fremlin.de/stagbeetles/glossary.html
>
> * Antennae (singular antenna) are paired appendages connected to the
> front-most segments of arthropods. In crustaceans, they are biramous
> and
> present on the first two segments of the head, with the smaller pair
> known as antennules. ...
> en.wikipedia.org/wiki/Antenna (biology)
>
> * A feeler organ on the head of an insect, crab, or other animal; A
> device to receive or transmit radio-frequency signal by converting
> electromagnetic radiation into electrical signal; The faculty of
> intuitive astuteness
> en.wiktionary.org/wiki/antenna
>
> THESE FOUND HE
>
> http://www.google.com/search?hl=en&q=define%3Aantenna&btnG=Search

> AND, THAT PAGE FOUND WITH THIS GOOGLE SEARCH TERM:
>
> define:antenna
>
> Gawd I had it when we get bored ... ;-)
>
> Regards,
> JS

I concede the point of grammar ok?
The original point was not whether the correct plural form of antenna
is antennas.
One antenna and two antennas ok?
This forum is about antennas not songs that was my point.
Why can't we stay on topic?
I'm a new Ham and want to learn more about Antennas.
I have been an Amateur for 4 months and went from Tech to Extra in 2 ½
months aced all 3 tests.
My interest is becoming the best Amateur Radio Operator I can be.
Along this line I'm looking for help, at age 64 it is just as important
to me as it is to a 10 year old Amateur.
73's :)

--
KJ4DIY

1104. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 14:52:28 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <OCXok.22933$Ri.13282@flpi146.ffdc.sbc.com>
Source record: 23376

Jim Kelley wrote:
> Let me try this then: Do you still think that interference is what
> moves ENERGY from one place to another?

To the best of my knowledge, I addressed all of your objections
in a revision to my energy article which was done many months
ago. The reasons for your objections don't even exist any more.

> Note that the reason the author included the disclaimer about "power
> flow" was because the term "power flow" had not been avoided by said
> author in this newsgroup, in an argument which must have gone on for 6
> weeks.

But that argument happened many, many years ago. You convinced
me that power doesn't flow. I respect the fact that it is a
commonly accepted concept defined in "The IEEE Dictionary",
rampant within every power company, and accepted by many
members of this newsgroup.

If you will check back over the years, you will find a posting
of mine where I said the dimensions of power flow would be
joules/sec/sec which doesn't make any physical sense.

> But the fact that (V1+V2)^2 is equal to
> V1^2 + V2^2 + 2V1*V2 doesn't depend in the least on whether
> "interference has occurred", Cecil. That was the whole point of my
> comment about it.

Yes, and you are still wrong according to Hecht. If the
interference term in the power equation is not zero,
(V1^2+V2^2) does not equal (V1+V2)^2. In the special case
where (V1^2+V2^2) = (V1+V2)^2, the interference
term is zero, i.e. zero interference.

Please reference page 388 in "Optics", by Hecht, 4th Edition.

> Hecht
> makes no such connection between 'power' and 'interference', Cecil.

But Hecht certainly makes a connection between 'power density' and
'interference'. It is a trivial matter to convert the power density
irradiance equation to the power equation by multiplying by the
cross-sectional area of a transmission line.

The units of irradiance (power density) are joules/sec/unit-area.

Multiply the irradiance equation by the unit-area of the coax,
e.g. 1 in^2, and you get joules/sec = power which is what a

Bird wattmeter indicates.

If you want, you can convert the Bird wattmeter reading to
irradiance by dividing by the cross-sectional area of the
coax.

>> 'A' is the angle between the V1 and V2 voltage phasors.
>
> ...and NOT between the two 'powers'.

Nobody has ever said there is a phase angle between two powers
yet you persist in that false strawman implication.
--
73, Cecil http://www.w5dxp.com

1105. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 18:32:57 UTC
From: kb9rqz@yahoo.com
Message-ID: <niu8a4d4g5j8f52bqjve6dg083vtole0mr@4ax.com>
Source record: 23398
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

1106. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 19:35:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g821g6$8om$1@news.albasani.net>
Source record: 23378

KJ4DIY wrote:

> ...
> I concede the point of grammar ok?
> The original point was not whether the correct plural form of antenna
> is antennas.
> One antenna and two antennas ok?
> This forum is about antennas not songs that was my point.
> Why canï¿½t we stay on topic?
> Iï¿½m a new Ham and want to learn more about Antennas.
> I have been an Amateur for 4 months and went from Tech to Extra in 2 ï¿½
> months aced all 3 tests.
> My interest is becoming the best Amateur Radio Operator I can be.
> Along this line Iï¿½m looking for help, at age 64 it is just as important
> to me as it is to a 10 year old Amateur.
> 73's :)

Well then, inundate us with your exuberance, recently aquired knowledge
(on topic of course, and all of your questions just screaming for
answers (on topic of course)--your "speculations" of antenna(s) (or
possibly, in your case, antennae) could also, possibly, be appreciated
(on topic of course!)

For the rest of us bored "news-groupers", well ... I know you find it in
your heart to forgive me/us/them. ;-)

As far as grammar goes--I am not big on it; if I can "get your 'Jest' "
(yes, a bit of pun), I'll be satisfied ...

Regards,
JS

1107. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 20:20:12 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <q8-dnW-Qe_HmDjnVnZ2dnUVZ_h6dnZ2d@bright.net>
Source record: 23379

Dear Howard KJ4DIY:

Your goal is commendable. An excellent start is to read the ARRL's Antenna Book. It will teach and inform about most of the breadth of antennas and their issues. Depth of understanding may be found in Kraus' Antennas (3rd Edition), which is an excellent textbook with examples. However, it is a college level text. Success in your quest. 73, Mac N8TT

--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net

"KJ4DIY" <KJ4DIY.2ea3640@radiobanter.com> wrote in message
news:KJ4DIY.2ea3640@radiobanter.com...
>
<snip>
>
> I concede the point of grammar ok?
> The original point was not whether the correct plural form of antenna
> is antennas.
> One antenna and two antennas ok?
> This forum is about antennas not songs that was my point.
> Why can't we stay on topic?
> I'm a new Ham and want to learn more about Antennas.
> I have been an Amateur for 4 months and went from Tech to Extra in 2 &#65533;
> months aced all 3 tests.
> My interest is becoming the best Amateur Radio Operator I can be.
> Along this line I'm looking for help, at age 64 it is just as important
> to me as it is to a 10 year old Amateur.
> 73's :)
>
>
>
>
> --
> KJ4DIY

1108. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-14 21:46:14 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g8293d$be2$1@news.service.uci.edu>
Source record: 23380

Cecil Moore wrote:
> Jim Kelley wrote:
>> Let me try this then: Do you still think that interference is what
>> moves ENERGY from one place to another?
>
> To the best of my knowledge, I addressed all of your objections
> in a revision to my energy article which was done many months
> ago. The reasons for your objections don't even exist any more.

May we assume that the term "4th mechanism of reflection" will be
avoided in future publications?

> You convinced me that power doesn't flow.

Thank you, Jesus.

>> But the fact that (V1+V2)^2 is equal to V1^2 + V2^2 + 2V1*V2 doesn't
>> depend in the least on whether "interference has occurred", Cecil.
>> That was the whole point of my comment about it.
>
> Yes, and you are still wrong according to Hecht.

Well, Hecht and I both understand the 8th grade algebra, and I don't
disagree with him. How then could he disagree with me? I think that's
the symmetric equality property. :-)

One possible way to resolve the apparent dichotomy would be to suppose
that you misunderstand what we are each saying.

>> Hecht makes no such connection between 'power' and 'interference', Cecil.
>
> But Hecht certainly makes a connection between 'power density' and
> 'interference'. It is a trivial matter to convert the power density
> irradiance equation to the power equation by multiplying by the
> cross-sectional area of a transmission line.

> The units of irradiance (power density) are joules/sec/unit-area.
>
> Multiply the irradiance equation by the unit-area of the coax,
> e.g. 1 in^2, and you get joules/sec = power which is what a
> Bird wattmeter indicates.

Which of course explains how it is that your answers come out correctly.
I believe I already mentioned that it does (obviously) produce correct
answers, given all the underlying assumptions are correct.

By the way, what assumptions are you making?

> If you want, you can convert the Bird wattmeter reading to
> irradiance by dividing by the cross-sectional area of the
> coax.

Wouldn't I first have to buy into the idea that power is flowing through
it? :-)

>>> 'A' is the angle between the V1 and V2 voltage phasors.
>>
>> ...and NOT between the two 'powers'.
>
> *Nobody* has ever said there is a phase angle between two powers
> yet you persist in that false strawman implication.

It's hard to imagine how a simple, mutually agreed upon statement of
fact could be construed as a "false strawman implication", but there it is.

73, ac6xg

1109. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 01:51:51 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Wh5pk.4327$zv7.1995@flpi143.ffdc.sbc.com>
Source record: 23381

Jim Kelley wrote:
> May we assume that the term "4th mechanism of reflection" will be
> avoided in future publications?

Yes, exactly as it has been for the past six months since
I revised my article. In less time than it takes to condemn
me for saying something in the far distant past, you could
have just read my article. Here's the half-year old footnote
from my article.

[10] Revision 1.1, Feb. 20, 2008 - In the original version, the
redistribution of energy due to wave cancellation was dubbed a
"reflection". W5DXP has dropped that designation in favor of a
"redistribution" as described by the FSU web page. The word "reflection"
is reserved for describing something that happens to a single wave when
it encounters an impedance discontinuity. The word "redistribution" of
energy is adopted for describing what happens to the energy in canceled
waves. In like manner, since interference can occur with or without wave
cancellation, any reference to interference as the cause of the
redistribution of energy has been removed.

>> You convinced me that power doesn't flow.
>
> Thank you, Jesus.

That was at least eight years ago, Jim. What is wrong with
you? I have no doubt that six months from now, you will again
be accusing me of believing that power flows. You seem to be
suffering from dementia.

> Which of course explains how it is that your answers come out correctly.
> I believe I already mentioned that it does (obviously) produce correct
> answers, given all the underlying assumptions are correct.

However, correct answers don't seem to be enough for you.
You seem to be looking for a stone tablet handed down from God.

>> If you want, you can convert the Bird wattmeter reading to
>> irradiance by dividing by the cross-sectional area of the
>> coax.
>
> Wouldn't I first have to buy into the idea that power is flowing through
> it? :-)

No, irradiance, like power, doesn't flow. If you don't know
that, that's probably the source of your confusion.

> It's hard to imagine how a simple, mutually agreed upon statement of
> fact could be construed as a "false strawman implication", but there it is.

Your multiple unethical attempts to imply that I said power
has a phase angle is more than obvious to everyone.
--
73, Cecil http://www.w5dxp.com

1110. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 03:29:23 UTC
From: JB <nospam@goofball.net>
Message-ID: <nK6pk.1045$xv.684@trnddc02>
Source record: 23382

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g7n351haj2@registered.motzarella.org...
> M0WYM wrote:
> > You wrote:
> >
> >>
> >> Now all you need to prove, is that the RF Power Density of a 300
> >> Milliwatt Cellphone, operating one one of 4 Bands in the 800-900
> >> Mhz, and 1800 - 2000 Mhz, will cause ANY Measurable Heating in
> >> Human Tissue, and therefore cause some sort of problem.
> >
> > No problem:
> >
> > http://www.wymsey.co.uk/wymchron/cooking.htm
> >
> >
>
> M0WYM:
>
> LOL!
>
> Warm regards,
> JS

Look if you really want the RF evaluation done, I need to charge you for it. I could show you where you are wrong in your calculation, verify what is correct and you can do what you want with it. It will cost you even more if I have to actually measure the power bandwidth and density of the actual unit.

You spoke earlier about widespread corruption and no trust beyond your fear. I can understand suspicion, but your fear is largely based on the unknown. It might help you to consider that manufacturers are largely motivated by greed, so it would be absurd to worry that they would spend the extra money to exceed the FCC specifications for maximum output, although I'm sure that there are individuals who would spend the extra money for an amplifier. I would suspect that sales would get their money and the customer would be sent to the complaint department to get their money's worth and the responsibility would fall.

http://infotech.awardspace.com/

1111. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 03:54:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g82un5$1a0$1@news.albasani.net>
Source record: 23383

JB wrote:

> ...
> Look if you really want the RF evaluation done, I need to charge you for it.
> I could show you where you are wrong in your calculation, verify what is
> correct and you can do what you want with it. It will cost you even more if
> I have to actually measure the power bandwidth and density of the actual
> unit.
>
> You spoke earlier about widespread corruption and no trust beyond your fear.
> I can understand suspicion, but your fear is largely based on the unknown.
> It might help you to consider that manufacturers are largely motivated by
> greed, so it would be absurd to worry that they would spend the extra money
> to exceed the FCC specifications for maximum output, although I'm sure that
> there are individuals who would spend the extra money for an amplifier. I
> would suspect that sales would get their money and the customer would be
> sent to the complaint department to get their money's worth and the
> responsibility would fall.
>
> http://infotech.awardspace.com/
>
>

Ahhh, you are an idiot!

You will have to excuse me. Yanno, sometimes you just run into that rare circumstance where, at first the person "seems normal." After a bit of dialog, however, you realize "there is no one home ...

1) They (cell phones) DON'T exceed the maximum allowed--and THAT IS SCARY! (1.6W per Kg ... how much does your head weigh?)

2) An amplifier would do you little good unless you could also increase the output on the cell tower ... but then, I don't like burnt toast! ;-)

3) The "damage" we "debate" is of such a nature, it could only be found it statistical studies--all studies to date are flawed ...

4) I expect "this problem" to take longer sorting out than the the tobacco problem/danger. How many deaths from tobacco alone?

5) Massive corruption, greed and loss of trust, that is in question? What else do you call it when the will of the people is constantly ignored; and when all-else-fails, the courts are called in to make a decision that the will of the people is NOT constitutional! (Rather illogical when the constitution takes justification from "we the people ..." I believe that same justification is used in the California law.)

6) New Orleans has still not recovered, despite "federal help", many are still without homes--google it! If it were in another country, we could have emergency supplies anywhere in the world in a matter of days and begin helping rebuild in a matter of weeks ... more goes on in Oz than meets than eye ... the terrorists only need to walk across the border--good for us they are too stupid to figure that out ... I guess.

PLONK!

Regards,
JS

1112. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 05:49:21 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <CN8pk.3164$dB6.428@newsfe01.iad>
Source record: 23384

"KJ4DIY" <KJ4DIY.2ea3640@radiobanter.com> wrote in message
news:KJ4DIY.2ea3640@radiobanter.com...

> I'm a new Ham and want to learn more about Antennas.
> I have been an Amateur for 4 months and went from Tech to Extra in 2 ?
> months aced all 3 tests.
> My interest is becoming the best Amateur Radio Operator I can be.
> Along this line I'm looking for help, at age 64 it is just as important
> to me as it is to a 10 year old Amateur.
>
> 73's :)
> KJ4DIY

Welcome.

I've been licensed for 15 years and passed Extra last year. Never aced anything. My scores belong in the Witness Protection Program.

ARRL Operating Manual is good source for beginners. www.arrl.org/catalog and http://www.arrl.org/catalog/index.php3?category=Operating

Also, http://www.arrl.org/catalog/?item=1018#top for the ARRL Handbook. (Can't tell why it's listed separately.) Not everybody likes the ARRL. I do.

Much useful info shows up in the newsgroups. Just keep your mental filters switched on.

73,
"Sal"
(KD6VKW -- "Vicious Killer Weasel")

1113. Re: 600 ohm balun vs 200 ohm balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 13:01:37 UTC
From: Edward Feustel <efeustel@hughes.net>
Message-ID: <1evaa4husnm3p1m4g4ttkufohot8gbq72m@4ax.com>
Source record: 23385

On Sun, 10 Aug 2008 11:32:24 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>Edward Feustel wrote:
>> I am interested in opinions on whether it would be better for me
>> to use a 450 or 600 ohm balun that might more closely match the
>> transmission line (in practice).
>
>450/50 = 9:1, 600/50 = 12:1 - Is that what you are thinking?
>
>On a transmission line with standing waves, the impedance seen
>by the balun will NEVER be the Z0 of the transmission line.
>
>Let's say you are using Z0=600 ohm feedline with an SWR of 20:1.
>Let's say a current maximum point exists at the balun. The balun
>will see an impedance of 600/20 = 30 ohms.
>
>Do you want to use a 4:1 balun and take it down to 7.5 ohms? Why?
>Do you want to use a 9:1 balun and take it down to 3.3 ohms? Why?
>Do you want to use a 12:1 balun and take it down to 2.5 ohms? Why?
>
>Do you want to use a 1:1 balun and leave it at 30 ohms?
>
>When the impedance being encountered by the balun is unknown,
>a lot of experts recommend a 1:1 current-choke-balun.

Cecil,
I had never thought to try this!
I happen to have one that I was planning to use in a balanced tuner.
So I will try it and see how it wouks Practically.
Thanks.
Ed, N5EI

1114. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 14:54:04 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g845ab$198k$1@f04n12.cac.psu.edu>
Source record: 23386

KJ4DIY wrote:

> Why canï¿½t we stay on topic?

That is the age old question with the newsgroups, Howard.

> Iï¿½m a new Ham and want to learn more about Antennas.

It is possible that you are fairly new to Netnews. While a place to
learn and teach and have fun, it is also largely unregulated. So we get
a fairly high noise to signal ratio.

In addition to the off topic forays, many of our more accomplished
members have favorite topics that can go on for quite a while, long past
any real reason, just tit for tat comments.

The best strategy is to just accept that there will be off topic and
run-on threads in the newsgroup, and either filter or otherwise ignore them.

That in no way means that you can't tweak someone once in a while! hehe

> I have been an Amateur for 4 months and went from Tech to Extra in 2 ï¿½
> months aced all 3 tests.
> My interest is becoming the best Amateur Radio Operator I can be.
> Along this line Iï¿½m looking for help, at age 64 it is just as important
> to me as it is to a 10 year old Amateur.

A general rule of thumb is to post a question, and the first few
answers will be the relevant ones. After that all bets are off.

Regarding the age thing, It is an excellent hobby/avocation for a
retiree or young ham. I got into the ARS later than some, at 46 years
old, but it's all good.

You might want to try out rec.radio.amateur. moderated also.

- 73 de Mike N3LI -

1115. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 15:43:34 UTC
From: JB <nospam@goofball.net>
Message-ID: <Guhpk.7$Ro1.0@trnddc04>
Source record: 23387

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g82un5$1a0$1@news.albasani.net...
> JB wrote:
>
> > ...
> > Look if you really want the RF evaluation done, I need to charge you for
it.
> > I could show you where you are wrong in your calculation, verify what is
> > correct and you can do what you want with it. It will cost you even
more if
> > I have to actually measure the power bandwidth and density of the actual
> > unit.
> >
> > You spoke earlier about widespread corruption and no trust beyond your
fear.
> > I can understand suspicion, but your fear is largely based on the
unknown.
> > It might help you to consider that manufacturers are largely motivated
by
> > greed, so it would be absurd to worry that they would spend the extra
money
> > to exceed the FCC specifications for maximum output, although I'm sure
that
> > there are individuals who would spend the extra money for an amplifier.
I
> > would suspect that sales would get their money and the customer would be
> > sent to the complaint department to get their money's worth and the
> > responsibility would fall.
> >
> > http://infotech.awardspace.com/
> >
> >
>
> Ahhh, you are an idiot!
>
> You will have to excuse me. Yanno, sometimes you just run into that
> rare circumstance where, at first the person "seems normal." After a
> bit of dialog, however, you realize "there is no one home ...
>
> 1) They (cell phones) DON'T exceed the maximum allowed--and THAT IS
> SCARY! (1.6W per Kg ... how much does your head weigh?)
>
> 2) An amplifier would do you little good unless you could also increase
> the output on the cell tower ... but then, I don't like burnt toast! ;-)

I was joking about actually putting an amplifier on any wireless device that you can put in your pocket and runs on batteries. But I guess I have to be very careful with the ignorant and superstitious, because an offhand quip might be taken to heart and grow to be a religion like your exposure rant. You call them "cell towers" because it is your boogie man. You probably haven't even been on a tour to a transmitter site.

> 3) The "damage" we "debate" is of such a nature, it could only be found
> it statistical studies--all studies to date are flawed ...
>
> 4) I expect "this problem" to take longer sorting out than the the
> tobacco problem/danger. How many deaths from tobacco alone?
>
> 5) Massive corruption, greed and loss of trust, that is in question?
> What else do you call it when the will of the people is constantly
> ignored; and when all-else-fails, the courts are called in to make a
> decision that the will of the people is NOT constitutional! (Rather
> illogical when the constitution takes justification from "we the people
> ..." I believe that same justification is used in the California law.)
>
> 6) New Orleans has still not recovered, despite "federal help", many are
> still without homes--google it! If it were in another country, we could
> have emergency supplies anywhere in the world in a matter of days and
> begin helping rebuild in a matter of weeks ... more goes on in Oz than
> meets than eye ... the terrorists only need to walk across the
> border--good for us they are too stupid to figure that out ... I guess.

>
> PLONK!
>
> Regards,
> JS

Everyone check this out:
http://en.wikipedia.org/wiki/List_of_fallacies

Read the section on "Red Herring fallacies"

Your numbers are all wrong so you call me an idiot. These newsgroups are googled and will probably be around for a while. Your conclusions based on your own erroneous suppositions won't make me an idiot. But you obviously have an environmental liberal whacko agenda to promote or you would produce your evidence.

My 30 year + observations of a community of professionals (and not so professionals) is the only statistical evidence I need to prove your dog can't walk because it has no legs.

If you want to do some good, why don't you rant about X-ray exposure from CRT's and why everyone should get rid of them in favor of LCD's for computer monitors, because I guarantee it is way more a health risk than little wireless devices.

You are correct that California is way AFU, but you don't know the half of it. Until you do, the same mistakes will be made when it comes to your town, because you are lock-stepped to belief systems that reject reality, so you will continually lay the blame for your error elsewhere until it has you by the throat.

1116. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 19:32:16 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g84lkgorg1@news.service.uci.edu>
Source record: 23388

Cecil Moore wrote:

> What is wrong with
> you?

Glutton for punishment I guess. Thanks for asking.

73, ac6xg

1117. FREE: 70 Page RF Products Catalog

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 19:44:23 UTC
From: RF King <TravisCurrier@gmail.com>
Message-ID: <5e4b85be-af74-4d09-8014-a147ca3fee32@z72g2000hsb.googlegroups.com>
Source record: 23389

AAA RF Products Latest Catalog is now available.

Please Provide your mailing address to receive your copy at no charge.

Hope you guys all have a great day and I will look forward to helping
you on all your RF needs

Travis Currier
AAA RF Products
Phone: 949-481-3154
Email:sales@aaarfproducts.com
Website: www.aaarfproducts.com
Location: San Clemente, CA

1118. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 20:52:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <l0mpk.16888$LG4.8606@nlpi065.nbdc.sbc.com>
Source record: 23390

Jim Kelley wrote:
> Cecil Moore wrote:
>> What is wrong with you?
>
> Glutton for punishment I guess. Thanks for asking.

Many years ago, five or more, I agreed with you that power doesn't flow. Yet, more than a dozen times in the ensuing years, you have accused me of believing that power flows. I denied it every time, yet you did it again this very month.

Many months ago, I revised my energy article based on your inputs. Yet, you continue to accuse me of promoting a "4th mechanism for reflection caused by interference".

Incidentally, whether interference causes reflections or not certainly depends upon the definitions of "interference" and "reflection" which seem ill-defined to start with.

Whether your rraa behavior is deliberate or not, it points to a personality disorder of some kind. I cannot find "glutton for punishment" in the "Diagnostic and Statistical Manual of Mental Disorders" but maybe you can plead 302.83 or 302.84.
--
73, Cecil http://www.w5dxp.com

1119. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 21:22:42 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g84s3lsje1@news.service.uci.edu>
Source record: 23391

Cecil Moore wrote:
> Many months ago, I revised my energy article based on your
> inputs. Yet, you continue to accuse me of promoting a "4th
> mechanism for reflection caused by interference".

Not everything is an accusation, Cecil. Please stop with the
melodramatics act. You wrote that bit about the 4th Mechanism of
Reflection in your paper against every bit of advice I had given you for
months. Buck up and take responsibility for your yourself for once.

73, ac6xg

1120. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 22:10:13 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2bnpk.7134$np7.4207@flpi149.ffdc.sbc.com>
Source record: 23392

Jim Kelley wrote:
> You wrote that bit about the 4th Mechanism of
> Reflection in your paper against every bit of advice I had given you for
> months. Buck up and take responsibility for your yourself for once.

I bucked up and took responsibility 6 months ago.
When are you going act like a man and let it go?
--
73, Cecil http://www.w5dxp.com

1121. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 22:43:07 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g850qg$21i$1@news.service.uci.edu>
Source record: 23393

Cecil Moore wrote:
> Jim Kelley wrote:
>> You wrote that bit about the 4th Mechanism of Reflection in your paper
>> against every bit of advice I had given you for months. Buck up and
>> take responsibility for your yourself for once.
>
> I bucked up and took responsibility 6 months ago.

I missed your retractions. If you wouldn't mind, please repost them.
Thanks very much.

73 ac6xg

1122. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-15 23:57:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8556p$aa9$1@registered.motzarella.org>
Source record: 23394

JB wrote:

> ...

Did I hear something?

I thought I heard something!

Guess not ...

Regards,
JS

1123. Re: WHAT IS THE NAME OF THE SONG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-16 00:01:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g855ff$aa9$2@registered.motzarella.org>
Source record: 23395

Michael Coslo wrote:

>> ...
> You might want to try out rec.radio.amateur. moderated also.
>
> - 73 de Mike N3LI -

Yeah!

Or, to put it another way, if you are thin skinned, an idiot, or just shallow, give the moderated chan a try and attempt to join with the "good ole' boys."

Personally, I consider them to be a group of idiots with NO EQUAL--your mileage may vary--good luck ... ;-0

Be forewarned, they worship at "The Cross Of The arrl!" ... <grin>

Regards,
JS

1124. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-16 02:22:46 UTC
From: Dave Holford <holford@cogeco.ca>
Message-ID: <TRqpk.5872$in.458@read1.cgocable.net>
Source record: 23396

>
> If you want to do some good, why don't you rant about X-ray exposure from
> CRT's and why everyone should get rid of them in favor of LCD's for
> computer
> monitors, because I guarantee it is way more a health risk than little
> wireless devices.
>

I spent 5 years in front of large CRTs while wearing a radiation monitor. When no one showed any sign of radiation the monitoring ceased. Did pick up some radiation from unrelated sources, but nothing from the CRTs.

Probably getting more radiation from the ionization smoke detector on the ceiling of my den! Not to mention all the natural sources - bananas for example.

Dave

1125. Re: FREE: 70 Page RF Products Catalog

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-16 09:44:42 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <zOWdncZSkMUWPDvVnZ2dnUVZ8jqdnZ2d@pipex.net>
Source record: 23399

RF King wrote:
> AAA RF Products Latest Catalog is now available.
>
> Please Provide your mailing address to receive your copy at no charge.
>
> Hope you guys all have a great day and I will look forward to helping
> you on all your RF needs
>
>
> Travis Currier
> AAA RF Products
> Phone: 949-481-3154
> Email:sales@aaarfproducts.com
> Website: www.aaarfproducts.com
> Location: San Clemente, CA
==========
Here in the UK can't connect to above web site

Frank GM0CSZ / KN6WH

1126. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-16 13:56:32 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <k0Bpk.18018$xZ.15281@nlpi070.nbdc.sbc.com>
Source record: 23400

Jim Kelley wrote:
> Cecil Moore wrote:
>> I bucked up and took responsibility 6 months ago.
>
> I missed your retractions. If you wouldn't mind, please repost them.
> Thanks very much.

One more time: "[10] Revision 1.1, Feb. 20, 2008 - In the
original version, the redistribution of energy due to wave
cancellation was dubbed a "reflection". W5DXP has dropped
that designation in favor of a "redistribution" as described
by the FSU web page. The word "reflection" is reserved for
describing something that happens to a single wave when it
encounters an impedance discontinuity. The word "redistribution"
of energy is adopted for describing what happens to the energy
in canceled waves. In like manner, since interference can occur
with or without wave cancellation, any reference to interference
as the cause of the redistribution of energy has been removed."
--
73, Cecil http://www.w5dxp.com

1127. Example of the real problem ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-16 14:14:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g86neu$r10$1@news.albasani.net>
Source record: 23401

John Smith wrote:

> ...
> In closing, "Keep On Cookin', Men!" (should be considered equiv. to
> "Keep On Truckin', Men!") <WINK>
>
> Regards,
> JS

This problem, IMHO, demonstrates a 1:1 relationship to the problem of cell phones and why any harm they might exhibit would be "masked" by financial, power and special/political interests.

http://newswire.ascribe.org/cgi-bin/behold.pl?ascribeid=20080815.130545&time=14%2013%20PDT&year=2008&public=0

and is VERY similar to how studies such as the one mentioned here:

http://www.rense.com/general26/2yrs.htm

are being ignored.

But then, some will attempt to dismiss all this to "environmental wackos"--"Darwin Awards" coming soon!

Regards,
JS

1128. Re: Example of the real problem ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-16 16:11:12 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <X_Cpk.18008$cW3.3141@nlpi064.nbdc.sbc.com>
Source record: 23402

John Smith wrote:
> This problem, IMHO, demonstrates a 1:1 relationship to the problem of
> cell phones and why any harm they might exhibit would be "masked" by
> financial, power and special/political interests.

"IEEE Spectrum" has had a couple of articles on tumors
caused by cell phones. They don't seem to be life-
threatening but maybe "where there's smoke ..."?

1. Can cell phones promote brain tumors the INTERPHONE study?
Lin, J.C.; Antennas and Propagation Magazine, IEEE
Volume 47, Issue 2, April 2005 Page(s):137 - 138
Digital Object Identifier 10.1109/MAP.2005.1487813

2. The risk of acoustic neuromas from using cell phones
Lin, J.C.; Antennas and Propagation Magazine, IEEE
Volume 47, Issue 1, Feb 2005 Page(s):183 - 185
Digital Object Identifier 10.1109/MAP.2005.1436270
--
73, Cecil http://www.w5dxp.com

1129. Re: FREE: 70 Page RF Products Catalog

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-16 16:36:04 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <T9KdncluXol6nDrVnZ2dnUVZ_uSdnZ2d@comcast.com>
Source record: 23403

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:zOWdncZSkMUWPDvVnZ2dnUVZ8jqdnZ2d@pipex.net...
> RF King wrote:
>> AAA RF Products Latest Catalog is now available.
>>
>> Please Provide your mailing address to receive your copy at no charge.
>>
>> Hope you guys all have a great day and I will look forward to helping
>> you on all your RF needs
>>
>>
>> Travis Currier
>> AAA RF Products
>> Phone: 949-481-3154
>> Email:sales@aaarfproducts.com
>> Website: www.aaarfproducts.com
>> Location: San Clemente, CA
> ======================
> Here in the UK can't connect to above web site
>
> Frank GM0CSZ / KN6WH

Here in the US I get the message "site under construction"

Tam/WB2TT

1130. Re: Example of the real problem ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-16 18:10:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g87581vpm1@news.albasani.net>
Source record: 23404

Cecil Moore wrote:
> John Smith wrote:
>> This problem, IMHO, demonstrates a 1:1 relationship to the problem of
>> cell phones and why any harm they might exhibit would be "masked" by
>> financial, power and special/political interests.
>
> "IEEE Spectrum" has had a couple of articles on tumors
> caused by cell phones. They don't seem to be life-
> threatening but maybe "where there's smoke ..."?
>
> 1. Can cell phones promote brain tumors the INTERPHONE study?
> Lin, J.C.; Antennas and Propagation Magazine, IEEE
> Volume 47, Issue 2, April 2005 Page(s):137 - 138
> Digital Object Identifier 10.1109/MAP.2005.1487813
>
> 2. The risk of acoustic neuromas from using cell phones
> Lin, J.C.; Antennas and Propagation Magazine, IEEE
> Volume 47, Issue 1, Feb 2005 Page(s):183 - 185
> Digital Object Identifier 10.1109/MAP.2005.1436270

Cecil:

I simply find it "strange", that the presumption that exposure to forms of radiation (RF in this case) is always considered safe until proved/proven harmful. The same goes for chemicals not existing in nature and to which the human body (or any biological organisms for that matter) has never been exposed. It seems all which is needed is to chant a "paranoid/wacko" mantra and such forms of thought are naturally generated in the human mind. The presumption, so generated, seems to be, "If we have never seen it before, if we have never been exposed to it before, maybe it is actually good for us!"

I mean, is this prudent thinking/behavior? Am I the only one to think the proof should rest with those introducing the potential harmful exposure/materials and their SAFETY--rather than those being exposed having to prove its' harm in order to effect their own safety?

If you look at the parallels between how tobacco was allowed to continue, without even a warning and for such a lengthy period, it all revolved over disputing studies/good-science which kept pointing to the dangers ... indeed, into the 70' and well beyond, the warning that "smoking was bad" was met with those chanting the myths of flawed studies ...

What truly amazes me is the fact that simple "safeguards" are available to vastly reduce risk (at least with cell phones.) What has become so

ingrained into our thinking/media which can make otherwise responsible men and women so irresponsible ... money, greed, corruption, insanity?

Someone here has thinking that is "a bit off", if it is me--I only pray rationality will come home ... I will continue to "re-think my thinking", maybe I will eventually see it ... until then, I do keep abreast of the "Rush Limbaugh Manta"--"Things are Good and Getting Better, don't trust your eyes, mind and thinking--they lie!" It simply does NOT motivate me "To Believe!"

I am willing to listen to any studies which find that cell phone radiation is making me smarter, handsomer, wittier, richer and more sexually attractive to the ladies, etc. ;-) Just show me some honest, unbiased studies which deal on REAL SCIENCE ... look at Love Canal in New York and the battle to prove, legally, that these chemicals being dumped into the environment were harming/killing people! ... how many examples before one chooses to error on the side of caution?

Let me give you a "hard case example", perhaps 99%+ of the snakes in the world are NOT POISONOUS--would I be prudent to consider the next snake I see non-poisonous and of NO danger? I think not ... heck, just a relatively "harmless bite" will get my attention! (not to mention the danger of infection.)

Regards,
JS

1131. Re: Example of the real problem ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 01:34:58 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <jfLpk.19439$89.15695@nlpi069.nbdc.sbc.com>
Source record: 23405

Cecil Moore wrote:
> John Smith wrote:
>> This problem, IMHO, demonstrates a 1:1 relationship to the problem of
>> cell phones and why any harm they might exhibit would be "masked" by
>> financial, power and special/political interests.
>
> "IEEE Spectrum" has had a couple of articles on tumors
> caused by cell phones. They don't seem to be life-
> threatening but maybe "where there's smoke ..."?
>
> 1. Can cell phones promote brain tumors the INTERPHONE study?
> Lin, J.C.; Antennas and Propagation Magazine, IEEE
> Volume 47, Issue 2, April 2005 Page(s):137 - 138
> Digital Object Identifier 10.1109/MAP.2005.1487813
>
> 2. The risk of acoustic neuromas from using cell phones
> Lin, J.C.; Antennas and Propagation Magazine, IEEE
> Volume 47, Issue 1, Feb 2005 Page(s):183 - 185
> Digital Object Identifier 10.1109/MAP.2005.1436270

Most of the people around here who have their heads glued to
cellphones, constantly, don't have enough brains to support
tumors successfully, anyway, so the problem is non-existent.
73,
Tom Donaly, KA6RUH

1132. Re: Example of the real problem ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 11:37:19 UTC
From: Mike <emce@iinet.net.au>
Message-ID: <48a80d73$0$8654$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 23406

"Tom Donaly" <dtdonaly@sbcglobal.net> wrote in message
news:jfLpk.19439$89.15695@nlpi069.nbdc.sbc.com...
> Cecil Moore wrote:
>> John Smith wrote:
>>> This problem, IMHO, demonstrates a 1:1 relationship to the problem of
>>> cell phones and why any harm they might exhibit would be "masked" by
>>> financial, power and special/political interests.
>>
>> "IEEE Spectrum" has had a couple of articles on tumors
>> caused by cell phones. They don't seem to be life-
>> threatening but maybe "where there's smoke ..."?
>>
>> 1. Can cell phones promote brain tumors the INTERPHONE study?
>> Lin, J.C.; Antennas and Propagation Magazine, IEEE
>> Volume 47, Issue 2, April 2005 Page(s):137 - 138
>> Digital Object Identifier 10.1109/MAP.2005.1487813
>> 2. The risk of acoustic neuromas from using cell phones
>> Lin, J.C.; Antennas and Propagation Magazine, IEEE
>> Volume 47, Issue 1, Feb 2005 Page(s):183 - 185
>> Digital Object Identifier 10.1109/MAP.2005.1436270
>
> Most of the people around here who have their heads glued to
> cellphones, constantly, don't have enough brains to support
> tumors successfully, anyway, so the problem is non-existent.
> 73,
> Tom Donaly, KA6RUH
Now there is someone with some sense.
Mike, VK6MO

1133. An antenna to listen with.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 13:59:52 UTC
From: ltdoc@yahoo.com
Message-ID: <18f5e70e-2d63-4495-a6fc-38c6db3c9f7d@a1g2000hsb.googlegroups.com>
Source record: 23407

This is a very general question. I'm looking for a very 'general'
answer, nothing particularly specific or 'brand' oriented.
What is a good listening or SWL antenna? Range would be from the
broadcast bands up through VHF/UHF. The 'attributes' of bigger and
higher come to mind, but how about something more than that?
- 'Doc

Keeping the answers sort of general, not too technical for the average
person who knows little about radio stuff.

1134. Re: An antenna to listen with.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 14:22:26 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <YuWpk.18082$cW3.2185@nlpi064.nbdc.sbc.com>
Source record: 23408

ltdoc@yahoo.com wrote:
> This is a very general question. I'm looking for a very 'general'
> answer, nothing particularly specific or 'brand' oriented.
> What is a good listening or SWL antenna? Range would be from the
> broadcast bands up through VHF/UHF.

For general SWLing, it's hard to beat a twinlead
center-fed dipole. For VHF/UHF, a discone is probably
a good choice. (VHF/UHF is not SW)
--
73, Cecil http://www.w5dxp.com

1135. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 15:23:25 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <s3gga4dpsj4vcbhq8gakpe5m7l1nm20f8q@4ax.com>
Source record: 23409

On Fri, 08 Aug 2008 17:18:16 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Richard Clark wrote:
>> On Fri, 08 Aug 2008 15:59:58 -0700, John Smith
>> <assemblywizard@gmail.com> wrote:
>>> I never claimed
>> What you haven't claimed could fill that popular page-turner, the
>> Congressional Record.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Well, I did "stretch" the facts on one point, blood has about 1/3 the
>salt content of sea water (not meaning the content of "sodium chloride"
>specifically!--or, any other element ...)--however, the point was not
>being made on heating blood until it "burned"--but just to do
>"noticeable damage" ... I am sure you will grant me that "writers'
>license." <grin>
>
>Regards,
>JS

Wrong again. The base fluid of blood is very like sea water, and with
good reason. The salt and other solute contents are essentially the
same between blood serum and sea water.

Unfortunately, your radio knowledge seems to be as inadequate as your
biology.

1136. Re: An antenna to listen with.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 15:25:20 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <DqidnVVi_I113zXVnZ2dnUVZ8uGdnZ2d@pipex.net>
Source record: 23410

Cecil Moore wrote:
> ltdoc@yahoo.com wrote:
>> This is a very general question. I'm looking for a very 'general'
>> answer, nothing particularly specific or 'brand' oriented.
>> What is a good listening or SWL antenna? Range would be from the
>> broadcast bands up through VHF/UHF.
>
> For general SWLing, it's hard to beat a twinlead
> center-fed dipole. For VHF/UHF, a discone is probably
> a good choice. (VHF/UHF is not SW)
==========
Indeed for VHF-UHF a discone is reasonably universal.
For MF-HF a twinlead centre-fed dipole is great but one should include a matching box (tuner if you like) to get the best out of this antenna,to connect it to any receiver (usually having an unbalanced antenna connection)
Otherwise a length of 'free-hanging'wire will be good enough .

Frank GM0CSZ / KN6WH

1137. Re: An antenna to listen with.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 15:52:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aphga4h4ee7lmetn28d1j88e1cg957a9fv@4ax.com>
Source record: 23411

On Sun, 17 Aug 2008 06:59:52 -0700 (PDT), ltdoc@yahoo.com wrote:

>This is a very general question. I'm looking for a very 'general'
>answer, nothing particularly specific or 'brand' oriented.
>What is a good listening or SWL antenna? Range would be from the
>broadcast bands up through VHF/UHF. The 'attributes' of bigger and
>higher come to mind, but how about something more than that?

I took a $40 Radio Shack SW radio to South Africa last October for several weeks. It had a standard 3 foot extendable whip that couldn't hear short wave until I clipped some wire-wrap wire onto the end and lobbed the ww wire up onto the roof of our cottage (while sitting outside in the evening or the morning). All-in-all about 20 feet of wire with a nickel taped to the end to help tossing it. I got more stations than I knew what to do with. No additional wire was necessary for VHF (FM), of course, and UHF would have only needed the whip collapsed to match (if UHF were available for that radio).

73's
Richard Clark, KB7QHC

1138. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 16:10:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g89ih1$l97$1@news.albasani.net>
Source record: 23412

JosephKK wrote:

> ...
> Wrong again. The base fluid of blood is very like sea water, and with
> good reason. The salt and other solute contents are essentially the
> same between blood serum and sea water.
>
> Unfortunately, your radio knowledge seems to be as inadequate as your
> biology.
>

This:

"First off, while both contain many of the same salts, concentration of dissolved particles in blood is very different from that in seawater. The primary constituents of both are sodium and chlorine (which together make up common salt, NaCl), but seawater has three times as much sodium and five times as much chlorine per unit weight. Hardly the same. Furthermore, it contains eight times as much calcium and fifty times as much magnesium."

From here:

http://www.icr.org/article/513/

Will idiots never cease? At least learn how to Google and NOT be lazy so you can't get off yer dead arse to do it!

Regards,
JS

1139. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 18:31:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3qqga4pt59i8p96p4itmn1sqpggefhot53@4ax.com>
Source record: 23413

On Sun, 17 Aug 2008 09:10:05 -0700, John Smith
<assemblywizard@gmail.com> wrote:

> From here:
>
>http://www.icr.org/article/513/

Brett,

You've been going to the gong show for science? Talk about lazy:
>>I think I first heard this one in a junior high school assembly during a "Mr. Wizard"
film.

Creation scienz basing its refutation on a 50 year old program for
children is about as reputable a source of information as believing
the Georgian-Soviet (whoops russian) peace accord (which is to say
suitable only for the white house intelligence community who wanted it
signed in Atlanta which is a shorter DC helicopter flight than to
Moscow Idaho).

73's
Richard Clark, KB7QHC

1140. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 18:47:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g89rno$v3i$1@news.albasani.net>
Source record: 23414

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

I threw in the creation science web site just for you!

Google up some university site(s), it will be the same ... now, git
offn' yer' lazy bum ...

Regards,
JS

1141. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 19:00:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g89sgrvom1@news.albasani.net>
Source record: 23415

Richard Clark wrote:
> On Sun, 17 Aug 2008 09:10:05 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> From here:
>>
>> http://www.icr.org/article/513/
>
> Brett,
>
> You've been going to the gong show for science? Talk about lazy:
>>> I think I first heard this one in a junior high school assembly during a "Mr. Wizard" film.
>
> Creation scienz basing its refutation on a 50 year old program for
> children is about as reputable a source of information as believing
> the Georgian-Soviet (whoops russian) peace accord (which is to say
> suitable only for the white house intelligence community who wanted it
> signed in Atlanta which is a shorter DC helicopter flight than to
> Moscow Idaho).
>
> 73's
> Richard Clark, KB7QHC

Come to think of it, your Google-ing abilities may be as wanting as your logic abilities ...

So, a hint, if blood had as high a concentration of salt as sea water, a person might be able to drink it and survive ... or, the osmotic pressure of blood is around 300, that of sea water is over 1000 ...

Regards,
JS

1142. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 19:04:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g89soiif1@news.albasani.net>
Source record: 23416

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

Well, come to think of it, that won't do now, will it?

I mean your education in biology is probably just as lacking as in all the other sciences you have demonstrated here ...

This:

"Human blood plasma has an osmotic pressure of about 290 mOsm and water from the open ocean has an osmotic pressure of about 1010 mOsm. This indicates that there is much more salt in sea water than in human blood plasma and also that there is less pure water in a liter of sea water than in a liter of plasma. Just as ions diffuse from areas of high concentration in a solution to areas of low concentration, so do water molecules diffuse from areas of high water concentration (= low osmotic pressure) to areas of low water concentration (= high osmotic pressure). In considering this it is well to remember that salt added to water lowers the water concentration of the resulting solution. When water diffuses through membranes such as those around cells (called semipermeable membranes because they are nearly impermeable to ions but very permeable to water), this diffusion of water is called osmosis. Osmosis is the reason that the skin on our hands wrinkles into "prune fingers" when we stay too long in the bath or shower. Water diffuses from the higher water concentration (but low salt concentration) of the fresh water in the bath into the lower water concentration (but higher salt concentration) of our skin, causing it to swell and be thrown into wrinkles. The exact opposite happens when we immerse ourselves in sea water at the beach and our skin, particularly on our hands and faces, shrinks by osmosis and feels tight."

From here:

http://ww2.lafayette.edu/~hollidac/osmoticprimer.html

Feel free to investigate other sites, perhaps harvard.edu?

Regards,
JS

1143. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 19:39:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7kuga452non3h1ljgoi3dfbsdeddbm6kp0@4ax.com>
Source record: 23417

On Sun, 17 Aug 2008 12:04:46 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Well, come to think of it, that won't do now, will it?

No one would think so from you Brett,

But a shallow clip and paste education has served your product here for years as a substitute to understanding certainly. Simple point of your posting to a forum of licensed radio operators where you can't even pass a minimal FCC test serves to illustrate this. Your pretending to be anonymous pollutes any sense of authentic thought even more.

Insofar as spamming articles here to elevate your sham status: if posting three times to a single offering (a signature if ever, especially when you respond to yourself twice too) were to crown you king of the xerox over Cecil, you would still have 10,000 postings to go to eclipse his commentaries - shouldn't take you more than an afternoon to reach that exalted height.

73's
Richard Clark, KB7QHC

1144. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 20:09:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8a0hu$4ue$1@news.albasani.net>
Source record: 23418

Richard Clark wrote:
> On Sun, 17 Aug 2008 12:04:46 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> Well, come to think of it, that won't do now, will it?
>
> No one would think so from you Brett,
>
> But a shallow clip and paste education has served your product here
> for years as a substitute to understanding certainly. Simple point of
> your posting to a forum of licensed radio operators where you can't
> even pass a minimal FCC test serves to illustrate this. Your
> pretending to be anonymous pollutes any sense of authentic thought
> even more.
>
> Insofar as spamming articles here to elevate your sham status: if
> posting three times to a single offering (a signature if ever,
> especially when you respond to yourself twice too) were to crown you
> king of the xerox over Cecil, you would still have 10,000 postings to
> go to eclipse his commentaries - shouldn't take you more than an
> afternoon to reach that exalted height.
>
> 73's
> Richard Clark, KB7QHC

Richard:

Your capabilities are quite obvious to those with serious gray matter ... your tactics remind me of gorilla warfare and behaviors I have seen demonstrated in high school :-(... your ramblings into shakespeare suggest your education is more suited to the liberal arts (there is nothing wrong with that, mind you!)

You made a grave mistake in all the educational institutions you may have attended ... you thought who taught the material mattered--it did not, only the material mattered--how/where to find it, etc. This has shattered your credibility and taken you far off course from logic ... you are stuck with attacking the messenger and NOT the message.

If you ever wish to change the fact you are easily ignored and made the butt of jokes ... look to the above ...

Regards,
JS

1145. Re: An antenna to listen with.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 20:33:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <NJqdndaKPJylFjXVnZ2dnUVZ_sTinZ2d@posted.easystreetonline>
Source record: 23419

What kind of receiver? A small "scanner" type receiver, for example, typically overloads if connected to a large antenna, so a short whip works best for much of the range.

And how "good" is "good"? If you use a long antenna at high frequencies, it'll have multiple lobes. So there will be many directions where you won't hear very well. Is that ok for your application? No single antenna will do terribly well over that entire frequency range.

My suggestion is that the person asking the question get a roll of wire (hookup or magnet wire is fine) and experiment, to see what's best, or good enough, for his particular receiver, location, and listening habits.

Roy Lewallen, W7EL

ltdoc@yahoo.com wrote:
> This is a very general question. I'm looking for a very 'general'
> answer, nothing particularly specific or 'brand' oriented.
> What is a good listening or SWL antenna? Range would be from the
> broadcast bands up through VHF/UHF. The 'attributes' of bigger and
> higher come to mind, but how about something more than that?
> - 'Doc
>
> Keeping the answers sort of general, not too technical for the average
> person who knows little about radio stuff.

1146. Size of dummy load required to tune 160 Watts CW, 200 W PEP SSB ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 21:36:42 UTC
From: pdlemper@earthlink.net
Message-ID: <4m5ha4141npbims12447nn7n5thkttm7so@4ax.com>
Source record: 23420

My old TS-520S is said to put out 160 watts DC CW and
200 watts PEP SSB .
Whats the minimum dummy load requirement to tune it ?

There are kits for 100 watt dummy loads. Would that be
enough for brief (~ 10 sec) tuning ?

Are there standards as to how the rating of a dummy load
is to be interpreted ?

Dave WB3DWE Temple, TX

1147. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 21:43:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ua5ha4he0r7dtk628cao2irkf1mln1bnvg@4ax.com>
Source record: 23421

On Sun, 17 Aug 2008 13:09:30 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>you thought who taught the material mattered
Imagine if Brett were to sign his own name to a post and had to
indulge the sophist fantasies of a "John Smith" in pointless reply. Is
it your fear that it would be a tough slog to hold your own as either
the plebe or the troll in that dim mirrored contest of wit?

73's
Richard Clark, KB7QHC

1148. Re: Size of dummy load required to tune 160 Watts CW, 200 W PEP SSB ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 22:07:39 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <Ae1qk.12374$De7.7020@bignews7.bellsouth.net>
Source record: 23422

<pdlemper@earthlink.net> wrote in message
news:4m5ha4141npbims12447nn7n5thkttm7so@4ax.com...
> My old TS-520S is said to put out 160 watts DC CW and
> 200 watts PEP SSB .
> Whats the minimum dummy load requirement to tune it ?
>
> There are kits for 100 watt dummy loads. Would that be
> enough for brief (~ 10 sec) tuning ?
>
> Are there standards as to how the rating of a dummy load
> is to be interpreted ?
>
> Dave WB3DWE Temple, TX

The old tube rigs used power input to finals as their customary metric.
Considerably less power was output as RF power, which is all that the dummy
load is concerned with - assuming that you have a sentient dummy load. 8>)

A standard 200 watt air cooled dummy load will suffice.

Ed, NM2K

1149. Re: Size of dummy load required to tune 160 Watts CW, 200 W PEP SSB ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 22:09:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j07ha4pf872rfl5ebljloib3mb4s00rv7q@4ax.com>
Source record: 23423

On Sun, 17 Aug 2008 16:36:42 -0500, pdlemper@earthlink.net wrote:

>My old TS-520S is said to put out 160 watts DC CW and
>200 watts PEP SSB .

Hi Dave,

DC? (Yes, I know, straight from the specification sheet, but
nonetheless: DC?)

>Whats the minimum dummy load requirement to tune it ?

Add 50% for safety factor. Or simply ask yourself, do you need to
tune up with full power? Kenwood is usually engineered well enough
not to demand this.

>There are kits for 100 watt dummy loads. Would that be
>enough for brief (~ 10 sec) tuning ?

Sure. Better question to ask is "can I trust the claims of this kit?"

>Are there standards as to how the rating of a dummy load
>is to be interpreted ?

Something short of:
1. throwing the solder of the connections (a temperature under the
eutectic point if 61/39 tin/lead).
2. ignition;
3. personal harm.

The dummy load's rating can be extended through cooling by forced air
or immersion - so its environment is as much a part of the
specification as anything (it doesn't work as well inside a stove as
it does a refrigerator).

If you are building your own (implied by your reference to a kit);
then it behooves you to maintain the lowest heat path resistance
between the load (the resistor) and the coolant. This generally means
a very tight gas-free bond between the load (the resistor) and the
heat sink and the absence of insulating air on the heat sink surface
(either in the form of an air pocket, poor circulation, or a bubble).

Last of all, how sure are you that the load is actually the Ohmic
value you need? The harder you push it, the less likely it will be
that value. In that case, derating to 25% to 50% is called for.
Frequency can be an issue too.

Caddock's MP9100 50 Ohm resistors are a useful jumping off point for building your own load.

73's
Richard Clark, KB7QHC

1150. Re: Size of dummy load required to tune 160 Watts CW, 200 W PEP SSB ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 22:48:02 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <pqWdnbvlePkwNzXVnZ2dnUVZ8hednZ2d@pipex.net>
Source record: 23425

> My old TS-520S is said to put out 160 watts DC CW and
> 200 watts PEP SSB .
> Whats the minimum dummy load requirement to tune it ?
>
> There are kits for 100 watt dummy loads. Would that be
> enough for brief (~ 10 sec) tuning ?
>
> Are there standards as to how the rating of a dummy load
> is to be interpreted ?

==========

Professional dummy loads are normally rated for continuous use .
They often have cooling fins with the actual resistor being of the thin film type on a heat sinking tab.

I have made my own dummy loads (for HF and lower VHF) from 20 pcs 1KOhm 2watts ,resistor ,so good for 40Watts as is ,but when immersed in motor oil capable of handling 100+Watts for 10-15 minutes.
I used carbon film resistors ,but metal oxide ones are perhaps better.
The advantage of using many resistors (in parallel) is a very low inductance.
I fitted the resistors (sandwiched between 2 jam jar lids with leads just long enough to solder to lids through holes) inside a cylindrical metal can with a SO239 connector fitted in centre of its lid.
To prevent oil 'swetting' from can I covered the seams with solder on the inside. Even after many years ,resistance was 50.6 Ohms or about.
A simple but effective homebrew project.

Frank GM0CSZ / KN6WH

1151. Re: Size of dummy load required to tune 160 Watts CW, 200 W PEP SSB ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-17 23:46:41 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <o9ednUoOi6K0NzXVnZ2dnUVZ_hOdnZ2d@earthlink.com>
Source record: 23424

<pdlemper@earthlink.net> wrote in message
news:4m5ha4141npbims12447nn7n5thkttm7so@4ax.com...
> My old TS-520S is said to put out 160 watts DC CW and
> 200 watts PEP SSB .
> Whats the minimum dummy load requirement to tune it ?
>
> There are kits for 100 watt dummy loads. Would that be
> enough for brief (~ 10 sec) tuning ?
>
> Are there standards as to how the rating of a dummy load
> is to be interpreted ?
>
> Dave WB3DWE Temple, TX

The numbers you have are the input to the final tubes. The rig will put out around 100 to 120 watts CW.

Dummy loads are usually rated for so much power for so long of a time. Some will be good for 100 watts continious and maybe 300 or 500 for a short time such as 30 seconds , with a cooling off period of 5 minuits.

I have a comercial one that is built with a pl259 on the end. The dummy load is about 3 inches long and 2 inches in diameter. It is rated for 15 watts continious and 100 watts for 15 seconds with a cooling off period of so long. I have ran a 100 watt rig into it for a short period of time. It does get very hot after a few seconds. The old Heathkit dummy I have is a resistor in a gallon 'paint can'. It is full of oil and can take a KW for a short period of time.

I picked up some dummy loads at a hamfest that are good for about 50 watts and not sure how long or how much power they will take. I did hit they with around 100 watts for about 30 seconds to check out a rig and they took it,but they did get very warm.

For the ts520 you can use a 100 watt light bulb. I would not recommend it for any rig with transistors for the output, but it is fine for the tube rigs. Just use about a foot of coax to the light bulb. They will radiate a small ammount of power, but not enough to both most stations.
You just tune for maximum brightness. If you have a wattmeter, it will probably not be accurate into the light bulb as it is not 50 ohms, but good enough to tune the rig to see if the power out is around 100 watts.

1152. Identify coax

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 01:01:34 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <67ebd10b-ac36-4e5e-ae53-919580cf5bce@d77g2000hsb.googlegroups.com>
Source record: 23426

What do you call the small rigid coax similar in size to RG402 but very rigid. I feel like an idiot after working with this stuff for 20 years and have only refered to it as minature hardline.

Jimmie

1153. Re: Identify coax

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 01:09:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tjiha4h43qgmferf462vq9ql2kjf01pfti@4ax.com>
Source record: 23427

On Sun, 17 Aug 2008 18:01:34 -0700 (PDT), JIMMIE
<JIMMIEDEE123@yahoo.com> wrote:

>What do you call the small rigid coax similar in size to RG402
Hi Jimmie,

The stuff I use is called MICRO COAX UT (c) 141-SA M17 IUT (r) 141A1

73's
Richard Clark, KB7QHC

1154. Re: Identify coax

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 01:12:02 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AFE71E75C172nonenowhere@61.9.191.5>
Source record: 23428

JIMMIE <JIMMIEDEE123@yahoo.com> wrote in news:67ebd10b-ac36-4e5e-ae53-919580cf5bce@d77g2000hsb.googlegroups.com:

> What do you call the small rigid coax similar in size to RG402 but
> very rigid. I feel like an idiot after working with this stuff for 20
> years and have only refered to it as minature hardline.
>
> Jimmie
>

Is UT-141 the same as RG-402? Both solid copper shield?

Owen

1155. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 01:53:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8akns$mc3$1@news.albasani.net>
Source record: 23429

Richard Clark wrote:
> On Sun, 17 Aug 2008 13:09:30 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> you thought who taught the material mattered
> Imagine if Brett were to sign his own name to a post and had to
> indulge the sophist fantasies of a "John Smith" in pointless reply. Is
> it your fear that it would be a tough slog to hold your own as either
> the plebe or the troll in that dim mirrored contest of wit?
>
> 73's
> Richard Clark, KB7QHC

LOL ...

"Dim Mirrored" is better than "dim-witted!" The shoe box your mind lays in is much too small ... however, I doubt you can ever raise up far enough to peek over the edge ... sorry story really ... :-(

Now, go bother other dim-wits ...

Regards,
JS

1156. Re: Size of dummy load required to tune 160 Watts CW, 200 W PEP SSB ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 01:56:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8akro$mc3$2@news.albasani.net>
Source record: 23430

Richard Clark wrote:

>> Whats the minimum dummy load requirement ...
>
> 73's
> Richard Clark, KB7QHC

Richard in the back of my pickup?

Regards,
JS

1157. Re: Identify coax

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 02:03:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <RpmdnXLdY9MfRTXVnZ2dnUVZ_tvinZ2d@posted.easystreetonline>
Source record: 23431

JIMMIE wrote:
> What do you call the small rigid coax similar in size to RG402 but
> very rigid. I feel like an idiot after working with this stuff for 20
> years and have only refered to it as minature hardline.
>
> Jimmie

If it has a solid, usually plain or tinned copper, shield, it's known as semi-rigid coax. There are no RG numbers associated with it that I know of -- it's simply specified by impedance and outside diameter - 0.085, 0.141, 0.250 inches and smaller are common. Insulation is usually, but not always, solid PTFE Teflon. Various manufacturers offer a number of variations, such as aluminum shield and FEP or foamed dielectric. Each manufacturer has its own part numbering scheme.

Roy Lewallen, W7EL

1158. Re: Size of dummy load required to tune 160 Watts CW, 200 W PEP SSB ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 02:04:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8alcfmmm1@news.albasani.net>
Source record: 23432

John Smith wrote:
> Richard Clark wrote:
>
>>> Whats the minimum dummy load requirement ...

8-)

...

1159. Re: Identify coax

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 02:49:48 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9AFE827AD7246nonenowhere@61.9.191.5>
Source record: 23433

Roy Lewallen <w7el@eznec.com> wrote in
news:RpmdnXLdY9MfRTXVnZ2dnUVZ_tvinZ2d@posted.easystreetonline:

> ... There are no RG numbers associated with it that I know
> of -- it's simply specified by impedance and outside diameter - 0.085,
> 0.141, 0.250 inches and smaller are common. ...

UT-141 is often also labelled RG-402, and UT-085 is often also labelled RG-405. Some manufacturers seem to think that there is some level of equivalence.

I added RG-402 and RG-405 to my line loss calculator to cover the apparently equivalent Uniform Tubes types (ie UT-nnn).

Owen

1160. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 03:02:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9apha457l44lip4hlp5lskrahgnuuj8evf@4ax.com>
Source record: 23434

On Sun, 17 Aug 2008 18:53:58 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>"Dim Mirrored" is better than "dim-witted!"

Sure, but which one is it? John or Brett? Who gets nicked when you
shave using this mirror? Brett seems bloodless, and JS is a ghost.

73's
Richard Clark, KB7QHC

1161. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 03:29:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8aqa4prq1@news.albasani.net>
Source record: 23435

Richard Clark wrote:

> ...
> Sure, but which one is it? John or Brett? Who gets nicked when you
> shave using this mirror? Brett seems bloodless, and JS is a ghost.
>
> 73's
> Richard Clark, KB7QHC

Hey, what comes around, goes around ...

Since all your responses to any of my posts have/has been
non-nonsensical, moronic, stupid, ignorant, without substance, vicious,
vindictive, etc., all I can do is repay the favor(s.)

Look for as much worth in my responses to your posts as I have found in
yours ... what? You expected different? LOL!

Good luck, may the others be stupid enough to remain your pawns ...

Regards,
JS

1162. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 03:55:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <71sha45degvoag37283cjvktk1mrfff01k@4ax.com>
Source record: 23436

On Sun, 17 Aug 2008 20:29:00 -0700, John Smith
<assemblywizard@gmail.com> wrote:

> all I can do is repay the favor(s.)

Rather bloodless and ghost-like imitation(z) really.

>Good luck, may the others be stupid enough to remain your pawns ...
You misspelled prawns again.

73's
Richard Clark, KB7QHC

1163. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 05:00:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8avm2$u6n$1@news.albasani.net>
Source record: 23437

Richard Clark wrote:
> On Sun, 17 Aug 2008 20:29:00 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> all I can do is repay the favor(s.)
>
> Rather bloodless and ghost-like imitation(z) really.
>
>> Good luck, may the others be stupid enough to remain your pawns ...
> You misspelled prawns again.
>
> 73's
> Richard Clark, KB7QHC

Check my spelling on "idiot", IDIOT!

Regards,
JS

1164. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 05:08:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8b04luct3@news.albasani.net>
Source record: 23438

Richard Clark wrote:
> On Sun, 17 Aug 2008 20:29:00 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> all I can do is repay the favor(s.)
>
> Rather bloodless and ghost-like imitation(z) really.
>
>> Good luck, may the others be stupid enough to remain your pawns ...
> You misspelled prawns again.
>
> 73's
> Richard Clark, KB7QHC

Look, if you keep this up, I am going to find out what nut house they have you stuck in, and you are hiding in, in Washington state. I then am going to make a complaint and have them cut your computer privileges, think about that ... you won't like it. 8-)

They might even take away your comic books and ice cream at bed time! ROFLOL!

Regards,
JS

1165. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 07:18:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8g8ia41i8c9acpj8q3ifcph1jkph1o1pv0@4ax.com>
Source record: 23439

On Sun, 17 Aug 2008 22:00:40 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Check my spelling on "idiot", IDIOT!

You misspelled idiom twice.

73's
Richard Clark, KB7QHC

1166. Re: An antenna to listen with.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 12:54:58 UTC
From: ltdoc@yahoo.com
Message-ID: <dbfd5128-a46d-4828-81b1-db97c87b146f@m44g2000hsc.googlegroups.com>
Source record: 23440

I ran across this 'question' on a forum. The general consensus appears to be the same in both places. Typically, bigger is better, to some ridiculous point. Higher is also better to some ridiculous point. Just depends on what you have available for the antenna and placing the antenna, and what it'll be connected to. And, there's no simple, cheap, small antenna that does -everything- well from day-light to dark. My main purpose was any rules-of-thumb (ROT, I like that one!) that apply to antennas in general. Depending on just how 'general' you want to be, I think it's been covered.
- 'Doc

1167. Artificial Ground Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 13:06:57 UTC
From: Spin <noemail@alone.invalid>
Message-ID: <Rteqk.158$Ro1.106@trnddc04>
Source record: 23441

For receive only, would an artificial ground be useful for the frequencies between .150-30 mhz?

1168. Re: An antenna to listen with.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 13:24:31 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <pqtia4lhrrhvk88f7dq7tdjqrc6289hd38@4ax.com>
Source record: 23442

On Mon, 18 Aug 2008 05:54:58 -0700 (PDT), ltdoc@yahoo.com wrote:

>I ran across this 'question' on a forum. The general consensus
>appears to be the same in both places. Typically, bigger is better,
>to some ridiculous point. Higher is also better to some ridiculous
>point. Just depends on what you have available for the antenna and
>placing the antenna, and what it'll be connected to. And, there's no
>simple, cheap, small antenna that does -everything- well from day-
>light to dark. My main purpose was any rules-of-thumb (ROT, I like
>that one!) that apply to antennas in general. Depending on just how
>'general' you want to be, I think it's been covered.
> - 'Doc

I've noticed in one of the swl groups they're awfully big on random
wires hooked to 9-to-1 baluns, plus a ground wire.

bob
k5qwg

1169. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 14:20:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8c0f6$sb7$1@news.albasani.net>
Source record: 23443

Richard Clark wrote:
> On Sun, 17 Aug 2008 22:00:40 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> Check my spelling on "idiot", IDIOT!
>
> You misspelled idiom twice.
>
> 73's
> Richard Clark, KB7QHC

Geesh, what was I thinking? Arse is with the capital "A", of course!

Even retired alcoholic barbers in washington know that!

Regards,
JS

1170. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 15:23:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <444ja49921h56keoqrke3n46g28hjsv5u9@4ax.com>
Source record: 23444

On Mon, 18 Aug 2008 07:20:12 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Even retired alcoholic barbers in washington know that!

Washington - place name spellings are capitalized.
So Brett, you are retired and planning to visit washington? How
boring. Instead, can you explain how a Blackberry can source 5KW to
offer a -10dBW indication some 15 wavelengths away? No one else seems
interested in that either, so feel free to expand on how you might
visit all the sights like the Lincoln Memorial and such.

73's
Richard Clark, KB7QHC

1171. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 15:29:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8c4h2hm1@news.albasani.net>
Source record: 23445

Richard Clark wrote:
> On Mon, 18 Aug 2008 07:20:12 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> Even retired alcoholic barbers in washington know that!
>
> Washington - place name spellings are capitalized.
> So Brett, you are retired and planning to visit washington? How
> boring. Instead, can you explain how a Blackberry can source 5KW to
> offer a -10dBW indication some 15 wavelengths away? No one else seems
> interested in that either, so feel free to expand on how you might
> visit all the sights like the Lincoln Memorial and such.
>
> 73's
> Richard Clark, KB7QHC

...

Your noise to signal ratio is overwhelming man!

Regards,
Brett Maverick AKA John Smith

1172. Re: Artificial Ground Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 15:46:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <215ja49spldflcfmsob87loh6ohvnk6aai@4ax.com>
Source record: 23446

On Mon, 18 Aug 2008 13:06:57 GMT, "Spin" <noemail@alone.invalid>
wrote:

>For receive only, would an artificial ground be useful for the frequencies
>between .150-30 mhz?

Sure. But not much over simply connecting to the safety ground at the
power outlet, and using a conventional tuner.

73's
Richard Clark, KB7QHC

1173. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 19:40:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4heja4ll3od5bukha7p4mg7jbnn036flku@4ax.com>
Source record: 23447

On Mon, 18 Aug 2008 08:29:27 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>>> Even retired alcoholic barbers in washington know that!
>>
>> Washington - place name spellings are capitalized.
>> So Brett, you are retired and planning to visit washington?
...
>Your noise to signal ratio is overwhelming man!

You remind me of a contester I heard years ago:
"You are coming in 5 by 9, CAN YOU REPEAT? CAN YOU REPEAT?"

Maybe someone in Sacramento can relay the message to you, Brett.

73's
Richard Clark, KB7QHC

1174. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 20:39:20 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8cmlo$17a4$1@f04n12.cac.psu.edu>
Source record: 23448

Dave Holford wrote:
>> If you want to do some good, why don't you rant about X-ray exposure from
>> CRT's and why everyone should get rid of them in favor of LCD's for
>> computer
>> monitors, because I guarantee it is way more a health risk than little
>> wireless devices.
>>
>
> I spent 5 years in front of large CRTs while wearing a radiation monitor.
> When no one showed any sign of radiation the monitoring ceased. Did pick up
> some radiation from unrelated sources, but nothing from the CRTs.
>
> Probably getting more radiation from the ionization smoke detector on the
> ceiling of my den! Not to mention all the natural sources - bananas for
> example.

There is a lot of lead in that CRT glass. That stops the X rays rather
nicely.

So I guess the fellow is saying that there is absolutely no effects. And
guarantees it also. I'm impressed by the level of confidence he has.

- 73 de Mike N3LI -

1175. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 20:43:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8cmth$k2c$1@news.albasani.net>
Source record: 23449

Richard Clark wrote:

> ...
> You remind me of a contester I heard years ago:
> "You are coming in 5 by 9, CAN YOU REPEAT? CAN YOU REPEAT?"
>
> Maybe someone in Sacramento can relay the message to you, Brett.
>
> 73's
> Richard Clark, KB7QHC

You remind of a funny guy I knew ... "Special Ed." ;-)

Regards,
JS

1176. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 20:53:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8cngpklr1@news.albasani.net>
Source record: 23450

Richard Clark wrote:
> On Mon, 18 Aug 2008 08:29:27 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>>> Even retired alcoholic barbers in washington know that!
>>> Washington - place name spellings are capitalized.
>>> So Brett, you are retired and planning to visit washington?
> ...
>> Your noise to signal ratio is overwhelming man!
>
> You remind me of a contester I heard years ago:
> "You are coming in 5 by 9, CAN YOU REPEAT? CAN YOU REPEAT?"
>
> Maybe someone in Sacramento can relay the message to you, Brett.
>
> 73's
> Richard Clark, KB7QHC

... or, another guy who struggled against great odds, with an antenna
"one element short of a full antenna!"

Regards,
JS

1177. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 20:54:34 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8cni9$1egk$2@f04n12.cac.psu.edu>
Source record: 23451

John Smith wrote:
> Richard Clark wrote:
>
>> ...
>> You remind me of a contester I heard years ago:
>> "You are coming in 5 by 9, CAN YOU REPEAT? CAN YOU REPEAT?"
>>
>> Maybe someone in Sacramento can relay the message to you, Brett.
>> 73's
>> Richard Clark, KB7QHC
>
> You remind of a funny guy I knew ... "Special Ed." ;-)
>
> Regards,
> JS

Remember Cheech and Chong's "Sister Mary Elephant" skit? Might be
fitting here kids......

Class?......Class?.........

- 73 de Mike N3LI -

1178. Re: Artificial Ground Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 21:13:25 UTC
From: No Spam <no@spam.com>
Message-ID: <kPOdnVGcatpoeDTVnZ2dnUVZ_qjinZ2d@comcast.com>
Source record: 23452

On Mon, 18 Aug 2008 08:46:51 -0700, Richard Clark wrote:

> On Mon, 18 Aug 2008 13:06:57 GMT, "Spin" <noemail@alone.invalid> wrote:
>
>>For receive only, would an artificial ground be useful for the
>>frequencies between .150-30 mhz?
>
> Sure. But not much over simply connecting to the safety ground at the
> power outlet, and using a conventional tuner.

Just to be a little note... some SWLers run a wire from the chassis of a radio to "any" ground realizing a increase in signal. This may be do to the fact that this ground actually becomes part of the antenna so-to-speak. Smply running a wire connected to the chassis out the window and in the other direction of your antenna may do the same thing. However, a safety ground with anything having an external antenna is generally a good idea. :-)

When using a power outlet as a ground, you may incur more noise depending on what equipment is also sharing the same ground.

1179. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 21:28:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8cpj2$n6f$1@news.albasani.net>
Source record: 23453

Michael Coslo wrote:

> ...
> Remember Cheech and Chong's "Sister Mary Elephant" skit? Might be
> fitting here kids......
>
> Class?......Class?.........
>
>
>
> - 73 de Mike N3LI -

LOL!

Point well taken ... ;-)

Regards,
JS

1180. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 22:53:59 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <d4nqk.28767$1p1.20170@en-nntp-08.dc1.easynews.com>
Source record: 23454

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:S66dnXjBAaZJNQHVnZ2dnUVZ_rHinZ2d@posted.easystreetonline...
> Not directly. What counts (considering the simple case of two elements) is
> the magnitude and phase of the current in the other element, and their
> spacing, orientation, and lengths.

Understood, thanks.

> But your search for small, broadband antennas puts you bump-up against the
> principle "small - broadband - efficient, choose any two".

Yeah, some years ago I read Wheeler's 1947 paper on the fundamental limits there (although one of my old professors, James McLean, was fond of mentioning how many peoples' interpretation of that paper wasn't quite right... and he wrote his own take on it back in 1996). In my case, I intend to use the usual folding techniques to obtain significantly greater overall length than what I'm allowed in any one dimension. When I look at such "meander line" antennas, though, it's often not clear to me if the designer took coupling between the folds into account or not, or instead just used some rules of thumbs to avoid "significant" coupling and then empirically trimmed the antenna to get the input impedance they were after.

> The book I'd go to for researching the possibilities would be Lo & Lee's
> _Antenna Handbook_.

Four volumes... wow!

> You might also get some ideas from Bailey, _TV and Other Receiving
> Antennas_, since TV antennas have to be pretty broadband.

That I have a copy of... I think I got it a few years ago when the topic of how "rabbit ear" TV antennas actually "work" was being discussed. (These days I think of them as similar to a tapered slot antenna, which is wideband.)

Thanks,
---Joel

1181. Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 22:55:53 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <3af7825e-4cf9-47de-92aa-ba835acd24ba@f63g2000hsf.googlegroups.com>
Source record: 23455

Bad picture, but can someone tell me if the antenna on top of the tower is for a Ham or CB radio? (I know the one on the left is a EV ant :)

http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg

1182. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 23:25:26 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <Uxnqk.39192$vK2.32473@en-nntp-03.dc1.easynews.com>
Source record: 23456

Interesting paper on how the fundamental limits on the Q of antennas applies to real-world devices: www.centurion.com/home/pdf/wp_dimension_limits.pdf -- some antennas perform better than one might initially predict based on coupling to adjacent ground planes (etc.) that effectively make the antenna electrically larger than initially intended!

1183. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-18 23:50:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3r0ka4dvh2nkcka1j85kuma5f2nn12t1ln@4ax.com>
Source record: 23457

On Mon, 18 Aug 2008 13:53:34 -0700, John Smith
<assemblywizard@gmail.com> wrote:
>>>>> Even retired alcoholic barbers in washington know that!
>>>> Washington - place name spellings are capitalized.
>>>> So Brett, you are retired and planning to visit washington?
>> ...
>>> Your noise to signal ratio is overwhelming man!
>>
>> You remind me of a contester I heard years ago:
>> "You are coming in 5 by 9, CAN YOU REPEAT? CAN YOU REPEAT?"
>>
>> Maybe someone in Sacramento can relay the message to you, Brett.

>... or, another guy who struggled against great odds, with an antenna
>"one element short of a full antenna!"

Brett, I see you got the relay, even from someone with one element
short. (Curious sort of thanks you offer your assistant.) At least
it has a asymptotic trajectory towards the topic. Let's just nudge
that into more than a glancing contact:

I know its a challenge for you to stay technical, but how much signal
is lost with that one missing element? Let's say an NBS Yagi. Can
you choose any one element and describe the net shift in dBi? You
couldn't respond to the Subject Line of how a Blackberry could source
5KW to provide -10dBW at 15 wavelengths, so this may be out of your
league too. ;-(

So, for the comic relief we can all count on Brett for, can you,
perhaps, tell us how many missing elements you would have to have to
reduce this pocketed Blackberry's boiling contribution to the sea
water in your Bulbo-Cavernous Artery by one degree Celsius? Please
post your bench test on youtube.

Better yet, don't remove ANY elements and repeat the bench test, and I
bet 60 Minutes will air that! What a coupe! Validation at last! And
I bet they will, probably, maintain your anonymity - maybe (so much
for validation). Anyway, its worth our fun to watch this by any name,
and OK so it will probably only be carried by Mythbusters (poetic
about that too).

So, the NBS Yagi report? The 15 wavelength explanation? Boiling sea
water experiment?

73's
Richard Clark, KB7QHC

1184. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 00:04:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8d2navbe1@news.albasani.net>
Source record: 23458

Richard Clark wrote:

> ...
> So, for the comic relief we can all count on Brett for, can you,
> ...
> 73's
> Richard Clark, KB7QHC

Richard:

Upgrade from tech+. It will give you something to do! Heck, you may
even stop "growing hair on yer' palms! <YUCK!> (just the thought :-( )

Regards,
JS

1185. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 00:20:34 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <unoqk.17145$LG4.3825@nlpi065.nbdc.sbc.com>
Source record: 23459

DES wrote:
> Bad picture, but can someone tell me if the antenna on top of the
> tower is for a Ham or CB radio? (I know the one on the left is a EV
> ant :)
>
> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>

In that the antenna/beam is vertical it is most likely a CB beam
antenna. An amateur radio antenna would be horizontal.

Dave WD9BDZ

1186. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 02:25:03 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <DZKdnbMazLBsszfVnZ2dnUVZ_hudnZ2d@comcast.com>
Source record: 23460

"David G. Nagel" <nagel.david@sbcglobal.net> wrote in message
news:unoqk.17145$LG4.3825@nlpi065.nbdc.sbc.com...
> DES wrote:
>> Bad picture, but can someone tell me if the antenna on top of the
>> tower is for a Ham or CB radio? (I know the one on the left is a EV
>> ant :)
>>
>> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>>
>
> In that the antenna/beam is vertical it is most likely a CB beam antenna.
> An amateur radio antenna would be horizontal.
>
> Dave WD9BDZ

Agreed.

Tam/WB2TT

1187. QST antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 03:53:17 UTC
From: jawod <jawod@fuse.net>
Message-ID: <c0e09$48aa426f$4ad7b981$14125@FUSE.NET>
Source record: 23461

In the latest QST there is an article on a Window line twin lead antenna that uses relays to switch sections in and out of a dipole configuration to allow multiband use. (DC is inserted into the coax to activate the relays.)

Sounds interesting to me.

But...the twin lead is connected directly to coax with no balun. Isn't this a mismatch? I wonder about significant RF coupling to the adjacent dipole sections through the relay assemblies. Also, I couldn't tell if the window line was shorted into a loop at the ends or not.

Any comments?

Thanks

John
AB8O

1188. Re: QST antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 04:11:10 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <ULrqk.19670$89.12351@nlpi069.nbdc.sbc.com>
Source record: 23462

jawod wrote:
> In the latest QST there is an article on a Window line twin lead antenna
> that uses relays to switch sections in and out of a dipole configuration
> to allow multiband use. (DC is inserted into the coax to activate the
> relays.)
>
> Sounds interesting to me.
>
> But...the twin lead is connected directly to coax with no balun. Isn't
> this a mismatch? I wonder about significant RF coupling to the adjacent
> dipole sections through the relay assemblies. Also, I couldn't tell if
> the window line was shorted into a loop at the ends or not.
>
> Any comments?
>
> Thanks
>
> John
> AB8O
The impedance of the dipole is in the 200 to 600 ohm range. The
transmission line is a fair match for the antenna element. A transmatch
is required at the transmitter end though.

Dave WD9BDZ

1189. Re: QST antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 04:25:33 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <F8adnTROk6ip1jfVnZ2dnUVZ_j6dnZ2d@comcast.com>
Source record: 23463

"David G. Nagel" <nagel.david@sbcglobal.net> wrote in message
news:ULrqk.19670$89.12351@nlpi069.nbdc.sbc.com...
> jawod wrote:
>> In the latest QST there is an article on a Window line twin lead antenna
>> that uses relays to switch sections in and out of a dipole configuration
>> to allow multiband use. (DC is inserted into the coax to activate the
>> relays.)
>>
>> Sounds interesting to me.
>>
>> But...the twin lead is connected directly to coax with no balun. Isn't
>> this a mismatch? I wonder about significant RF coupling to the adjacent
>> dipole sections through the relay assemblies. Also, I couldn't tell if
>> the window line was shorted into a loop at the ends or not.
>>
>> Any comments?
>>
>> Thanks
>>
>> John
>> AB8O
> The impedance of the dipole is in the 200 to 600 ohm range. The
> transmission line is a fair match for the antenna element. A transmatch is
> required at the transmitter end though.
>
> Dave WD9BDZ

It's not a folded dipole. Both wires are fed in phase, and the second wire
is needed for a DC return only.

Tam/WB2TT

1190. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 04:59:29 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AFEDFB711EC6Huckleberrybigvalley@198.186.192.196>
Source record: 23464

A belated response to my initial post. After reading all the responses, and after much thought, I have decided to fore-go using a vertical at present.

I have problems with high winds, corrosion, some noise, ability to place an adequate grounds system, and even aesthetics, etc. so I have decided, for the time being, anyway, to put up a rather low dipole (NVIS) instead.

My thanks to all who took their time to give me their opinions and ideas. Its a good learning experiece, even if I don't proceed with the initial plan.

Ed

1191. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 05:03:50 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9AFEE073DCB80Huckleberrybigvalley@198.186.192.196>
Source record: 23465

>>>
>>> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>>>
>>
>> In that the antenna/beam is vertical it is most likely a CB beam
>> antenna. An amateur radio antenna would be horizontal.
>>
>> Dave WD9BDZ
>
> Agreed.
>
> Tam/WB2TT
>
>

I have operated 10M FM in the past... using ground planes and vertical dipoles. It is possible that that is a devoted 10M FM ham. However, I'll admit, not likely, and is probably a CB amtemma.

Ed K7AAT

1192. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 05:08:28 UTC
From: ltdoc@yahoo.com
Message-ID: <c2bf618c-973b-40d0-80e8-5a6a6c87e0fd@e53g2000hsa.googlegroups.com>
Source record: 23466

Without some reference for size, anything would only be a guess.
The most common guess would be either a 10 or 11 meter antenna, since
it appears to at least be in that range, sort of. After that, it's
only a guess.
- 'Doc

1193. Re: An antenna to listen with.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 05:14:14 UTC
From: ltdoc@yahoo.com
Message-ID: <47faffb5-2630-4a6c-8f2d-e482586d5cb5@y21g2000hsf.googlegroups.com>
Source record: 23467

What's the point in using a balun if the feed line and antenna are
both unbalanced? Sort of a contradiction, isn't it?
- 'Doc

1194. Re: An antenna to listen with.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 05:39:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <Yq2dnb5QotM4wTfVnZ2dnUVZ_oDinZ2d@posted.easystreetonline>
Source record: 23468

ltdoc@yahoo.com wrote:
> What's the point in using a balun if the feed line and antenna are
> both unbalanced? Sort of a contradiction, isn't it?
> - 'Doc

The purpose of a balun is to balance the feedline, that is, cause the currents in the two conductors to be equal and opposite so it doesn't radiate or receive signals. Either twinlead or coax can be either unbalanced or balanced. If the feedline is unbalanced, as you say, a balun will prevent the line from radiating or receiving signals.

Anyone interested in learning more about this topic can find more information at http://eznec.com/Amateur/Articles/Baluns.pdf.

Roy Lewallen, W7EL

1195. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 08:09:03 UTC
From: gsm@mendelson.com
Message-ID: <slrngakvrb.35o.gsm@cable.mendelson.com>
Source record: 23469

DES wrote:
> Bad picture, but can someone tell me if the antenna on top of the
> tower is for a Ham or CB radio? (I know the one on the left is a EV
> ant :)
>
> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg

Could be a 6m beam.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

1196. Re: Example of the real problem ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 10:56:28 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g8e8t1pt1@aioe.org>
Source record: 23470

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g87581vpm1@news.albasani.net...
> Cecil Moore wrote:
>> John Smith wrote:
>>> This problem, IMHO, demonstrates a 1:1 relationship to the problem of
>>> cell phones and why any harm they might exhibit would be "masked" by
>>> financial, power and special/political interests.
>>
>> "IEEE Spectrum" has had a couple of articles on tumors
>> caused by cell phones. They don't seem to be life-
>> threatening but maybe "where there's smoke ..."?
>>
>> 1. Can cell phones promote brain tumors the INTERPHONE study?
>> Lin, J.C.; Antennas and Propagation Magazine, IEEE
>> Volume 47, Issue 2, April 2005 Page(s):137 - 138
>> Digital Object Identifier 10.1109/MAP.2005.1487813
>> 2. The risk of acoustic neuromas from using cell phones
>> Lin, J.C.; Antennas and Propagation Magazine, IEEE
>> Volume 47, Issue 1, Feb 2005 Page(s):183 - 185
>> Digital Object Identifier 10.1109/MAP.2005.1436270
>
> Cecil:
>
> I simply find it "strange", that the presumption that exposure to forms of
> radiation (RF in this case) is always considered safe until proved/proven
> harmful. The same goes for chemicals not existing in nature and to which
> the human body (or any biological organisms for that matter) has never
> been exposed. It seems all which is needed is to chant a "paranoid/wacko"
> mantra and such forms of thought are naturally generated in the human
> mind. The presumption, so generated, seems to be, "If we have never seen
> it before, if we have never been exposed to it before, maybe it is
> actually good for us!"
>
> I mean, is this prudent thinking/behavior? Am I the only one to think the
> proof should rest with those introducing the potential harmful
> exposure/materials and their SAFETY--rather than those being exposed
> having to prove its' harm in order to effect their own safety?
>
> If you look at the parallels between how tobacco was allowed to continue,
> without even a warning and for such a lengthy period, it all revolved over
> disputing studies/good-science which kept pointing to the dangers ...
> indeed, into the 70' and well beyond, the warning that "smoking was bad"
> was met with those chanting the myths of flawed studies ...
>

> What truly amazes me is the fact that simple "safeguards" are available to
> vastly reduce risk (at least with cell phones.) What has become so
> ingrained into our thinking/media which can make otherwise responsible men
> and women so irresponsible ... money, greed, corruption, insanity?
>
> Someone here has thinking that is "a bit off", if it is me--I only pray
> rationality will come home ... I will continue to "re-think my thinking",
> maybe I will eventually see it ... until then, I do keep abreast of the
> "Rush Limbaugh Manta"--"Things are Good and Getting Better, don't trust
> your eyes, mind and thinking--they lie!" It simply does NOT motivate me
> "To Believe!"
>
> I am willing to listen to any studies which find that cell phone radiation
> is making me smarter, handsomer, wittier, richer and more sexually
> attractive to the ladies, etc. ;-) Just show me some honest, unbiased
> studies which deal on REAL SCIENCE ... look at Love Canal in New York and
> the battle to prove, legally, that these chemicals being dumped into the
> environment were harming/killing people! ... how many examples before one
> chooses to error on the side of caution?
>
> Let me give you a "hard case example", perhaps 99%+ of the snakes in the
> world are NOT POISONOUS--would I be prudent to consider the next snake I
> see non-poisonous and of NO danger? I think not ... heck, just a
> relatively "harmless bite" will get my attention! (not to mention the
> danger of infection.)
>
> Regards,
> JS

How many people have developed the brain tumors associated with cellphone use versus the number of people whose lives have been saved because of the use of a cellphone?

Think of all of the 911 calls that have saved folks' lives over the years that the cellphone has been available to the public.

I am NOT saying that cellphone use is entirely safe. I truly do not know, one way or the other, but, if immediate tumors or other cancers had been developed during the all to brief preliminary testing of devices operating at such high frequencies in close approximation to the human body, I feel certain that said developers would not have rushed their devices into mass production so quickly.

Risk versus benefit must be taken into consideration too.

Ed, NM2K

1197. Re: QST antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 11:15:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <qVxqk.8153$cn7.4914@flpi145.ffdc.sbc.com>
Source record: 23471

jawod wrote:
> But...the twin lead is connected directly to coax with no balun. Isn't
> this a mismatch?

The ladder-line is NOT used as RF transmission line.
It is used for DC current and for RF antenna current.
This is just an ordinary coax-fed dipole with an extra
wire to carry the DC. There is no BALanced to UNbalanced
RF junction to worry about.
--
73, Cecil http://www.w5dxp.com

1198. Re: Identify coax

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 12:27:14 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g8ee79$uk7$1@registered.motzarella.org>
Source record: 23472

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:67ebd10b-ac36-4e5e-ae53-919580cf5bce@d77g2000hsb.googlegroups.com...
> What do you call the small rigid coax similar in size to RG402 but
> very rigid. I feel like an idiot after working with this stuff for 20
> years and have only refered to it as minature hardline.
>
> Jimmie

You have lots and lots of company, Jimmie. Don't feel bad.

Ed, NM2K

1199. Re: Phased array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 12:28:55 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g8eeae$v2u$1@registered.motzarella.org>
Source record: 23473

Ahhhhhhhh. That's better.

Ed, NM2K

1200. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 12:31:27 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g8eef6on1@registered.motzarella.org>
Source record: 23474

I seriously doubt that the antenna knows the difference. 8>)

I can't see the image very well, but it looks like (to me) that there are two larger and two smaller elements on the mast. As I said, the image isn't very clear, so I could be mistaken.

Problem is, I can't think of a dual band antenna that would use that much spacing between the two interior smaller elements. But what do I know?

Ed, NM2K

1201. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 12:32:27 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g8eeh1$14o$1@registered.motzarella.org>
Source record: 23475

"David G. Nagel" <nagel.david@sbcglobal.net> wrote in message
news:unoqk.17145$LG4.3825@nlpi065.nbdc.sbc.com...
> DES wrote:
>> Bad picture, but can someone tell me if the antenna on top of the
>> tower is for a Ham or CB radio? (I know the one on the left is a EV
>> ant :)
>>
>> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>>
>
> In that the antenna/beam is vertical it is most likely a CB beam antenna.
> An amateur radio antenna would be horizontal.
>
> Dave WD9BDZ

Unless this antenna was used to work a 10 meter repeater.

Ed, NM2K

1202. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 12:34:20 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g8eekj$1p2$1@registered.motzarella.org>
Source record: 23476

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrngakvrb.35o.gsm@cable.mendelson.com...
> DES wrote:
>> Bad picture, but can someone tell me if the antenna on top of the
>> tower is for a Ham or CB radio? (I know the one on the left is a EV
>> ant :)
>>
>> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>
> Could be a 6m beam.
>
> Geoff.

Yep.

Or it could be and dual band 10 and 6 meter beam. To me, the interior two elements look considerably shorter than the end elements. Could be just my eyes.

Ed, NM2K

1203. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 12:45:47 UTC
From: Dave Holford <holford@cogeco.ca>
Message-ID: <eJzqk.5992$in.1943@read1.cgocable.net>
Source record: 23478

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:g8cmlo$17a4$1@f04n12.cac.psu.edu...
> Dave Holford wrote:
>>> If you want to do some good, why don't you rant about X-ray exposure
>>> from
>>> CRT's and why everyone should get rid of them in favor of LCD's for
>>> computer
>>> monitors, because I guarantee it is way more a health risk than little
>>> wireless devices.
>>>
>>
>> I spent 5 years in front of large CRTs while wearing a radiation monitor.
>> When no one showed any sign of radiation the monitoring ceased. Did pick
>> up
>> some radiation from unrelated sources, but nothing from the CRTs.
>>
>> Probably getting more radiation from the ionization smoke detector on the
>> ceiling of my den! Not to mention all the natural sources - bananas for
>> example.
>
>
> There is a lot of lead in that CRT glass. That stops the X rays rather
> nicely.
>
> So I guess the fellow is saying that there is absolutely no effects. And
> guarantees it also. I'm impressed by the level of confidence he has.
>
> - 73 de Mike N3LI -

The only use of the word guarantee I see it the foregoing is "because I guarantee it is way more a health risk than little wireless devices." in reference to CRT X-rays.

But the bannanas and granite countertop in the kitchen might be a problem.

Dave

1204. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 12:50:51 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <f6bf4061-40a9-4100-9a3c-02e6d7c3019f@d77g2000hsb.googlegroups.com>
Source record: 23477

OK, I'm gonna try and get a better picture for you guys, but it won't be today because it's pouring down rain.

1205. Re: Example of the real problem ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 13:21:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8ehcv$6rv$1@news.albasani.net>
Source record: 23479

Ed Cregger wrote:

> ...
> ------------
>
> How many people have developed the brain tumors associated with cellphone
> use versus the number of people whose lives have been saved because of the
> use of a cellphone?
>
> Think of all of the 911 calls that have saved folks' lives over the years
> that the cellphone has been available to the public.
>
> I am NOT saying that cellphone use is entirely safe. I truly do not know,
> one way or the other, but, if immediate tumors or other cancers had been
> developed during the all to brief preliminary testing of devices operating
> at such high frequencies in close approximation to the human body, I feel
> certain that said developers would not have rushed their devices into mass
> production so quickly.
>
> Risk versus benefit must be taken into consideration too.
>
> Ed, NM2K
>
>

Yes, exactly, back to the original intent of my original post ...

Maximize benefits, minimize risk, error on the side of caution, watch
out for yourself--trust no one to do it for you ... I believe you
present an excellent case.

Regards,
JS

1206. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 13:24:01 UTC
From: gsm@mendelson.com
Message-ID: <slrngali8j.8cq.gsm@cable.mendelson.com>
Source record: 23480

DES wrote:
> OK, I'm gonna try and get a better picture for you guys, but it won't
> be today because it's pouring down rain.

How about going up to the door and asking?

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

1207. Re: Telescopic aluminum question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 13:45:37 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <s0jla41kf4e0le0ndj90ier5hbse2qka27@4ax.com>
Source record: 23481

On 19 Aug 2008 04:59:29 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>
> A belated response to my initial post. After reading all the responses,
>and after much thought, I have decided to fore-go using a vertical at
>present.
>
> I have problems with high winds, corrosion, some noise, ability to
>place an adequate grounds system, and even aesthetics, etc. so I have
>decided, for the time being, anyway, to put up a rather low dipole (NVIS)
>instead.
>
> My thanks to all who took their time to give me their opinions and
>ideas. Its a good learning experiece, even if I don't proceed with the
>initial plan.
>
>
> Ed
It has been an interesting thread. For some reason it never occurred
to me that the tubing sold for chain link fence top rails would make
an inexpensive and durable vertical. TV masting sems to be getting
more expensive and harder to find. I will likely use it for the next
refresh cycle on my vertical.

Of your stated objections only the matter of the ground seems to be
really tough to solve for me. I bet that in time you will try both.
The NVIS and vertical will give you two different sets of contacts!

John Ferrell W8CCW

1208. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 13:52:32 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <c512e8f3-07c3-481a-ab9d-5b1a11320a0a@s50g2000hsb.googlegroups.com>
Source record: 23482

On Aug 19, 9:24 am, g...@mendelson.com (Geoffrey S. Mendelson) wrote:
> DES wrote:
> > OK, I'm gonna try and get a better picture for you guys, but it won't
> > be today because it's pouring down rain.
>
> How about going up to the door and asking?
>
> Geoff.

That isn't an option. I can't go into details in a public forum.. I
just need to know if the guy is broadcasting with a ham or CB radio,
and figured you guys could tell me from looking at the antenna.

1209. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 15:09:03 UTC
From: gsm@mendelson.com
Message-ID: <slrngalo8h.a34.gsm@cable.mendelson.com>
Source record: 23483

DES wrote:

> That isn't an option. I can't go into details in a public forum.. I
> just need to know if the guy is broadcasting with a ham or CB radio,
> and figured you guys could tell me from looking at the antenna.

I don't know what youthink you are doing, but it's not going IMHO to end well. If you think that the resident of the property is operating illegally, on whatever band you think they may be doing so, contact a local ham radio club, or if you don't know of one, the ARRL or local equivalent and ask for assitance in tracking down the source of the interference.

I'm sure there is someone near you who has the skill and the equipment to find out what the problem is and locate the actual source.

Usually they guy with the most visible antennas is the one who is the least likely source of whatever interference you are experiencing assuming you are experiencing some sort of interference and are not just out the get the guy because you don't want anyone with antennas in your neighborhood.

Geoff.
--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

1210. Re: QST antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 15:18:14 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <WuBqk.214$482.49@trnddc06>
Source record: 23484

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:qVxqk.8153$cn7.4914@flpi145.ffdc.sbc.com...
> jawod wrote:
>> But...the twin lead is connected directly to coax with no balun. Isn't
>> this a mismatch?
>
> The ladder-line is NOT used as RF transmission line.
> It is used for DC current and for RF antenna current.
> This is just an ordinary coax-fed dipole with an extra
> wire to carry the DC. There is no BALanced to UNbalanced
> RF junction to worry about.
> --
> 73, Cecil http://www.w5dxp.com
-
QST antenna designs would be easier to understand if QST used the
traditional electrical diagrams for antennas, instead of those goofball
drawings that have insulators/guy wires/etc. shown as major features. This
particular antenna design, unlike some of the other antenna articles, can be
waded through by looking at the drawing.

1211. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 15:54:14 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <8c06b97f-6502-4063-8070-00c23f1f7030@w7g2000hsa.googlegroups.com>
Source record: 23485

On Aug 19, 11:09 am, g...@mendelson.com (Geoffrey S. Mendelson) wrote:
> DES wrote:
> > That isn't an option. I can't go into details in a public forum.. I
> > just need to know if the guy is broadcasting with a ham or CB radio,
> > and figured you guys could tell me from looking at the antenna.
>
> I don't know what youthink you are doing, but it's not going IMHO to end
> well. If you think that the resident of the property is operating
> illegally, on whatever band you think they may be doing so, contact a
> local ham radio club, or if you don't know of one, the ARRL or local
> equivalent and ask for assitance in tracking down the source of the
> interference.
>
> I'm sure there is someone near you who has the skill and the equipment to
> find out what the problem is and locate the actual source.
>
> Usually they guy with the most visible antennas is the one who is
> the least likely source of whatever interference you are experiencing
> assuming you are experiencing some sort of interference and are not
> just out the get the guy because you don't want anyone with antennas
> in your neighborhood.
>
> Geoff.
> --
> Geoffrey S. Mendelson, Jerusalem, Israel g...@mendelson.com N3OWJ/4X1GM

What the hell, public forum or not, I need some help here, and this
guy is giving legal users a bad name.

I've approached the guy *several* times over the past few yrs and
asked him very nicely to lower the boost/gain (whatever it's called)
on his radio and he has complaied to a certain extent.

His broadcast were only coming through my stereo speakers during low
passages at the time.

As of a few months ago, it is now so bad, that his broadcast are now
coming through my TV speakers, and causing horizontal lines in the
picture. (on all four of my TV's) And it's so bad on my computer
speakers now, that I have to turn them off. As far as listening to my
stereo, I can't even do that now if he is broadcasting.

So I approached him again, only this time, he told me to "F off", that
"he wasn't doing anything illegal".

When I got home, not only was the broadcast even louder, he was
telling one of his radio buddies about the "incident" in FULL detail.

So, I know for a FACT it is him.

I know just need to know what kind of radio he is using.

Question, can a CB transmit

1212. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 16:02:39 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <f677faba-52b6-4639-b681-1fb9bbc8fb08@m44g2000hsc.googlegroups.com>
Source record: 23486

On Aug 19, 11:54 am, DES <BigELil...@msn.com> wrote:
> On Aug 19, 11:09 am, g...@mendelson.com (Geoffrey S. Mendelson) wrote:
>
>
>
> > DES wrote:
> > > That isn't an option. I can't go into details in a public forum.. I
> > > just need to know if the guy is broadcasting with a ham or CB radio,
> > > and figured you guys could tell me from looking at the antenna.
>
> > I don't know what youthink you are doing, but it's not going IMHO to end
> > well. If you think that the resident of the property is operating
> > illegally, on whatever band you think they may be doing so, contact a
> > local ham radio club, or if you don't know of one, the ARRL or local
> > equivalent and ask for assitance in tracking down the source of the
> > interference.
>
> > I'm sure there is someone near you who has the skill and the equipment to
> > find out what the problem is and locate the actual source.
>
> > Usually they guy with the most visible antennas is the one who is
> > the least likely source of whatever interference you are experiencing
> > assuming you are experiencing some sort of interference and are not
> > just out the get the guy because you don't want anyone with antennas
> > in your neighborhood.
>
> > Geoff.
> > --
> > Geoffrey S. Mendelson, Jerusalem, Israel g...@mendelson.com N3OWJ/4X1GM
>
> What the hell, public forum or not, I need some help here, and this
> guy is giving legal users a bad name.
>
> I've approached the guy *several* times over the past few yrs and
> asked him very nicely to lower the boost/gain (whatever it's called)
> on his radio and he has complaied to a certain extent.
>
> His broadcast were only coming through my stereo speakers during low
> passages at the time.
>
> As of a few months ago, it is now so bad, that his broadcast are now
> coming through my TV speakers, and causing horizontal lines in the
> picture. (on all four of my TV's) And it's so bad on my computer
> speakers now, that I have to turn them off. As far as listening to my

> stereo, I can't even do that now if he is broadcasting.
>
> So I approached him again, only this time, he told me to "F off", that
> "he wasn't doing anything illegal".
>
> When I got home, not only was the broadcast even louder, he was
> telling one of his radio buddies about the "incident" in FULL detail.
>
> So, I know for a FACT it is him.
>
> I know just need to know what kind of radio he is using.
>
Hit send by accident.

Question, can a CB transmit 700 miles?

1213. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 16:17:01 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g8erltmvg1@news.jpl.nasa.gov>
Source record: 23493

Joel Koltner wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:S66dnXjBAaZJNQHVnZ2dnUVZ_rHinZ2d@posted.easystreetonline...
>> Not directly. What counts (considering the simple case of two elements) is
>> the magnitude and phase of the current in the other element, and their
>> spacing, orientation, and lengths.
>
> Understood, thanks.
>
>> But your search for small, broadband antennas puts you bump-up against the
>> principle "small - broadband - efficient, choose any two".

But actually, that's not the principle.. The actual limits have to do with the ratio of stored energy vs radiated power in the antenna (Q, in the energy storage sense, not in the "resonant circuit" sense). For example, a lot of the efficiency issues in practical antenna systems are more to deal with the reactive component of the feedpoint impedance, and the reactive/lossy network used to make it look like the feedline or transmitter output impedance.

And the classical formulation also makes some not necessarily always valid assumptions: linearity and reciprocity of components being the notable one (Foster vs non-Foster terminations, for instance).

1214. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 16:20:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <strla4lha585ml92kenf5mvt8givq4v1na@4ax.com>
Source record: 23487

On Tue, 19 Aug 2008 09:02:39 -0700 (PDT), DES <BigELilE05@msn.com>
wrote:

>Question, can a CB transmit 700 miles?

At the power levels you are suggesting, globally during certain
periods of the sun spot cycle. But that is not terribly different
with legal CB power.

As to his remarking that he wasn't doing anything illegal (CB with
amplification that some smarmy posters here think is perfectly OK); if
that be the case, then you need to fix your problem, because the FCC
does not mandate that a Ham legally using his equipment is obligated
to defer to your TV watching habits.

That fix is going to be the same if power levels don't go down for any
reason (issues of morality notwithstanding). The judicious and
liberal application of Ferrite RFI suppressors will solve a lot of
your suffering.

Look at any of your computer display leads and notice the end of the
cable with the odd bulge before one connector. That is a suppressor.
It is nothing more than a ferrite donut or tube. Ferrite is a
magnetic ceramic (it will break like china if you drop it). It is
made in many forms and appears to be dark gray with a slick to dusty
finish. The Ferrite RFI suppressors available at Radio Shack come
with a plastic clamshell holding one of these tubes that is split
lengthwise so you can open it, insert a wire or wires, and then lock
it shut. This makes it reusable if the problem isn't solved with your
choice of wire(s) or where you apply it.

This last suggests experimentation on your part is necessary. It also
means you are going to need more than one given you have described a
number of issues. For a start, get two or three and see how well they
work on the power cords going to the affected component (TV, radio,
computer) and even with both wires of any speaker. In short, put a
suppressor on any interconnecting cable or wire and see if symptoms
change.

73's
Richard Clark, KB7QHC

1215. Re: QST antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 16:25:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <f78rn5-7l5.ln1@mail.specsol.com>
Source record: 23488

jawod <jawod@fuse.net> wrote:
> In the latest QST there is an article on a Window line twin lead antenna
> that uses relays to switch sections in and out of a dipole configuration
> to allow multiband use. (DC is inserted into the coax to activate the
> relays.)
>
> Sounds interesting to me.
>
> But...the twin lead is connected directly to coax with no balun. Isn't
> this a mismatch? I wonder about significant RF coupling to the adjacent
> dipole sections through the relay assemblies. Also, I couldn't tell if
> the window line was shorted into a loop at the ends or not.

It is not a folded dipole.

The two sides of the ladder line are connected together at RF at the
input by capacitors C4 and C5 in the splitter making it look like a
slightly fat, ordinary dipole.

If you want to know about RF coupling on the adjacent elements, you
could model it with the demo version of EZNEC.

--
Jim Pennino

Remove .spam.sux to reply.

1216. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 16:30:22 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <YxCqk.4596$zv7.1381@flpi143.ffdc.sbc.com>
Source record: 23489

Dave Holford wrote:
> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:g8cmlo$17a4$1@f04n12.cac.psu.edu...
>> Dave Holford wrote:
>>>> If you want to do some good, why don't you rant about X-ray exposure
>>>> from
>>>> CRT's and why everyone should get rid of them in favor of LCD's for
>>>> computer
>>>> monitors, because I guarantee it is way more a health risk than little
>>>> wireless devices.
>>>>
>>> I spent 5 years in front of large CRTs while wearing a radiation monitor.
>>> When no one showed any sign of radiation the monitoring ceased. Did pick
>>> up
>>> some radiation from unrelated sources, but nothing from the CRTs.
>>>
>>> Probably getting more radiation from the ionization smoke detector on the
>>> ceiling of my den! Not to mention all the natural sources - bananas for
>>> example.
>>
>> There is a lot of lead in that CRT glass. That stops the X rays rather
>> nicely.
>>
>> So I guess the fellow is saying that there is absolutely no effects. And
>> guarantees it also. I'm impressed by the level of confidence he has.
>>
>> - 73 de Mike N3LI -
>
> The only use of the word guarantee I see it the foregoing is "because I
> guarantee it is way more a health risk than little wireless devices." in
> reference to CRT X-rays.
>
> But the bannanas and granite countertop in the kitchen might be a problem.
>
> Dave
>
>
Dave;

Don't forget the radioactive potasium in your heart.

Another Dave

1217. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 16:44:11 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <2LCqk.4597$zv7.719@flpi143.ffdc.sbc.com>
Source record: 23490

Ed Cregger wrote:
> "David G. Nagel" <nagel.david@sbcglobal.net> wrote in message
> news:unoqk.17145$LG4.3825@nlpi065.nbdc.sbc.com...
>> DES wrote:
>>> Bad picture, but can someone tell me if the antenna on top of the
>>> tower is for a Ham or CB radio? (I know the one on the left is a EV
>>> ant :)
>>>
>>> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>>>
>> In that the antenna/beam is vertical it is most likely a CB beam antenna.
>> An amateur radio antenna would be horizontal.
>>
>> Dave WD9BDZ
>
> -----------
>
> Unless this antenna was used to work a 10 meter repeater.
>
> Ed, NM2K
>
>
True

Dave WD9BDZ

1218. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 16:52:18 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <c377d678-0e14-4051-a74f-c13c9a452b89@x41g2000hsb.googlegroups.com>
Source record: 23491

On Aug 19, 12:20 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Tue, 19 Aug 2008 09:02:39 -0700 (PDT), DES <BigELil...@msn.com>
> wrote:
>
> >Question, can a CB transmit 700 miles?
>
> At the power levels you are suggesting, globally during certain
> periods of the sun spot cycle. But that is not terribly different
> with legal CB power.

So, if I'm hearing him on a daily bases speaking to someone that is
700 miles away, then it has to be a Ham?
>
> As to his remarking that he wasn't doing anything illegal (CB with
> amplification that some smarmy posters here think is perfectly OK); if
> that be the case, then you need to fix your problem, because the FCC
> does not mandate that a Ham legally using his equipment is obligated
> to defer to your TV watching habits.

He's obviously not legal. He has been getting louder and louder over
the years to the point of what I described in my earlier post about
the problem with the TV's now.

And even the very first time I approached him, I mentioned that I knew
he was broadcasting illegally, and that we all have our hobbies, but
his was interfering with mine, which at the time was home theater. He
didn't deny that he wasn't illegal, at the time, and he did lower the
power, for a while.

I've approached this guy at least 5 times in the past few yrs, and
every time he has lowered the power, for a while. Not this time,
though, and it is now out of control.

<snipped> helpful info

1219. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 17:00:19 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9AFF7A176F8DDVeebleFetzer@127.0.0.1>
Source record: 23492

BigELilE05@msn.com (DES) wrote in
news:c512e8f3-07c3-481a-ab9d-5b1a11320a0a@s50g2000hsb.googlegroups.com:

> On Aug 19, 9:24 am, g...@mendelson.com (Geoffrey S. Mendelson)
> wrote:
>> DES wrote:
>> > OK, I'm gonna try and get a better picture for you guys, but it
>> > won't be today because it's pouring down rain.
>>
>> How about going up to the door and asking?
>>
>> Geoff.
>
> That isn't an option. I can't go into details in a public forum.. I
> just need to know if the guy is broadcasting with a ham or CB radio,
> and figured you guys could tell me from looking at the antenna.

Do you know the guy's name? You can see if there's a license issued to
him:

http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp

--
Bert Hyman | St. Paul, MN | bert@iphouse.com

1220. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 17:08:48 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <eea99cee-0095-4e3c-941d-02526deec009@x35g2000hsb.googlegroups.com>
Source record: 23494
Body handling: HTML body converted to readable text

On Aug 19, 1:00 pm, Bert Hyman wrote:
> BigELil...@msn.com (DES) wrote
innews:c512e8f3-07c3-481a-ab9d-5b1a11320a0a@s50g2000hsb.googlegroups.com:
>
> > On Aug 19, 9:24 am, g...@mendelson.com (Geoffrey S. Mendelson)
> > wrote:
> >> DES wrote:
> >> > OK, I'm gonna try and get a better picture for you guys, but it
> >> > won't be today because it's pouring down rain.
>
> >> How about going up to the door and asking?
>
> >> Geoff.
>
> > That isn't an option. I can't go into details in a public forum.. I
> > just need to know if the guy is broadcasting with a ham or CB radio,
> > and figured you guys could tell me from looking at the antenna.
>
> Do you know the guy's name? You can see if there's a license issued to
> him:
>
> http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp
>
> --
> Bert Hyman | St. Paul, MN | b...@iphouse.com

Only his address, and the house is listed in a females name in public
records. Thanks for the link, I gonna see if I can find out his name.

1221. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 17:11:15 UTC
From: Jeff <jeff@local.host>
Message-ID: <48aaff05$0$19363$834e42db@reader.greatnowhere.com>
Source record: 23495

>He's obviously not legal. He has been getting louder and louder over
>the years to the point of what I described in my earlier post about
>the problem with the TV's now.

You are probably not going to agree with this Des, but the fact that you have a problem with your TV and hifi is no indication that the guy with the transmitter is at fault. Hams are legally allowed to transmit with very high power and the fact that your equipment is susceptible to these transmissions is more an indication of your equipment's short comings than the transmitter's. Unfortunately some manufacturers take few precautions to prevent this kind of interference getting into audio equipment etc. They prefer to save money and only deal with complaints when they occur; it is more cost effective for them!! The selling price is no indication of how well a TV or hifi will stand up when exposed to strong transmissions.

Home theatre set ups are especially susceptible due to all the long speaker cables lying about acting as antennas.

Regards
Jeff

1222. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 17:18:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gnvla41j31jgb4vu5pe0tuoroocf96vb5d@4ax.com>
Source record: 23497

On Tue, 19 Aug 2008 09:17:01 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>>> But your search for small, broadband antennas puts you bump-up against the
>>> principle "small - broadband - efficient, choose any two".
>
>But actually, that's not the principle.. The actual limits have to do
>with the ratio of stored energy vs radiated power in the antenna (Q, in
>the energy storage sense, not in the "resonant circuit" sense).

Hi Jim,

Different meanings of Q? The measure of Q may vary according to
arbitrary usage: the choice of SWR limits to define bandwidth which
infers Q. Some choose 2:1, classic Q would go further. Either way,
and for either quantitative result, the meaning of Q remains
essentially the same.

> For
>example, a lot of the efficiency issues in practical antenna systems are
>more to deal with the reactive component of the feedpoint impedance, and
>the reactive/lossy network used to make it look like the feedline or
>transmitter output impedance.

That isn't Q, that is matching considerations. Certainly there is a Q
for the system and Q can be extremely high in detriment to getting
transmitting power out of the antenna. This is, albeit, a largely
unattainable situation, but try sending voice communications through a
very efficient 1M loop at 160M.

73's
Richard Clark, KB7QHC

1223. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 17:19:02 UTC
From: gsm@mendelson.com
Message-ID: <slrngalvsh.bu5.gsm@cable.mendelson.com>
Source record: 23496

DES wrote:

> What the hell, public forum or not, I need some help here, and this
> guy is giving legal users a bad name.

You have not in any way proved that he is NOT a legal user.

What I've gotten out of your posts are:

1. He is having conversations using a radio.

2. Your stereo system picks them up.

3. You are annoyed by this.

Anything else is in the end irrelevant.

Since he is speaking to someone else, he is NOT broadcasting and may very
well be operating legally. Since you have not said where you are, people
have assumed that you are in the U.S. If that is not the case, this
is the time to say where you are.

> I've approached the guy *several* times over the past few yrs and
> asked him very nicely to lower the boost/gain (whatever it's called)
> on his radio and he has complaied to a certain extent.

That's very nice of him. If he is operating legally, then there is NOTHING
that he MUST do, and he was trying to accomodate you. You were acting
like a neighbor who calls the fire department everytime someone lights
their barbeque.

> His broadcast were only coming through my stereo speakers during low
> passages at the time.

How were they doing that? Do they come through with the stereo off? If they
do it's a problem with the speakers and their wiring. If they don't,
it's a problem with the stereo itself, YOUR antenna, or YOUR power wiring.

> As of a few months ago, it is now so bad, that his broadcast are now
> coming through my TV speakers, and causing horizontal lines in the
> picture. (on all four of my TV's) And it's so bad on my computer
> speakers now, that I have to turn them off. As far as listening to my
> stereo, I can't even do that now if he is broadcasting.

Now we are getting somewhere. Are they connected to cable TV? Do you have
an external antenna?

> So I approached him again, only this time, he told me to "F off", that
> "he wasn't doing anything illegal".

I don't agree with the method, but the message is correct. If he is
not doing anything illegal, it's your problem, not his. He's tried to
make a reasonable accomodation (reducing power), but you've done nothing
except complain more.

> When I got home, not only was the broadcast even louder, he was
> telling one of his radio buddies about the "incident" in FULL detail.
>
> So, I know for a FACT it is him.
>
> I know just need to know what kind of radio he is using.

Most likely he is using a ham transmiter in the AM mode. These are quite
rare nowadays, but are perfectly legal. If he were using FM mode it
would sound like a loud continuous buzz, and if it were single side band,
the more popular mode, it would sound like donald duck and you probably
could not understand him.

If he were using morse code, it would sound like buzzing that stops and
starts quickly.

He may be using a CB as many of them are AM, but generally they have a range
of about 5-10 miles. Even with illegal power, due to global cooling (lack
of sunspots), they won't reach far beyond line of sight for another 3-5
years.

At this point if I were you, I would go knock on his door, appologize for
the misunderstanding in the past and ask for him to either give you advice
on what to do to resolve the problem or recommend someone to ask.

My guess is as a start that YOU have an electrician come out and check
the GROUND wire on your electrical system. Make sure YOUR main panel is
in fact grounded and all the outlets you have are really grounded.

Unless you have ISO-BAR (or better) surge protectors, throw them away.
It's not a waste of good money, they are worthless trash anyway.

After that unplug the antenna connections from all of your TV's and
stereo system. Have him transmit a test signal. If they come through the
TV's, or stereo, get power line filters. If no signal comes through the
TV or stereo, and it starts when you reconnect the antenna, get a better
antenna (shielded wire) connection with a proper ground and a "high pass"
filter.

Get good computer speakers anyway. Try USB ones instead of ones that
plug into your sound card.

Geoff.
--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

1224. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 17:34:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0e0ma4p605jlagn3m5s95lfbfpiqtp53n4@4ax.com>
Source record: 23498

On Tue, 19 Aug 2008 09:52:18 -0700 (PDT), DES <BigELilE05@msn.com>
wrote:

>So, if I'm hearing him on a daily bases speaking to someone that is
>700 miles away, then it has to be a Ham?

There is nothing to distinguish a Ham from a CBer here.

>He's obviously not legal.

As you came here to make a determination of class of operation, your
statement is clearly a guess, not "obviously" a correct observation.

Simple point in fact is that even for a professional, it is
exceedingly difficult to determine a power level that is not legal.
You, as a citizen, are perfectly empowered to notify the nearest FCC
field office that is equipped to do this, but I wouldn't hold my
breath. Your tax rebate check robbed that agency of enforcement power
funds so you could buy a new TV. You can change that at the ballot
box - expect a higher tax bill if you want government to solve this.

>He has been getting louder and louder over
>the years to the point of what I described in my earlier post about
>the problem with the TV's now.
>
>And even the very first time I approached him, I mentioned that I knew
>he was broadcasting illegally, and that we all have our hobbies, but
>his was interfering with mine, which at the time was home theater. He
>didn't deny that he wasn't illegal, at the time, and he did lower the
>power, for a while.
>
>I've approached this guy at least 5 times in the past few yrs, and
>every time he has lowered the power, for a while. Not this time,
>though, and it is now out of control.

Yes, not pleasant at all. Your complaint is neither new, nor original
over the course of 80 years now. In all practicality, your only real
option is to go to Radio Shack and stock up on suppressors. Save
yourself the added postage cost of sending a letter to the FCC and the
delay of bureaucracy waiting for them to tell you the same thing.

73's
Richard Clark, KB7QHC

1225. Re: QST antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 17:41:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <HyDqk.8167$cn7.5744@flpi145.ffdc.sbc.com>
Source record: 23499

Cecil Moore wrote:
> There is no BALanced to UNbalanced RF junction to worry about.

Make that "transmission line junction". Of course, the
UNbalanced coax to BALanced dipole connection could use
a 1:1 choke.
--
73, Cecil http://www.w5dxp.com

1226. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 17:44:01 UTC
From: gsm@mendelson.com
Message-ID: <slrngam1i9.cgn.gsm@cable.mendelson.com>
Source record: 23500

DES wrote:
> He's obviously not legal. He has been getting louder and louder over
> the years to the point of what I described in my earlier post about
> the problem with the TV's now.

How do you know that? It could very easily be that YOUR problem is getting worse. You just automaticly blame him without doing anything to determine what the real problem is.

I'm probably at least 6,000 miles away from you but you should check out what I wrote in my last post very carefully. I think in the end not only will you owe him an apology, but you will thank him for pointing out a situation which could cause your house to burn down with you in it.

BTW, do you happen to live in Willingboro New Jersey? Or somewhere built around the same time? *

Geoff.

* Aluminum house wiring, which if you do have it, it ALL should be replaced. Aluminum wiring from the pole to your main panel is ok, but in the walls, it's a disaster working up to the "big one".

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

1227. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 17:47:22 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <16315bd5-5fe0-48b7-8503-c5f58ea8d093@s50g2000hsb.googlegroups.com>
Source record: 23301
Body handling: HTML body converted to readable text

On Aug 19, 1:00 pm, Bert Hyman wrote:
> BigELil...@msn.com (DES) wrote
innews:c512e8f3-07c3-481a-ab9d-5b1a11320a0a@s50g2000hsb.googlegroups.com:
>
> > On Aug 19, 9:24 am, g...@mendelson.com (Geoffrey S. Mendelson)
> > wrote:
> >> DES wrote:
> >> > OK, I'm gonna try and get a better picture for you guys, but it
> >> > won't be today because it's pouring down rain.
>
> >> How about going up to the door and asking?
>
> >> Geoff.
>
> > That isn't an option. I can't go into details in a public forum.. I
> > just need to know if the guy is broadcasting with a ham or CB radio,
> > and figured you guys could tell me from looking at the antenna.
>
> Do you know the guy's name? You can see if there's a license issued to
> him:
>
> http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp
>
> --
> Bert Hyman | St. Paul, MN | b...@iphouse.com

Thank you, very much!

Since I didn't know his name, I just started clicking on all of the
names in my zip code, and his address popped up.

So, it is definitely a Ham.

Thanks for everyone's advice and help!

1228. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 18:04:59 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <2dabf3ca-92aa-4fcf-a7a4-5fd4de56f887@l42g2000hsc.googlegroups.com>
Source record: 23302

On Aug 19, 1:44 pm, g...@mendelson.com (Geoffrey S. Mendelson) wrote:
> DES wrote:
> > He's obviously not legal. He has been getting louder and louder over
> > the years to the point of what I described in my earlier post about
> > the problem with the TV's now.
>
> How do you know that? It could very easily be that YOUR problem is getting
> worse. You just automaticly blame him without doing anything to determine
> what the real problem is.
>
> I'm probably at least 6,000 miles away from you but you should check out
> what I wrote in my last post very carefully. I think in the end not
> only will you owe him an apology, but you will thank him for pointing
> out a situation which could cause your house to burn down with you in it.
>
> BTW, do you happen to live in Willingboro New Jersey? Or somewhere built
> around the same time? *
>
> Geoff.
>
> * Aluminum house wiring, which if you do have it, it ALL should be
> replaced. Aluminum wiring from the pole to your main panel is ok, but
> in the walls, it's a disaster working up to the "big one".
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel g...@mendelson.com N3OWJ/4X1GM

Like I said, thanks for everyone's help and advice.

1229. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 18:15:21 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8f2jp$ur6$1@f04n12.cac.psu.edu>
Source record: 23303

Dave Holford wrote:
> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:g8cmlo$17a4$1@f04n12.cac.psu.edu...
>> Dave Holford wrote:
>>>> If you want to do some good, why don't you rant about X-ray exposure
>>>> from
>>>> CRT's and why everyone should get rid of them in favor of LCD's for
>>>> computer
>>>> monitors, because I guarantee it is way more a health risk than little
>>>> wireless devices.
>>>>
>>> I spent 5 years in front of large CRTs while wearing a radiation monitor.
>>> When no one showed any sign of radiation the monitoring ceased. Did pick
>>> up
>>> some radiation from unrelated sources, but nothing from the CRTs.
>>>
>>> Probably getting more radiation from the ionization smoke detector on the
>>> ceiling of my den! Not to mention all the natural sources - bananas for
>>> example.
>>
>> There is a lot of lead in that CRT glass. That stops the X rays rather
>> nicely.
>>
>> So I guess the fellow is saying that there is absolutely no effects. And
>> guarantees it also. I'm impressed by the level of confidence he has.
>>
>> - 73 de Mike N3LI -
>
> The only use of the word guarantee I see it the foregoing is "because I
> guarantee it is way more a health risk than little wireless devices." in
> reference to CRT X-rays.

The health risk from an unshielded CRT would be significant. I'm not so
sure about the risks from cell phone near field RF (yes, I know the
discussion is often far field, but sometimes I think I'm "wrong" because
some people don't like John Smith.

At the risk of bringing actual research into this

http://tinyurl.com/6ghw69

It is a pdf with abstract/conclusions of several studies.

A lot of interesting stuff there. I haven't read it all yet - its 76
pages long, but at first blush, it appears that it is unlikely to have
carcinogenic effects. Some studies see some things happening, but that

doesn't necessarily lead to a carcinogenic conclusion.

At the same time, there are some EEG effects that are very interesting.

Take a look, and try not to focus on only the effects that say "no problem here!" or "problem here!"

Keeping in mind that many of these tests are very specific (as they should be to build a knowledge base) It is not overwhelmingly difficult to come to the conclusion that there might be something going on that is not carcinogenic, but neurological in nature.

Even in one of the tests, there are people who report a warming feeling on their hands and around the side of their head when using a cell phone for an extended time. I'm one of them. While the hand feeling could easily be attributed to the battery discharge warmth, the feeling around the ears is more difficult to ascribe to the batteries.

> But the bannanas and granite countertop in the kitchen might be a problem.

There are some granite counter tops that are significantly radioactive. What surprises me is that the fact surprises so many people.

So anyhow, the research is submitted for bathroom reading, People can feel free to discount/invalidate whatever research they don't agree with......

- 73 de Mike N3LI -

1230. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 18:50:07 UTC
From: dplatt@radagast.org
Message-ID: <v7hrn5-fcd.ln1@radagast.org>
Source record: 23304

>He has been getting louder and louder over
>the years to the point of what I described in my earlier post about
>the problem with the TV's now.
>
>And even the very first time I approached him, I mentioned that I knew
>he was broadcasting illegally, and that we all have our hobbies, but
>his was interfering with mine, which at the time was home theater. He
>didn't deny that he wasn't illegal, at the time, and he did lower the
>power, for a while.
>
>I've approached this guy at least 5 times in the past few yrs, and
>every time he has lowered the power, for a while. Not this time,
>though, and it is now out of control.

Well, I have some good news and some bad news for you.

Let's do the bad news first, OK?

As others have pointed out, it's entirely possible that your neighbor is transmitting legally. If he has a ham license, he could be transmitting with power levels of up to 1500 watts, in most bands, and still be entirely within the bounds of his license.

The fact that he "didn't deny" that he was "broadcasting illegally" isn't proof, by any means. He may simply have not wanted to get into an argument with a neighbor who was making harsh accusations without proof or evidence (and, sorry to say, I *am* referring to you here).

Unless you have evidence that he's transmitting without a license, or in ways which violate whatever license he has, you don't have much legal leverage, and probably won't be able to persuade anybody to do anything on your behalf.

As others have pointed out... if a stereo amplifier, or loudspeaker, or telephone starts picking up and reproducing radio transmissions, then *this* device is defective/broken/badly-designed. This is a condition referred to as "undesired operation" - the phone or speaker is reacting to something (a strong RF field) which is irrelevant to this device's normal mode of operation.

It is the position of the FCC that such "undesired operation" is a defect in the device in question, and not the fault of a (legal) radio transmission. It's is technically possible (and not all that difficult) to shield and filter devices such as amplifiers and phones so that they don't react to RF fields. Some manufacturers skimp on this filtering and shielding, in order to save money... and if the

consumer buys such a device (rather than a more expensive, better-designed one) then any problems which result are the responsibility of the consumer and the device's manufacturer.

Many, many consumer electronics devices these days come with a "Part 15" label or advisory, on the device or in the manual. Part of the wording says these devices "must not interfere" with licensed radio services, and "must accept" interference from both licensed and unlicensed radio services "including interference which causes undesired operation".

That's the bad news.

Now, for the good news.

It's usually possible to add some after-market RF suppression devices to the affected components, and greatly reduce or entirely eliminate the interference. You can buy such devices over the counter or by mail, and they're not expensive.

For phones, a small filter which plugs in between the phone cord and the wall outlet will often do the trick. Plug-in DSL filters are commonly available and will probably do the job well enough.

For loudspeakers and stereos - in most cases I've seen, the RF is being picked up by the wires between the speaker and amplifier or PC... the wires act as antennas, carry the RF into the amplifier section, and the amplifier "detects" the RF by accident and converts it to audio and amplifies it. It is often possible to entirely eliminate such unwanted pickup by adding an interference suppressor (a.k.a "choke" or "ferrite") to each speaker wire, right before it enters the amplifier. The commonest variety is a "snap-on" two-part ferrite - snap it open, wind the speaker wire through it a few times (leaving a short stub of wire at the end), snap it closed, and reconnect the wire to the amplifier/receiver. With amplified speakers (computer or subwoofer), put a ferrite right at the speaker end of the wire.

Adding ferrites to the AC power cords of the receiver, amplified subwoofers, etc. is also a good idea.

For TV interference, you may need a "high-pass filter" connected in the antenna line right at the TV. This will keep the strong RF signal from your neighbor's transmitter out of the TV set's receiver.

Ferrites and filters are probably available at your local Radio Shack, or by mailorder from quite a few suppliers.

For further information about actually solving the problem, I'd suggest that you look at the ARRL's extensive collection of information about this issue. Start at

http://www.arrl.org/tis/info/rfigen.html

for a table of contents and a good overview of the basic issues involved. The "Information for neighbors of hams" page is also worthwhile reading.

Oh... if you want to know whether your neighbor is a ham, you may be able to find out from:

http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp

Click "Amateur", then plug in your zipcode and do a search. See if your neighbor's name comes up.

However, even if your neighbor doesn't have a ham license, and is transmitting on CB, it's entirely possible that his transmissions could be getting into your radio even if they were limited to legal power... and if so, he wouldn't be under any obligation to stop transmitting or reduce power.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

1231. Re: QST antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 19:25:09 UTC
From: john Wiener <jawod@fuse.net>
Message-ID: <48AB1E15.8030806@fuse.net>
Source record: 23305

jawod wrote:
> In the latest QST there is an article on a Window line twin lead antenna
> that uses relays to switch sections in and out of a dipole configuration
> to allow multiband use. (DC is inserted into the coax to activate the
> relays.)
>
> Sounds interesting to me.
>
> But...the twin lead is connected directly to coax with no balun. Isn't
> this a mismatch? I wonder about significant RF coupling to the adjacent
> dipole sections through the relay assemblies. Also, I couldn't tell if
> the window line was shorted into a loop at the ends or not.
>
> Any comments?
>
> Thanks
>
> John
> AB8O
Thanks to all for the enlightenment. I appreciate it.

73

John
AB8O

1232. zzzz

1233. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 19:34:36 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <4m7ma4pvdgji9c8dpilito66dq7hmnnqb8@4ax.com>
Source record: 23307

>
>What the hell, public forum or not, I need some help here, and this
>guy is giving legal users a bad name.
>
>I've approached the guy *several* times over the past few yrs and
>asked him very nicely to lower the boost/gain (whatever it's called)
>on his radio and he has complaied to a certain extent.
>
>His broadcast were only coming through my stereo speakers during low
>passages at the time.
>
>As of a few months ago, it is now so bad, that his broadcast are now
>coming through my TV speakers, and causing horizontal lines in the
>picture. (on all four of my TV's) And it's so bad on my computer
>speakers now, that I have to turn them off. As far as listening to my
>stereo, I can't even do that now if he is broadcasting.
>
>So I approached him again, only this time, he told me to "F off", that
>"he wasn't doing anything illegal".
>
>When I got home, not only was the broadcast even louder, he was
>telling one of his radio buddies about the "incident" in FULL detail.
>
>So, I know for a FACT it is him.
>
>I know just need to know what kind of radio he is using.
>
>Question, can a CB transmit
In my limited experience it is not the power level that leads to the
interference but excessive modulation level. Over modulation leads to
spatter all over and is lost power as far as the user is concerned.

In other words, he would put out a larger signal if he kept it to the
intended frequency. Unfortunately those who flaunt the law are seldom
interested in facts.

If it is infact a legal transmission you should at some time hear
callsign information.

John Ferrell W8CCW

1234. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 19:36:30 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g8f7bu$c47$1@news.jpl.nasa.gov>
Source record: 23308

Richard Clark wrote:
> On Tue, 19 Aug 2008 09:17:01 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
> wrote:
>
>>>> But your search for small, broadband antennas puts you bump-up against the
>>>> principle "small - broadband - efficient, choose any two".
>> But actually, that's not the principle.. The actual limits have to do
>> with the ratio of stored energy vs radiated power in the antenna (Q, in
>> the energy storage sense, not in the "resonant circuit" sense).
>
> Hi Jim,
>
> Different meanings of Q? The measure of Q may vary according to
> arbitrary usage: the choice of SWR limits to define bandwidth which
> infers Q. Some choose 2:1, classic Q would go further. Either way,
> and for either quantitative result, the meaning of Q remains
> essentially the same.

Actually, the Q you use is not the actual definition, which is the ratio of the energy stored in the system vs the energy lost per cycle (or possibly per radian, so there's factor of 2pi in there)

The articles that talk about size, efficiency, and Q, use this definition (Energy stored in near field vs energy radiated away). (e.g. the papers by Chu, Harrington, etc.)

For a single LCR tuned circuit with reasonably high Q, it just happens that the BW/CF works out to the same thing (because it's a quadratic equation that determines both..)

Chu, 1948, defines Q = 2*omega*mean electric energy stored beyond input terminals/(power dissipated in radiation) (page 1170). he goes on to say,"We have computed the Q of an antenna from the energy stored in the equivalent circuit and the power radiated, and *interpreted it freely* as the reciprocal of the fractional bandwidth." (my emphasis added) " To be more accurate, one must define the bandwidth in terms of allowable impedance variation or the tolerable reflection coefficient over the band. For a given antenna, the bandwidth can be increased by choosing a proper matching network. The theoretical aspect of this problem has been dealt with by R.M. Fano."

Harrington, 1965, considering directional antennas (Chu dealt with omnis) defines Q as = 2*omega*W/Pin [eq 54], which is slightly different than Chu. W is either We or Wm (the energy stored in the E or H field respectively), and Pin is the input power to the array. He goes on to say,"If the Q is large, it is related to the frequency bandwidth of the

array as follows. Consider the array to be resonated by a suitable reactance network at the frequency of interest, omega/sub/r. Define the ferquency bandwidth of the array in the usual manner to be the fractional frequency increment between the 0.707 points on the normalized input |Z|,
beta = deltaOmega/Omega/sub/r. [eq 56]

If the Q is high (say Q>10) then we have the relationship:
Q approx= 1/beta [eq 57]"

Note well the "approximately equal" and the "resonated by a suitable reactance network"

SWR bandwidth is something totally different of course..

But again, if you pick the right SWR value for your bandwidth measurement, then a dipole antenna is modeled pretty well by a single pole LCR resonant, so the math works out conveniently the same.

Once you start straying away from antennas that can be modeled as a single LCR, the "bandwidth" vs "Q" relationship goes away.

A good example would be some forms of phased arrays with non-reciprocal devices. Antennas with multiple resonances would be another case (except if you are only working over a restricted range, where the single resonance in your range is approximated well by a single LCR)

1235. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 20:28:32 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8fadf$1iqk$1@f04n12.cac.psu.edu>
Source record: 23309

David G. Nagel wrote:
> Dave Holford wrote:

>>
>> But the bannanas and granite countertop in the kitchen might be a
>> problem.
>>
>> Dave
> Dave;
>
> Don't forget the radioactive potasium in your heart.

Yeah, and trees make CO2 so they are responsible for global warming. ;^)

- 73 de Mike N3LI -

1236. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 21:18:40 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <TMGqk.47092$vK2.8379@en-nntp-03.dc1.easynews.com>
Source record: 23310

"Dave Platt" <dplatt@radagast.org> wrote in message
news:v7hrn5-fcd.ln1@radagast.org...
> The fact that he "didn't deny" that he was "broadcasting illegally"
> isn't proof, by any means.

I agree with you, Dave, but it's the usual case where it sure *looks*
suspicious if someone who's doing something entirely legal doesn't claim as
much when accused of doing something illegal. Something like, "Actually, I'm
a licensed amateur radio operator, and my setup is perfectly legal, although I
don't really care to debate this with you -- good day." is in no way
provocative.

I would suggest that the O.P. contact his local amateur radio club and see if
anyone there has a spectrum analyzer -- that should very quickly resolve the
question of whether he's transmitting on 11m or some ham frequency. If it is
a ham frequency, I would agree that realistically one has to assume he's
transmitting well within his legal rights, as (1) exact power measurements
aren't going to be easy and (2) perfectly legal power levels can still cause
plenty of interference.

I would hope that all hams would be intersted in assisting the O.P. in this
case. While the transmitter may well be a hermit ham operating perfectly
legally, it's certainly in the amateur community's interest (and perhaps even
charter) to help the O.P. out by at least verifying that the transmissions are
plausibly legal, and then providing suggestions on reducing interference (if
they are legal), as you have done.

> However, even if your neighbor doesn't have a ham license, and is
> transmitting on CB, it's entirely possible that his transmissions
> could be getting into your radio even if they were limited to legal
> power...

Also true, but highly unlikely, IMO. This can usually be verified by just
listening to the guy for awhile -- pretty much every CB'er I've ever met who
had an amplifier liked to brag about it at some point on the air.
Additionally, if some local ham with a spectrum analyzer can additionally
estimate the gain of the antenna, he can estimate what sort of signal power a
5W CB should produce with a test dipole connected to his analyzer. If he's
getting, e.g., 20dB or more above the estimate, the likelihood that it's a
legal CB transmission is effectively zero.

---Joel

1237. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 21:26:32 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <eUGqk.34146$4p1.11213@en-nntp-09.dc1.easynews.com>
Source record: 23311

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:g8f2jp$ur6$1@f04n12.cac.psu.edu...
> While the hand feeling could easily be attributed to the battery discharge
> warmth, the feeling around the ears is more difficult to ascribe to the
> batteries.

Umm... many cell phones get noticeably warm over time due to internal power dissipation. (In fact, the amount of heat generated by the battery is negligible compared to the heat generator by, e.g., the RF power amplifiers, the digital circuitry, etc.)

How many studies have been done looking for beneficial health outcomes from the use of cell phones? Like wine and alcohol in moderation are now considered to be!

1238. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 22:21:05 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g8fh0oodm1@registered.motzarella.org>
Source record: 23312

"DES" <BigELilE05@msn.com> wrote in message
news:8c06b97f-6502-4063-8070-00c23f1f7030@w7g2000hsa.googlegroups.com...
On Aug 19, 11:09 am, g...@mendelson.com (Geoffrey S. Mendelson) wrote:
> DES wrote:
> > That isn't an option. I can't go into details in a public forum.. I
> > just need to know if the guy is broadcasting with a ham or CB radio,
> > and figured you guys could tell me from looking at the antenna.
>
> I don't know what youthink you are doing, but it's not going IMHO to end
> well. If you think that the resident of the property is operating
> illegally, on whatever band you think they may be doing so, contact a
> local ham radio club, or if you don't know of one, the ARRL or local
> equivalent and ask for assitance in tracking down the source of the
> interference.
>
> I'm sure there is someone near you who has the skill and the equipment to
> find out what the problem is and locate the actual source.
>
> Usually they guy with the most visible antennas is the one who is
> the least likely source of whatever interference you are experiencing
> assuming you are experiencing some sort of interference and are not
> just out the get the guy because you don't want anyone with antennas
> in your neighborhood.
>
> Geoff.
> --
> Geoffrey S. Mendelson, Jerusalem, Israel g...@mendelson.com N3OWJ/4X1GM

What the hell, public forum or not, I need some help here, and this
guy is giving legal users a bad name.

I've approached the guy *several* times over the past few yrs and
asked him very nicely to lower the boost/gain (whatever it's called)
on his radio and he has complaied to a certain extent.

His broadcast were only coming through my stereo speakers during low
passages at the time.

As of a few months ago, it is now so bad, that his broadcast are now
coming through my TV speakers, and causing horizontal lines in the
picture. (on all four of my TV's) And it's so bad on my computer
speakers now, that I have to turn them off. As far as listening to my
stereo, I can't even do that now if he is broadcasting.

So I approached him again, only this time, he told me to "F off", that
"he wasn't doing anything illegal".

When I got home, not only was the broadcast even louder, he was
telling one of his radio buddies about the "incident" in FULL detail.

So, I know for a FACT it is him.

I know just need to know what kind of radio he is using.

Question, can a CB transmit

Yes, CB radios transmit. They wouldn't be of much use if they didn't.

It is possible that your neighbor IS doing everything legally and that your particular situation is what is causing the reception of unwanted radio waves.

Go to Radio Shack and ask them if they have any devices that will help block out your neighbor's transmissions. I know that they used to sell such devices. I don't know if they still do today. If they do not, you can look for sellers on the internet.

Years ago, Congress was presented with a bill that would have required all consumer electronics that were susceptible to RF interference to have factory installed devices that would eliminate the problem. The estimated additional cost per each consumer electronics device was $1.50. The electronics industry lobbyists convinced the congress critters that it would be too expensive for them to do. So, congress voted down the bill. If you're really pissed about your situation, jump up and down on your congress person via TELEPHONE. They don't read their emails. At least they don't yet. They will someday, but the phone is the best way to make your point.

If you are using rabbit ears for TV reception, you don't stand a chance of winning your case with the FCC. If you are utilizing a properly installed TV antenna, the fix is simple. Your computer speakers can be muted by buying aftermarket ferrite cores and installing them on your speaker leads. It is up to YOU to eliminate the RF interference that your appliances are experiencing. Not the radio operator.

Typically, it is up to you to fix your interference problems and not that of the CB or amateur radio operator. Yes, it sucks, but that's the way it is. Whether the CB operator is operating legally or not is between he and the FCC. It bears no relevance to you. Keep pestering the guy and you could end up with a broken nose.

Ed, NM2K

1239. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 22:48:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8fik4$8t6$1@news.albasani.net>
Source record: 23314

DES wrote:

>> ...
> Hit send by accident.
>
> Question, can a CB transmit 700 miles?
>

CB (not Cooking Bands) can do 7000+ ... even on 5 watts, but then, sun spot activity has been down ...

Regards,
JS

1240. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 22:51:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8fip2$8t6$2@news.albasani.net>
Source record: 23315

DES wrote:
> Bad picture, but can someone tell me if the antenna on top of the
> tower is for a Ham or CB radio? (I know the one on the left is a EV
> ant :)
>
> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>

Better question, are you receiving your TV from rabbit ears, external
(outside antenna), cable, satellite, internet, etc? -- which one(s?)

Regards,
JS

1241. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 22:52:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8firv$8t6$3@news.albasani.net>
Source record: 23316

DES wrote:
> Bad picture, but can someone tell me if the antenna on top of the
> tower is for a Ham or CB radio? (I know the one on the left is a EV
> ant :)
>
> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>

Oh yeah, almost forgot, you are using coax? Right?

Regards,
JS

1242. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 22:55:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8fj26$8t6$4@news.albasani.net>
Source record: 23317

DES wrote:
> Bad picture, but can someone tell me if the antenna on top of the
> tower is for a Ham or CB radio? (I know the one on the left is a EV
> ant :)
>
> http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>

If the offending freq(s) is/are in the CB band (and EVEN if he is running a PA/linear), how about a trap filter to remove them (the freq(s)) and prevent them from overloading the front end of your set(s?)

Regards,
JS

1243. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 22:56:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sbima4djt38ivl2s0rfv9386f8d2i2pr6i@4ax.com>
Source record: 23318

On Tue, 19 Aug 2008 12:36:30 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>Richard Clark wrote:
>> On Tue, 19 Aug 2008 09:17:01 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
>> wrote:
>>
>>>>>> But your search for small, broadband antennas puts you bump-up against the
>>>>>> principle "small - broadband - efficient, choose any two".
>>> But actually, that's not the principle.. The actual limits have to do
>>> with the ratio of stored energy vs radiated power in the antenna (Q, in
>>> the energy storage sense, not in the "resonant circuit" sense).
>>
>> Hi Jim,
>>
>> Different meanings of Q? The measure of Q may vary according to
>> arbitrary usage: the choice of SWR limits to define bandwidth which
>> infers Q. Some choose 2:1, classic Q would go further. Either way,
>> and for either quantitative result, the meaning of Q remains
>> essentially the same.
>
>
>Actually, the Q you use is not the actual definition, which is the ratio
>of the energy stored in the system vs the energy lost per cycle (or
>possibly per radian, so there's factor of 2pi in there)

Hi Jim,

If you will note, my example was a measure, not a definition of Q.
The half power points bandwidth compared to the center frequency is a
classic computation of Q. As I point out, the choice of 2:1 SWR, not
being half power points, is arbitrary but in no way diverges from the
sense of Q (and could be extrapolated anyway).

>The articles that talk about size, efficiency, and Q, use this
>definition (Energy stored in near field vs energy radiated away).
>(e.g. the papers by Chu, Harrington, etc.)

Use "which" definition? You offer what appear to be two, and that is
one too many.

>For a single LCR tuned circuit with reasonably high Q, it just happens
>that the BW/CF works out to the same thing (because it's a quadratic
>equation that determines both..)
>
>

>Chu, 1948, defines Q = 2*omega*mean electric energy stored beyond input
>terminals/(power dissipated in radiation) (page 1170). he goes on to
>say,"We have computed the Q of an antenna from the energy stored in the
>equivalent circuit and the power radiated, and *interpreted it freely*
>as the reciprocal of the fractional bandwidth." (my emphasis added) " To
>be more accurate, one must define the bandwidth in terms of allowable
>impedance variation or the tolerable reflection coefficient over the
>band. For a given antenna, the bandwidth can be increased by choosing a
>proper matching network. The theoretical aspect of this problem has
>been dealt with by R.M. Fano."
>
>Harrington, 1965, considering directional antennas (Chu dealt with
>omnis) defines Q as = 2*omega*W/Pin [eq 54], which is slightly different
>than Chu. W is either We or Wm (the energy stored in the E or H field
>respectively), and Pin is the input power to the array. He goes on to
>say,"If the Q is large, it is related to the frequency bandwidth of the
>array as follows. Consider the array to be resonated by a suitable
>reactance network at the frequency of interest, omega/sub/r. Define the
>ferquency bandwidth of the array in the usual manner to be the
>fractional frequency increment between the 0.707 points on the
>normalized input |Z|,
> beta = deltaOmega/Omega/sub/r. [eq 56]
>
> If the Q is high (say Q>10) then we have the relationship:
>Q approx= 1/beta [eq 57]"

Hence the two definitions? What I see are computational models for
different systems which arbitrarily restrain loss to inhabit their
model or exclude it. Q can deteriorate considerable if you open the
definition to include more components going back to the power supplies
to the finals.

>Note well the "approximately equal" and the "resonated by a suitable
>reactance network"
>
>
>SWR bandwidth is something totally different of course..
>
>But again, if you pick the right SWR value for your bandwidth
>measurement, then a dipole antenna is modeled pretty well by a single
>pole LCR resonant, so the math works out conveniently the same.
>
>Once you start straying away from antennas that can be modeled as a
>single LCR, the "bandwidth" vs "Q" relationship goes away.
>
>A good example would be some forms of phased arrays with non-reciprocal
>devices.

This example needs a sub-example: Non-reciprocal devices? I don't see
how this will alter the concept of Q.

>Antennas with multiple resonances would be another case
>(except if you are only working over a restricted range, where the
>single resonance in your range is approximated well by a single LCR)

All antennas have multiple resonances and it is a classic
differentiator between themselves and LCR circuits. I see no example
here that is not already offered by my original post.

Let's simply return to the quote I responded to:
On Tue, 19 Aug 2008 09:17:01 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:
>(Q, in the energy storage sense, not in the "resonant circuit" sense)
embodies two explicit definitions of Q:
1. Q for energy storage, and
2. Q for "resonant circuit."
The measurement of Q might deviate by the result offered, but
conceptually energy storage and resonance are inextricably congruent.
If by resonance you are suggesting ONLY the peak frequency, then it
follows there is(are) some other frequency(ies) that are not resonant
(a tautology), and Q follows by exactly the same relation and degree
as it does for energy storage.

If there is any suitable distinction of Q in an antenna, then it is
that the degradation of Q is a benefit to the antenna, IFF the
substantial portion of R is radiation resistance. If the benefit of
filtering (phasing) due to resonance were not an issue, then a Q of 1
would be the Holy Grail of antenna design. Even in the design of the
finals stage in a tube amplifier, Terman teaches us that the final's
tank should NOT have an excessive working Q (beyond 10-15); hence a
high Q is NOT beneficial. Q and efficiency are a slippery topic when
you try to tie them together.

73's
Richard Clark, KB7QHC

1244. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 23:26:50 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <CemdnZ4p7LPo1TbVnZ2dnUVZ_u2dnZ2d@earthlink.com>
Source record: 23313

>Thank you, very much!

>Since I didn't know his name, I just started clicking on >all of the
>names in my zip code, and his address popped up.

>So, it is definitely a Ham.

>Thanks for everyone's advice and help!

He could be a ham , but also operating on the CB at times. If you can hear him comming in with a clear voice on your computer or sterio speakers, he is probably operating AM and not in single side band. If you got his name and call leters off the FCC data base, you should hear him give the call leters atleast once every 10 minuits. If you do not hear them,but he uses one of the made up names, he could be operating out of the ham bands and on the CB with too much power. This is not legal.

As pointed out , many computer speakers and other home items are not resistant to radio transmitters. It is up to you and the maker of the speaker, or other devices to correct this problem. If he is operating with illeagle power or out of the ham bands then it is his problem.

1245. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 23:45:06 UTC
From: dplatt@radagast.org
Message-ID: <2h2sn5-eei.ln1@radagast.org>
Source record: 23319

>"DES" <BigELilE05@msn.com> wrote

>What the hell, public forum or not, I need some help here, and this
>guy is giving legal users a bad name.

>I've approached the guy *several* times over the past few yrs and
>asked him very nicely to lower the boost/gain (whatever it's called)
>on his radio and he has complaied to a certain extent.

Well, here's another bit of my take on the matter.

By doing what you did, you (implicitly) put all of the blame and responsibility for fixing the problem on his shoulders.

If he is in fact a ham (as your subsequent message seems to indicate), and if he's transmitting legally within the scope of his license, then *anything* he did to help reduce your undesired-reception problem was a *favor* to you. It was not required by law.

In retrospect, you might have gotten better long-term results if you had instead approached him and said,

"Hey, my stereo is picking up your transmissions. Is there any way you can help me eliminate this problem?"

If you had phrased it that way, you might have a long-term solution by now... you'd have indicated that you were open to possible solutions other than "Hey, turn that blasted thing down!"

You didn't... because you didn't realize at the time that in a situation such as this (if it's actually "ham radio transmissions being picked up by consumer-electronics equipment"), the law says that it is *your* responsibility to fix the problem, and not his. Instead, you seem to have just repeated your demand that *he* fix the problem (by changing his behavior).

I agree with others, that your neighbor could and should have done more to help bring matters to a friendly and successful conclusion. He could have educated you as to the actual cause of the problem, and how to go about truly fixing it. He could have been a better "ambassador" for ham radio. It's a shame that he didn't. Possibly he didn't know how to go about doing this well... or possibly he's just a jerk (some hams are, alas).

On the other hand, it's possible that the attitude you were expressing at the time was hostile enough that he wasn't inclined to be a nice guy and go to extra effort to calm you down and explain matters in a helpful fashion.

At this point, the bridges between the two of you *may* have been burned... or, you may be able to rebuild them, and get into a dialog with him which will bring matters to a successful conclusion.

In order to do so, I suspect that you may have to eat a bit of crow... by going to him and say "Hey, guy, I'm sorry I hassled you so hard. I realize now that you're a licensed ham, and I understand that you do have a right to transmit. I'd like to ask you for help in figuring out how to filter my radios and TV so that your transmissions don't get into them so badly."

If you're willing to do that, I think there's a fair chance that you'll get a helpful response.

>His broadcast were only coming through my stereo speakers during low
>passages at the time.
>
>As of a few months ago, it is now so bad, that his broadcast are now
>coming through my TV speakers, and causing horizontal lines in the
>picture. (on all four of my TV's) And it's so bad on my computer
>speakers now, that I have to turn them off. As far as listening to my
>stereo, I can't even do that now if he is broadcasting.

I feel I ought to point out a minor terminology issue here (which is something that your neighbor would know as a ham, but which you weren't aware of).

In FCC language, a "broadcast" is a one-way transmission - somebody sends it, there's no direct response from whomever is listening (if anyone is). TV stations broadcast. Commercial radio stations broadcast.

Hams don't broadcast - with very rare and specific exceptions, we aren't allowed to. We "transmit", in a two-way conversation with one or more other hams.

>So I approached him again, only this time, he told me to "F off", that
>"he wasn't doing anything illegal".
>
>When I got home, not only was the broadcast even louder, he was
>telling one of his radio buddies about the "incident" in FULL detail.
>
>So, I know for a FACT it is him.
>
>I know just need to know what kind of radio he is using.

It's not likely to be easy to tell just by looking at his antenna, because the CB frequencies (the 11-meter band, around 27 MHz) are very close to those used in one of the ham-radio bands (the 10-meter band, around 28 MHz). If he's transmitting CB with enough power to get into your radios, then he's probably breaking the law... but if he's transmitting on 10 meters using his ham privileges, then there's a very good chance that he's entirely legal.

You'll probably need access to a radio receiver or some test equipment
to determine accurately what frequency he is transmitting.

A simple RF frequency counter, hooked to a few feet of wire, would
probably be sensitive enough.

A CB radio, tuned through the channels, would let you determine
whether he's transmitting on a (legal) CB frequency.

A ham-radio receiver, or a general-purpose shortwave receiver which
works up through 30 MHz, would do as well, as long as its dial is
calibrated accurately enough.

>Question, can a CB transmit

Yes, it can. CB radios are limited by law to a relatively low power
and to relatively short distances (and, unfortunately, these laws are
broken just about as frequently as the laws against jaywalking).

I agree with another comment that was posted - it's unlikely that a
legal-power CB transmission would cause your problems. Legal CB AM
transmissions are limited to around 3.5 watts of RF power, and in my
experience one usually does not start getting "break-through" into
consumer electronics equipment until the RF power is up in the range
of 20 to 30 watts (depending on frequency, antenna gain, proximity,
phase of moon, and about a dozen other factors).

At this point, my advice is to approach your neighbor in a non-hostile
fashion, and ask him for help in fixing your problem (rather than
demanding that he shut down). As others have pointed out, if he's a
ham and is acting legally, the FCC almost certainly *not* provide you
with any help or ammunition in shutting him down, and your local legal
authorities have no jurisdiction to do so.

If you don't feel comfortable in approaching him in person at this
point, try writing him a friendly letter.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1246. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-19 23:54:44 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9AFFABFC963BDdoldridgsprintca@64.59.135.159>
Source record: 23320

DES <BigELilE05@msn.com> wrote in news:c377d678-0e14-4051-a74f-c13c9a452b89@x41g2000hsb.googlegroups.com:

> On Aug 19, 12:20 pm, Richard Clark <kb7...@comcast.net> wrote:
>> On Tue, 19 Aug 2008 09:02:39 -0700 (PDT), DES <BigELil...@msn.com>
>> wrote:
>>
>> >Question, can a CB transmit 700 miles?
>>
>> At the power levels you are suggesting, globally during certain
>> periods of the sun spot cycle. But that is not terribly different
>> with legal CB power.
>
> So, if I'm hearing him on a daily bases speaking to someone that is
> 700 miles away, then it has to be a Ham?

At this point in the sunspot cycle, I would think that to be the case, though summertime sporadic E propagation can put a CB signal down at that distance.
>>
>> As to his remarking that he wasn't doing anything illegal (CB with
>> amplification that some smarmy posters here think is perfectly OK); if
>> that be the case, then you need to fix your problem, because the FCC
>> does not mandate that a Ham legally using his equipment is obligated
>> to defer to your TV watching habits.
>
> He's obviously not legal. He has been getting louder and louder over
> the years to the point of what I described in my earlier post about
> the problem with the TV's now.

How many times have you changed your equipment over the years? I mean your audio equipment is responding to RADIO signals. Those are not audio signals and the problem really lies in the fact that your equipment is responding to radio signals that it SHOULD reject. As the years have gone by, audio and TV equipment has used smaller and smaller devices. Vacuum tube TV sets were virtually immune to this kind of interference (though not to harmonic interference). Vacuum tube stereos were almost never affected. Transistors began to dhange that. This is because transistors are essentally the same kind of thing early crystal set radios were made from. With the advent of microchips, the problem got excessive, because some of the transistors are much tinier than the crystal-catwhisker junctions of the old crystal sets. So put a strong radio station, especially an AM or SSB station (if you're able to copy your neighbour, that might be a clue that he's using CB, as few hams use AM these days, but if he sounds like Donald Duck and you have to strain

to make him out, he's more likely a ham) near a modern stereo made by companies more than willing to save 10 cents per product by leaving out any credible attempt to suppress radio frequency pickup, and you have the makings of a nasty problem. My Kenwood stereo is remarkably immune, but Kenwood also makes and sells amateur radio equipment and has a reputation to uphold with the users of same. Even so, I needed suppression on the line cord, the stereo input cabling (except the digital inputs) and all the speaker leads.

> And even the very first time I approached him, I mentioned that I knew
> he was broadcasting illegally, and that we all have our hobbies, but
> his was interfering with mine, which at the time was home theater. He
> didn't deny that he wasn't illegal, at the time, and he did lower the
> power, for a while.

If he is running on the CB band. a local ham should be able to at least veryify this. Power on CB is limited to 5 watts AM carrier or 12 watts peak SSB power. Hams, on the other hand, are permitted a kilowatt.

> I've approached this guy at least 5 times in the past few yrs, and
> every time he has lowered the power, for a while. Not this time,
> though, and it is now out of control.

Knowing the dimensions of the antenna might help, along with a better picture.

> <snipped> helpful info
>

One more thing, if he's a ham, he will sign his callsign fairly often, whereas CBer's don't really have them anymore.

--
Dave Oldridge+
ICQ 1800667

1247. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 00:27:24 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <b0c30d4d-cb26-4643-bf2d-a6df91ab4bd6@2g2000hsn.googlegroups.com>
Source record: 23321

On Aug 19, 6:51 pm, John Smith <assemblywiz...@gmail.com> wrote:
> DES wrote:
> > Bad picture, but can someone tell me if the antenna on top of the
> > tower is for a Ham or CB radio? (I know the one on the left is a EV
> > ant :)
>
> >http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>
> Better question, are you receiving your TV from rabbit ears, external
> (outside antenna), cable, satellite, internet, etc? -- which one(s?)
>
> Regards,
> JS

Cable. And the house was completely rewired inside and out about 4
yrs ago.

Just had the cable company out here last week, and they said there was
nothing they could do because everything was in working order.

1248. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 00:36:33 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g8fouo$620$1@registered.motzarella.org>
Source record: 23322

"DES" <BigELilE05@msn.com> wrote in message
news:b0c30d4d-cb26-4643-bf2d-a6df91ab4bd6@2g2000hsn.googlegroups.com...
On Aug 19, 6:51 pm, John Smith <assemblywiz...@gmail.com> wrote:
> DES wrote:
> > Bad picture, but can someone tell me if the antenna on top of the
> > tower is for a Ham or CB radio? (I know the one on the left is a EV
> > ant :)
>
> >http://i126.photobucket.com/albums/p96/bigelile/IM002446.jpg
>
> Better question, are you receiving your TV from rabbit ears, external
> (outside antenna), cable, satellite, internet, etc? -- which one(s?)
>
> Regards,
> JS

Cable. And the house was completely rewired inside and out about 4
yrs ago.

Just had the cable company out here last week, and they said there was
nothing they could do because everything was in working order.

While there are exceptions to the rule, generally cable installers are not
electronics savvy. Installing cable does not require any education in
electronics. That is why most cable companies subcontract their installation
work to independent folks. They don't want to have to pay qualified
electronics people at positions other than the head end.

So, don't think that the cable guys have the final word on your situation.
Being a home theater enthusiast, it will be good for your system's
performance for you to become proactive and learn some electronics. No one
will care for your system as well as you will.

Ed, NM2K

1249. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 00:39:07 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <afd2a79c-81f0-4d5f-9d81-cd0b6f9f9220@l33g2000pri.googlegroups.com>
Source record: 23323

On Aug 8, 1:13 pm, Roy Lewallen <w...@eznec.com> wrote:
> Joel Koltner wrote:
> > "Roy Lewallen" <w...@eznec.com> wrote in message
> >news:O5ydnXOTZuABFwHVnZ2dnUVZ_sDinZ2d@posted.easystreetonline...
> >> Not by a long shot! Here's a simple example from the EZNEC demo program,
> >> using example file Cardioid.EZ. It's a two element array of quarter
> >> wavelength vertical elements spaced a quarter wavelength apart and fed with
> >> equal currents in quadrature to produce a cardioid pattern. The impedance of
> >> a single isolated element is 36.7 + j1.2 ohms. In the array, the impedances
> >> are 21.0 - j18.7 and 51.6 + j20.9 ohms, and the elements require 29 and 71
> >> percent of the applied power respectively in order to produce equal fields.
> >> The deviation is due to mutual coupling.
>
> > That's a much, much greater difference than I would have guessed. Wow...
>
> > Isn't the input impedance of one element affected not only by the relative
> > position of the other element, but also how it's driven? I.e., element #1
> > "sees" element #2 and couples to it, but how much coupling occurs depends on
> > whether the input of element #2 is coming from a 50 ohm generator vs. a 1 ohm
> > power amplifier (close to a voltage source), etc.? (Essentially viewing the
> > antennas as loosely coupled transformers, where the transformer terminations
> > get reflected back to the "primary.")
>
> Not directly. What counts (considering the simple case of two elements)
> is the magnitude and phase of the current in the other element, and
> their spacing, orientation, and lengths. A good way to look at the
> effect of mutual coupling is as "mutual impedance", i.e., the amount of
> impedance change caused by mutual coupling. (Johnson/Jasik covers this
> concept well.) If you were to feed two elements with constant current
> sources (as in the Cardioid.EZ EZNEC example), mutual coupling doesn't
> change the element currents, but only the feedpoint impedances. With any
> other kind of feed system, the impedance change causes the currents to
> change, which in turn affects the impedances. So the feed method
> certainly does have an effect on the currents you get, which affects
> both mutual coupling and pattern.
>
> There's a lot more about this, and how to design feed systems which will
> effect the desired currents, in the _ARRL Antenna Book_.
>
> > Thanks for the book links. Do you happen to have a copy of "Small Antenna
> > Design" by Douglas Miron? And have an opinion about it? Or some other book
> > on electrically small antennas? (Not phased arrays, though :-) -- more like
> > octave bandwidth VHF or UHF antennas that are typically 1/10-1/40 lambda in
> > physical size.)

>
> I just recently purchased Miron's book but haven't yet looked at it in
> any depth. It appears to be most interesting to anyone wanting a better
> understanding of method of moments numerical methods. If you can read
> German, you might be interested in _Kurze Antennen_ by Gerd Janzen. But
> your search for small, broadband antennas puts you bump-up against the
> principle "small - broadband - efficient, choose any two". They'll be
> inefficient, which will hurt you both receiving and transmitting at VHF
> and above. The book I'd go to for researching the possibilities would be
> Lo & Lee's _Antenna Handbook_. You might also get some ideas from
> Bailey, _TV and Other Receiving Antennas_, since TV antennas have to be
> pretty broadband.
>
> Roy Lewallen, W7EL

Simply in an effort to provide a bit more insight, or perhaps I should better say to suggest a math tool that may lead you to more insight, consider what "mutual impedance" means. In a simple circuit where there's a current through an impedance, the voltage drop across it is given by V = Z * I. If you expand this idea to include mutual impedances, the Z becomes a matrix, and I and V are vectors. So in an antenna system with, say, four feedpoints, V becomes a vector of four voltages, one for each feedpoint, and I similarly is a vector of four currents, one for each feedpoint. Z is then a four-by-four matrix with self-impedances along the diagonal and mutual impedances off the diagonal. It is clear that if you know the four currents, you can find the voltages. Further, if you can invert the Z matrix, then you can calculate the currents if you know the voltages. That also suggests how to find the mutual impedances: if you excite one feedpoint with a known current and leave all the rest open, you can measure the voltages at each (including phase) and that immediately gives you the mutual impedance from the excited feedpoint to each of the others: your I vector has only one non-zero component. Repeat for each feedpoint.

You can use the same sort of analysis with other systems which have interaction among components. For example, a system of inductors which share magnetic fields can easily be characterized by a matrix of self-inductances and mutual inductances. For a single inductor, V = L*di/dt; if you have two coupled inductors, V1 = L1 * di1/dt + M12 * di2/dt, and V2 = M21 * di1/dt + L2 * di2/dt -- or in matrix notation, V = L * d/dt(I). That can expand to as many inductors as you care to consider.

(If this is confusing, it's probably best to just ignore this suggestion...)

Cheers,
Tom

1250. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 01:51:45 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <UMKqk.21771$3I2.11403@en-nntp-02.dc1.easynews.com>
Source record: 23324

"K7ITM" <k7itm@msn.com> wrote in message
news:afd2a79c-81f0-4d5f-9d81-cd0b6f9f9220@l33g2000pri.googlegroups.com...
> (If this is confusing, it's probably best to just ignore this
> suggestion...)

Not at all, thanks for the additional details, Tom.

Somewhere I have copies of IEEE tutorial articles on this sort of generalized circuit theory... they ended up as references for work I did in college. (We spent the bulk of our time worrying about scattering parameter matrices, however. I did write some Matlab code to do n-port conversions between S, Y, and Z parameters, though -- but based off of formulas from papers: I question if I could have correctly derived the conversions between, e.g., S and Y myself in a reasonable period of time, since the port terminations for the scattering parameters were allowed to be arbitrary at each port and the math for this requires a decent background in linear algebra.)

---Joel

1251. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 02:05:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8fu5vioc1@news.albasani.net>
Source record: 23325

DES wrote:

> ...
> Cable. And the house was completely rewired inside and out about 4
> yrs ago.
>
> Just had the cable company out here last week, and they said there was
> nothing they could do because everything was in working order.
>

I have had interference from neighbors with CB units. I have had RFI
from my own equipment--mostly with my VHF xmitters and old coaxial tank
circuits. In every case of mine, going to a cable company completely
removed all RFI ...

Still, I wonder about a stub trap/filter made out of coax, on a
tee-fitting and the length pruned to rid the offending freq(s.) I have
only done such a thing in the past when I was using twin-lead and was
able to construct a trap for an offending VHF freq out of two ~8 inch
lengths of twin-lead with a variable cap the ends of the
twin-lead/8-inch sections (other two ends of these were shorted to form
series loops with the twin-lead sections.)

I have never had to duplicate the above with coax ... but I am sure
someone here has played with such enough to be an expert ... other than
that, I would have little experience to offer ...

If the signal is coming across the ac power, perhaps a "brute force
filter", but I haven't seen one of those to purchase in ages. The
internet or hams here may have construction details ...

Regards,
JS

1252. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 02:23:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8fv7fjhs1@news.albasani.net>
Source record: 23326

Michael Coslo wrote:

> ...
> Even in one of the tests, there are people who report a warming feeling
> on their hands and around the side of their head when using a cell phone
> for an extended time. I'm one of them. While the hand feeling could
> easily be attributed to the battery discharge warmth, the feeling around
> the ears is more difficult to ascribe to the batteries.
> ...
> - 73 de Mike N3LI -

Nice set of bowling balls! <grin>

I stopped short of commenting on the "warming effect" ... yes, even the wife has remarked on it, I am only surprised you are the first, other than me and the wife, which has made comment on it--I had just written it off to warm batteries and paranoia ... could it just be the batteries? I wonder ... but if most are willing to argue the obvious--that question could/would "roll on forever ..."

Regards,
JS

1253. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 02:32:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8fvohjtp1@news.albasani.net>
Source record: 23327

Joel Koltner wrote:
> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:g8f2jp$ur6$1@f04n12.cac.psu.edu...
>> While the hand feeling could easily be attributed to the battery discharge
>> warmth, the feeling around the ears is more difficult to ascribe to the
>> batteries.
>
> Umm... many cell phones get noticeably warm over time due to internal power
> dissipation. (In fact, the amount of heat generated by the battery is
> negligible compared to the heat generator by, e.g., the RF power amplifiers,
> the digital circuitry, etc.)
>
> How many studies have been done looking for beneficial health outcomes from
> the use of cell phones? Like wine and alcohol in moderation are now
> considered to be!
>
>

The Li-Ion battery in my DV9000 HP 17" laptop are away from
processor/hard-drive/video-card (high circuity heat sources), the
battery GETS HOT all on its' own ... my cell phone is also Li-Ion so I
do think most of the heat generated is from the battery--testing to
prove all this one way or another is simply beyond my time allotments
and means to do so ... I will accept that "cell phone heat" is
explainable to battery/components/circuitry and simply is transfered, or
the "sense of heat is transfered", to body components in close proximity
... it certainly is the MAJOR component of this "perceived heat."

Regards,
JS

1254. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 03:02:57 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <53506078-007d-4ecf-a5fc-43160affdd31@l64g2000hse.googlegroups.com>
Source record: 23328

On Aug 19, 12:20 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Tue, 19 Aug 2008 09:02:39 -0700 (PDT), DES <BigELil...@msn.com>
> wrote:

> That fix is going to be the same if power levels don't go down for any
> reason (issues of morality notwithstanding). The judicious and
> liberal application of Ferrite RFI suppressors will solve a lot of
> your suffering.
>
> Look at any of your computer display leads and notice the end of the
> cable with the odd bulge before one connector. That is a suppressor.
> It is nothing more than a ferrite donut or tube. Ferrite is a
> magnetic ceramic (it will break like china if you drop it). It is
> made in many forms and appears to be dark gray with a slick to dusty
> finish. The Ferrite RFI suppressors available at Radio Shack come
> with a plastic clamshell holding one of these tubes that is split
> lengthwise so you can open it, insert a wire or wires, and then lock
> it shut. This makes it reusable if the problem isn't solved with your
> choice of wire(s) or where you apply it.
>
> This last suggests experimentation on your part is necessary. It also
> means you are going to need more than one given you have described a
> number of issues. For a start, get two or three and see how well they
> work on the power cords going to the affected component (TV, radio,
> computer) and even with both wires of any speaker. In short, put a
> suppressor on any interconnecting cable or wire and see if symptoms
> change.
>
> 73's
> Richard Clark, KB7QHC

Alright, I'm just gonna do that, because I can't take it anymore.

1255. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 04:18:12 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <aWMqk.34344$KZ.4008@newsfe03.iad>
Source record: 23329
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.swap

"Wouff Hong" <have.cattle.prod@will.travel> wrote in message
news:a8qdnes2sqGrgDbVnZ2dnUVZ_tvinZ2d@earthlink.com...

> He might be a licensee, but if he didn't pass a code test he's not a
> real ham. Real hams had to pass a code test.

With that at the beginning of a post, do you want to rely on what follows?
You know the guy's just labeled himself a troublemaker.

1256. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 04:47:49 UTC
From: KU2S <ku2s@arast.org>
Message-ID: <la8na4do9vfppoekpmkfssol6qm4s3r77o@4ax.com>
Source record: 23330

On Tue, 19 Aug 2008 08:54:14 -0700 (PDT), DES <BigELilE05@msn.com>, in
an obviously impaired state, wrote:

>
>What the hell, public forum or not, I need some help here, and this
>guy is giving legal users a bad name.
>
>I've approached the guy *several* times over the past few yrs and
>asked him very nicely to lower the boost/gain (whatever it's called)
>on his radio and he has complaied to a certain extent.
>
>His broadcast were only coming through my stereo speakers during low
>passages at the time.
>
>As of a few months ago, it is now so bad, that his broadcast are now
>coming through my TV speakers, and causing horizontal lines in the
>picture. (on all four of my TV's) And it's so bad on my computer
>speakers now, that I have to turn them off. As far as listening to my
>stereo, I can't even do that now if he is broadcasting.
>
>So I approached him again, only this time, he told me to "F off", that
>"he wasn't doing anything illegal".
>
>When I got home, not only was the broadcast even louder, he was
>telling one of his radio buddies about the "incident" in FULL detail.
>
>So, I know for a FACT it is him.
>
>I know just need to know what kind of radio he is using.
>
>Question, can a CB transmit

Yes. A CB can transmit.

Now, about your problem. Here's the deal. Your stereo, your TV and
even your CD players are all FCC Part 15 devices. That means that
they are at fault if they are receiving interference from properly
operated, licensed equipment. Your Good Buddy neighbor, operating CB
or Amateur Radio is operating under FCC rules part 97 and/or 95. As
such, their operation is protected by the Federal Government. What
that all means is this: THE RESPONSIBILITY FOR MITIGATING ANY
INTERFERENCE ISSUES FALLS FIRST ON YOUR SHOULDERS.

Have a nice day...
--

Raymond Sirois - KU2S
http://www.hamxam.org
10-10 #70270

1257. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 04:49:01 UTC
From: gsm@mendelson.com
Message-ID: <slrngan8ap.n6s.gsm@cable.mendelson.com>
Source record: 23331

DES wrote:
>
> Cable. And the house was completely rewired inside and out about 4
> yrs ago.
>
> Just had the cable company out here last week, and they said there was
> nothing they could do because everything was in working order.

Did things get better or worse when they did? It's simple to test,
just DISCONNECT the cable from your TV's and stereo and see what happens.
Make sure to unplug any cable boxes you have from the wall, because they
may be picking up the signal and leaking it into the power lines (rare
but not impossible).

No strange voices from them, wiggly pictures, etc, then it's likley a
cable problem.

Cable systems can have bad grounds, poorly installed connectors, improperly
sheilded amplifiers and so on too. As someone else said the cable company's
subcontractors are not always able to tell if anything is wrong with the
instalation or the equipment.

BTW. do you have a cable modem for the Internet? I'm guessing their is
a common thing here, and it's the cable system.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

1258. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 11:31:02 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B004D2D1E2F1mcoslocomcastnet@216.196.97.136>
Source record: 23332

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in
news:eUGqk.34146$4p1.11213@en-nntp-09.dc1.easynews.com:

> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:g8f2jp$ur6$1@f04n12.cac.psu.edu...
>> While the hand feeling could easily be attributed to the battery
>> discharge warmth, the feeling around the ears is more difficult to
>> ascribe to the batteries.
>
> Umm... many cell phones get noticeably warm over time due to internal
> power dissipation. (In fact, the amount of heat generated by the
> battery is negligible compared to the heat generator by, e.g., the RF
> power amplifiers, the digital circuitry, etc.)

Strange, I could have said just that!. Oh wait, I did. Look, it is easy for a person's hand to get warm and attribute it to battery warmth. I trust you are not ascribing the same for an area that the phone isn't touching? That is easy to check for, as the hand would be heated by conduction, and the area around the ear that isn't being touched would be radiative heat. Other wise there would be a significant thermal gradient.

> How many studies have been done looking for beneficial health outcomes
> from the use of cell phones?

Probably none. The reason why is that the studies are looking for effect in general, not positive or negative ones. To look for a specific positive or negative from the start is more in line with creation science.

> Like wine and alcohol in moderation are
> now considered to be!

It is easy to find out the effects of alcohol. Lots of studies. And they found out a lot of things they didn't expect, such as keeping the blood vessels clean, and other more obvious things such as stress relief/relaxation in moderation.

I'm certain that if some positive result is found, we'll hear about it.

- 73 de Mike N3LI -

1259. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 12:48:36 UTC
From: John Passaneau <w3jxp@arrl.net>
Message-ID: <Xns9B0059A077AB4jxp16psuedu@128.118.141.40>
Source record: 23333

Michael Coslo <mjc5@psu.edu> wrote in news:g8fadf$1iqk$1
@f04n12.cac.psu.edu:

> David G. Nagel wrote:
>> Dave Holford wrote:
>
>>>
>>> But the bannanas and granite countertop in the kitchen might be a
>>> problem.
>>>
>>> Dave
>> Dave;
>>
>> Don't forget the radioactive potasium in your heart.
>
>
> Yeah, and trees make CO2 so they are responsible for global warming. ;^)
>
>
>
> - 73 de Mike N3LI -
>

No Mike that's caused by cow belches

John W3JXP

1260. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 14:49:12 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <L9Wqk.81$Pe5.47@fe101.usenetserver.com>
Source record: 23334

Michael Coslo wrote:

> Yeah, and trees make CO2 so they are responsible for global warming. ;^)

They do? All this time I was certain that trees produced oxygen.

Dave K8MN

1261. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 15:06:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8hbunsli1@news.albasani.net>
Source record: 23335

Dave Heil wrote:
> Michael Coslo wrote:
>
>> Yeah, and trees make CO2 so they are responsible for global warming. ;^)
>
> They do? All this time I was certain that trees produced oxygen.
>
> Dave K8MN

During the daylight hours, trees and other plants do make oxygen. At
night, in the dark, they do consume some of the oxygen--however, there
is a net gain; i.e. they do "make oxygen."

Regards,
JS

1262. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 15:09:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n1aoa451b2at9stqkj328vpugcsnm9bb1q@4ax.com>
Source record: 23336

On Wed, 20 Aug 2008 06:31:02 -0500, Mike Coslo
<mcoslo@youknow.comcast.net> wrote:

>> How many studies have been done looking for beneficial health outcomes
>> from the use of cell phones?
>
>Probably none. The reason why is that the studies are looking for effect
>in general, not positive or negative ones. To look for a specific
>positive or negative from the start is more in line with creation
>science.

Hi Mike,

Did you read the material you offered yesterday? Science reveals all
results observed without going into a study mining for expectations as
you rightly offer here.

>I'm certain that if some positive result is found, we'll hear about it.

The very first study, on the very first page with the very first
paragraph offers:
"Overall,the TDMA field-exposed animals exhibited
trends toward a reduced incidence of spontaneous
CNS tumors (P < 0. 16, two-tailed) and ENU-induced
CNS tumors (P < 0.16, two-tailed)."

The very last study, on the very last page with the second paragraph
offers:
"For an effectively transmitted power of 0.25 W,
the maximum averaged SAR values in both cubic
and arbitrary-shaped volumes are, respectively, about
1.72 and 2.55 W kg-1 for 1g and
0.98 and 1.73 W kg-1 for 10 g of tissue."

These choices are offered as they represent what a reasonable, but
only slightly interested reader would peruse while ignoring the bulk
of the document. As no one has shown any interest in the bulk, and
even less in the first page (much less the last); I introduce it here
to everyone's embarrassment. Don't worry, the feeling will pass with
alacrity.

Interpretation is the name of the "game" here in this forum and I am
sure Brett would find plenty to worry about when the first study says
that exposure REDUCES tumors in the Central Nervous System. The Bible
must inform us this is an error and only Satan could have published
the first study.

The last study gives us more exposure data (the discussion of which inevitably scatters in the rhetorical wind of debate). I can only wonder if the reader can draw a conclusion from this quoted sentence that can be expressed in temperature rise. There's enough data to do this, only intelligence remains to perform.

Your link, like the data of the original post, offers enough data to warrant informed discussion. The original post's data reveals a howler of invention. That cast aside, it allowed a cascade of spiritualism to dominate. Let me kick off the next side-thread of belly-button contemplation and ask: "Why don't we see this data discussed?"

73's
Richard Clark, KB7QHC

1263. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 15:30:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8hdbe$ud2$1@news.albasani.net>
Source record: 23337

Richard Clark wrote:

> ...
> Interpretation is the name of the "game" here in this forum and I am
> sure Brett would find plenty to worry about when the first study says
> that exposure REDUCES tumors in the Central Nervous System. The Bible
> must inform us this is an error and only Satan could have published
> the first study.
> ...
> 73's
> Richard Clark, KB7QHC

Since you seem more than willing to act as an expert and inform the masses that a 300mw, omni-directional, source of cooking band freqs held millimeters from the skull does absolutely no damage what-so-ever, at just what power intensities should we begin to worry and expect damage? One-watt, ten-watts, one-hundred-watts, one-kilowatt, multi-kilowatts?

Perhaps your point is that human flesh is unaffected by microwave energy which cooks our food and any power level can be tolerated by the body? You will excuse me if I hold out for much more "in depth" studies done by institutions/colleges/consumer-watchdogs, etc. which have absolutely "no horse in the race!" Decades of living with "safe radiation levels" established for atomic elements sources which were "re-evaluated" to downward levels many times has made me a bit more cautious than yourself ...

Perhaps these are the "evolved cell phones?" Produced from throwing handfuls of metal, glass, plastic, etc. into a mud hole, allowing these elements "to evolve" and then digging out the cell phones? Well, of course I would expect different than yourself! I purchased a manufacturers cell phone! ;-)

Regards,
JS

1264. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 15:42:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4neoa4pqldjsni99kf49bk479rnlohakns@4ax.com>
Source record: 23338

The Belly Button Gaze becomes fixated and the side thread begins:

On Wed, 20 Aug 2008 08:30:42 -0700, John Smith
<assemblywizard@gmail.com> wrote:
> I purchased a manufacturers cell phone!

73's
Richard Clark, KB7QHC

1265. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 15:51:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8hei9vhk1@news.albasani.net>
Source record: 23339

Richard Clark wrote:
> The Belly Button Gaze becomes fixated and the side thread begins:
>
> On Wed, 20 Aug 2008 08:30:42 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>> I purchased a manufacturers cell phone!
>
> 73's
> Richard Clark, KB7QHC

Or, the idiot fires up and "reinforces" his "experts' argument" with personal attacks on personalities rather than offer concrete "proofs", logic/logical-arguments to the validity of his arguments ... <yawn> ... you have already been there, done that ...

You have everything in your "shoe-box." Just make sure you maintain control by keeping everything limited to the points which will "prove" your "shoe-box assumptions/theories/logic."

To me, you only appear as a "witchdoctor expert", and only a technician grade one at that ...

Regards,
JS

1266. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 15:51:28 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <U1Xqk.8238$cn7.3777@flpi145.ffdc.sbc.com>
Source record: 23341

Dave Heil wrote:
> Michael Coslo wrote:
>> Yeah, and trees make CO2 so they are responsible for global warming. ;^)
>
> They do? All this time I was certain that trees produced oxygen.

The most common greenhouse gas is water vapor. Trees
take liquid water out of the ground and turn it into
water vapor.
--
73, Cecil http://www.w5dxp.com

1267. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 15:51:54 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8heip$191m$1@f04n12.cac.psu.edu>
Source record: 23340

Dave Heil wrote:
> Michael Coslo wrote:
>
>> Yeah, and trees make CO2 so they are responsible for global warming. ;^)
>
> They do? All this time I was certain that trees produced oxygen.

We're both right, Dave. Trees produce CO2 or O2 depending on the time
of day. I can smell the changeover as it is getting dark and the trees
shift.

- 73 de Mike N3LI -

1268. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 15:52:42 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8hek9$191m$2@f04n12.cac.psu.edu>
Source record: 23342

John Passaneau wrote:
> Michael Coslo <mjc5@psu.edu> wrote in news:g8fadf$1iqk$1
> @f04n12.cac.psu.edu:
>
>> David G. Nagel wrote:
>>> Dave Holford wrote:
>>>> But the bannanas and granite countertop in the kitchen might be a
>>>> problem.
>>>>
>>>> Dave
>>> Dave;
>>>
>>> Don't forget the radioactive potasium in your heart.
>>
>> Yeah, and trees make CO2 so they are responsible for global warming. ;^)
>>
>>
>>
>> - 73 de Mike N3LI -
>>
>
>
> No Mike that's caused by cow belches

From both ends, it would seem!

- 73 de Mike N3LI -

1269. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 15:58:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8hevdvqq1@news.albasani.net>
Source record: 23343

John Smith wrote:
> ...
> To me, you only appear as a "witchdoctor expert", and only a technician
> grade one at that ...
>
> Regards,
> JS

Oh yeah, and "Technically", only an "Amateur" one at that ... :-(

Probably only be ethical to emphasize that as well, so your "expert qualifications" are well defined and placed in a proper position in your shoe box ... some of us are only relying on our "logic based opinions" to exercise caution on and defend against money, power, greed, corruption, etc. which may fail in the face of our best interests ...

Regards,
JS

1270. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 16:01:17 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8hf4d$6vk$1@f04n12.cac.psu.edu>
Source record: 23344

Richard Clark wrote:

> Did you read the material you offered yesterday? Science reveals all
> results observed without going into a study mining for expectations as
> you rightly offer here.

Not all of it yet. I confess to skimming the oncological studies - although I did notice the tumor reduction outcome. Interesting.

> Your link, like the data of the original post, offers enough data to
> warrant informed discussion. The original post's data reveals a
> howler of invention. That cast aside, it allowed a cascade of
> spiritualism to dominate. Let me kick off the next side-thread of
> belly-button contemplation and ask: "Why don't we see this data
> discussed?"

A very good question indeed! I might speculate a bit here.

It is a big complicated world, and so many people are intellectually lazy. It is easier to say "RF exposure is bad" than it is to actually find out if it is. It is easier to say "liberals are the cause of all life's problems" than it is to investigate and find that the last liberal died in 1985.

So many people are capable of great suspension of disbelief. There are people who protest vigorously against a cell phone tower in their neighborhood because of "RF exposure", yet I don't doubt some of them use cell phones. It's just a little thing - it can't be bad....

Look at radioactivity for instance. While people are scared spitless over it, these same folks would put that granite in their houses, sometimes tons of it, and can't even figure out that the granite comes from a volcanic process that is mixing all sorts of minerals, including hot ones.

But they are too busy watching "Beauty and the Geek or some other trash on television. I dunno why, many of these folk are intelligent, yet stupid at the same time.

It is apparently hard to get at the truth.

Let's not forget the propaganda effect. The tobacky industry for years fought off the fact that tobacco is a cause of a whole lot of problems, from cancer to emphasyma and more. Just as there is a whole lot of money involved in both Cell phones and tobacco, there is a lot of reason to discount any problems caused by them.

Now that being said, the "other side" can use those same examples to say that the Cell phone industry equates with the tobacco industry. It does not. Different industries, and just maybe the same tactics.

Sometimes I think it just boils down to some people want them to be harmless, and nothing will convince them otherwise.

Another group wants them to be dangerous, and nothing will convince them otherwise.

A third group wants actual facts, and probably pisses all of the others off..

- 73 de Mike N3LI -

1271. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 16:22:09 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <UwXqk.22068$3I2.12368@en-nntp-02.dc1.easynews.com>
Source record: 23345

"Mike Coslo" <mcoslo@youknow.comcast.net> wrote in message
news:Xns9B004D2D1E2F1mcoslocomcastnet@216.196.97.136...
> I
> trust you are not ascribing the same for an area that the phone isn't
> touching?

What I'm saying is that a phone uses a certain amount of power -- in the ballpark of a watt -- and much of that is being turned into heat. Although most of the actual heat generation isn't the battery, heat of course flows, so in general the handset can get warm in many places other than where the heat is actually being produced. Batteries tend to get warm because they're good heat sinks, I would imagine.

> To look for a specific
> positive or negative from the start is more in line with creation
> science.

I agree with you there, although I have a suspicion many studies are desirous of finding deleterious effects.

---Joel

1272. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 16:23:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4qgoa4h9j3d1qoficdtuk4238khg9meira@4ax.com>
Source record: 23346

On Wed, 20 Aug 2008 12:01:17 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>> Your link, like the data of the original post, offers enough data to
>> warrant informed discussion. The original post's data reveals a
>> howler of invention. That cast aside, it allowed a cascade of
>> spiritualism to dominate. Let me kick off the next side-thread of
>> belly-button contemplation and ask: "Why don't we see this data
>> discussed?"
>
> A very good question indeed! I might speculate a bit here.

Hi Mike,

But that is still only the fixated gaze at the belly button. Fully
anticipated and fulfilled. The problem is how to turn off this fire
hydrant.

I would like to see some numbers from data offered - its all there to
give us a temperature rise from KNOWNS! Even Brett's three function
calculator (one function is not approved by creation scienz) might be
able to come close. Unfortunately, for many others it is obviously
more comforting to enjoy gazing upon an approaching asteroid than to
find it is nothing more than a mote in the eye.

73's
Richard Clark, KB7QHC

1273. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 16:28:36 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <WCXqk.32335$C65.1457@en-nntp-01.dc1.easynews.com>
Source record: 23347

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g8hdbe$ud2$1@news.albasani.net...
> at just what power intensities should we begin to worry and expect damage?
> One-watt, ten-watts, one-hundred-watts, one-kilowatt, multi-kilowatts?

There are guidelines available for this from the FCC -- it's a function of exposure time, frequency, and of course power. The numbers have been around for many decades now, and you might recall some questions about it showing up on your license exam.

That being said, I'm not suggesting more studies aren't in order, just that many people have a very mistaken impression that there aren't already many, many studies that have tried to ascertain "safe" exposure levels to RF. (Another thing most people aren't aware of is that cell phone antennas are usually specifically designed to *not* radiate "into" the head. Ham radio antennas usually aren't, yet you see plenty of folking holding up a 5W HT to their mouths...)

> Decades of living with "safe radiation levels" established for atomic
> elements sources which were "re-evaluated" to downward levels many times has
> made me a bit more cautious than yourself ...

Life today is far, far safer overall than it was decades ago. Anything like "safe RF exposure levels" is always going to be a bit subjective, so producing e.g., 1 additional tumor in a population of a million has to be weighed against saving 100 lives from having a phone handy in an emergency. (I'm just making up the numbers here, of course, but you get the point.)

---Joel

1274. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 17:23:11 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g8hjtv$7mu$1@news.jpl.nasa.gov>
Source record: 23349

>
> The very last study, on the very last page with the second paragraph
> offers:
> "For an effectively transmitted power of 0.25 W,
> the maximum averaged SAR values in both cubic
> and arbitrary-shaped volumes are, respectively, about
> 1.72 and 2.55 W kg-1 for 1g and
> 0.98 and 1.73 W kg-1 for 10 g of tissue."

> The last study gives us more exposure data (the discussion of which
> inevitably scatters in the rhetorical wind of debate). I can only
> wonder if the reader can draw a conclusion from this quoted sentence
> that can be expressed in temperature rise. There's enough data to do
> this, only intelligence remains to perform.
>

that's pretty simple.. Assume that the tissue has the specific heat of water. 1 Joule will raise the temperature of 1 gram of water about 1/4 degree C..

So, dump 2.55W/kg and you get about 0.0006 degree rise per second. Hang on the phone for, say, 10 minutes (600 seconds) and you'll get a temperature rise of a bit less than 1/2 degree C.

For comparison:
putting your head in sunlight results in an incident flux of about 1kW/square meter (peak). Assuming skin reflectivity of 0.36, the flux being absorbed is about 640W/square meter. Let's assume that the energy is absorbed in the first centimeter of your skin/bone, and that your head is a circle about 10cm in radius (e.g. 314 square centimeters).. That works out to about 20 watts total power being absorbed (compare to the 0.25W RF in the example above). Again, let's say that the density is 1g/cc, so the 20W is being dumped into 0.314 kg, or a SAR of 64 W/kg.

That's a rise of 0.015 degree/second, or 10 degrees in 10 minutes. In reality, you won't see that much rise, because bloodflow carries some of the heat away, and so does convection.

1275. Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 17:55:50 UTC
From: Joe <joe@telnet.com>
Message-ID: <bMudndocJYIwxzHVnZ2dnUVZ_hednZ2d@comcast.com>
Source record: 23348

Have any of you ever used a gas powered lawn edger to bury a cable/s? I was thinking of trying this. I wonder if I set the edger blade at about 2 " or so deep and took my time if it would work. I need to bury 3 cables from my Direct TV dish and a RG8 coax from my vertical to my house. Please post if you think this would work or have tried it.
Thanks.

1276. Re:ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 18:15:11 UTC
From: James KB9IH <James.KB9IH.2f21f29@radiobanter.com>
Message-ID: <James.KB9IH.2f21f29@radiobanter.com>
Source record: 23252

Harry H;641414 Wrote:
> I am wondering is anyone has a copy of an article on a multiband mobile
>
> helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.
>
>
> I do have a copy but the majority of it is intelligible.
>
> Thanks
> HH

I have a pdf of that entire issue. It is about 20Mb and some of it is
still illegible. Let me know if you want me to send it to you. TNX

--
James KB9IH

1277. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 18:24:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8hnhf$b3o$1@news.albasani.net>
Source record: 23350

Richard Clark wrote:

> Hi Mike,
>
> But that is still only the fixated gaze at the belly button. Fully
> anticipated and fulfilled. The problem is how to turn off this fire
> hydrant.
>
> I would like to see some numbers from data offered - its all there to
> give us a temperature rise from KNOWNS! Even Brett's three function
> calculator (one function is not approved by creation scienz) might be
> able to come close. Unfortunately, for many others it is obviously
> more comforting to enjoy gazing upon an approaching asteroid than to
> find it is nothing more than a mote in the eye.
>
> 73's
> Richard Clark, KB7QHC

You "play the odds." You bet that all which is knowledge/in-print is correct--you counsel others to only walk well worn paths. Of course, the odds will bear this out ... it is only that rare event which will produce something revolutionary, useful or provides a path for further exploration, etc. In all your posts, this is the ONE fact which always proves true.

You attempt to "look smart" by poking fun at others attempts to further and refine that which already exists, their speculations/logic/experiments/etc. You find safety in other mens endeavors which have born fruit ...

You have a low self-opinion of yourself (perhaps a correct one!) You, long ago, gave up on the ability of your mind/thinking/experiments to produce anything usable (again, perhaps correct.) You have absolutely nothing to offer except those things thought-of/discovered/experimented-with/documented-by other men, you must protect your ego at all costs--this implies you must NEVER be wrong, at any cost(s) ... you recognize this deficiency in yourself and attempt to convert it into an asset rather than a liability. The energy/stealth and deception/deceit afford you a modicum of success--the general public is easily confused and fooled ...

You think I am the only one to notice these things about you, and much more? I think not, most just don't like arguing with children. Your glass house not only exhibits holes/fractures/breaks, whole panes are missing!

Now, on about your business -- I will be watching and recording, long past all others have grown bored and moved on. There is something morbid and fascinating about such self-inflicted punishment(s) which grabs a minds attention, and pity ... the size of your shoe-box has been seen and duly noted ...

You attempt to make words suggesting caution a directly conflict to some chosen point(s) of yours, a slight-of-hand fitting a grade school student ... as you were soldier, carry on ...

Regards,
JS

1278. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 18:32:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8hnvibgi1@news.albasani.net>
Source record: 23251

Joe wrote:
> Have any of you ever used a gas powered lawn edger to bury a cable/s? I
> was thinking of trying this. I wonder if I set the edger blade at about
> 2 " or so deep and took my time if it would work. I need to bury 3
> cables from my Direct TV dish and a RG8 coax from my vertical to my
> house. Please post if you think this would work or have tried it.
> Thanks.

Got a four wheel drive?

In the past, I have just chained a wide crowbar to the hitch, at a low point on the bar, held it up-right and had the wife idle forward in the line I had for the coax. Two/three passes got me the depth I wished ... some cleaning of the trench was done after ... easiest I have found. Have used this for radials also ... but, would NOT be suited for ones small yard.

However, in very rocky soil I wonder how well it would work?

Regards,
JS

1279. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 19:33:46 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <868wurmqg5.fsf@qmc.ph.msstate.edu>
Source record: 23253

>Have any of you ever used a gas powered lawn edger to bury a cable/s?
>I was thinking of trying this. I wonder if I set the edger blade at
>about 2 " or so deep and took my time if it would work. I need to bury
>3 cables from my Direct TV dish and a RG8 coax from my vertical to my
>house. Please post if you think this would work or have tried it.

I have tried this. It worked ok for smaller RG6-sized cable for my
beverages. It was fairly time-consuming and not that easy to do. The
slot cut by the edger I have is too narrow to bury RG8 sized cable easily
however.

Tor
N4OGW

1280. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 20:11:40 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <b9KdnapKp8Ea5zHVnZ2dnUVZ8trinZ2d@pipex.net>
Source record: 23254

Joe wrote:
> Have any of you ever used a gas powered lawn edger to bury a cable/s? I
> was thinking of trying this. I wonder if I set the edger blade at about
> 2 " or so deep and took my time if it would work. I need to bury 3
> cables from my Direct TV dish and a RG8 coax from my vertical to my
> house. Please post if you think this would work or have tried it.
> Thanks.
==========
Apart from with which equipment you bury the coax cables ,I would
recommend that you run the cables inside plastic (polyethylene) water
pipe instead of allowing the cables to be buried directly .You then can
use 'normal' coax including the 75 Ohms stuff used for satellite TV dish.
Where the pipe with cables come out of the ground make a 180 degree bend
such that the open end points downwards ,avoiding water ingress while
keeping an open vent preventing condensation inside the plastic pipe.

The plastic pipe also provides mechanical protection .

I installed a TV satellite dish in the garden running the coax
underground as per the above .
That was 16 years ago ....never had a problem !

Frank , GM0CSZ/KN6WH in wet northern Scotland

1281. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 20:37:26 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <3c55ab54-4b4e-4834-bc9c-b6aba7fbfa01@z72g2000hsb.googlegroups.com>
Source record: 23255

On Aug 20, 11:56 am, Jim Higgins <inva...@invalid.invalid> wrote:
>
> Before doing anything with this information I think you need to follow
> all of the other good advice you've received in this forum for
> mitigating the problem on your end.

I've already stated that I'm getting the filters.

There is an electronics specialty store close by that carries all
sizes and range in price from 50 cents to a $1.50.

1282. Re: Re:ZE6JP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 22:09:59 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <XC0rk.29901$IK1.3702@news-server.bigpond.net.au>
Source record: 23256

Thanks James, would appreciate it!

Thanks
Harry H
"James KB9IH" <James.KB9IH.2f21f29@radiobanter.com> wrote in message
news:James.KB9IH.2f21f29@radiobanter.com...
>
> Harry H;641414 Wrote:
>> I am wondering is anyone has a copy of an article on a multiband mobile
>>
>> helical antenna published in the Dec 1972 edition Ham Radio, by ZE6JP.
>>
>>
>> I do have a copy but the majority of it is intelligible.
>>
>> Thanks
>> HH
>
> I have a pdf of that entire issue. It is about 20Mb and some of it is
> still illegible. Let me know if you want me to send it to you. TNX
>
>
>
>
> --
> James KB9IH
>

1283. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 22:20:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cmvoa4hhk7krvm4ff5pf4d94bvivttlke2@4ax.com>
Source record: 23257

On Wed, 20 Aug 2008 10:23:11 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>>
>> The very last study, on the very last page with the second paragraph
>> offers:
>> "For an effectively transmitted power of 0.25 W,
>> the maximum averaged SAR values in both cubic
>> and arbitrary-shaped volumes are, respectively, about
>> 1.72 and 2.55 W kg-1 for 1g and
>> 0.98 and 1.73 W kg-1 for 10 g of tissue."
>
>> The last study gives us more exposure data (the discussion of which
>> inevitably scatters in the rhetorical wind of debate). I can only
>> wonder if the reader can draw a conclusion from this quoted sentence
>> that can be expressed in temperature rise. There's enough data to do
>> this, only intelligence remains to perform.
>>
>
>
>that's pretty simple.. Assume that the tissue has the specific heat of
>water. 1 Joule will raise the temperature of 1 gram of water about 1/4
>degree C..
>
>So, dump 2.55W/kg and you get about 0.0006 degree rise per second.
>Hang on the phone for, say, 10 minutes (600 seconds) and you'll get a
>temperature rise of a bit less than 1/2 degree C.
>
>For comparison:
>putting your head in sunlight results in an incident flux of about
>1kW/square meter (peak). Assuming skin reflectivity of 0.36, the flux
>being absorbed is about 640W/square meter. Let's assume that the energy
>is absorbed in the first centimeter of your skin/bone, and that your
>head is a circle about 10cm in radius (e.g. 314 square centimeters)..
>That works out to about 20 watts total power being absorbed (compare to
>the 0.25W RF in the example above). Again, let's say that the density
>is 1g/cc, so the 20W is being dumped into 0.314 kg, or a SAR of 64 W/kg.
>
>That's a rise of 0.015 degree/second, or 10 degrees in 10 minutes. In
>reality, you won't see that much rise, because bloodflow carries some of
>the heat away, and so does convection.

Thanx Jim.

Exactly. If this proves anything, it proves that those who are not worried about stepping out into the sun, but fear exposure to their cell phone, they will always be worried about their cell phones.

Let's approach this from first principles. The battery in the phone is the only source of power. My own as an example has by the manufacturers rating -
From Nokia for their 6263 model:
BL-5C 1020 mAh Capacity;
Talk time GSM up to 3 hours 20 min;
Stand-by GSM up to 11.25 days
Dump that capacity at a potential of 3.6V for the full talk time after a fresh charge gives us 1.10 W PER HOUR.

Put 3 1/2W 51 Ohm resistors into a series circuit across the terminals of a 12V DC Source, hold the resistor pack (less than 1cMï¿½) against the skin (I used my earlobe) and you have a literal tissue test under the full power capacity of the battery as used continuously in a Nokia 6263 EXCEPT 100% of that power is lost to heat entirely - nothing towards the display, nothing towards the RF, nothing towards the speaker, nothing towards the microprocessor, etc. ALL of the heat is confined with nothing towards the greater mass of tissues in the CNS.

What is the temperature rise? As measured using a fever thermometer on the opposite side of the lobe: from 98.0ï¿½F to 99.4ï¿½F for 11.82V @0.0778A after several minutes. Cut the blood flow by tightly griping the lobe/pack/thermometer, and you can push this up another 6ï¿½F. As Jim offers in his last comment, blood flow makes all the difference (unless the creationists are worried about the tumor inducing effects on corpses).

You have to first ask yourself, how to make the RF "grip" the tissue to lower blood flow to raise temperature.

Next you have to ask how to make the RF ignore the mass of tissue. An ear lobe is highly insulated from the heat absorbing bulk of the skull. Ask any creationist why God chose large ears for animals that have to shed heat that can't escape their fur covered bodies.

Next you have to ask how to make the Total conversion of battery power into RF (lossless, perfect source) available for total, selective absorption in the tissue.

All questions above are for the worriers to dwell upon and to conspire to fulfill through creationist scienz (ironically "blame God" would be their answer). First, 1020mAh is maximum available battery capacity. Other ratings for a replacement battery range as low as around 500-750mAh. You may elevate the earlobe temperature by 1.4ï¿½F - but not for long.

This particular Nokia model operates as high as 2.1GHz (14cM band) and would require an extremely complex antenna (pointed directly into your skull) to focus a beam in a 0.6cMï¿½ cube (1/16th wavelength area within less than a wavelength from the antenna). As the medicos would say:

the application of a directional antenna of these design requirements for a general coverage service is contra-indicated.

Unless someone comes up with other figures (you will need the creationist un-approved full four function calculator), it would seem that nothing less than navel gazing can propel this thread further.

73's
Richard Clark, KB7QHC

1284. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-20 22:33:55 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g8i64jtit1@news.jpl.nasa.gov>
Source record: 23258

Richard Clark wrote:
> On Wed, 20 Aug 2008 10:23:11 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
> wrote:
>
>>> The very last study, on the very last page with the second paragraph
>>> offers:
>>> "For an effectively transmitted power of 0.25 W,
>>> the maximum averaged SAR values in both cubic
>>> and arbitrary-shaped volumes are, respectively, about
>>> 1.72 and 2.55 W kg-1 for 1g and
>>> 0.98 and 1.73 W kg-1 for 10 g of tissue."
>>> The last study gives us more exposure data (the discussion of which
>>> inevitably scatters in the rhetorical wind of debate). I can only
>>> wonder if the reader can draw a conclusion from this quoted sentence
>>> that can be expressed in temperature rise. There's enough data to do
>>> this, only intelligence remains to perform.
>>>
>>
>> that's pretty simple.. Assume that the tissue has the specific heat of
>> water. 1 Joule will raise the temperature of 1 gram of water about 1/4
>> degree C..
>>
>>
>> That's a rise of 0.015 degree/second, or 10 degrees in 10 minutes. In
>> reality, you won't see that much rise, because bloodflow carries some of
>> the heat away, and so does convection.
>
>
> Thanx Jim.
>
> Exactly. If this proves anything, it proves that those who are not
> worried about stepping out into the sun, but fear exposure to their
> cell phone, they will always be worried about their cell phones.
>
Actually, it's not quite *that* simple..

The simple analysis is just for thermal effects. One has to also ask whether there are significant "athermal" effects. These can come from several potential sources. First, one can consider whether the radiation itself can do anything.. well, the photon energy at microwave frequencies is so low that it's orders of magnitude below any known chemical reaction's activation energy.

Or, one can consider E or H field effects. If the E field is high enough, it can depolarize a neural membrane, for instance, and cause

false neural impulses. That would be an acute effect.

One also needs to consider peak vs average effects. One could probably power a defibrillator from a cellphone battery quite nicely, and that can dump a few hundred joules at just the right time to cause some serious problems. Again, though, that's an acute, not exposure/chronic effect.

1285. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 00:41:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kvcpa4p360p6c4odkulqdipdik0ulhieqf@4ax.com>
Source record: 23259

On Wed, 20 Aug 2008 15:33:55 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>> Exactly. If this proves anything, it proves that those who are not
>> worried about stepping out into the sun, but fear exposure to their
>> cell phone, they will always be worried about their cell phones.
>>
>Actually, it's not quite *that* simple..
>
>The simple analysis is just for thermal effects. One has to also ask
>whether there are significant "athermal" effects. These can come from
>several potential sources. First, one can consider whether the
>radiation itself can do anything.. well, the photon energy at microwave
>frequencies is so low that it's orders of magnitude below any known
>chemical reaction's activation energy.
>
>Or, one can consider E or H field effects. If the E field is high
>enough, it can depolarize a neural membrane, for instance, and cause
>false neural impulses. That would be an acute effect.
>
>One also needs to consider peak vs average effects. One could probably
>power a defibrillator from a cellphone battery quite nicely, and that
>can dump a few hundred joules at just the right time to cause some
>serious problems. Again, though, that's an acute, not exposure/chronic
>effect.

Hi Jim,

It IS that simple. The athermal effects you describe such as "photon
energy" is a temperature so low that for all practical purposes could
be called absolute zero. No one has suggested frost-bite induction as
a source of CNS trauma. Besides, thermal effects (or athermal) are
related to phononic energy. Phonon-Photon interaction is the
principle you are implying, and besides myself, I doubt anyone could
follow that discussion. Aside from yourself, no one here showed any
capacity to either calculate a temperature rise, or test it at the
bench. This leaves little room for dialog on the matter - hence the
plunge into shamanism.

As for the E field, a 9 volt battery clipped between the ears hardly
suffices, and electroshock therapy goes a further and most obvious
distance. The arguments put forward by those who cry caution beg for
dramatic and catastrophic effects that are unnoticed - a contradiction
on the face of it: an anticonvulsant taser wound without a mark. The
lack of substantive evidence is begged off as being undetectable (the

same contradiction) or too mysterious to have been thought of (which is a vanity statement). My allusion to Phonons would certainly fall into this last category, but it is an old field of established study that is rare, not unknown.

I've calibrated defibrillators and worked with peak energy delivery systems from millijoules to kilojoules. A cell phone does not qualify - not even acute and chronic is several orders of magnitude below that. Every thing about the design conspires against it.

73's
Richard Clark, KB7QHC

1286. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 00:47:25 UTC
From: ltdoc@yahoo.com
Message-ID: <bd54ae10-f41e-4678-831d-5d5bde759473@v57g2000hse.googlegroups.com>
Source record: 23260

Better way!

Borrow a couple of cymbols from someone (large concave disks). Remove
wheel from wheel barrow. Bolt cymbols together in place of the
wheel. Fill wheel barrow with required amount of weight for deep
enough trench. Have wife push it where the trench needs to go. Stamp
down sides of trench after laying cables. Easy! Oh, return cymbols
after cleaning. Good luck about the 'wife' part! (Tell'em it builds
particular sets of muscles groups, that ought'a help?)
- 'Doc

1287. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 01:13:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8ifga$3av$1@news.albasani.net>
Source record: 23261

Richard Clark wrote:

> ...
> Exactly. If this proves anything, it proves that those who are not
> worried about stepping out into the sun, but fear exposure to their
> cell phone, they will always be worried about their cell phones.
> ...
> 73's
> Richard Clark, KB7QHC

Really? You are kidding me, or else you don't know what you are talking about, again, right? I mean, this is the best apple & oranges comparison I have ever seen done by an IQ-challenged person!

Ghz cell phones, which cause a oscillations (indeed, complete turn-abouts of the water molecules) ~one-billion times per/sec is a good comparison to light? Who said that, the wizard of oz?

You idiot ... such oscillations cause actual changes in the cell walls of food being cooked which can be observed ... google is your friend wizard richard ... what was your title again? Excellent kiss-a$$ to the real experts? "One who stands in the shadow of the big guys hoping something will rub off?"

I should think, "Brown-Noser-Wannabe" pretty much sums up the title you deserve, to everyones satisfaction--certainly to mine!

Regards,
JS

1288. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 01:16:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8ifl9$3b1$1@news.albasani.net>
Source record: 23262

Richard Clark wrote:

> Hi Jim,
>
> It IS that simple. ...
>
> 73's
> Richard Clark, KB7QHC

Simplier than even that, indeed, causing me to coin a new term to
describe such simplicity demonstrated by a simpleton!

"RICHARD CLARK SIMPLE!"

Regards,
JS

1289. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 02:10:54 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B00E258341Cmcoslocomcastnet@216.196.97.136>
Source record: 23263

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in
news:WCXqk.32335$C65.1457@en-nntp-01.dc1.easynews.com:

> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:g8hdbe$ud2$1@news.albasani.net...
>> at just what power intensities should we begin to worry and expect
>> damage? One-watt, ten-watts, one-hundred-watts, one-kilowatt,
>> multi-kilowatts?
>
> There are guidelines available for this from the FCC -- it's a
> function of exposure time, frequency, and of course power. The
> numbers have been around for many decades now, and you might recall
> some questions about it showing up on your license exam.
>
> That being said, I'm not suggesting more studies aren't in order, just
> that many people have a very mistaken impression that there aren't
> already many, many studies that have tried to ascertain "safe"
> exposure levels to RF. (Another thing most people aren't aware of is
> that cell phone antennas are usually specifically designed to *not*
> radiate "into" the head. Ham radio antennas usually aren't, yet you
> see plenty of folking holding up a 5W HT to their mouths...)

Some differences are that HT conversations tend to be a lot shorter.

I'll bet my XYL spends 4 hours a day on various wireless and cell phones.
I know some who spend more. But they are convenient, they are handy. You
can walk around with them and do other things whil you are doing it. Its
a "big help" in her business.

That's okay, she thinks I'm nuts with my concern for cellphone use also.
Hopefully I'm wrong.....

>> Decades of living with "safe radiation levels" established for atomic
>> elements sources which were "re-evaluated" to downward levels many
>> times has made me a bit more cautious than yourself ...

We've revised them downward because we've found out more about them.

> Life today is far, far safer overall than it was decades ago.

Right. Its a learning process. We've found out about a lot of things
that can do us damage.

- 73 d e Mike N3LI -

1290. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 02:22:14 UTC
From: JB <nospam@goofball.net>
Message-ID: <qj4rk.319$p72.159@trnddc05>
Source record: 23264

"Dave Platt" <dplatt@radagast.org> wrote in message
news:v7hrn5-fcd.ln1@radagast.org...
> >He has been getting louder and louder over
> >the years to the point of what I described in my earlier post about
> >the problem with the TV's now.
> >
> >And even the very first time I approached him, I mentioned that I knew
> >he was broadcasting illegally,

Bad way to get on someones good side. Usually considered fightin' words.
Some places you can look up the local ham club and ask for help correcting
at your end if you don't point fingers. As for myself and others I was
brought up with, it was standard proceedure to insure cleanliness at our
end, and bend over backward to make sure our neighbors were happy. Things
like this aren't being taught in the seminars, nor is the knowledge getting
through to newer recruits. I also had problems with a neighbor at one point
and described to him exactly how to fix it at his end and due to his
beligerance, he raged for another year before actually taking my advice,
then appologizing and in fact THANKING me for the best TV reception he had
never seen before.

Take the step by step approach. Do away with any antenna Amp if possible
and check for flaky connectors and cables. RG-59 cables should be thrown
out in favor of RG-6 Quad shield for all TV cables including jumpers.

All the the following is your best advise, but I find the snap together type
of ferrites to have marginal results. Use the large Doughnut type that will
allow you to loop the connector through several turns (4-10) for the Speaker
wires and for the TV cable too (but use large loops to avoid kinking) just
before going into the amplifier or stack. This is a good way to tidy up
extra wire. Two or three doughnuts do better if you need extra protection
This keeps the energy from riding along the cable right into the chassis
where unintended bad things happen. With this setup I am able to watch
of-the-air broadcast TV while operating a 500 watt station in the same room.

I haven't bothered with the computer speakers in the next room though. They
pick up the data noise from nearby cellphones but not the ham station... Go
figure!

> Well, I have some good news and some bad news for you.
>
> Let's do the bad news first, OK?
>
> As others have pointed out, it's entirely possible that your neighbor
> is transmitting legally. If he has a ham license, he could be
> transmitting with power levels of up to 1500 watts, in most bands, and

> still be entirely within the bounds of his license.
>
> The fact that he "didn't deny" that he was "broadcasting illegally"
> isn't proof, by any means. He may simply have not wanted to get into
> an argument with a neighbor who was making harsh accusations without
> proof or evidence (and, sorry to say, I *am* referring to you here).
>
> Unless you have evidence that he's transmitting without a license, or
> in ways which violate whatever license he has, you don't have much
> legal leverage, and probably won't be able to persuade anybody to do
> anything on your behalf.
>
> As others have pointed out... if a stereo amplifier, or loudspeaker,
> or telephone starts picking up and reproducing radio transmissions,
> then *this* device is defective/broken/badly-designed. This is a
> condition referred to as "undesired operation" - the phone or speaker
> is reacting to something (a strong RF field) which is irrelevant to
> this device's normal mode of operation.
>
> It is the position of the FCC that such "undesired operation" is a
> defect in the device in question, and not the fault of a (legal) radio
> transmission. It's is technically possible (and not all that
> difficult) to shield and filter devices such as amplifiers and phones
> so that they don't react to RF fields. Some manufacturers skimp on
> this filtering and shielding, in order to save money... and if the
> consumer buys such a device (rather than a more expensive, better-
> designed one) then any problems which result are the responsibility of
> the consumer and the device's manufacturer.
>
> Many, many consumer electronics devices these days come with a "Part
> 15" label or advisory, on the device or in the manual. Part of the
> wording says these devices "must not interfere" with licensed radio
> services, and "must accept" interference from both licensed and
> unlicensed radio services "including interference which causes
> undesired operation".
>
> That's the bad news.
>
> Now, for the good news.
>
> It's usually possible to add some after-market RF suppression devices
> to the affected components, and greatly reduce or entirely eliminate
> the interference. You can buy such devices over the counter or by
> mail, and they're not expensive.
>
> For phones, a small filter which plugs in between the phone cord and
> the wall outlet will often do the trick. Plug-in DSL filters are
> commonly available and will probably do the job well enough.
>
> For loudspeakers and stereos - in most cases I've seen, the RF is

> being picked up by the wires between the speaker and amplifier or
> PC... the wires act as antennas, carry the RF into the amplifier
> section, and the amplifier "detects" the RF by accident and converts
> it to audio and amplifies it. It is often possible to entirely
> eliminate such unwanted pickup by adding an interference suppressor
> (a.k.a "choke" or "ferrite") to each speaker wire, right before it
> enters the amplifier. The commonest variety is a "snap-on" two-part
> ferrite - snap it open, wind the speaker wire through it a few times
> (leaving a short stub of wire at the end), snap it closed, and
> reconnect the wire to the amplifier/receiver. With amplified speakers
> (computer or subwoofer), put a ferrite right at the speaker end of the
> wire.
>
> Adding ferrites to the AC power cords of the receiver, amplified
> subwoofers, etc. is also a good idea.
>
> For TV interference, you may need a "high-pass filter" connected in
> the antenna line right at the TV. This will keep the strong RF signal
> from your neighbor's transmitter out of the TV set's receiver.
>
> Ferrites and filters are probably available at your local Radio Shack,
> or by mailorder from quite a few suppliers.
>
> For further information about actually solving the problem, I'd
> suggest that you look at the ARRL's extensive collection of
> information about this issue. Start at
>
> http://www.arrl.org/tis/info/rfigen.html
>
> for a table of contents and a good overview of the basic issues
> involved. The "Information for neighbors of hams" page is also
> worthwhile reading.
>
> Oh... if you want to know whether your neighbor is a ham, you may be
> able to find out from:
>
> http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp
>
> Click "Amateur", then plug in your zipcode and do a search. See if
> your neighbor's name comes up.
>
> However, even if your neighbor doesn't have a ham license, and is
> transmitting on CB, it's entirely possible that his transmissions
> could be getting into your radio even if they were limited to legal
> power... and if so, he wouldn't be under any obligation to stop
> transmitting or reduce power.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior

> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

1291. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 02:22:15 UTC
From: JB <nospam@goofball.net>
Message-ID: <rj4rk.320$p72.245@trnddc05>
Source record: 23265

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:g8hjtv$7mu$1@news.jpl.nasa.gov...
> >
> > The very last study, on the very last page with the second paragraph
> > offers:
> > "For an effectively transmitted power of 0.25 W,
> > the maximum averaged SAR values in both cubic
> > and arbitrary-shaped volumes are, respectively, about
> > 1.72 and 2.55 W kg-1 for 1g and
> > 0.98 and 1.73 W kg-1 for 10 g of tissue."
>
> > The last study gives us more exposure data (the discussion of which
> > inevitably scatters in the rhetorical wind of debate). I can only
> > wonder if the reader can draw a conclusion from this quoted sentence
> > that can be expressed in temperature rise. There's enough data to do
> > this, only intelligence remains to perform.
> >
>
>
> that's pretty simple.. Assume that the tissue has the specific heat of
> water. 1 Joule will raise the temperature of 1 gram of water about 1/4
> degree C..
>
> So, dump 2.55W/kg and you get about 0.0006 degree rise per second.
> Hang on the phone for, say, 10 minutes (600 seconds) and you'll get a
> temperature rise of a bit less than 1/2 degree C.
>
> For comparison:
> putting your head in sunlight results in an incident flux of about
> 1kW/square meter (peak). Assuming skin reflectivity of 0.36, the flux
> being absorbed is about 640W/square meter. Let's assume that the energy
> is absorbed in the first centimeter of your skin/bone, and that your
> head is a circle about 10cm in radius (e.g. 314 square centimeters)..
> That works out to about 20 watts total power being absorbed (compare to
> the 0.25W RF in the example above). Again, let's say that the density
> is 1g/cc, so the 20W is being dumped into 0.314 kg, or a SAR of 64 W/kg.
>
> That's a rise of 0.015 degree/second, or 10 degrees in 10 minutes. In
> reality, you won't see that much rise, because bloodflow carries some of
> the heat away, and so does convection.
>

That was my point restated ever so diligently.

After reading 1/4 of the "Biological studies..." it is interesting. But we need to remember that experiments only become valid when repeated numerous times. As these are only summaries, they are hard to compare and we loose that without having the full experiment laid out before us. I have tended to throw away those that didn't describe the frequency and field strength in some way as less than anecdotal.

I have seen data from a few of the experiments before and further experimentation would be a good thing particularly the ones that seem to describe low levels with certain modulation specifics. Also we need to differentiate the studies that involved 60 Hz AC fields which do seem to have an effect, but again more experimentation is required to try to figure out why some of these experiments conflict.

I have performed an RF evaluation at my station and recommend prudence when operating. I am expected to do this because I am in control of the equipment and can make changes that may result in higher levels of exposure. Those who go out and buy the wireless device are limited by the FCC approval of the whole unit, and battery vs. talk time also limit the potential of exposure and hazard to negligible.

Now as for certain people who equate that with hazards that require the defeating of safety interlocks to prove their point? Cars are dangerous, but most of all, people who run off the road into overpasses to prove the point. God help them.

Real hazards are people trying to expose themselves to exhaust fumes with the vehicle in reverse or in a closed garage or removing the guards from lawn mowers and putting their hand in the blade or electing someone to public office that makes selections on judges, who also pals around with extremists and radicals, including those who hate the country they live in and make death threats on those they hate. You can judge a book by its cover if it is trying to tell you what is inside. Dropping some friends just because you are running for public office says something too. Also it seems to me that those who promote "change" without positive solutions are really seeking to destroy.

1292. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 02:28:27 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B00E552493D7mcoslocomcastnet@216.196.97.136>
Source record: 23266

Richard Clark <kb7qhc@comcast.net> wrote in
news:cmvoa4hhk7krvm4ff5pf4d94bvivttlke2@4ax.com:

>
> Thanx Jim.
>
> Exactly. If this proves anything, it proves that those who are not
> worried about stepping out into the sun, but fear exposure to their
> cell phone, they will always be worried about their cell phones.

> Let's approach this from first principles. The battery in the phone
> is the only source of power. My own as an example has by the
> manufacturers rating -
> From Nokia for their 6263 model:
> BL-5C 1020 mAh Capacity;
> Talk time GSM up to 3 hours 20 min;
> Stand-by GSM up to 11.25 days
> Dump that capacity at a potential of 3.6V for the full talk time after
> a fresh charge gives us 1.10 W PER HOUR.

So,I trust you are not saying that all effects from these wonderful
devices are thermal?

One of the problems I see is that frankly, there is a tactic being used
here that is strangely reverse related to the old creationist argument
of if A is wrong, or cannot be proven, then B must be the answer.

It isn't. The warming feeling I noted is almst certainly NOT an actual
thermal effect. I've touched my ear when this has happened, and it isn't
a bit warmer to the touch - it only feels warm in my "headspace".Sorry,
couldn't think of any other words to describe it.

I'm possibly nuts (not all that likely) psychosomatic (maybe, but I doubt
it) or maybe there is something happening here.

- 73 de Mike N3LI -

1293. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 04:04:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8uopa45jmue3916stea73orj96inem1vaj@4ax.com>
Source record: 23267

On Wed, 20 Aug 2008 21:28:27 -0500, Mike Coslo
<mcoslo@youknow.comcast.net> wrote:

>Richard Clark <kb7qhc@comcast.net> wrote in
>news:cmvoa4hhk7krvm4ff5pf4d94bvivttlke2@4ax.com:
>
>>
>> Thanx Jim.
>>
>> Exactly. If this proves anything, it proves that those who are not
>> worried about stepping out into the sun, but fear exposure to their
>> cell phone, they will always be worried about their cell phones.
>
>> Let's approach this from first principles. The battery in the phone
>> is the only source of power. My own as an example has by the
>> manufacturers rating -
>> From Nokia for their 6263 model:
>> BL-5C 1020 mAh Capacity;
>> Talk time GSM up to 3 hours 20 min;
>> Stand-by GSM up to 11.25 days
>> Dump that capacity at a potential of 3.6V for the full talk time after
>> a fresh charge gives us 1.10 W PER HOUR.
>
>So,I trust you are not saying that all effects from these wonderful
>devices are thermal?
>
>One of the problems I see is that frankly, there is a tactic being used
>here that is strangely reverse related to the old creationist argument
>of if A is wrong, or cannot be proven, then B must be the answer.
>
>It isn't. The warming feeling I noted is almst certainly NOT an actual
>thermal effect. I've touched my ear when this has happened, and it isn't
>a bit warmer to the touch - it only feels warm in my "headspace".Sorry,
>couldn't think of any other words to describe it.
>
>I'm possibly nuts (not all that likely) psychosomatic (maybe, but I doubt
>it) or maybe there is something happening here.
>
> - 73 de Mike N3LI -

Hi Mike,

So, you experience it as a burn, it isn't a burn, and it is as serious
as a burn, but it is otherwise inexplicable? Now THAT is an argument
for the books and sure to defy any measure, qualification, or

solution. We may as well speculate that if you fall out of bed while dreaming of plunging off a cliff, then you die when you strike the floor.

This is called an anecdotal report - and the Bible is full of them. Unfortunately, theologians don't really argue the Bible, they argue religion which has some very rigorous protocols. I don't see any protocols observed in the anecdote and is one reason why the Vatican rarely admits new miracles.

If it worried you as a real problem, you would probably stop it. This is a common protocol that needs no authorization from the Pope. If you don't stop, then perhaps you might want to re-evaluate the diagnosis of being nuts (avoiding a real problem is NOT psychosomatic).

If it doesn't worry you as a real problem, this is simply navel gazing and still does not rise to psychosomatic. That's OK too, because hard science has already finished off the substance of the issue. If you want the science behind the "perception." I would offer that it is only remotely associated with Physics as initiator, and backfilled with the Ape's reflex of drawing away from the fire (the scienz of psychology that you anticipate above).

Thus it devolves to the allowance that, yes, perhaps you might catch fire if you used your cell phone in your sleep. That should spawn traffic in yet another side thread that arcs away from antennas.

73's
Richard Clark, KB7QHC

1294. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 06:42:53 UTC
From: Bob <bobasko@hotmail.com>
Message-ID: <d6fce$48ad0dcf$cef8ba3e$15104@TEKSAVVY.COM-Free>
Source record: 23268
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.swap
Body handling: HTML body converted to readable text

```
"Wouff Hong" wrote in message
news:a8qdnes2sqGrgDbVnZ2dnUVZ_tvinZ2d@earthlink.com...
> DES wrote in
> news:16315bd5-5fe0-48b7-8503-c5f58ea8d093@s50g2000hsb.googlegroups.com:
>
>> On Aug 19, 1:00 pm, Bert Hyman wrote:
>>> BigELil...@msn.com (DES) wrote
>>> innews:c512e8f3-07c3-481a-ab9d-5b1a11320a0
>> a@s50g2000hsb.googlegroups.com:
>>>
>>> > On Aug 19, 9:24 am, g...@mendelson.com (Geoffrey S. Mendelson)
>>> > wrote:
>>> >> DES wrote:
>>> >> > OK, I'm gonna try and get a better picture for you guys, but it
>>> >> > won't be today because it's pouring down rain.
>>>
>>> >> How about going up to the door and asking?
>>>
>>> >> Geoff.
>>>
>>> > That isn't an option. I can't go into details in a public forum.. I
>>> > just need to know if the guy is broadcasting with a ham or CB radio,
>>> > and figured you guys could tell me from looking at the antenna.
>>>
>>> Do you know the guy's name? You can see if there's a license issued to
>>> him:
>>>
>>> http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp
>>>
>>> --
>>> Bert Hyman | St. Paul, MN | b...@iphouse.com
>>
>> Thank you, very much!
>>

the Rubber Duck. No
> doubt you're gettin out! Ten-four Ten-four...."
>
> If you hear something like that he's most likely a no-coder or a
> nickel-licensee and you should definately turn his dumb ass in to
> the FCC.
>
> HTH
```

>
> Wouff Hong

A feeeee! It's nice to be denouncer?

1295. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 07:26:20 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <AM8rk.2489$Fr1.1464@newsfe03.iad>
Source record: 23269

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:b9KdnapKp8Ea5zHVnZ2dnUVZ8trinZ2d@pipex.net...

< snip>

> I would
> recommend that you run the cables inside plastic (polyethylene) water
> pipe instead of allowing the cables to be buried directly .You then can
> use 'normal' coax including the 75 Ohms stuff used for satellite TV dish.
> Where the pipe with cables come out of the ground make a 180 degree bend
> such that the open end points downwards ,avoiding water ingress while
> keeping an open vent preventing condensation inside the plastic pipe.
>
> The plastic pipe also provides mechanical protection .

I also did a successful cable run inside plastic pipe. I used PVC 20 years
ago and not a problem since.

Some cable is advertised for "Direct Burial" but, based on the amount of
foot traffic over the area, I elected to use the pipe for the mechanical
protection. Pulling the cable was a tough job because I underestimated the
size pipe I needed. I finally had to cut the pipe and pull the cables in in
two sessions. I included a union in my final pull and cemented the halves
together before filling in the ditch.

1296. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 08:01:23 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <e6689379-957f-4b94-9e01-9a010ee6fe64@m3g2000hsc.googlegroups.com>
Source record: 23270

On Aug 20, 10:22 pm, "JB" <nos...@goofball.net> wrote:
> "Dave Platt" <dpl...@radagast.org> wrote in message
>
> news:v7hrn5-fcd.ln1@radagast.org...
>
> > >He has been getting louder and louder over
> > >the years to the point of what I described in my earlier post about
> > >the problem with the TV's now.
>
> > >And even the very first time I approached him, I mentioned that I knew
> > >he was broadcasting illegally,
>
> Bad way to get on someones good side. Usually considered fightin' words.

Really?

You have no idea about how the conversation transpired.

1297. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 12:45:12 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8jo0m$192c$1@f04n12.cac.psu.edu>
Source record: 23271

Richard Clark wrote:

> Unless someone comes up with other figures (you will need the
> creationist un-approved full four function calculator), it would seem
> that nothing less than navel gazing can propel this thread further.

I applied similar calculations to a jalepeno pepper I ate today. I took it out of the refrigerator in which it had stabilized at around 35 degrees. Popped it in my mouth and munched away. The pepper made my mouth hot and it burned pretty good.

It isn't possible to do that. Given that the pepper was at 35 degrees, it in fact should have lowered the temperature in my mouth temporarily until blood flow could compensate.

Further inspection showed that there were no apparent blisters or unusual redness in my mouth after eating the pepper, so the only conclusion I can make is that the sensation I felt, I did not feel.

- 73 de Mike N3LI -

1298. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 13:07:45 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8jpav$ne8$1@f04n12.cac.psu.edu>
Source record: 23272

Richard Clark wrote:
> On Wed, 20 Aug 2008 21:28:27 -0500, Mike Coslo
> <mcoslo@youknow.comcast.net> wrote:
>
>> Richard Clark <kb7qhc@comcast.net> wrote in
>> news:cmvoa4hhk7krvm4ff5pf4d94bvivttlke2@4ax.com:
>>
>>> Thanx Jim.
>>>
>>> Exactly. If this proves anything, it proves that those who are not
>>> worried about stepping out into the sun, but fear exposure to their
>>> cell phone, they will always be worried about their cell phones.
>>> Let's approach this from first principles. The battery in the phone
>>> is the only source of power. My own as an example has by the
>>> manufacturers rating -
>>> From Nokia for their 6263 model:
>>> BL-5C 1020 mAh Capacity;
>>> Talk time GSM up to 3 hours 20 min;
>>> Stand-by GSM up to 11.25 days
>>> Dump that capacity at a potential of 3.6V for the full talk time after
>>> a fresh charge gives us 1.10 W PER HOUR.
>> So,I trust you are not saying that all effects from these wonderful
>> devices are thermal?
>>
>> One of the problems I see is that frankly, there is a tactic being used
>> here that is strangely reverse related to the old creationist argument
>> of if A is wrong, or cannot be proven, then B must be the answer.
>>
>> It isn't. The warming feeling I noted is almst certainly NOT an actual
>> thermal effect. I've touched my ear when this has happened, and it isn't
>> a bit warmer to the touch - it only feels warm in my "headspace".Sorry,
>> couldn't think of any other words to describe it.
>>
>> I'm possibly nuts (not all that likely) psychosomatic (maybe, but I doubt
>> it) or maybe there is something happening here.
>>
>> - 73 de Mike N3LI -
>
> Hi Mike,
>
> So, you experience it as a burn, it isn't a burn, and it is as serious
> as a burn, but it is otherwise inexplicable.

Richard, I can stuff words into my mouth easily, I don't need help.

>> So, you experience it as a burn,

I experience it as a warming sensation

>> it isn't a burn

It's a warming sensation

>> and it is as serious as a burn,

I don't know if is a serious matter or not. I just report it. I'm not the only one

> This is called an anecdotal report - and the Bible is full of them.

C'mon, Richard. It follows then that cell phone use is proscribed by the bible? At least according to the local Amish Bishops...

The last statement was nonsense, ant the quote it replied to wasn't much above it.

I broke my ankle a few years back. It hurt like hell. Of course that's anecdotal too. 8^)

> If it worried you as a real problem, you would probably stop it. This
> is a common protocol that needs no authorization from the Pope. If
> you don't stop, then perhaps you might want to re-evaluate the
> diagnosis of being nuts (avoiding a real problem is NOT
> psychosomatic).

I have to carry a cell as part of my work. My average call is less than a minute. I use it as little as possible.

> If it doesn't worry you as a real problem, this is simply navel gazing
> and still does not rise to psychosomatic. That's OK too, because hard
> science has already finished off the substance of the issue.

For a very narrow issue. One that is not related to what I am looking at.

> Thus it devolves to the allowance that, yes, perhaps you might catch
> fire if you used your cell phone in your sleep. That should spawn
> traffic in yet another side thread that arcs away from antennas.

From the sublime to....

Does it follow then that since I'm not at all likely to spontaneously combust due to my cell phone use, that there are no effects?

And to think I had some hope that this might turn into a productive discussion.

- 73 de Mike N3LI -

1299. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 13:24:34 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8jqah$1duu$1@f04n12.cac.psu.edu>
Source record: 23273

JB wrote:

> After reading 1/4 of the "Biological studies..." it is interesting. But we
> need to remember that experiments only become valid when repeated numerous
> times. As these are only summaries, they are hard to compare and we loose
> that without having the full experiment laid out before us. I have tended
> to throw away those that didn't describe the frequency and field strength in
> some way as less than anecdotal.

I'm still not convinced that use of tobacco products are bad for you,
and I've got scientific evidence from tobacco industry lawyers to back
me up. ;^) No relation to this issue except there are people who stand
to profit by both being harmless.

There is always the question of how many studies it takes to make
something "real". I always like to mention the book from the 1870's that
mentions how smoking causes lung cancer; chewing causes oral cancer. But
it wasn't until almost a hundred years later that it really did, because
it took that long to be "proven".

All we can do is make an informed guess, and stick with it. I choose to
limit my cell phone use.

- 73 de Mike N3LI -

1300. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 14:42:17 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8jus9$6bi$1@f04n12.cac.psu.edu>
Source record: 23274

DES wrote:
> On Aug 20, 10:22 pm, "JB" <nos...@goofball.net> wrote:
>> "Dave Platt" <dpl...@radagast.org> wrote in message
>>
>> news:v7hrn5-fcd.ln1@radagast.org...
>>
>>>> He has been getting louder and louder over
>>>> the years to the point of what I described in my earlier post about
>>>> the problem with the TV's now.
>>>> And even the very first time I approached him, I mentioned that I knew
>>>> he was broadcasting illegally,
>> Bad way to get on someones good side. Usually considered fightin' words.
>
>
> Really?
>
> You have no idea about how the conversation transpired.

He knows enough that you told the neighbor he was broadcasting
illegally. Just like you said.

So okay. Do you want to solve the problem, or do you want to be one of
the stories on Dateline some evening? About the two nieghbors who
couldn't get along, and it escalated into something much worse...
Perhaps it isn't important for you to get along with your neighbors, but
you made it a lot harder to fix the problem.

If this person is a Ham and operating legally, it's your responsibility.
In most cases the Ham is really happy to help, because in most cases,
they just want to be a good neighbor. Oh, but wait, you already poisoned
the waters. After all, He's doing this illegally, eh?

On the other hand, if he is a CB'er using illegal power, you have a
whole lot more leverage. You can turn him in to the F.C.C. and they can
take care of the matter. But wait! He knows exactly who turned him in,
doesn't he?

But your attitude here in the group, where people are actually trying to
help you, indicates that you might be just as worried about "being
right" as you are about having the problem fixed. People try to give
good advice, and you get p***d off at them. Have fun!

- 73 de Mike N3LI -

1301. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 15:00:19 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <km0ra49srj66cm7v4cqfts7ge4qor7q9tg@4ax.com>
Source record: 23275

On Wed, 20 Aug 2008 12:55:50 -0500, "Joe" <joe@telnet.com> wrote:

>Have any of you ever used a gas powered lawn edger to bury a cable/s? I was
>thinking of trying this. I wonder if I set the edger blade at about 2 " or
>so deep and took my time if it would work. I need to bury 3 cables from my
>Direct TV dish and a RG8 coax from my vertical to my house. Please post if
>you think this would work or have tried it.
>Thanks.
Everything depends on soil conditions...
John Ferrell W8CCW

1302. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 16:37:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8k5jo$jn2$1@news.albasani.net>
Source record: 23276

Michael Coslo wrote:

>> ...
> I'm still not convinced that use of tobacco products are bad for
> you, and I've got scientific evidence from tobacco industry lawyers to
> back me up. ;^) No relation to this issue except there are people who
> stand to profit by both being harmless.
> ...
> - 73 de Mike N3LI -

I don't think the nicotine in a cigarette is going to "calm richards'
condition."

Perhaps some Thorazine would help, but that is only by prescription ...
"getting laid" has always helped me ... <GRIN>

Regards,
JS

1303. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 16:37:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <em4ra4do4grv4b9tgc67cti3kgnfvcsu6g@4ax.com>
Source record: 23277

On Thu, 21 Aug 2008 09:07:45 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>Does it follow then that since I'm not at all likely to spontaneously
>combust due to my cell phone use, that there are no effects?

Hi Mike,

Not likely? This "certitude" falls into the same category of
speculation that began this side thread. The rhetoric of "not likely"
automatically admits it into having the same small possibility of cell
phone tumor risk.

In the loose, dataless environment of this debate, spontaneous
combustion from the use of a cell phone is now a reality supported by
dialog. That it is a fiction is overwhelmed by it inhabiting debate
about real worry.

Of course I introduced this tar-baby and it worked. There is no way
to back out of its grip without data now.

73's
Richard Clark, KB7QHC

1304. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 16:50:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8k6dhkrp1@news.albasani.net>
Source record: 23278

Michael Coslo wrote:

> ...
> And to think I had some hope that this might turn into a productive
> discussion.
>
> - 73 de Mike N3LI -

What is really going to "cook your noodle" is when you realize this is how cigarette smoking was determined to actually be good for you. Remember the old ads with doctors, of actors who looked like doctors, telling how studies had actually determined smoking improved/enhanced your health?

Now class, can you find any examples of this/these "disinformation methods" still in use today? Any suspected examples?

Regards,
JS

1305. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 17:00:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uf6ra4prvffcgtmmb3jjjbo68u7e7rc5an@4ax.com>
Source record: 23279

On Thu, 21 Aug 2008 08:45:12 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

> so the only
>conclusion I can make is that the sensation I felt, I did not feel.

Let's see, if one were to take a cubic inch block of dry air-chilled sodium straight out of the fridge and dump it into a bath tub with 4 orders of more magnitude volume of water, no heat should be possible because of the massive heat sink of that water at room temperature and that same cold block of material. The same could be said of Phosphorous going in the reverse direction.

No bang would be heard, if you weren't there to hear it.

You willing to witness this test (sodium or phosphorous) to confirm the supposition? Take a bigger bite of an apple size Chipotle and report about the absence of blistering instead.

Better yet, can you prove that the jalapenos don't lead to CNS tumors. Are you willing to accept the responsibility for your stand that they don't.

Regards,
JS

1306. free sex moves download

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 17:05:39 UTC
From: ratana <maryratana2008@gmail.com>
Message-ID: <a4b7fa2c-29a7-4168-9d5a-ce68b88606ac@v26g2000prm.googlegroups.com>
Source record: 23280

free sex moves download

http://kumaripud.blogspot.com/

1307. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 17:15:38 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8k7rq$1954$1@f04n12.cac.psu.edu>
Source record: 23281

Richard Clark wrote:
> On Thu, 21 Aug 2008 09:07:45 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> Does it follow then that since I'm not at all likely to spontaneously
>> combust due to my cell phone use, that there are no effects?
>
> Hi Mike,
>
> Not likely? This "certitude" falls into the same category of
> speculation that began this side thread. The rhetoric of "not likely"
> automatically admits it into having the same small possibility of cell
> phone tumor risk.

Admittedly, this is the first time that I have heard "not likely"
turned into certitude. I would at one time have said that wasn't very
likely.

One might begin to think that there is bit of a difference between
scientific discourse and English discourse. That is likely. Whereas I
highly doubt that it would happen, you use that doubt as a springboard
to add to the issue.

All without answering my question!

I doubt that using a cell phone wil cause me to crave lutefisk either.
So we add another possibility to the mix.

Ask a scientist if a singularity might show up and start spitting to
coffee cups S/he will probably say "not likely", when indeed it is
almost impossible, yet not eliminated. Something like almost infinitely
unlikely, depending on if we ascribe to the big crunch eventually
following the big bang, or even the big cigarette. But at least take a
shower. But I digress.....

It doesn't ipso fatso mean they accept that as a real possibility. But
the odds, as scientists look at them, make it difficult to state 100
percent yes or no. We see it all the time on TV cop shows when they go
to court. They even give odds on DNA evidence.

Now onto the concept of spontaneous human composting er combustion....

- 73 de Mike N3LI -

1308. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 17:30:43 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8k8o2$197q$1@f04n12.cac.psu.edu>
Source record: 23282

John Smith wrote:
> Michael Coslo wrote:
>
>> ...
>> And to think I had some hope that this might turn into a
>> productive discussion.
>>
>> - 73 de Mike N3LI -
>
> What is really going to "cook your noodle" is when you realize this is
> how cigarette smoking was determined to actually be good for you.
> Remember the old ads with doctors, of actors who looked like doctors,
> telling how studies had actually determined smoking improved/enhanced
> your health?

I remember Arther Godfrey.

http://www.bigsmilehealth.com/blog/6/war-on-smoking/

http://www.blujay.com/?page=ad&cat=7170000&adid=1449506

1309. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 17:34:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8k8vf$ni4$1@news.albasani.net>
Source record: 23283

Michael Coslo wrote:

> ...
> Now onto the concept of spontaneous human composting er combustion....
>
>
> - 73 de Mike N3LI -

... was lazy today; just shaved and looked in the mirror. I do believe I am more handsome today than yesterday! It is incredible, certainly NOT my imagination.

So, I stood before and asked the wife if she noticed the drastic improvement--she did not. But then, she is jealous that way. Since the multitude of cosmetic products she has applied have only have a minimal effect, the fact she is green with jealousy limits her ability to truly appreciate my good fortune--and sudden increase in handsomeness!

I do attribute it to using the cell phone yesterday, perhaps I will have to re-thing things! 8-)

Regards,
JS

1310. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 17:36:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8k92k$ni4$2@news.albasani.net>
Source record: 23284

John Smith wrote:
> Michael Coslo wrote:
>
>> ...
>> Now onto the concept of spontaneous human composting er combustion....
>>
>>
>> - 73 de Mike N3LI -
>
> ... was lazy today; just shaved and looked in the mirror. I do believe
> I am more handsome today than yesterday! It is incredible, certainly
> NOT my imagination.
>
> So, I stood before and asked the wife if she noticed the drastic
> improvement--she did not. But then, she is jealous that way. Since the
> multitude of cosmetic products she has applied have only have a minimal
> effect, the fact she is green with jealousy limits her ability to truly
> appreciate my good fortune--and sudden increase in handsomeness!
>
> I do attribute it to using the cell phone yesterday, perhaps I will have
> to re-thing things! 8-)
>
> Regards,
> JS

... well, I certainly going to have to re-check my spelling and words in
my posts. <GRIN>

Regards,
JS

1311. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 17:36:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l49ra4h98kbcmj6pcp73c9al58rkti5v1d@4ax.com>
Source record: 23285

On Thu, 21 Aug 2008 13:15:38 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

> Admittedly, this is the first time that I have heard "not likely"
>turned into certitude. I would at one time have said that wasn't very
>likely.

See how this grows? We are now engaged in debating what is "not
likely," but of course that is how it started out anyway. What is
embraced as a real risk is equally dismissed by the same logic. Anyone
who worries about CNS tumors induced by cell phones, must allow that
they could suffer spontaneous combustion from the same source, same
risk. Risk, after all, is not a thing, it is a number. Without data,
employing risk as rhetoric automatically elevates everything that was
once inconsequential to life threatening.

However, as to your literal statement above, I feel it is "very
likely" that you HAVE heard "not likely" turned into a certitude:
"...due to the nature of Improbability calculations,
that which is Infinitely Improbable is actually very
likely to happen almost immediately..."

And I feel it is "very likely" you can name the author.

QED

73's
Richard Clark, KB7QHC

1312. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 17:40:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8k9bi$o1u$1@news.albasani.net>
Source record: 23286

Richard Clark wrote:

>> ...
> Let's see, if one were to take a cubic inch block of dry air-chilled
> sodium straight out of the fridge and dump it into a bath tub with 4
> orders of more magnitude volume of water, no heat should be possible
> because of the massive heat sink of that water at room temperature and
> that same cold block of material. The same could be said of
> Phosphorous going in the reverse direction.
> ...

I have always found a good cigar, a stiff vodka collins and getting laid has a much more beneficial effect on my general well being ... a good chat over the cell phone with a close friend "bragging" about my good luck seems to add some pleasure to this experience also--your mileage may vary ...

If the chilled sodium, water, phosphorous don't work for you, you may consider my choice(s.) ;-)

Regards,
JS

1313. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 17:47:17 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8k9n4$191e$1@f04n12.cac.psu.edu>
Source record: 23287

Richard Clark wrote:
> On Thu, 21 Aug 2008 13:15:38 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> Admittedly, this is the first time that I have heard "not likely"
>> turned into certitude. I would at one time have said that wasn't very
>> likely.
>
> See how this grows?

WEll yes. It's highly likey you're pushing it along in that direction
quite vigoously.

> However, as to your literal statement above, I feel it is "very
> likely" that you HAVE heard "not likely" turned into a certitude:
> "...due to the nature of Improbability calculations,
> that which is Infinitely Improbable is actually very
> likely to happen almost immediately..."
>
> And I feel it is "very likely" you can name the author.

I would have to say that it is Douglas Adams?

- 73 de Mike N3LI -

1314. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 18:09:58 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8kb1lnds1@f04n12.cac.psu.edu>
Source record: 23288

Richard Clark wrote:
> On Thu, 21 Aug 2008 08:45:12 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> so the only
>> conclusion I can make is that the sensation I felt, I did not feel.
>
> Let's see, if one were to take a cubic inch block of dry air-chilled
> sodium straight out of the fridge and dump it into a bath tub with 4
> orders of more magnitude volume of water, no heat should be possible
> because of the massive heat sink of that water at room temperature and
> that same cold block of material. The same could be said of
> Phosphorous going in the reverse direction.

Exactly! Not. The power or lack of it on the part of cell phones to cause much direct thermal heating does not mean that one who experiences the sensation of heat is not feeling it. The Jalepeno has a chemical which triggers pain receptors on your tongue, mucus membranes and skin. Your sodium example - and puhleeze don't anyone try that,it is an extremely vigorous reaction - is based on sodium's reactivity with Water. Just as the odd heat sensation that some people get from extended use of a cell phone, there is probably something else going on.

Direct thermal heating via cellphone is at best a red herring. Heating sources abound, so I just don't buy it.

> You willing to witness this test (sodium or phosphorous) to confirm
> the supposition?

I'll pass. I wouldn't mind watching from a distance though. I'm foolish that way. Remember, I'm the one who uses a chainsaw to dig his radial trenches. (Don't try this at home kids!)

> Better yet, can you prove that the jalapenos don't lead to CNS tumors.
> Are you willing to accept the responsibility for your stand that they
> don't.

Side note - they've recently found out why hot food is popular. Over the years, people have suggested reasons such as making people in tropical zones sweat to cool them off, or a sort of masochism. I never bought either of those, although I can get a good hot food sweat going, but it just didn't make sense to me.

Turns out that after the initial burn, the same chemicals give you a bit of euphoria. Receptors in the brain apparently enjoy it.

Looks like a new target for the war on drugs! ;^)

"Your honor, the task force did observe the defendant consuming several objects that after testing in the lab and from stool samples, turned out to be capsicum annuuum" We arrested him on the spot, Tasers were used, as pepper spray would only enhance his high, and would possibly lead to a Hot High, during which offenders are known to experience superhuman enjoyment."

- 73 de Mike N3LI -

1315. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 18:28:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8kc54$rb9$1@news.albasani.net>
Source record: 23289

Michael Coslo wrote:

> ...
> Exactly! Not. The power or lack of it on the part of cell phones to
> cause much direct thermal heating does not mean that one who experiences
> the sensation of heat is not feeling it. The Jalepeno has a chemical
> which triggers pain receptors on your tongue, mucus membranes and skin.
> Your sodium example - and puhleeze don't anyone try that,it is an
> extremely vigorous reaction - is based on sodium's reactivity with
> Water. Just as the odd heat sensation that some people get from extended
> use of a cell phone, there is probably something else going on.
> ...
> - 73 de Mike N3LI -
>
>

Michael:

I don't know how "the course of the river" has been diverted to the argument that "heating" is the "consideration of danger" a prudent man would, at least firstly, exercise in thought/logic/research.

It is the energetic/fast/absolute reversal of the dipole water molecules (and even oxygen molecules) which would seem the most obvious area of exploration ... indeed, I have seen reference made to the "spinning" of this molecules.

This:

"Dipolar Bonding in Water

The dipolar interaction between water molecules represents a large amount of internal energy and is a factor in water's large specific heat. The dipole moment of water provides a "handle" for interaction with microwave electric fields in a microwave oven. Microwaves can add energy to the water molecules, whereas molecules with no dipole moment would be unaffected.

The polar nature of water molecules allows them to bond to each other in groups and is associated with the high surface tension of water. The polar nature of the water molecule has many implications. It causes water vapor at sufficient vapor pressure to depart from the ideal gas law because of dipole-dipole attractions. This can lead to condensation and phenomena like cloud formation, fog, the dewpoint, etc. It also has a great deal to do with the function of water as the solvent of life in biological systems. "

From here:

http://hyperphysics.phy-astr.gsu.edu/hbase/electric/diph2o.html

Makes note of the fact microwave DO cause noticeable effects/affects in just water ... there are other polar molecules in the body which have NEVER been the subject of study in relation to microwaves ... this is simply a fact ...

Those who would claim all is known, nothing of significance will ever be discovered of microwaves, even low levels, effect on the body, are simply idiots--isn't that obvious and totally apparent? If these idiots can convince others they have some form of "psychic knowledge" which requires no more scientific testing/exploration--well, the term, "Buyer beware" comes to mind ...

Why would anyone argue against "confirmation of safety", unless one has a horse in the race or is just an idiot with "a message from God?"

Regards,
JS

1316. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 18:33:38 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8kce1$190u$1@f04n12.cac.psu.edu>
Source record: 23290

Michael Coslo wrote:

>
> WEll yes. It's highly likey you're pushing it along in that
> direction quite vigoously.

sigh..... "vigorously too!

- 73 de Mike N3LI -

1317. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 18:36:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <madra4121dmd2h2i7r27gh23ik05n12meh@4ax.com>
Source record: 23291

On Thu, 21 Aug 2008 14:33:38 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>Michael Coslo wrote:
>
>>
>> WEll yes. It's highly likey you're pushing it along in that
>> direction quite vigoously.
>
>
>sigh..... "vigorously too!

and highly likey.... (I wasn't going to go here until you posted
this. Actually, I LIKED vigoously.)

73's
Richard Clark, KB7QHC

1318. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 18:46:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8kd6usnn1@news.albasani.net>
Source record: 23292

Michael Coslo wrote:

> [stuff] ...
> - 73 de Mike N3LI -
>
>

Michael:

Sometimes when I run into personalities which are "all about themselves" and attempt to serve as an "oracle of truth(s)", I seek out minds and those minds products who "I really DO respect."

Here is a page:

http://rescomp.stanford.edu/~cheshire/EinsteinQuotes.html

Which will take you to quotes from such a man I DO respect. Looking them over, and then richards' posts, just seems to put things in proper perspective, for me--perhaps you can find the same?

Regards,
JS

1319. Re: Size of dummy load required to tune 160 Watts CW, 200 W PEP SSB ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 18:54:46 UTC
From: JB <nospam@goofball.net>
Message-ID: <WRirk.450$UX.21@trnddc03>
Source record: 23293

<pdlemper@earthlink.net> wrote in message
news:4m5ha4141npbims12447nn7n5thkttm7so@4ax.com...
> My old TS-520S is said to put out 160 watts DC CW and
> 200 watts PEP SSB .
> Whats the minimum dummy load requirement to tune it ?
>
> There are kits for 100 watt dummy loads. Would that be
> enough for brief (~ 10 sec) tuning ?
>
> Are there standards as to how the rating of a dummy load
> is to be interpreted ?
>
> Dave WB3DWE Temple, TX

For ham goodies look at the specs. Ham stuff usually needs to be more bulletproof than commercial but it aint'. You would probably be all right with the 100 watt kit for quick tune-ups unless the fine print says 100w for 10 seconds. It isn't the 200w pep to worry about, it's the 160 w CW and FM and how long you lean on it. Five seconds on and off three times should be all you need to get it tuned or get a reading.

I have an old Bird Termaline, oil filled, rated for 20 watts that I have used for years on barefoot rigs. I would never go smaller than that because the heat may rise too fast and burn the oil and anneal the contacts of the load resistor. I have used a big 500 watt Bird for continuous burn-in (weeks) of 100 watt FM repeaters and Base transmitters though. It is all about duty cycle and whether the heat can me moved out fast enough to prevent damage to the resistors and contacts.

Dry dummy loads are a different story. Don't put more than double the rating even for brief periods unless they are well heat sinked..

1320. techical blog from teh kosher ham

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 19:34:27 UTC
From: an old friend <kb9rqz@yahoo.net>
Message-ID: <g8kfvvvuv2@news.albasani.net>
Source record: 23294
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.swap,alt.ham-radio.vhf-uhf

techical note from the kosher ham sorry folks
I owe you all an extra tip for Feb I promise

http://techkb9rqz.blogspot.com/

i indeed moronatate it so ASBOLUTELY noting OT will be alowed

1321. Re: techical blog from teh kosher ham

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 19:39:21 UTC
From: an old friend <kb9rqz@yahoo.net>
Message-ID: <g8kg96ld1@news.albasani.net>
Source record: 23295
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.swap,alt.ham-radio.vhf-uhf

"an old friend" <kb9rqz@yahoo.net> wrote in message
news:g8kfvvvuv2@news.albasani.net...
> techical note from the kosher ham sorry folks
> I owe you all an extra tip for Feb I promise
>
> http://techkb9rqz.blogspot.com/
>
> i indeed moronatate it so ASBOLUTELY noting OT will be alowed
>
>
>
amlost forget two add you too can be part of the work of the kosher ham mail
your article to this address and perhaps you seeyour name for all time (or
at least as long as blogger lasts

1322. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 19:44:08 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8kgi8$uu4$1@f04n12.cac.psu.edu>
Source record: 23296

Richard Clark wrote:
> On Thu, 21 Aug 2008 14:33:38 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> Michael Coslo wrote:
>>
>>> WEll yes. It's highly likey you're pushing it along in that
>>> direction quite vigoously.
>>
>> sigh..... "vigorously too!
>
> and highly likey.... (I wasn't going to go here until you posted
> this. Actually, I LIKED vigoously.)

Well, I didn't want to unjustly accuse you of being to vigoose! ;^)

- 73 de Mike N3LI -

1323. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 19:51:45 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8kh0h$uu6$1@f04n12.cac.psu.edu>
Source record: 23297

John Smith wrote:
> Michael Coslo wrote:
>
>> [stuff] ...
>> - 73 de Mike N3LI -
>>
>>
>
> Michael:
>
> Sometimes when I run into personalities which are "all about themselves"
> and attempt to serve as an "oracle of truth(s)", I seek out minds and
> those minds products who "I really DO respect."
>
> Here is a page:
>
> http://rescomp.stanford.edu/~cheshire/EinsteinQuotes.html
>
> Which will take you to quotes from such a man I DO respect. Looking
> them over, and then richards' posts, just seems to put things in proper
> perspective, for me--perhaps you can find the same?

Well, I certainly do respect old Albert.

I was reading through this and enjoying it. Then I came upon this line:

"I know not with what weapons World War III will be fought, but World
War IV will be fought with sticks and stones."

Whoa.

Then again, I don't get too mad at Richard. He's got quite a command of
the language, and can be a bit acerbic. But he keeps me on my toes. More
like I'm running to keep up.

- 73 de Mike N3LI -

1324. zzzz

1325. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 20:15:57 UTC
From: JB <nospam@goofball.net>
Message-ID: <12krk.368$482.96@trnddc06>
Source record: 23299

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:g8jqah$1duu$1@f04n12.cac.psu.edu...
> JB wrote:
>
> > After reading 1/4 of the "Biological studies..." it is interesting. But
we
> > need to remember that experiments only become valid when repeated
numerous
> > times. As these are only summaries, they are hard to compare and we
loose
> > that without having the full experiment laid out before us. I have
tended
> > to throw away those that didn't describe the frequency and field
strength in
> > some way as less than anecdotal.
>
>
> I'm still not convinced that use of tobacco products are bad for you,
> and I've got scientific evidence from tobacco industry lawyers to back
> me up. ;^) No relation to this issue except there are people who stand
> to profit by both being harmless.
>
>
> There is always the question of how many studies it takes to make
> something "real". I always like to mention the book from the 1870's that
> mentions how smoking causes lung cancer; chewing causes oral cancer. But
> it wasn't until almost a hundred years later that it really did, because
> it took that long to be "proven".
>
> All we can do is make an informed guess, and stick with it. I choose to
> limit my cell phone use.
>
> - 73 de Mike N3LI -

One way to tell is by looking around you to see how those around you are
being affected. Perhaps the MEDIA causes the most brain damage on the
planet by spreading madness on grand scales. I can point to a whole lot of
people who WERE harmed in so many ways by Tobacco products. I can only
point to ONE who has been harmed by RF. The guy leaned up against an
inverted V and grabbed on to it. Probably 5kw and it killed a line in his
palm. It did completely heal though. Still I wouldn't consider a ban on
either, as long as the user can keep it from costing or endangering me.
Don't forget there is a political agenda to do away with a lot of things.
The RF hazard thing is based on a minor risk blown out of proportion by

those whose million dollar views were spoiled by transmitter sites. If it weren't for well funded environmental lobbyists, the FCC wouldn't have been pressured into cutting exposure limits to half from what was learned by military studies in the 40's to the 60's and established in the 70's and cut to half of that in the 80's and finally made into law for hams and cut in half again for nervous people who still can't point to anything more concrete than the old military studies. Those same people had oil production cut in this country so that now you have to pay $4 a gallon. Who profits isn't always the point. Some people have to be vindicated even if it comes all out of someone else's pocket.

BTW I don't even own a cell phone. I have had them but they are too much of a distraction.

1326. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 20:20:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8kiml$34u$1@news.albasani.net>
Source record: 23300

Michael Coslo wrote:

> ...
> Then again, I don't get too mad at Richard. He's got quite a command of
> the language, and can be a bit acerbic. But he keeps me on my toes. More
> like I'm running to keep up.
>
> - 73 de Mike N3LI -

Mad? Hmm, never got much from it ... but, been there, done that; likely
to repeat the same mistake(s.) :-(

However, "spiking the debate/discussion" in not below my reach. ;-)

It takes a whole bunch of different types to make things interesting ...

Warm regards,
JS

1327. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 20:26:26 UTC
From: JB <nospam@goofball.net>
Message-ID: <Sbkrk.369$482.2@trnddc06>
Source record: 23201

> I don't think the nicotine in a cigarette is going to "calm richards'
> condition."
>
> Perhaps some Thorazine would help, but that is only by prescription ...
> "getting laid" has always helped me ... <GRIN>
>
> Regards,
> JS

I should think there would be health risks from "getting laid" face down in
the mud.

1328. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 20:26:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8kj2a$3rp$1@news.albasani.net>
Source record: 23202

JB wrote:

> ... The guy leaned up against an
> inverted V and grabbed on to it. Probably 5kw and it killed a line in his
> palm. It did completely heal though. ...
> ...
> BTW I don't even own a cell phone. I have had them but they are too much
> of a distraction.
>
>

I developed a liking to high power at an early age ... also, brought my fingers within too close a distance to a plate cap of large transmitting tube at this time ... all it took was one hole completely though my finger to gain a HIGH appreciation for caution around high power RF ...

I would like to tell you this single lesson was enough for me -- it wasn't ... still, I eventually learned.

Now you know two stupid guys. ;-)

Regards,
JS

1329. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 20:29:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8kj7g$3rp$2@news.albasani.net>
Source record: 23203

JB wrote:

> ...
> I should think there would be health risks from "getting laid" face down in
> the mud.
>
>

Yeah, there is ... but, being 6'2" and having an uncle who was an
ex-amateur boxer made my risks fairly low ... :-) Now I am 55, I worry
more about it ... :-(

Regards,
JS

1330. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 22:46:36 UTC
From: JB <nospam@goofball.net>
Message-ID: <gfmrk.476$lf2.298@trnddc07>
Source record: 23204

> > >And even the very first time I approached him, I mentioned that I knew
> > >he was broadcasting illegally,
>
> Bad way to get on someones good side. Usually considered fightin' words.

/Really?

/You have no idea about how the conversation transpired.

Truly... I see you weren't interested in anything else I said. Perhaps
the conversation was worse than I imagined.

1331. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 23:25:21 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <QKmrk.13903$XB4.2693@bignews9.bellsouth.net>
Source record: 23205

"Joe" <joe@telnet.com> wrote in message
news:bMudndocJYIwxzHVnZ2dnUVZ_hednZ2d@comcast.com...
> Have any of you ever used a gas powered lawn edger to bury a cable/s? I
> was thinking of trying this. I wonder if I set the edger blade at about 2
> " or so deep and took my time if it would work. I need to bury 3 cables
> from my Direct TV dish and a RG8 coax from my vertical to my house.
> Please post if you think this would work or have tried it.
> Thanks.
sounds like a good idea - might try using 2 blades if you can.
I have also heard of buying a new chain and bar for your chainsaw, then
using the OLD one to cut a path through the yard.
But whatever you do, do not even think of touching a shovel - that would be
un-ham-like. :-)

1332. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-21 23:35:15 UTC
From: Dave Holford <holford@cogeco.ca>
Message-ID: <TYmrk.6051$in.750@read1.cgocable.net>
Source record: 23206

"Mike Coslo" <mcoslo@youknow.comcast.net> wrote in message
news:Xns9B004D2D1E2F1mcoslocomcastnet@216.196.97.136...
> "Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in
> news:eUGqk.34146$4p1.11213@en-nntp-09.dc1.easynews.com:
>
>> "Michael Coslo" <mjc5@psu.edu> wrote in message
>> news:g8f2jp$ur6$1@f04n12.cac.psu.edu...
>>> While the hand feeling could easily be attributed to the battery
>>> discharge warmth, the feeling around the ears is more difficult to
>>> ascribe to the batteries.
>>
>> Umm... many cell phones get noticeably warm over time due to internal
>> power dissipation. (In fact, the amount of heat generated by the
>> battery is negligible compared to the heat generator by, e.g., the RF
>> power amplifiers, the digital circuitry, etc.)
>
> Strange, I could have said just that!. Oh wait, I did. Look, it is easy
> for a person's hand to get warm and attribute it to battery warmth. I
> trust you are not ascribing the same for an area that the phone isn't
> touching? That is easy to check for, as the hand would be heated by
> conduction, and the area around the ear that isn't being touched would be
> radiative heat. Other wise there would be a significant thermal gradient.
>
>
>
>> How many studies have been done looking for beneficial health outcomes
>> from the use of cell phones?
>
> Probably none. The reason why is that the studies are looking for effect
> in general, not positive or negative ones. To look for a specific
> positive or negative from the start is more in line with creation
> science.
>
>> Like wine and alcohol in moderation are
>> now considered to be!
>
> It is easy to find out the effects of alcohol. Lots of studies. And they
> found out a lot of things they didn't expect, such as keeping the blood
> vessels clean, and other more obvious things such as stress
> relief/relaxation in moderation.
>
> I'm certain that if some positive result is found, we'll hear about it.
>
> - 73 de Mike N3LI -

When "it" gets hot pop the battery off - now, which is hot the battery or the phone?

Dave

1333. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 02:29:38 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B027F0FC3C5Enonenowhere@61.9.191.5>
Source record: 23207

"Hal Rosser" <hmrosser@bellsouth.net> wrote in
news:QKmrk.13903$XB4.2693@bignews9.bellsouth.net:

> I have also heard of buying a new chain and bar for your chainsaw,
> then using the OLD one to cut a path through the yard.

In this part of the world, you can rent a Ditch-Witch or Trench-Wench which use a similar concept, but the chain carries cutters designed for earth and rocks rather than one designed for wet timber.

Ditch-Witchs and Trench-Wenchs aren't very good for cutting trees, nor are chainsaws very good for digging trenches.

You don't have to invent a new tool for this application, plumbers and electricians have been inserting narrow conduits / pipes in earth trenches for decades using these types of machines.

An alternative to renting a machine may be to find a plumber who specialiese in in-ground sprinkler systems... and get a quote for him to dig your trenches.

Owen

1334. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 06:23:51 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <1Ysrk.4372$x62.1952@fe091.usenetserver.com>
Source record: 23208

Michael Coslo wrote:
> Dave Heil wrote:
>> Michael Coslo wrote:
>>
>>> Yeah, and trees make CO2 so they are responsible for global warming. ;^)
>>
>> They do? All this time I was certain that trees produced oxygen.
>
>
> We're both right, Dave. Trees produce CO2 or O2 depending on the
> time of day. I can smell the changeover as it is getting dark and the
> trees shift.

My trees only shift in a heavy wind, Mike. Now I have this video stuck
in my head of you sniffing the output of trees at twilight. ;-)

Dave K8MN

1335. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 13:19:46 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8medhupk1@f04n12.cac.psu.edu>
Source record: 23209

JB wrote:
> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:g8jqah$1duu$1@f04n12.cac.psu.edu...
>> JB wrote:
>>
>>> After reading 1/4 of the "Biological studies..." it is interesting. But
> we
>>> need to remember that experiments only become valid when repeated
> numerous
>>> times. As these are only summaries, they are hard to compare and we
> loose
>>> that without having the full experiment laid out before us. I have
> tended
>>> to throw away those that didn't describe the frequency and field
> strength in
>>> some way as less than anecdotal.
>>
>> I'm still not convinced that use of tobacco products are bad for you,
>> and I've got scientific evidence from tobacco industry lawyers to back
>> me up. ;^) No relation to this issue except there are people who stand
>> to profit by both being harmless.
>>
>>
>> There is always the question of how many studies it takes to make
>> something "real". I always like to mention the book from the 1870's that
>> mentions how smoking causes lung cancer; chewing causes oral cancer. But
>> it wasn't until almost a hundred years later that it really did, because
>> it took that long to be "proven".
>>
>> All we can do is make an informed guess, and stick with it. I choose to
>> limit my cell phone use.
>>
>> - 73 de Mike N3LI -
>
> One way to tell is by looking around you to see how those around you are
> being affected. Perhaps the MEDIA causes the most brain damage on the
> planet by spreading madness on grand scales.

I'vve always thought we get the media we deserve.....

> I can point to a whole lot of
> people who WERE harmed in so many ways by Tobacco products. I can only
> point to ONE who has been harmed by RF. The guy leaned up against an
> inverted V and grabbed on to it. Probably 5kw and it killed a line in his
> palm. It did completely heal though.

Ouch! I was hit once with about 50 watts. One of my first antennas was
a random wire, and RF was coupled to the metal ring around the tuning
cap on my matchbox. Hurt something awful, put a hole in my finger, and
there was even a little smoke. That guy must have really hurt.

Who was it here that told about birds landing on ladder line and
getting zapped. leaving only their feet wrapped around the line?

> Still I wouldn't consider a ban on
> either, as long as the user can keep it from costing or endangering me.
> Don't forget there is a political agenda to do away with a lot of things.
> The RF hazard thing is based on a minor risk blown out of proportion by
> those whose million dollar views were spoiled by transmitter sites.

Well, that is one of the reasons. We sometimes tend to focus pretty
narrowly. That some of these folk don't like much of anything is pretty
spot on. But we shouldn't carry that over as blanket condemnation. Its
like blaming the little old lady sitting at home drinking her sherry
with binge drinking college students.

> If it
> weren't for well funded environmental lobbyists,
> the FCC wouldn't have been
> pressured into cutting exposure limits to half from what was learned by
> military studies in the 40's to the 60's and established in the 70's and cut
> to half of that in the 80's and finally made into law for hams and cut in
> half again for nervous people who still can't point to anything more
> concrete than the old military studies.

There have been lots of studies since then.

> Those same people had oil
> production cut in this country so that now you have to pay $4 a gallon.

The supply/demand effects of our oil production via offshore, or unused
interior drilling, are not responsible for the prices we are paying now.
There is a combination of massive demand by the developing countries,
large demand by ourselves, and rampant speculation.

There is also the issue of we really only have so much oil. And we've
used most of it (unless you ascribe to the abiotic oil theory)

Don't discount the possibility of sitting on reserves. In our area,
there were gas and oil wells drilled between 25 years ago, and the
present. Most of them sat, some to the point of needing new caps put on
the wells because the old ones got rusty. But there are many hundreds,
perhaps thousands of wells there. As we speak, there are new pipelines
being put in to bring the stuff to market. Simply when the price became
right, the supply was "uncorked". And it looks like there is a lot of
it. More gas than oil, but still significant.

Not a liberal or a tree hugger in the mix. Just good old supply and demand.

You want to point fingers? There has been a bubble of shady speculation
running through the business world. A few years back, it was the Dot.com

bubble. then it was the criminally innovative accounting practices that burst Enron and World.com into the news. Then it was the real estate issue, with loans so bad that some of these people were folding back their interest payments into their principal. That is insanity. How on earth could such a thing be allowed or legal? But the people originating the loans had not reason not to. They got their commission, and the loan was immediately sold to some other institution, who would then play a game of "hot potato", whoever was holding the mortgage when it defaulted was the loser. Interesting that the gasoline prices went haywire so soon after the real estate markets collapsed. These folk (a very loose aggregation, but certainly a trend) just moved from one form of speculation to another.

Speculation is and should be a good thing, allowing money to be put into risky and unproven fields. But it can be taken too far. See the above.

> BTW I don't even own a cell phone. I have had them but they are too much
> of a distraction.

I'd rather not, but I have to.. 8^(

- 73 de Mike N3LI -

1336. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 13:21:14 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8meg9upk2@f04n12.cac.psu.edu>
Source record: 23210

Dave Heil wrote:

> Michael Coslo wrote:

> My trees only shift in a heavy wind, Mike. Now I have this video stuck
> in my head of you sniffing the output of trees at twilight. ;-)

The XYL says I look kinda like a dog, sniffing at the air. Probably is
a litle disturbing to watch! ;^)

- 73 de Mike N3LI -

1337. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 14:38:09 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8mj0g$vo8$1@f04n12.cac.psu.edu>
Source record: 23211

Owen Duffy wrote:
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in
> news:QKmrk.13903$XB4.2693@bignews9.bellsouth.net:
>
>> I have also heard of buying a new chain and bar for your chainsaw,
>> then using the OLD one to cut a path through the yard.
>
> In this part of the world, you can rent a Ditch-Witch or Trench-Wench which
> use a similar concept, but the chain carries cutters designed for earth and
> rocks rather than one designed for wet timber.
>
> Ditch-Witchs and Trench-Wenchs aren't very good for cutting trees, nor are
> chainsaws very good for digging trenches.

Perhaps. But I use a chainsaw none the less. I've got a cheap electric
one just for the purpose.

> You don't have to invent a new tool for this application, plumbers and
> electricians have been inserting narrow conduits / pipes in earth trenches
> for decades using these types of machines.

Ah, but that rental cost is something. I'd be looking at hundreds of
dollars each time I do it. Thousands if I hire someone.

That 40 dollars I spent for the electric chansaw is cheap by comparison.
And very very quick. Yeah, it ruins the chainsaw blade and bar. At 40
dollars, I consider the whole thing disposable. I could buy a lot of
them for the price of renting the trencher.

I should make the standard disclaimer here. I'm not suggesting that
anyone use this method, In fact, don't try this at home kids. Anything
sharp can be dangerous, so leave everything you do to the professionals.
(that was a disclaimer, not a jab at your sugesstions, Owen)

> An alternative to renting a machine may be to find a plumber who
> specialiese in in-ground sprinkler systems... and get a quote for him to
> dig your trenches.

I've always had the problem of wanting to do so many things, yet my
resources are a little limited. So I get a little creative at times.

- 73 de Mike N3LI -

1338. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 16:06:31 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g8mo67ecv1@news.jpl.nasa.gov>
Source record: 23212

Owen Duffy wrote:
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in
> news:QKmrk.13903$XB4.2693@bignews9.bellsouth.net:
>
>> I have also heard of buying a new chain and bar for your chainsaw,
>> then using the OLD one to cut a path through the yard.
>
> In this part of the world, you can rent a Ditch-Witch or Trench-Wench which
> use a similar concept, but the chain carries cutters designed for earth and
> rocks rather than one designed for wet timber.
>
> Ditch-Witchs and Trench-Wenchs aren't very good for cutting trees, nor are
> chainsaws very good for digging trenches.

On the other hand, there's a big difference between a "slit into which a cable/small conduit can be stuffed" and a 4" wide trench with a ridge of dirt along side.

Mind you, I am a HUGE fan of the gas powered trencher, but it's a pretty invasive approach.

You also have to really contemplate "shovel and back" vs trencher. I had a 100 ft or so gas line installed a year ago, and the plumber just got the shovel out and trenched it by hand in a couple of hours. That's comparable to the time I spent going down to the rental yard, getting the trencher, bringing it home, unloading it off the trailer, spending 30 minutes trenching for the irrigation lines, then returning it.

And I'm not sure my back was any better off than the plumber's at the end of the day.

Granted, the trencher is nice in dense, rock filled clay, where a "digging bar" is part of the required tool complement. The plumber had the advantage of digging where I had previously dug some years before.
>
> You don't have to invent a new tool for this application, plumbers and
> electricians have been inserting narrow conduits / pipes in earth trenches
> for decades using these types of machines.
>
There's also a sort of walk behind motorized plow for doing this sort of thing. I saw one at the rental yard a few years ago. It has a sturdy steel blade that has a sort of overall V shape, and fairly large tires driven by a geared down gasoline motor and a bunch of ballast. I think the advantage of this is that you can drive it across a lawn to lay a cable or pipe and not have to do a bunch of resodding after you are done.

In any case, as the poster comments, this is a pretty standard overall
task, and there's lots of ways to do it.

> An alternative to renting a machine may be to find a plumber who
> specialiese in in-ground sprinkler systems... and get a quote for him to
> dig your trenches.
>
> Owen

1339. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 16:14:15 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g8mokn$j2o$1@news.jpl.nasa.gov>
Source record: 23213

Michael Coslo wrote:
> Owen Duffy wrote:
>
> Ah, but that rental cost is something. I'd be looking at hundreds of
> dollars each time I do it. Thousands if I hire someone.
>
> That 40 dollars I spent for the electric chansaw is cheap by comparison.
> And very very quick. Yeah, it ruins the chainsaw blade and bar. At 40
> dollars, I consider the whole thing disposable. I could buy a lot of
> them for the price of renting the trencher.
>

The small trenchers rent for $35/hr in my area (4" wide x 24" deep).
There's a 2 hour minimum. You can dig a LOT of trenches in really hard
soil with lots of rocks in 2 hours. I also found out you could have
them deliver the thing and pick it up for $80 (which is a lot of money
if you happen to have a vehicle that can tow a small trailer, but if all
you have is a compact car, it's a lot cheaper than renting a truck)

In any case, not hundreds of dollars.

1340. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 16:28:19 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g8mpf3qur1@news.jpl.nasa.gov>
Source record: 23214

Michael Coslo wrote:
> JB wrote:

>> If it
>> weren't for well funded environmental lobbyists,
>> the FCC wouldn't have been
>> pressured into cutting exposure limits to half from what was learned by
>> military studies in the 40's to the 60's and established in the 70's
>> and cut
>> to half of that in the 80's and finally made into law for hams and cut in
>> half again for nervous people who still can't point to anything more
>> concrete than the old military studies.
>
> There have been lots of studies since then.
>

I would suggest taking a look at the latest IEEE/ANSI standard for exposure. The actual limits in the standard only take a few pages. The other 100 pages is the critical analysis of the hundreds of studies with respect to every effect one can imagine, and then some.

As Michael points out, there's been a LOT of studies in the last few years (driving, for instance, a change from field strength limits to SAR limits in some cases)

What the standard and accompanying analysis makes very clear, though, is that there is no way to "prove a negative": i.e. there is no way to "prove" that a particular EM field exposure doesn't have any long term effects. All you can do is say that there is no known mechanism by which such an effect can be produced, or that if it does exist, there's no way to measure it in a statistically significant way, or, in some cases, that greater exposures have been shown experimentally to have no moderate term effects (e.g. nobody's done a longitudinal study lasting 30-40 years that's been controlled for other confounding effects).

What you CAN say is that the studies prompting the early alarmist literature (e.g. "currents of death", "VDTs cause miscarriage") have severe methodological or statistical problems. Unfortunately, those early studies have been (poorly) abstracted and summarized many times and the caveats in the original paper, or subsequent better studies, are ignored.

Particularly in non-technical trade literature (e.g. trade magazines aimed at, for example, small business owners), the author of an article writing about minimizing hazards in the workplace might not actually know very much about the details of the hazards, nor do a whole lot of

research beyond what's in Wikipedia or copied from some other trade magazine. They certainly don't go back to the original source, nor do they look at current standards, etc. I still run across articles that (indirectly) cite the famous (and totally misinterpreted) Kaiser VDT study from 1981/1982, published in 1988. While that study found a correlation, one has to remember correlation is not causation. Someone googling VDT and miscarriage will no doubt turn up articles in the NY Times from 1988, for instance, but not pay attention to the fact that the article is 20 years old, because, on the web, the date is tiny print and grey.

1341. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 18:11:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <b7udnSN2LIjMnDLVnZ2dnUVZ_tXinZ2d@posted.easystreetonline>
Source record: 23215

Jim Lux wrote:
> . . .
> You also have to really contemplate "shovel and back" vs trencher. I
> had a 100 ft or so gas line installed a year ago, and the plumber just
> got the shovel out and trenched it by hand in a couple of hours. That's
> comparable to the time I spent going down to the rental yard, getting
> the trencher, bringing it home, unloading it off the trailer, spending
> 30 minutes trenching for the irrigation lines, then returning it.
>
> And I'm not sure my back was any better off than the plumber's at the
> end of the day.
> . . .

I have a hand tool that's considerably better than a shovel for cutting a narrow slot. I think it's intended to be a manual edger. It's on a handle like a shovel but the blade is flat, semi-circular, and sharpened. You can push it into the ground by stepping on it, then you can rock it to widen the slit it cuts. I wouldn't try using it here in the summer when the ground is basically adobe, but it's reasonable in the winter when the ground is wet and soft. I don't think it would make a slot deep and wide enough for conduit, but you could probably use one to get bare coax under the sod and mower.

Roy Lewallen, W7EL

1342. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 19:48:45 UTC
From: Joe <joe@telnet.com>
Message-ID: <tY2dndsk09SzhTLVnZ2dnUVZ_qXinZ2d@comcast.com>
Source record: 23216

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:b7udnSN2LIjMnDLVnZ2dnUVZ_tXinZ2d@posted.easystreetonline...
> Jim Lux wrote:
>> . . .
>> You also have to really contemplate "shovel and back" vs trencher. I had
>> a 100 ft or so gas line installed a year ago, and the plumber just got
>> the shovel out and trenched it by hand in a couple of hours. That's
>> comparable to the time I spent going down to the rental yard, getting the
>> trencher, bringing it home, unloading it off the trailer, spending 30
>> minutes trenching for the irrigation lines, then returning it.
>>
>> And I'm not sure my back was any better off than the plumber's at the end
>> of the day.
>> . . .
>
> I have a hand tool that's considerably better than a shovel for cutting a
> narrow slot. I think it's intended to be a manual edger. It's on a handle
> like a shovel but the blade is flat, semi-circular, and sharpened. You can
> push it into the ground by stepping on it, then you can rock it to widen
> the slit it cuts. I wouldn't try using it here in the summer when the
> ground is basically adobe, but it's reasonable in the winter when the
> ground is wet and soft. I don't think it would make a slot deep and wide
> enough for conduit, but you could probably use one to get bare coax under
> the sod and mower.
>
> Roy Lewallen, W7EL

I am the original poster. I just got done using my gas powered lawn edger and it worked fine. I had to cut 2 slits for my Direct TV cables. 1 was for High Dev cables and the other for the digital cables. I couldn't get them in one slit. My 2 cuts were about 35 feet long.and about 2 inches or so deep. We had a full day of rain here in Illinois so it may the cutting easy. After I got them in the slits I took a 3/4" board and gently tapped the cables down in the ground. I hope that freeze this winter doesn't heave them up. Thanks for your comments.

1343. Re: Ham or CB Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 21:15:39 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <061b2915-56bd-44d1-b5b8-cd0713b46c0c@c65g2000hsa.googlegroups.com>
Source record: 23217

On Aug 21, 10:42 am, Michael Coslo <m...@psu.edu> wrote:

>
> But your attitude here in the group, where people are actually trying to
> help you, indicates that you might be just as worried about "being
> right" as you are about having the problem fixed. People try to give
> good advice, and you get p***d off at them. Have fun!

I said TWICE now, that I'm getting the filters.

1344. E-Field between 2 parallel wires

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 21:49:37 UTC
From: Jon Mcleod <jonmcleod2003@yahoo.com>
Message-ID: <ts6dnUFWc5HjrjLVnZ2dnUVZ_qPinZ2d@earthlink.com>
Source record: 23218

MAYBE NOT EXACTLY THE RIGHT GROUP, but..

If I tape 2 insulated, parallel wires to the wall, x cm apart, and then drive a sinewave into them (Vo p-p), how can I calculate the field strength between the 2 wires?

For instance, 120KHz, 100V, 5cm apart, what is the field in V/cm between the two wires?

Any references or information on how to calculate this would be greatly appreciated.

1345. Re: E-Field between 2 parallel wires

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 22:23:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <Ut2dnU4DQN7OoTLVnZ2dnUVZ_hWdnZ2d@posted.easystreetonline>
Source record: 23219

Jon Mcleod wrote:
> MAYBE NOT EXACTLY THE RIGHT GROUP, but..
>
> If I tape 2 insulated, parallel wires to the wall, x cm apart, and then
> drive a sinewave into them (Vo p-p), how can I calculate the field
> strength between the 2 wires?
>
> For instance, 120KHz, 100V, 5cm apart, what is the field in V/cm between
> the two wires?
>
> Any references or information on how to calculate this would be greatly
> appreciated.

Is the sine wave applied and the load, if any, connected such that the currents in the two wires are equal and opposite? If so, the problem becomes exactly the same as a single wire suspended above and parallel to an infinite perfect ground plane. In the plane exactly midway between the wires -- the position represented by the perfect ground plane in the simplified model -- the field is zero, since the fields from the two wires are equal and opposite in that plane. If the currents aren't equal and opposite, the problem becomes considerably more complex.

By "between the wires", do you mean in the plane of the wires, or some larger region?

Are you looking for a closed-form solution, or would a numerical analysis result be adequate?

If this is a homework assignment, the professor assigning it should be able to steer you to some suitable references.

Roy Lewallen, W7EL

1346. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-22 22:32:59 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B0356F011425nonenowhere@61.9.191.5>
Source record: 23220

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
news:g8mo67ecv1@news.jpl.nasa.gov:

> On the other hand, there's a big difference between a "slit into which
> a cable/small conduit can be stuffed" and a 4" wide trench with a
> ridge of dirt along side.
>

Models are available here which cut a trench about 2" wide, and to a depth of about 18" max, and pile the fine spoil neatly clear of the trench (rather than in the operator's boot etc).

I have used them on electrical contracting jobs, and they work a treat. They will cut through small tree roots, deal with small rocks, and are easy to backfill neatly.

Owen

1347. Re: E-Field between 2 parallel wires

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 00:51:07 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <be32c5f6-be88-45ec-a6c7-7d1ef0797129@a3g2000prm.googlegroups.com>
Source record: 23221

On Aug 22, 3:23 pm, Roy Lewallen <w...@eznec.com> wrote:
> Jon Mcleod wrote:
> > MAYBE NOT EXACTLY THE RIGHT GROUP, but..
>
> > If I tape 2 insulated, parallel wires to the wall, x cm apart, and then
> > drive a sinewave into them (Vo p-p), how can I calculate the field
> > strength between the 2 wires?
>
> > For instance, 120KHz, 100V, 5cm apart, what is the field in V/cm between
> > the two wires?
>
> > Any references or information on how to calculate this would be greatly
> > appreciated.
>
> Is the sine wave applied and the load, if any, connected such that the
> currents in the two wires are equal and opposite? If so, the problem
> becomes exactly the same as a single wire suspended above and parallel
> to an infinite perfect ground plane. In the plane exactly midway between
> the wires -- the position represented by the perfect ground plane in the
> simplified model -- the field is zero, since the fields from the two
> wires are equal and opposite in that plane. If the currents aren't equal
> and opposite, the problem becomes considerably more complex.
>
> By "between the wires", do you mean in the plane of the wires, or some
> larger region?
>
> Are you looking for a closed-form solution, or would a numerical
> analysis result be adequate?
>
> If this is a homework assignment, the professor assigning it should be
> able to steer you to some suitable references.
>
> Roy Lewallen, W7EL

Hmmm...I don't think that's quite right, Roy. I expect the E field
between the wires, in the plane of the wires, to be parallel to the
plane, perpendicular to the wires, if there is a potential between the
wires and they are straight and parallel. For a wire above ground,
the E field must be perpendicular to the ground at the ground (assumed
perfect), but it's not zero in general.

Cheers,
Tom

1348. Re: Example of the real problem ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 01:27:21 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B02DAF61E143mcoslocomcastnet@216.196.97.136>
Source record: 23222

"Ed Cregger" <ecregger@bellsouff.net> wrote in
news:g8e8t1pt1@aioe.org:

Since yo mentioned this.....
> Think of all of the 911 calls that have saved folks' lives over the
> years that the cellphone has been available to the public.

> Risk versus benefit must be taken into consideration too.

Major truth disguised as sarcasm alert!

The really cool thing is that the cell phone user can cause an accident.
kill someone, and call 911 to efficiently get an ambulance to take them
to the morgue! At least they weren't killed by a drunk driver....

Sarcasm alert off

http://unews.utah.edu/p/?r=062206-1

Relating cell phone use while driving to drunken driving.

The Harvard cell phone study.

http://www.youngmoney.com/technology/tech_trends/030205_02

Quick look:

2600 deaths per year/500,000 injuries.

Sorry Ed, I respectfully disgree 8^)

- 73 de Mike N3LI -

1349. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 01:45:04 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B02DDF722931mcoslocomcastnet@216.196.97.136>
Source record: 23223

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
news:g8mokn$j2o$1@news.jpl.nasa.gov:

> In any case, not hundreds of dollars.

Some times. Some rental stores want you to have it the whole day, or in my area, you have to have it back by noon Saturday when they close, or you get to rent it the whole weekend.

Regardless, it's still a lot more expensive.

- 73 de Mike N3LI -

1350. Re: Example of the real problem ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 01:55:25 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g8nqp8$2tc$1@registered.motzarella.org>
Source record: 23224

"Mike Coslo" <mcoslo@youknow.comcast.net> wrote in message
news:Xns9B02DAF61E143mcoslocomcastnet@216.196.97.136...
> "Ed Cregger" <ecregger@bellsouff.net> wrote in
> news:g8e8t1pt1@aioe.org:
>
> Since yo mentioned this.....
>> Think of all of the 911 calls that have saved folks' lives over the
>> years that the cellphone has been available to the public.
>
>> Risk versus benefit must be taken into consideration too.
>
> Major truth disguised as sarcasm alert!
>
> The really cool thing is that the cell phone user can cause an accident.
> kill someone, and call 911 to efficiently get an ambulance to take them
> to the morgue! At least they weren't killed by a drunk driver....
>
> Sarcasm alert off
>
> http://unews.utah.edu/p/?r=062206-1
>
> Relating cell phone use while driving to drunken driving.
>
> The Harvard cell phone study.
>
> http://www.youngmoney.com/technology/tech_trends/030205_02
>
> Quick look:
>
> 2600 deaths per year/500,000 injuries.
>
> Sorry Ed, I respectfully disgree 8^)
>
> - 73 de Mike N3LI -

In the end, none of what transpires in life truly matters anyway. I am a believer (God, I hate using that word - oops!) in non locality. As such, and believing that all that has ever happened, or ever will happen, is bundled up in one tight little ball of data, we have no free will anyway, thus, nothing is a matter of choice. It simply is and we're just those little football players on the magnetic football game of life. Enjoy what you can and ignore the rest.

Ed, NM2K

1351. Re: E-Field between 2 parallel wires

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 04:23:31 UTC
From: "H. Adam Stevens" <mayatwo@earthlink.net>
Message-ID: <eNedncbPhtoiDTLVnZ2dnUVZ_qjinZ2d@earthlink.com>
Source record: 23225

Any references or information on how to calculate this would be greatly
appreciated.

It's called Classical Electrodynamics.

http://www.amazon.com/gp/reader/047130932X/ref=sib_dp_pt#reader-link

"Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
news:ts6dnUFWc5HjrjLVnZ2dnUVZ_qPinZ2d@earthlink.com...
> MAYBE NOT EXACTLY THE RIGHT GROUP, but..
>
> If I tape 2 insulated, parallel wires to the wall, x cm apart, and then
> drive a sinewave into them (Vo p-p), how can I calculate the field
> strength between the 2 wires?
>
> For instance, 120KHz, 100V, 5cm apart, what is the field in V/cm between
> the two wires?
>
> Any references or information on how to calculate this would be greatly
> appreciated.

1352. ISOPOLE antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 04:26:33 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <9343d169-7dd1-4f07-a851-3076bebb289f@x41g2000hsb.googlegroups.com>
Source record: 23226

I used to have an AEA Isopole 2M antenna before Hurricane Hugo took it down. In tribute to this antenna I would like to build a 2.4 Ghz version for my wireless router. I have assembly instructions for the 2M version but I dont know how impedance matching for the 5/8 section was accomplished. Was it just a series coil? I may also try to roll my own 2M version of the antenna. I used to really enjoy when neigbors would ask what the heck that thing was.

Jimmie.

1353. Re: ISOPOLE antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 07:01:45 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <wBOrk.13074$ls1.9147@newsfe04.iad>
Source record: 23227

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:9343d169-7dd1-4f07-a851-3076bebb289f@x41g2000hsb.googlegroups.com...
> I used to have an AEA Isopole 2M antenna before Hurricane Hugo took it
> down. In tribute to this antenna I would like to build a 2.4 Ghz
> version for my wireless router. I have assembly instructions for the
> 2M version but I dont know how impedance matching for the 5/8 section
> was accomplished. Was it just a series coil? I may also try to roll my
> own 2M version of the antenna. I used to really enjoy when neigbors
> would ask what the heck that thing was.

I can help just a little. Some of the Isopoles are a DC short, meaning they
have a shunt coil, too. I say that from knowing my 220 Isopole.

1354. How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 15:58:19 UTC
From: "Dave Lemper"
Message-ID: <b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com>
Source record: 23228

The soil in central Texas is called Caliche with a lot of clay,
CaCO3 & shale. Attempting to drive in a ground rod
yielded only a mushroom on top & blisters on me.
Local tool rental place has concrete bits, but maximum
length of 18 inches. Possibly longer bits are available in
a larger city.

Renting a back hoe is out.
Any suggestions appreciated.
Dave WB3DWE pdlemper@earthlink.net

1355. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 16:29:03 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <jVWrk.521$482.438@trnddc06>
Source record: 23229

<Dave Lemper> wrote in message
news:b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com...
> The soil in central Texas is called Caliche with a lot of clay,
> CaCO3 & shale. Attempting to drive in a ground rod
> yielded only a mushroom on top & blisters on me.
> Local tool rental place has concrete bits, but maximum
> length of 18 inches. Possibly longer bits are available in
> a larger city.
>
> Renting a back hoe is out.
> Any suggestions appreciated.
> Dave WB3DWE pdlemper@earthlink.net
-
I lived for many years in the Dallas area. The caliche was down about 2 feet and was about a foot thick. I had to dig a hole with a shovel down to the caliche, then use a heavy hammer and long chisel to get through the caliche. Then, backfill and proceed as normal. Don't know what your configuration would be. Good luck.

1356. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 16:41:57 UTC
From: "Dave WB3DWE"
Message-ID: <k4f0b4hcg9c5rvrcvsnn7ek2l43jrer5ed@4ax.com>
Source record: 23230

On Sat, 23 Aug 2008 16:29:03 GMT, "Wayne" <mygarbagecan@verizon.net>
wrote:

>-
>I lived for many years in the Dallas area. The caliche was down about 2
>feet and was about a foot thick. I had to dig a hole with a shovel down to
>the caliche, then use a heavy hammer and long chisel to get through the
>caliche. Then, backfill and proceed as normal. Don't know what your
>configuration would be. Good luck.
>

Thanks Wayne.
As a last resort I will hack a trench with a pick and lay in the rod
at a shallow angle to the surface. Would this give an adequate
ground ? I could also bond it to an outdoor brass spigot
10 yards away or even to an anchor fence in the other direction.
Dave WB3DWE

1357. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 16:50:41 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <BdXrk.527$482.222@trnddc06>
Source record: 23231

<Dave WB3DWE> wrote in message
news:k4f0b4hcg9c5rvrcvsnn7ek2l43jrer5ed@4ax.com...
> On Sat, 23 Aug 2008 16:29:03 GMT, "Wayne" <mygarbagecan@verizon.net>
> wrote:
>
>>-
>>I lived for many years in the Dallas area. The caliche was down about 2
>>feet and was about a foot thick. I had to dig a hole with a shovel down
>>to
>>the caliche, then use a heavy hammer and long chisel to get through the
>>caliche. Then, backfill and proceed as normal. Don't know what your
>>configuration would be. Good luck.
>>
>
> Thanks Wayne.
> As a last resort I will hack a trench with a pick and lay in the rod
> at a shallow angle to the surface. Would this give an adequate
> ground ? I could also bond it to an outdoor brass spigot
> 10 yards away or even to an anchor fence in the other direction.
> Dave WB3DWE
-
In my opinion the trench would be ok, but I'll leave that to the experts on
the group.

However, I remember chiseling through the caliche to be annoying, but not
that difficult with the right tools. It can be done with a "shooter" style
shovel, but that is a bit more effort. However, I doubt if you would ever
get a copper rod driven through without some major damage to the rod.

1358. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 17:02:15 UTC
From: "Jim, K7JEB" <k7jeb_2@yahoo.com>
Message-ID: <EoXrk.7103$Ks1.2449@newsfe02.iad>
Source record: 23232

Dave Lemper wrote:
> The soil in central Texas is called Caliche with a lot of clay,
> CaCO3 & shale. Attempting to drive in a ground rod
> yielded only a mushroom on top & blisters on me.
[...]
> Any suggestions appreciated.
> Dave WB3DWE

I'm having thoughts of steel pipes filled with
muriatic (swimming-pool) acid eating through
the caliche chemically. Usual acid-handling
precautions would definitely apply.

Jim, K7JEB

1359. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 18:24:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c7l0b4tbesl6c005rq0qj2hd05fji36d3q@4ax.com>
Source record: 23233

On Sat, 23 Aug 2008 10:58:19 -0500, Dave Lemper wrote:

>The soil in central Texas is called Caliche with a lot of clay,
>CaCO3 & shale. Attempting to drive in a ground rod
>yielded only a mushroom on top & blisters on me.
>Local tool rental place has concrete bits, but maximum
>length of 18 inches. Possibly longer bits are available in
>a larger city.
>
>Renting a back hoe is out.
>Any suggestions appreciated.
>Dave WB3DWE pdlemper@earthlink.net

Seems like it was only yesterday, but it is, in fact closer to a year:

>"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in
>news:pan.2007.08.04.19.30.44.587275@from.qrz.com:
>
>> On Sat, 04 Aug 2007 11:27:33 -0700, Chuck Olson wrote:
>>
>>> is there any chance you might know what brand and model number of
>hammer
>>> drill you used?
>>
>> Yup, it's the Hilti TE-76-ATC.
>>
>> Nobody I ever heard of... but it sure works nice.
>>
>
>Rick,
>
>I see on Hilti's web site he TE-76-ATC, and its accessories include a TE-
>Y driving shank and a series of adapters TP-TKS ground rod driving
>adapters for different diameters.
>
>Hilti BTW are suppliers of expensive quality tools to the construction
>industry, you probably won't find their tools in home handyman stores.
>
>The tool you rented is a little lighter than the one I used, and that is
>probably why driving times were a little longer. My Hitach PH-65 machine
>with home made driving adapter will drive a 16mm diameter 2.4m earth rod
>into dry clay in less than a minute.
>
>Pleased it worked for you. It is the way to go, isn't it!
>

>The numbers above might help people looking to rent a device.
>
>Owen

Search Google Groups using advanced search features to include Owen as the author, and the time period of several weeks before and after the posting above on the subject of:
"Hammer drills and ground rods, followup"
and
"Hammer drills and ground rods"

73's
Richard Clark, KB7QHC

1360. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 18:39:41 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-3CD3C8.14394123082008@nntp.aioe.org>
Source record: 23234

In article <b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com>, Dave Lemper wrote:

> The soil in central Texas is called Caliche with a lot of clay,
> CaCO3 & shale. Attempting to drive in a ground rod
> yielded only a mushroom on top & blisters on me.
> Local tool rental place has concrete bits, but maximum
> length of 18 inches. Possibly longer bits are available in
> a larger city.

Dave-

Last year there was a discussion here about sinking a ground rod using an "SDS Plus" Hammer Drill set to hammer-only. I think it was Ian White, GM3SEK, who proposed that method. There is also an article at <http://www.n4lcd.com/groundrod/> that proposes a slightly different method of coupling the hammer drill to the ground rod.

The question is whether Caliche can be penetrated by such a method. Has anyone tried it?

Another consideration is whether or not there is moisture in the soil below the Caliche. If not, then it might not provide a low-impedance ground even if you could penetrate it!

Fred
K4DII

1361. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 19:20:31 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <3qZrk.564$w51.326@trnddc01>
Source record: 23235

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-3CD3C8.14394123082008@nntp.aioe.org...
> In article <b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com>, Dave Lemper
> wrote:
>
>> The soil in central Texas is called Caliche with a lot of clay,
>> CaCO3 & shale. Attempting to drive in a ground rod
>> yielded only a mushroom on top & blisters on me.
>> Local tool rental place has concrete bits, but maximum
>> length of 18 inches. Possibly longer bits are available in
>> a larger city.
>
> Dave-
>
> Last year there was a discussion here about sinking a ground rod using
> an "SDS Plus" Hammer Drill set to hammer-only. I think it was Ian
> White, GM3SEK, who proposed that method. There is also an article at
> <http://www.n4lcd.com/groundrod/> that proposes a slightly different
> method of coupling the hammer drill to the ground rod.
>
> The question is whether Caliche can be penetrated by such a method. Has
> anyone tried it?
>
> Another consideration is whether or not there is moisture in the soil
> below the Caliche. If not, then it might not provide a low-impedance
> ground even if you could penetrate it!
>
> Fred
> K4DII
-
If you don't have all the tools described above for an elegant way to drive
a ground rod, it isn't that bad by hand. The secret is to dig through the
soft dirt to expose the caliche. I used a crowbar hammered with a small
sledge. It isn't too bad for just a ground rod, and might be quicker than
looking for/borrowing more tools.

I planted a 60 foot self supporting tower in a hole 3 ft by 3ft and 6 feet
deep. I would have preferred an elegant solution for that!

1362. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 20:30:19 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <e4ea1b2a-e5f6-448b-948f-450ede57b4d3@x41g2000hsb.googlegroups.com>
Source record: 23236

On Aug 23, 11:58 am, Dave Lemper wrote:
> The soil in central Texas is called Caliche with a lot of clay,
> CaCO3 & shale. Attempting to drive in a ground rod
> yielded only a mushroom on top & blisters on me.
> Local tool rental place has concrete bits, but maximum
> length of 18 inches. Possibly longer bits are available in
> a larger city.
>
> Renting a back hoe is out.
> Any suggestions appreciated.
> Dave WB3DWE   pdlem...@earthlink.net

I know the stuff you are talking about, it will even jam up a
Ditch Witch

When I was in San Antonio with the USAF we made a spade
bit out of metal rod and welded the spades on the side.
We stared the hole with a post hole digger, filled it with water.
then drilled down into it. After drilling a couple of feet we were
able to pound in the ground rods
Im thinking using a real spade bit with an extension may work.

Jimmie

1363. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 21:07:55 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <K__rk.10840$L_.3797@flpi150.ffdc.sbc.com>
Source record: 23237

JIMMIE wrote:
> I know the stuff you are talking about, it will even jam up a
> Ditch Witch

They pave roads with caliche in West Texas. From Wikipedia:
"Caliche is also used for road construction, either as a
surfacing material or, more commonly, as a base material."
--
73, Cecil http://www.w5dxp.com

1364. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-23 23:52:50 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <ck81b4166ptu8gsr2drm1ld76pmuboq3pn@4ax.com>
Source record: 23238

On Sat, 23 Aug 2008 10:58:19 -0500, Dave Lemper wrote:

>The soil in central Texas is called Caliche with a lot of clay,
>CaCO3 & shale. Attempting to drive in a ground rod
>yielded only a mushroom on top & blisters on me.
>Local tool rental place has concrete bits, but maximum
>length of 18 inches. Possibly longer bits are available in
>a larger city.
>
>Renting a back hoe is out.
>Any suggestions appreciated.
>Dave WB3DWE pdlemper@earthlink.net

I would find out how local electricians do it. They have to meet code.
John Ferrell W8CCW

1365. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 01:53:47 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B03C03BEE0E8Huckleberrybigvalley@198.186.192.196>
Source record: 23239

That caliche must be something else. I've never heard of it. But I must question either your selection of ground rod, or method of insertion. I've sunk a number of ground rods in semi-rock.... sometimes penetrating granite too.

We used 5/8" copper clad steel, or sometimes 3/4" copper clad steel rods. We also used rotary impact hammers to drive the rods down.... often right through a rock or whatever. Worked almost all the time, and did not "mushroom" the top of the rod.

If a 3/4" pointed solid steel rod can not be driven through Caliche with an impact hammer I can't imagine any other tool short of dynamite doing the job.

Ed K7AAT

1366. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 02:39:14 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <bc4f2925-bd2d-4f41-a0f8-3df726bdaed5@m3g2000hsc.googlegroups.com>
Source record: 23240

On Aug 22, 10:38 am, Michael Coslo <m...@psu.edu> wrote:
> Owen Duffy wrote:
> > "Hal Rosser" <hmros...@bellsouth.net> wrote in
> >news:QKmrk.13903$XB4.2693@bignews9.bellsouth.net:
>
> >> I have also heard of buying a new chain and bar for your chainsaw,
> >> then using the OLD one to cut a path through the yard.
>
> > In this part of the world, you can rent a Ditch-Witch or Trench-Wench which
> > use a similar concept, but the chain carries cutters designed for earth and
> > rocks rather than one designed for wet timber.
>
> > Ditch-Witchs and Trench-Wenchs aren't very good for cutting trees, nor are
> > chainsaws very good for digging trenches.
>
>   Perhaps. But I use a chainsaw none the less. I've got a cheap electric
> one just for the purpose.
>
> > You don't have to invent a new tool for this application, plumbers and
> > electricians have been inserting narrow conduits / pipes in earth trenches
> > for decades using these types of machines.
>
> Ah, but that rental cost is something. I'd be looking at hundreds of
> dollars each time I do it. Thousands if I hire someone.
>
> That 40 dollars I spent for the electric chansaw is cheap by comparison.
> And very very quick. Yeah, it ruins the chainsaw blade and bar. At 40
> dollars, I consider the whole thing disposable. I could buy a lot of
> them for the price of renting the trencher.
>
> I should make the standard disclaimer here. I'm not suggesting that
> anyone use this method, In fact, don't try this at home kids. Anything
> sharp can be dangerous, so leave everything you do to the professionals.
>   (that was a disclaimer, not a jab at your sugesstions, Owen)
>
> > An alternative to renting a machine may be to find a plumber who
> > specialiese in in-ground sprinkler systems... and get a quote for him to
> > dig your trenches.
>
> I've always had the problem of wanting to do so many things, yet my
> resources are a little limited. So I get a little creative at times.
>
>   - 73 de Mike N3LI -

Ditch Witch also makes a device that looks and operates very similar
to an edger but cuts deeper
and piles the dirt neatly beside the cut.

Jimmie

1367. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 02:46:30 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <f5483730-c565-4072-8ab3-33513cf489d0@i76g2000hsf.googlegroups.com>
Source record: 23241

On Aug 22, 3:48 pm, "Joe" <j...@telnet.com> wrote:
> "Roy Lewallen" <w...@eznec.com> wrote in message
>
> news:b7udnSN2LIjMnDLVnZ2dnUVZ_tXinZ2d@posted.easystreetonline...
>
>
>
>
>
> > Jim Lux wrote:
> >> . . .
> >> You also have to really contemplate "shovel and back" vs trencher. I had
> >> a 100 ft or so gas line installed a year ago, and the plumber just got
> >> the shovel out and trenched it by hand in a couple of hours. That's
> >> comparable to the time I spent going down to the rental yard, getting the
> >> trencher, bringing it home, unloading it off the trailer, spending 30
> >> minutes trenching for the irrigation lines, then returning it.
>
> >> And I'm not sure my back was any better off than the plumber's at the end
> >> of the day.
> >> . . .
>
> > I have a hand tool that's considerably better than a shovel for cutting a
> > narrow slot. I think it's intended to be a manual edger. It's on a handle
> > like a shovel but the blade is flat, semi-circular, and sharpened. You can
> > push it into the ground by stepping on it, then you can rock it to widen
> > the slit it cuts. I wouldn't try using it here in the summer when the
> > ground is basically adobe, but it's reasonable in the winter when the
> > ground is wet and soft. I don't think it would make a slot deep and wide
> > enough for conduit, but you could probably use one to get bare coax under
> > the sod and mower.
>
> > Roy Lewallen, W7EL
>
> I am the original poster. I just got done using my gas powered lawn edger
> and it worked fine. I had to cut 2 slits for my Direct TV cables. 1 was for
> High Dev cables and the other for the digital cables. I couldn't get them in
> one slit. My 2 cuts were about 35 feet long.and about 2 inches or so deep.
> We had a full day of rain here in Illinois so it may the cutting easy. After
> I got them in the slits I took a 3/4" board and gently tapped the cables
> down in the ground. I hope that freeze this winter doesn't heave them up.
> Thanks for your comments.- Hide quoted text -
>
> - Show quoted text -

Ditch Witch makes a trencher that is exactly like an edger except it has a guard that piles the dirt up along side the the cut.
I have also known of people putting a concrete cutting blade on an edger and cutting through a curb with it. Probably two things you shouldnt do.

Jimmie

1368. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 06:59:04 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <%E7sk.5566$Fr1.4588@newsfe03.iad>
Source record: 23242

<Dave Lemper> wrote in message
news:b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com...
> The soil in central Texas is called Caliche with a lot of clay,
> CaCO3 & shale. Attempting to drive in a ground rod
> yielded only a mushroom on top & blisters on me.
> Local tool rental place has concrete bits, but maximum
> length of 18 inches. Possibly longer bits are available in
> a larger city.
>
> Renting a back hoe is out.
> Any suggestions appreciated.
> Dave WB3DWE pdlemper@earthlink.net

Here's a snippet from the state of Washington's website that quotes the NEC:

NEC 250-52 (c)(3) (1999 edition) requires that ground rods "be driven to a
depth of not less than 8 feet
(2.44m) except that, where rock bottom is encountered, the electrode shall
be driven at an oblique angle
not to exceed 45 degrees from the vertical or shall be buried in a trench
that is at least 2½ ft. (762mm)
deep."

The requirement is that the rod be driven to a depth of 8 feet. If the rod
cannot be driven then there is a
choice of either driving it at a 45-degree angle or laying it in a trench
that is not less than 2½ feet deep.

http://www.lni.wa.gov/tradeslicensing/electrical/files/currents/elc0210.pdf.

I browsed some newer discussions and found nothing newer to be at variance
with the quoted material. The current NEC is $75 if snippets won't do ya'.

http://www.nfpa.org/itemDetail.asp?categoryID=860&itemID=21227&URL=Publicati
ons/

You need 25 ohms maximum rersistance (three-point method) to say you have a
good ground.

1369. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 07:36:53 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <8XkeMNDV+QsIFAN5@ifwtech.co.uk>
Source record: 23243

Fred McKenzie wrote:
>In article <b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com>, Dave Lemper
>wrote:
>
>> The soil in central Texas is called Caliche with a lot of clay,
>> CaCO3 & shale. Attempting to drive in a ground rod
>> yielded only a mushroom on top & blisters on me.
>> Local tool rental place has concrete bits, but maximum
>> length of 18 inches. Possibly longer bits are available in
>> a larger city.
>
>Dave-
>
>Last year there was a discussion here about sinking a ground rod using
>an "SDS Plus" Hammer Drill set to hammer-only. I think it was Ian
>White, GM3SEK, who proposed that method.

The other point was that SDS+ bits are available up to 1.0 metres long,
so by using both rotary and hammer action you can drill a pilot hole
through most kinds of rock down to that depth.

>There is also an article at
><http://www.n4lcd.com/groundrod/> that proposes a slightly different
>method of coupling the hammer drill to the ground rod.
>
>The question is whether Caliche can be penetrated by such a method. Has
>anyone tried it?
>
We don't have caliche here, by that name, but from accounts on the web
I'd doubt if it could be penetrated by hammer action alone. However, it
seems more likely that an SDS+ bit could drill through it.

>Another consideration is whether or not there is moisture in the soil
>below the Caliche. If not, then it might not provide a low-impedance
>ground even if you could penetrate it!

That is certainly the problem at this QTH, where an earth rod drilled
and hammered into the very rocky subsoil produced a resistance of
500ohms! Long horizontal electrodes are the only kind that work at this
QTH.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1370. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 13:16:52 UTC
From: ltdoc@yahoo.com
Message-ID: <8b615ce7-4fdf-4661-9892-3535f1ed2001@k7g2000hsd.googlegroups.com>
Source record: 23244

While I don't have any 'caliche' on my property, I am blessed with a lot of randomly placed rock. Driving any ground rod to about 6 feet is a guessing game more than anything else. I've found that ground radials are more practical. Not easy, just practical. They seem to work as well as any ground rod I've ever used (better in some instances).
The local power company is supposed to put down ground rods for safety. Having seen some of their methods, I'd tend to go with the radials (ground wire attached to water pipes... PVC water pipes, great idea huh? And, NO, I'm not kidding.)
- 'Doc

1371. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 13:36:46 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <gmo2b4982t56jl6cmgv8k72s2k8riku8rq@4ax.com>
Source record: 23245

On Sat, 23 Aug 2008 10:58:19 -0500, Dave Lemper wrote:

>The soil in central Texas is called Caliche with a lot of clay,
>CaCO3 & shale. Attempting to drive in a ground rod
>yielded only a mushroom on top & blisters on me.
>Local tool rental place has concrete bits, but maximum
>length of 18 inches. Possibly longer bits are available in
>a larger city.
>
>Renting a back hoe is out.
>Any suggestions appreciated.
>Dave WB3DWE pdlemper@earthlink.net

I have a Glen Martin ground rod driver (fashioned after a fence post driver) that worked fine in Houston. In San Antonio, it only drives a rod about one foot down, then muck... I ended up just driving a short rod, mainly used as a connection post, and then I extended several long, buried wires out from it.

bob
k5qwg

1372. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 16:45:25 UTC
From: Michael <micoder@sbcglobal.net>
Message-ID: <Fegsk.81793$Qi2.47570@fe06.news.easynews.com>
Source record: 23246

I got a better ground than using a stake by doing something a little unorthodox.

I buried an old channel 6 yagi antenna in under six inches of earth. It made a pretty good ground. It was a lot better than a stake.

Michael

Dave Lemper wrote:
> The soil in central Texas is called Caliche with a lot of clay,
> CaCO3 & shale. Attempting to drive in a ground rod
> yielded only a mushroom on top & blisters on me.
> Local tool rental place has concrete bits, but maximum
> length of 18 inches. Possibly longer bits are available in
> a larger city.
>
> Renting a back hoe is out.
> Any suggestions appreciated.
> Dave WB3DWE pdlemper@earthlink.net

1373. Re: Size of dummy load required to tune 160 Watts CW, 200 W PEP SSB ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 18:03:08 UTC
From: Robert Smits <bob@rsmits.ca>
Message-ID: <df332fa2d6fcb972242a9032f62e7046@grapevine.islandnet.com>
Source record: 23247

JB wrote:

> For ham goodies look at the specs. Ham stuff usually needs to be more
> bulletproof than commercial but it aint'. You would probably be all right
> with the 100 watt kit for quick tune-ups unless the fine print says 100w
> for
> 10 seconds. It isn't the 200w pep to worry about, it's the 160 w CW and
> FM
> and how long you lean on it. Five seconds on and off three times should
> be all you need to get it tuned or get a reading.
>
> I have an old Bird Termaline, oil filled, rated for 20 watts that I have
> used for years on barefoot rigs. I would never go smaller than that
> because the heat may rise too fast and burn the oil and anneal the
> contacts of the
> load resistor. I have used a big 500 watt Bird for continuous burn-in
> (weeks) of 100 watt FM repeaters and Base transmitters though. It is all
> about duty cycle and whether the heat can me moved out fast enough to
> prevent damage to the resistors and contacts.
>
> Dry dummy loads are a different story. Don't put more than double the
> rating even for brief periods unless they are well heat sinked..

I concur. Unless you're going to leave the transmitter keyed up for minutes
or hours even a 50 watt dummy load is quite sufficient to tune up my TS
820S, which has essentially the same finals. Done it for years.
--
bob@rsmits.ca (Robert Smits, Ladysmith BC)

"I'm not one of those who think Bill Gates is the devil. I simply suspect
that if Microsoft ever met up with the devil, it wouldn't need an
interpreter." - Nicholas Petreley

1374. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 18:58:19 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B05328AD9A09nonenowhere@61.9.191.5>
Source record: 23248

Dave Lemper wrote in news:b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com:

> The soil in central Texas is called Caliche with a lot of clay,
> CaCO3 & shale. Attempting to drive in a ground rod
> yielded only a mushroom on top & blisters on me.
> Local tool rental place has concrete bits, but maximum
> length of 18 inches. Possibly longer bits are available in
> a larger city.
>
> Renting a back hoe is out.
> Any suggestions appreciated.
> Dave WB3DWE pdlemper@earthlink.net

Dave,

If you truly cannot drive an electrode vertically, then you will need to consider drilling for horizontal electrodes in trenches chased into the rock. Drilling creates another problem, backfilling for conductivity.

Electrodes in dry rock might not be very effective.

I have had success in driving electrodes into moderately shaly ground, and even very dry clay isn't too difficult. Pointed 19mm copper clad steel rods or stainless steel rods are a lot easier to drive into hard stuff than smaller sizes.

The following article shows some of the equipment that I have used sucessfully, and likely to be more successful than using an ordinary hammer. Machine driving does not mushroom then end of the electrode near as much as hand hammering.

http://www.vk1od.net/post/driver.htm

Owen

1375. Re: E-Field between 2 parallel wires

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 21:38:59 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Txksk.707$lf2.96@trnddc07>
Source record: 23249

"Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
news:ts6dnUFWc5HjrjLVnZ2dnUVZ_qPinZ2d@earthlink.com...
> MAYBE NOT EXACTLY THE RIGHT GROUP, but..
>
> If I tape 2 insulated, parallel wires to the wall, x cm apart, and then
> drive a sinewave into them (Vo p-p), how can I calculate the field
> strength between the 2 wires?
>
> For instance, 120KHz, 100V, 5cm apart, what is the field in V/cm between
> the two wires?
>
> Any references or information on how to calculate this would be greatly
> appreciated.

if you are looking for a closed form solution you will need to investigate some classical electrodynamics methods for wires on a dielectric half plane. There are probably some not so elegant methods to calculate it using the relative dielectric constants of the air on one side and the wall material on the other. The field will of course be different in the wall material than in the air. as a first approximation you can take an average of them and use that to estimate the field as if the conductors were embedded in an infinite block of dielectric material, that is probably a simpler problem.

there are programs that will do finite element analysis and come up with numerical solutions, that is probably simpler in most cases than the raw field equations.

For a relatively low frequency like 120khz and those low voltages you can bound the problem by assuming 2 wires in air... 100v/5cm=20v/cm half way between the wires... with a material on one side it will usually have a lower field than in the air by approximately the ratio of the relative dielectric constants. For wood the constant depends a lot on moisture content, from a low of maybe 5 up to 100 for saturated wood. The higher the dielectric constant the lower the field in the material, as a first approximation with a constant of 5 you could guess that 80% of the field was in the air and 20% in the wall... and of course the farther from the wires the lower the field... so from a max of maybe 20v/cm between the wires the field will decrease as you move away from the wall in air, and decrease about 5x faster as you move into the wall. the hard part is close to the wires, there it depends on the diameter of the wire, the smaller the diameter the higher the field, to get those numbers you need one of the other methods above.

1376. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 22:57:32 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B04C19057AAmcoslocomcastnet@216.196.97.136>
Source record: 23250

"Wayne" <mygarbagecan@verizon.net> wrote in
news:BdXrk.527$482.222@trnddc06:

>> As a last resort I will hack a trench with a pick and lay in the rod
>> at a shallow angle to the surface. Would this give an adequate
>> ground ? I could also bond it to an outdoor brass spigot
>> 10 yards away or even to an anchor fence in the other direction.
>> Dave WB3DWE
> -
> In my opinion the trench would be ok, but I'll leave that to the
> experts on the group.
>
> However, I remember chiseling through the caliche to be annoying, but
> not that difficult with the right tools. It can be done with a
> "shooter" style shovel, but that is a bit more effort. However, I
> doubt if you would ever get a copper rod driven through without some
> major damage to the rod.

If the soil is permiable to water, you could try another of my hack
methods. Sweat a garden hose connection onto a piece of copper tubing.
Attach a garden hose to the fitting, and point the rod down in the place
you want to sink int. Then let it rip. In my area, we have a few inches
of topsoil, than a really hard clay, then rocky clay, followed by sandy
clay/sand. It will even move some rocks out of the way. The tubing
becomes the ground rod of course.

- 73 de Mike N3LI -

1377. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 23:22:17 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <K2msk.42904$4p1.18048@en-nntp-09.dc1.easynews.com>
Source record: 23151

Ed,

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9B03C03BEE0E8Huckleberrybigvalley@198.186.192.196...
> We used 5/8" copper clad steel, or sometimes 3/4" copper clad steel
> rods. We also used rotary impact hammers to drive the rods down.... often
> right through a rock or whatever.

Hammer-only mode? Or "rotate & hammer" mode?

---Joel

1378. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-24 23:29:41 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <I9msk.56303$vK2.45277@en-nntp-03.dc1.easynews.com>
Source record: 23152

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:f5483730-c565-4072-8ab3-33513cf489d0@i76g2000hsf.googlegroups.com...
"I have also known of people putting a concrete cutting blade on an
edger and cutting through a curb with it."

Seems like a concrete blade on a regular old Skillsaw would be easier and have
more torque? Is there any advantage to the edger other than (1) not having to
get down on your hands and feet and (2) you may not actually have a Skillsaw?

1379. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 01:25:43 UTC
From: Joe <joe@telnet.com>
Message-ID: <HISdnfjHyMG6ly_VnZ2dnUVZ_sbinZ2d@comcast.com>
Source record: 23153

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
news:I9msk.56303$vK2.45277@en-nntp-03.dc1.easynews.com...
> "JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
> news:f5483730-c565-4072-8ab3-33513cf489d0@i76g2000hsf.googlegroups.com...
> "I have also known of people putting a concrete cutting blade on an
> edger and cutting through a curb with it."
>
> Seems like a concrete blade on a regular old Skillsaw would be easier and
> have more torque? Is there any advantage to the edger other than (1) not
> having to get down on your hands and feet and (2) you may not actually
> have a Skillsaw?
>
>
I think it would be a lot faster, but wouldn't there be a shock hazard doing
that?

1380. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 01:52:42 UTC
From: JB <nospam@goofball.net>
Message-ID: <Kfosk.612$p72.274@trnddc05>
Source record: 23154

> When "it" gets hot pop the battery off - now, which is hot the battery or
> the phone?
>
> Dave

That's a good question. Batteries do warm in operation, but the radio heatsinks are often the back panel, driving heat into the battery rather than your hand. People complain when they burn their hand so designers are content to just sell more batteries.

1381. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 01:55:46 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B04C09119D53Huckleberrybigvalley@198.186.192.196>
Source record: 23155

>> We used 5/8" copper clad steel, or sometimes 3/4" copper clad
>> steel
>> rods. We also used rotary impact hammers to drive the rods down....
>> often right through a rock or whatever.
>
> Hammer-only mode? Or "rotate & hammer" mode?
>
> ---Joel

Hope I did not confuse ! I used a rotary impact hammer in all my years of ground rod driving, but only used impact mode..... the rotary mode would only turn the hammer head, not the rod . .. anyway. Most of the time I had a sized Bosch tool, not some cheap import.

--- Ed K7AAT

1382. Re: ISOPOLE antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 02:22:32 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <ctednf_IYYTKii_VnZ2dnUVZ_u-dnZ2d@comcast.com>
Source record: 23156

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:9343d169-7dd1-4f07-a851-3076bebb289f@x41g2000hsb.googlegroups.com...
>I used to have an AEA Isopole 2M antenna before Hurricane Hugo took it
> down. In tribute to this antenna I would like to build a 2.4 Ghz
> version for my wireless router. I have assembly instructions for the
> 2M version but I dont know how impedance matching for the 5/8 section
> was accomplished. Was it just a series coil? I may also try to roll my
> own 2M version of the antenna. I used to really enjoy when neigbors
> would ask what the heck that thing was.
>
> Jimmie.
I wouldn't bother. Especially if all your stuff is not all on one floor. I
once had a 2m Isopole on the roof. Worked better than the 1/4 wave in the
attic in some directions, not as good in some other directions.

Tam

1383. Coil.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 02:32:58 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <uRosk.31120$IK1.24912@news-server.bigpond.net.au>
Source record: 23157

Hello,
Can someone tell me if Brian Beezley's program COIL.EXE is still available?

If it is, could someone point me in the right direction?

I have Googled it but nothing useful comes up.

Thanks HarryH

1384. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 13:41:20 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8ucq0$6ts$1@f04n12.cac.psu.edu>
Source record: 23158

Jim Lux wrote:

> What you CAN say is that the studies prompting the early alarmist
> literature (e.g. "currents of death", "VDTs cause miscarriage") have
> severe methodological or statistical problems. Unfortunately, those
> early studies have been (poorly) abstracted and summarized many times
> and the caveats in the original paper, or subsequent better studies, are
> ignored.

Absolutely. I am not at all afraid to use my cell phone in moderation. It isn't going to make me drop over or faint - unless Ed McMahon calls me about my PCH prize.

The issue to me is that we are seeing some effects that are more subtle than nasty diseases or imminent death. Those early and poorly done studies did not help for sure.

But you can see out on the roads - something is happening. There are stone sober people who are driving like drunken people. Their reaction times are bad, they make poor decisions they have trouble staying in their lane, they drive through red lights and remain stopped at green lights.

Some of the excuses given for this behavior just don't wash if you ask me. Things like driving distracted, while plausible, have a niggling problem. People like the police and Ham radio operators and plenty of other folk use radios daily, yet when was the last time that you heard about say a State Forest Ranger getting in an accident because he was using the radio?

Many of these cell users survive on the good graces of other drivers looking out for them, and avoiding them. Whereas once I would look at the cars around me in a general fashion, I now zero in on the driver to see if they are talking on their cell, or even worse, texting, I then chart my course to separate myself from them as far as possible. Problem is, there are too many of them on many local roads, and those places I just avoid.

But I think is is just plain sad that we have to drive with impaired drives every day.

The thing I find odd is that this behavior is verifiable and widespread, and yet to point it out and ask the question "Is there something going on here?" gets one labeled a kook.

And yet, if these very same drivers were driving intoxicated and killing and injuring people, there would be the same old hue and cry. Is a

person killed by a drunk driver more dead than one killed by one using a cell phone, and driving the same way as the drunk guy?

As the comedian once said "Drive carefully on the way home folks - it only counts if you get killed during the holidays!"

- 73 de Mike N3LI -

1385. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 14:43:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uog5b4proeg7ucj35jn34kco1kk9im5qa8@4ax.com>
Source record: 23159

On Mon, 25 Aug 2008 09:41:20 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

> People like the police and Ham radio operators and plenty of
>other folk use radios daily, yet when was the last time that you heard
>about say a State Forest Ranger getting in an accident because he was
>using the radio?

Hi Mike,

Am I the only one to recall that time when it was AGAINST THE LAW to
operate a ham radio while driving for EXACTLY THE SAME REASONS you
have witnessed with cell phone users poor driving performance? Having
a rig in the car came with the legal distinction of operating mobile
and operating remote. I've lived in states where you could only
operate remote, and it was against the law to operate mobile. Consult
old copies of the Ham rags for various campaigns to change the laws
(even to operating remote).

If the laws changed at all, it wasn't because of our legislative clout
so much as it was the telephone company's.

Ham radio operators behind the wheel and engaged in a QSO exhibit no
greater care than the ordinary driver on the cell phone.

73's
Richard Clark, KB7QHC

1386. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 14:55:29 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <KLzsk.7779$np7.5922@flpi149.ffdc.sbc.com>
Source record: 23160

Richard Clark wrote:
> Ham radio operators behind the wheel and engaged in a QSO exhibit no
> greater care than the ordinary driver on the cell phone.

My half-duplex ham radio seems less distracting
than my full-duplex cell phone that I have to
hold to my ear and mouth at the same time.
--
73, Cecil http://www.w5dxp.com

1387. Free downloadable playstation roms

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:16:19 UTC
From: pwphelpsthistle@gmail.com
Message-ID: <8e859a45-8586-49fb-a071-5d2ede4369dd@a70g2000hsh.googlegroups.com>
Source record: 23161

.
.
Ok so i was surfing for free downloadable playstation roms. As
allways :). And i
found it. You should take a break and check out this link
http://freactor.com/download.php?sid=1&file=playstation+roms+collection
It features some serious hot playstation roms, that you really need
to see :)

1388. Obtaining a copy of my w2 form

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:17:06 UTC
From: pwphelpsthistle@gmail.com
Message-ID: <b65daa02-fa08-4f1f-9b05-becbcecaa5e8@m3g2000hsc.googlegroups.com>
Source record: 23162
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Ok so i was surfing for Obtaining a copy of my w2 form. As allways :).
And i
found it. You should take a break and check out this link
http://vids365.com/s

1389. Under age girls masterbating

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:17:49 UTC
From: pwphelpsthistle@gmail.com
Message-ID: <d1bb5662-2ce6-4754-b1f9-0fd70f36f088@79g2000hsk.googlegroups.com>
Source record: 23163
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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.
Ok so i was surfing for Under age girls masterbating. As allways :).
And i
found it. You should take a break and check out this link
http://vids365.com/Under+age+girls+masterbating
It features some serious hot Under age girls masterbating, that you
really need
to see :)

1390. Free birthday compatibility

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:23:42 UTC
From: pwphelpsthistle@gmail.com
Message-ID: <caa22077-640d-44c4-9a14-c0fa8eeaac17@t54g2000hsg.googlegroups.com>
Source record: 23164
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Free birthday compatibility - http://vids365.com/birthday+compatibility

1391. Nalgas de mujeres en tangas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:24:00 UTC
From: pwphelpsthistle@gmail.com
Message-ID: <973624a2-03b8-4c7f-8df4-e3f9008bb05e@r66g2000hsg.googlegroups.com>
Source record: 23165
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Nalgas de mujeres en tangas - http://vids365.com/Nalgas+de+mujeres+en+tangas

1392. Spring break girls flashing

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:24:18 UTC
From: pwphelpsthistle@gmail.com
Message-ID: <b56c7428-a819-4cc0-a821-2fdb784af19f@x41g2000hsb.googlegroups.com>
Source record: 23166
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Spring break girls flashing - http://vids365.com/Spring+break+girls+flashing

1393. Different types of flowers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:24:32 UTC
From: pwphelpsthistle@gmail.com
Message-ID: <0a6ea462-e6b1-4513-962c-981de48be7ec@d45g2000hsc.googlegroups.com>
Source record: 23167
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Different types of flowers - http://vids365.com/Different+types+of+flowers

1394. Granny swallowing gallery

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:24:52 UTC
From: pwphelpsthistle@gmail.com
Message-ID: <dea72332-67a0-4170-9ccc-5a26f83b23a9@79g2000hsk.googlegroups.com>
Source record: 23168
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Granny swallowing gallery - http://vids365.com/Granny+swallowing+gallery
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1395. Wedding invitation verses

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:25:38 UTC
From: uwhintonaverage@googlemail.com
Message-ID: <e9341ec6-cc6a-4ab7-8682-62f524f084ff@d77g2000hsb.googlegroups.com>
Source record: 23169

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Wedding invitation verses - http://vids365.com/Wedding+invitation+verses
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1396. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:25:47 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8uitr$1914$1@f04n12.cac.psu.edu>
Source record: 23170

Richard Clark wrote:

> Am I the only one to recall that time when it was AGAINST THE LAW to
> operate a ham radio while driving for EXACTLY THE SAME REASONS you
> have witnessed with cell phone users poor driving performance?

Actually I don't, but okay.

Does it therefore follow that because those reasons turned out to be wrong for operating Ham radio mobile that they are wrong for cell phones? Despite the differences.

One of the more amusing aspects of DUIC driving is the slippery sloping done by people. Equivalents are attempted to assure us that cell phones are as safe as anything else because, hey, eating or drinking coffee is a distraction, and just talking to the person beside you is a distraction also. So the argument goes, you shouldn't discourage cell phone use because then you would have to ban eating, drinking and talking to anyone in the car.

> Ham radio operators behind the wheel and engaged in a QSO exhibit no
> greater care than the ordinary driver on the cell phone.

I would respectfully disagree there Richard. I'm nearly struck nearly every day by someone operating mobile. I haven't kept count, but over the years it's been possibly over a thousand times. You would think by now, one or two of them would have been Hams operating mobile. We have a very active Ham population around here, and the local repeaters are constantly in use.

(note that my off the cuff "stats" are compiled for both personal driving and pedestrian incidents and observed ones. Even if my figures are exaggerated by faulty memory, I've never been in a collision or near collision with a Ham during operation, or a truck driver while s/he was using a CB. Same goes for law enforcement and various communication vehicles.

- 73 de Mike N3LI -

1397. Dooney burke outlet store

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:25:59 UTC
From: uwhintonaverage@googlemail.com
Message-ID: <44b092ad-62fe-4dc3-95cd-2904db681478@k13g2000hse.googlegroups.com>
Source record: 23171
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Dooney burke outlet store - http://vids365.com/Dooney+burke+outlet+store
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1398. Masterbation tips for men

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:26:14 UTC
From: uwhintonaverage@googlemail.com
Message-ID: <b31a67ea-48f6-4390-92aa-cb0efeb567dd@j22g2000hsf.googlegroups.com>
Source record: 23172
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Masterbation tips for men - http://vids365.com/Masterbation+tips+for+men
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1399. Print tournament brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:26:28 UTC
From: uwhintonaverage@googlemail.com
Message-ID: <272b28f8-21f5-4f3c-a197-ef01d5e07e2c@m45g2000hsb.googlegroups.com>
Source record: 23173
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Print tournament brackets - http://vids365.com/Print+tournament+brackets
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1400. Masterbation techniques

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:27:14 UTC
From: uwhintonaverage@googlemail.com
Message-ID: <873ece29-22b5-4511-8b17-fbd5b5a48673@a70g2000hsh.googlegroups.com>
Source record: 23174
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Masterbation techniques - http://vids365.com/Print+tournament+brackets
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1401. Father daughter stories

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:27:49 UTC
From: uwhintonaverage@googlemail.com
Message-ID: <45959c07-5f00-4e8c-bda2-e854911db77e@m45g2000hsb.googlegroups.com>
Source record: 23175
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Father daughter stories - http://vids365.com/Father+daughter+stories
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1402. Vulva of youngest girls

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:28:04 UTC
From: uwhintonaverage@googlemail.com
Message-ID: <6b5625a9-ef5d-45e5-b1de-ac4e14896b20@y21g2000hsf.googlegroups.com>
Source record: 23176
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Vulva of youngest girls - http://vids365.com/Vulva+of+youngest+girls
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1403. Pthc bbs message board

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:28:21 UTC
From: uwhintonaverage@googlemail.com
Message-ID: <26b74d5b-76b8-4edd-82b9-43971042ac9f@m3g2000hsc.googlegroups.com>
Source record: 23177
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Pthc bbs message board - http://vids365.com/Pthc+bbs+message+board
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1404. Husband feminization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:29:46 UTC
From: pdfordsuper@googlemail.com
Message-ID: <423aec9d-4d9a-46d4-a449-06cee6b107ee@x35g2000hsb.googlegroups.com>
Source record: 23178
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Husband feminization - http://vids365.com/Husband+feminization
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1405. 16 18 nudist teens

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:30:10 UTC
From: pdfordsuper@googlemail.com
Message-ID: <87f9ff93-01e1-4790-a702-fa85fcc67f0d@k37g2000hsf.googlegroups.com>
Source record: 23179
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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16 18 nudist teens - http://vids365.com/16+18+nudist+teens
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1406. Beastiality stories

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:30:46 UTC
From: pdfordsuper@googlemail.com
Message-ID: <ce297d72-2881-4284-a5a5-4c827ca46d81@c58g2000hsc.googlegroups.com>
Source record: 23180
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Beastiality stories - http://vids365.com/Beastiality+stories
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1407. Wicked temptations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:49:30 UTC
From: pdfordsuper@googlemail.com
Message-ID: <390b517d-5929-49cf-83c8-b76991e6903c@v57g2000hse.googlegroups.com>
Source record: 23181
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Wicked temptations - http://vids365.com/Wicked+temptations
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1408. Big breast archive

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:49:53 UTC
From: pdfordsuper@googlemail.com
Message-ID: <a615306d-b653-4903-9212-fac6b03a0ebb@2g2000hsn.googlegroups.com>
Source record: 23182
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Big breast archive - http://vids365.com/Big+breast+archive
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1409. Rate my girlfriend

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:50:17 UTC
From: pdfordsuper@googlemail.com
Message-ID: <88e0cf46-46aa-41a3-91b5-64f77211b239@d1g2000hsg.googlegroups.com>
Source record: 23183
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Rate my girlfriend - http://vids365.com/Liza
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1410. how to make a woman squirt

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:51:27 UTC
From: pdfordsuper@googlemail.com
Message-ID: <a2469741-36d4-48bc-a040-0231b8178d60@d45g2000hsc.googlegroups.com>
Source record: 23184
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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how to make a woman squirt - http://vids365.com/Liza
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1411. Fast times at nau

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:53:09 UTC
From: uypostpositionwinn@gmail.com
Message-ID: <410ff8fd-9955-4df0-93b0-94ba0161b497@a1g2000hsb.googlegroups.com>
Source record: 23185
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Fast times at nau - http://vids365.com/fast+times+at+nau
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1412. Virginie gervais

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 15:53:29 UTC
From: uypostpositionwinn@gmail.com
Message-ID: <2bf49d4a-b870-4dcc-8267-59981f119641@i76g2000hsf.googlegroups.com>
Source record: 23186
Cross-posted to: rec.radio.amateur.antenna,rec.music.makers.piano

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Virginie gervais - http://vids365.com/Virginie+gervais
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1413. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 16:07:43 UTC
From: fkf1 <fkf1@cornell.edu>
Message-ID: <g8ulcifec1@ruby.cit.cornell.edu>
Source record: 23187

Cecil Moore wrote:
> Richard Clark wrote:
>> Ham radio operators behind the wheel and engaged in a QSO exhibit no
>> greater care than the ordinary driver on the cell phone.

I don't find that to be the case at all. Either for myself, or for
others I've discussed the issue with.
>
> My half-duplex ham radio seems less distracting
> than my full-duplex cell phone that I have to
> hold to my ear and mouth at the same time.

I agree with Cecil, I find radio QSO's to be *much* less distracting
than cell phone conversations. I think there are a couple of reasons
for that.

1) Cell phones usually are only in one ear, even with a hands free
headset. I find it takes considerably more concentration to process
audio that is delivered in that fashion and most of the other folks
I've compared notes with find that also. The cabin filling audio of
the radio speaker which is heard by both ears is much easier to get
information from.

2) I think there is a different cultural meme about telephone
conversations vs radio conversations. I think most of us grow up using
a phone in a household where we tend to turn inwards and pay attention
to the call and isolate ourselves from the room full of distractions
(TV, other conversations, etc). I think that's reinforced by the
relatively low audio level in the handset which tends not to overpower
the local environment's noises, you pretty much have to focus on the
conversation on the phone and we learn that behavior. I believe that
'phone' behavior is carried over into cell phone usage, and mobile
cell phone usage where it's obviously not a good thing. In contrast
most folks have QSO's with room filling audio and a whole different
paradigm for how they interact with a 'radio' device as opposed to a
'telephone' device. I suspect that part of the popularity of the Push
To Talk services offered by some cell companies is because they break
that 'phone device' paradigm.

3) The conversations themselves might command more attention. It's one
thing to be chatting with my buddies on the radio, if I drop out of
the conversation to pay attention to traffic or whatever, there are no
repercussions. On the other hand, a business phone call may command a
lot more of my attention - if my boss has gone to the trouble of
tracking me down on my cell, it's likely the call carries more weight
than a casual conversation with friends. That alone will cause me to

invest more attention resources to dealing with it than I will for a radio conversation, with whatever collateral effects on my concentration for driving. If I'm trying to think about a problem and do remote troubleshooting via phone, it's even worse and I better pull over (and do).

I find that all three of these factors combine to make a cell phone call much different than a radio conversation in terms of how it impacts my situational awareness while driving (or flying). While flying it's often the case that I'm listening to two different conversations on two radios (tower and ATC) to piece together a picture of what's going on in the airspace I'm in, and even that is less attention grabbing than a cell call.

YMMV

73 de Kevin, WB2EMS

1414. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 16:39:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <41n5b4164upjg6iaedudceg8repu20nnq2@4ax.com>
Source record: 23188

On Mon, 25 Aug 2008 11:25:47 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>> Ham radio operators behind the wheel and engaged in a QSO exhibit no
>> greater care than the ordinary driver on the cell phone.
>
>
> I would respectfully disagree there Richard. I'm nearly struck nearly
>every day by someone operating mobile.

And so do others, all probably cell-phone users too. I challenge
anyone to replace QSO with conversation and Rig with Cell-phone and
notice 200 million cell-phone user's claim to driving perfection while
talking.

The count of those you've seen operating dangerously could expand to
make a line stretching along the equator - each claiming with as much
gusto to have never presented a risk and swearing at ham radio
operators as driving impaired.

The fact remains that the current complaint about cell-phone users
behind the wheel ealier provided the identical logic for enforcing a
ban against Ham radio mobile operation. Only two things have changed:
the law, and the number of mobile operators of both classes. What has
not changed is poor performance. There is nothing inherent about Ham
mobile operation that is safer than cell-phone use and claims to the
contrary are self serving.

73's
Richard Clark, KB7QHC

1415. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 16:46:47 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g8unlndio2@news.jpl.nasa.gov>
Source record: 23189

Sal M. Onella wrote:
> <Dave Lemper> wrote in message
> news:b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com...
>> The soil in central Texas is called Caliche with a lot of clay,
>> CaCO3 & shale. Attempting to drive in a ground rod
>> yielded only a mushroom on top & blisters on me.
>> Local tool rental place has concrete bits, but maximum
>> length of 18 inches. Possibly longer bits are available in
>> a larger city.
>>
>> Renting a back hoe is out.
>> Any suggestions appreciated.
>> Dave WB3DWE pdlemper@earthlink.net
>
>
>
> Here's a snippet from the state of Washington's website that quotes the NEC:
>
> NEC 250-52 (c)(3) (1999 edition) requires that ground rods "be driven to a
> depth of not less than 8 feet
> (2.44m) except that, where rock bottom is encountered, the electrode shall
> be driven at an oblique angle
> not to exceed 45 degrees from the vertical or shall be buried in a trench
> that is at least 2ï¿½ ft. (762mm)
> deep."
>
> The requirement is that the rod be driven to a depth of 8 feet. If the rod
> cannot be driven then there is a
> choice of either driving it at a 45-degree angle or laying it in a trench
> that is not less than 2ï¿½ feet deep.
>
> http://www.lni.wa.gov/tradeslicensing/electrical/files/currents/elc0210.pdf.
>
> I browsed some newer discussions and found nothing newer to be at variance
> with the quoted material. The current NEC is $75 if snippets won't do ya'.
>
> http://www.nfpa.org/itemDetail.asp?categoryID=860&itemID=21227&URL=Publicati
> ons/
>
> You need 25 ohms maximum rersistance (three-point method) to say you have a
> good ground.
>
>

or, do what most jurisdictions now require, and build yourself a concrete encased grounding electrode (Ufer ground)... no minimum depth, per se.

1416. Re: Mounting an Antron 99 in a tricky spot. HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 18:09:33 UTC
From: Lloyd Davies <novfp@timelordruler.com>
Message-ID: <48b2f56e@news.x-privat.org>
Source record: 23190
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.policy

"Ron" <anon @anon> wrote in message news:24qia4.phl.17.1@news.alt.net...
> Back when I had this problem I used a loop of copper wire around the
> ceiling of my apartment. I put another loop around the floor around the
> base boards for a radial and I was actually able to transmit quite well
> and didn't cause any interference to my neighbors televisions.
>
> But I was only runnning 25 watts out.
>
>
I still run that setup in my apartment and I'm too stupid to pass the
no-code test so I'll remain a technichian for life!

1417. zzzz

1418. Re: Coil.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 18:21:49 UTC
From: amdx <amdx@knology.net>
Message-ID: <d595$48b2f6fd$18d6b40c$21322@KNOLOGY.NET>
Source record: 23192

"Harry H" <harryharms@hotmail.com> wrote in message
news:uRosk.31120$IK1.24912@news-server.bigpond.net.au...
> Hello,
> Can someone tell me if Brian Beezley's program COIL.EXE is still
> available?
>
> If it is, could someone point me in the right direction?
>
> I have Googled it but nothing useful comes up.
>
> Thanks HarryH
>
I'm not sure what COIL.EXE does but I'll bet Reg Edwards wrote a program
that will
perform the magic you need.
Page down to "Site Index" click on "Download Programs From HERE"
Check out the first 3, RJELOOP1, 2, or 3. Or maybe SOLENOID3 or MAGLOOP4.
They all have to do with coils.

http://www.zerobeat.net/G4FGQ/

Mike

1419. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 18:29:02 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g8utlj$1926$1@f04n12.cac.psu.edu>
Source record: 23193

Richard Clark wrote:
> On Mon, 25 Aug 2008 11:25:47 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:

> The fact remains that the current complaint about cell-phone users
> behind the wheel ealier provided the identical logic for enforcing a
> ban against Ham radio mobile operation. Only two things have changed:
> the law, and the number of mobile operators of both classes. What has
> not changed is poor performance. There is nothing inherent about Ham
> mobile operation that is safer than cell-phone use and claims to the
> contrary are self serving.

Looks like we'll have to agree to disagree, or whatever, Richard.

There are some differences between operating mobile and using a cell
phone, but gosh, I'm kinda tired of the whole thing.

I think we've just about beat this one to death, so we might as well get
back to antennas. You can have last word privileges if ya like.;^)

- 73 de Mike N3LI -

1420. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 21:27:31 UTC
From: "H. Adam Stevens" <mayatwo@earthlink.net>
Message-ID: <el-dnftacdABvi7VnZ2dnUVZ_t3inZ2d@earthlink.com>
Source record: 23194

"Dave Lemper" wrote in message
news:b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com...
> The soil in central Texas is called Caliche with a lot of clay,
> CaCO3 & shale. Attempting to drive in a ground rod
> yielded only a mushroom on top & blisters on me.
> Local tool rental place has concrete bits, but maximum
> length of 18 inches. Possibly longer bits are available in
> a larger city.
>
> Renting a back hoe is out.
> Any suggestions appreciated.
> Dave WB3DWE pdlemper@earthlink.net

I use a pneumatic rivet gun.
Works great.

73, H.
NQ5H

1421. Re: Coil.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 23:05:47 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <fVGsk.813$Ro1.446@trnddc04>
Source record: 23195

"amdx" <amdx@knology.net> wrote in message
news:d595$48b2f6fd$18d6b40c$21322@KNOLOGY.NET...
>
> "Harry H" <harryharms@hotmail.com> wrote in message
> news:uRosk.31120$IK1.24912@news-server.bigpond.net.au...
>> Hello,
>> Can someone tell me if Brian Beezley's program COIL.EXE is still
>> available?
>>
>> If it is, could someone point me in the right direction?
>>
>> I have Googled it but nothing useful comes up.
>>
>> Thanks HarryH
>>
> I'm not sure what COIL.EXE does but I'll bet Reg Edwards wrote a program
> that will
> perform the magic you need.
> Page down to "Site Index" click on "Download Programs From HERE"
> Check out the first 3, RJELOOP1, 2, or 3. Or maybe SOLENOID3 or MAGLOOP4.
> They all have to do with coils.
>
> http://www.zerobeat.net/G4FGQ/
>
> Mike
>
Coil.exe is much much easier to use.

Dale W4OP

1422. Re: Coil.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-25 23:23:10 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <y9Hsk.31286$IK1.20178@news-server.bigpond.net.au>
Source record: 23196

Thanks to all who answered my query, both here and offline, I appreciate he
time taken!
HH

"Dale Parfitt" <parinc1@verizon.net> wrote in message
news:fVGsk.813$Ro1.446@trnddc04...
>
> "amdx" <amdx@knology.net> wrote in message
> news:d595$48b2f6fd$18d6b40c$21322@KNOLOGY.NET...
>>
>> "Harry H" <harryharms@hotmail.com> wrote in message
>> news:uRosk.31120$IK1.24912@news-server.bigpond.net.au...
>>> Hello,
>>> Can someone tell me if Brian Beezley's program COIL.EXE is still
>>> available?
>>>
>>> If it is, could someone point me in the right direction?
>>>
>>> I have Googled it but nothing useful comes up.
>>>
>>> Thanks HarryH
>>>
>> I'm not sure what COIL.EXE does but I'll bet Reg Edwards wrote a program
>> that will
>> perform the magic you need.
>> Page down to "Site Index" click on "Download Programs From HERE"
>> Check out the first 3, RJELOOP1, 2, or 3. Or maybe SOLENOID3 or MAGLOOP4.
>> They all have to do with coils.
>>
>> http://www.zerobeat.net/G4FGQ/
>>
>> Mike
>>
> Coil.exe is much much easier to use.
>
> Dale W4OP
>
>

1423. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 00:00:49 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B05CC4B9EC12mcoslocomcastnet@216.196.97.136>
Source record: 23197

Michael Coslo <mjc5@psu.edu> wrote in
news:g8utlj$1926$1@f04n12.cac.psu.edu:

> I think we've just about beat this one to death, so we might as well
> get back to antennas. You can have last word privileges if ya like.;^)

Ohh, I just had to share this one though:

I was coming home from work tonight. Part of the rout is on a road with a center lane for left hand turns.

A lady pulls out from the left hand side of the road. She starts driving down the middle of the road in the left turn lane. I figured she was going to turn soon. Nope. She is going fairly slowly, so I figured I would drive past in th enormal lane. As I was passing her, I looked over and yup, there is the cell phoneI get past and continue. She drives the better part of a mile in the center lane, causing some people to have to get out of the lane, cuz she wasn't stopping. Then she comes up to the light where she apparently *did* want to turn left. But for some unknown reason, she went back into the travel lanes, nearly clipping the car beside her. The she stops, backing up traffic. Then she proceeds to make a left turn from the travel lane. Which cuts off the person who went into the turn lane legally.

Simply brilliant.

Quite frankly, I'm beginning to *hope* that my thesis about cell phone use causing people to become stupid is true, because otherwise I feel badly for so many people who are so malfunctionally stupid without any good excuse. I mean this lady is not going to last too long on the highway.

- 73 de Mike N3LI -

1424. Re: Coil.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 01:01:30 UTC
From: Jim-NN7K
Message-ID: <cCIsk.19364$mh5.18212@nlpi067.nbdc.sbc.com>
Source record: 23198

Harry H wrote:
> Hello,
> Can someone tell me if Brian Beezley's program COIL.EXE is still available?
>
> If it is, could someone point me in the right direction?
>
> I have Googled it but nothing useful comes up.
>
> Thanks HarryH
>
>
It is my understanding that Brian was so ripped off, for his programs,
that he stopped supplying them (Not to mention supporting them).

Also, keep in mind that these were DOS programs (and IF you using Vista,
Most likely wont work) Only a couple of dos drivers have I succeeded in
getting to perform in this machine! As info, Jim NN7K

1425. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 01:08:26 UTC
From: JB <nospam@goofball.net>
Message-ID: <eIIsk.677$482.380@trnddc06>
Source record: 23199

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:g8utlj$1926$1@f04n12.cac.psu.edu...
> Richard Clark wrote:
> > On Mon, 25 Aug 2008 11:25:47 -0400, Michael Coslo <mjc5@psu.edu>
> > wrote:
>
> > The fact remains that the current complaint about cell-phone users
> > behind the wheel ealier provided the identical logic for enforcing a
> > ban against Ham radio mobile operation. Only two things have changed:
> > the law, and the number of mobile operators of both classes. What has
> > not changed is poor performance. There is nothing inherent about Ham
> > mobile operation that is safer than cell-phone use and claims to the
> > contrary are self serving.
>
>
> Looks like we'll have to agree to disagree, or whatever, Richard.
>
> There are some differences between operating mobile and using a cell
> phone, but gosh, I'm kinda tired of the whole thing.
>
> I think we've just about beat this one to death, so we might as well get
> back to antennas. You can have last word privileges if ya like.;^)
>
> - 73 de Mike N3LI -
>
The big difference, I don't have to hold my radio up to my head limiting my ability to see around and I can keep both hands on the wheel with the mic on my lap most of the time. The cell phone just ties up more attention, my hand, my head, then there's dialing. I rarely did TT control in motion.

Law in California now! Must Be Hands Free with the car in motion. Under 18 no Ham radios either! Only because of lobbys and lawyers that they don't go after hams and CBers altogether. Of course they want to make it a law, no photographing police field executions either due to the cost of litigation to the citys.

1426. Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 01:17:11 UTC
From: Jim-NN7K
Message-ID: <WOIsk.11487$vn7.10870@flpi147.ffdc.sbc.com>
Source record: 23200

Hi- was searching Amazon , and see several books on Strip Line Antennas
my biggie is: Eznec will take WIRE DIA, and Dial. Constant, and
Thickness in inches of that dialectric. Does this mean that EZNEC is
useable to substrate material (G-10, Teflon, ect) to model Printed
Circuit antennas?
IF so, how do you go from a WIRE Diameter, to a Rectangular wire,
(say 3 MM X width of 5 MM,by x cm long), on a plane of G-10 ?
Or is this beyond its capabilities? Just curious if can handle this!
Maybe am halucinateing, again!

Comments, please! Jim NN7K

1427. Re: Blackberry power level 4.9GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 01:20:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g8vlpk$874$1@news.albasani.net>
Source record: 23051

JB wrote:
> ... Of course they want to make it a law, no
> photographing police field executions either due to the cost of litigation
> to the citys.
>
>

That is sheer insanity!

The final word is always the people, to "blind" the people is to "burn
the constitution."

These are evil times we live in ... and run by the evil-ist of people!

George Orwells' 1984 is upon us ...

Regards,
JS

1428. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 04:01:58 UTC
From: Tom Horne <hornetd@verizon.net>
Message-ID: <WeLsk.823$lf2.721@trnddc07>
Source record: 23052

Jim Lux wrote:
> Sal M. Onella wrote:
>> <Dave Lemper> wrote in message
>> news:b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com...
>>> The soil in central Texas is called Caliche with a lot of clay,
>>> CaCO3 & shale. Attempting to drive in a ground rod
>>> yielded only a mushroom on top & blisters on me.
>>> Local tool rental place has concrete bits, but maximum
>>> length of 18 inches. Possibly longer bits are available in
>>> a larger city.
>>>
>>> Renting a back hoe is out.
>>> Any suggestions appreciated.
>>> Dave WB3DWE pdlemper@earthlink.net
>>
>>
>>
>> Here's a snippet from the state of Washington's website that quotes
>> the NEC:
>>
>> NEC 250-52 (c)(3) (1999 edition) requires that ground rods "be driven
>> to a
>> depth of not less than 8 feet
>> (2.44m) except that, where rock bottom is encountered, the electrode
>> shall
>> be driven at an oblique angle
>> not to exceed 45 degrees from the vertical or shall be buried in a trench
>> that is at least 2ï¿½ ft. (762mm)
>> deep."
>>
>> The requirement is that the rod be driven to a depth of 8 feet. If the
>> rod
>> cannot be driven then there is a
>> choice of either driving it at a 45-degree angle or laying it in a trench
>> that is not less than 2ï¿½ feet deep.
>>
>> http://www.lni.wa.gov/tradeslicensing/electrical/files/currents/elc0210.pdf.
>>
>>
>> I browsed some newer discussions and found nothing newer to be at
>> variance
>> with the quoted material. The current NEC is $75 if snippets won't do
>> ya'.
>>

>> http://www.nfpa.org/itemDetail.asp?categoryID=860&itemID=21227&URL=Publicati
>>
>> ons/
>>
>> You need 25 ohms maximum rersistance (three-point method) to say you
>> have a
>> good ground.
>>
>>
>
> or, do what most jurisdictions now require, and build yourself a
> concrete encased grounding electrode (Ufer ground)... no minimum depth,
> per se.
>

The minimum depth is provided by the building code. Since the footer
must be below the frost line the resultant Ufer Ground is also below the
frost line. If it's not it will be ineffective.
--
Tom Horne

"This alternating current stuff is just a fad. It is much too dangerous
for general use." Thomas Alva Edison

1429. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 06:21:16 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <hpvxiBDcD6sIFAN0@ifwtech.co.uk>
Source record: 23053

Earlier, someone wrote:
>>>> Renting a back hoe is out.

I just skim-read that as "Renting a black hole is out"... well, why not?

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1430. Re: E-Field between 2 parallel wires

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 08:10:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <kNadnUZZYMoMJy7VnZ2dnUVZ_qfinZ2d@posted.easystreetonline>
Source record: 23054

K7ITM wrote:
> On Aug 22, 3:23 pm, Roy Lewallen <w...@eznec.com> wrote:
>> Is the sine wave applied and the load, if any, connected such that the
>> currents in the two wires are equal and opposite? If so, the problem
>> becomes exactly the same as a single wire suspended above and parallel
>> to an infinite perfect ground plane. In the plane exactly midway between
>> the wires -- the position represented by the perfect ground plane in the
>> simplified model -- the field is zero, since the fields from the two
>> wires are equal and opposite in that plane. If the currents aren't equal
>> and opposite, the problem becomes considerably more complex.
>> . . .
>> Roy Lewallen, W7EL
>
> Hmmm...I don't think that's quite right, Roy. I expect the E field
> between the wires, in the plane of the wires, to be parallel to the
> plane, perpendicular to the wires, if there is a potential between the
> wires and they are straight and parallel. For a wire above ground,
> the E field must be perpendicular to the ground at the ground (assumed
> perfect), but it's not zero in general.
>
> Cheers,
> Tom

Tom is completely right -- as always. The problem is, as I said, the same as a single wire suspended above a perfect conducting plane. The E field is perpendicular to the conducting plane (that is, in the plane containing the wires as Tom said) and not zero as I incorrectly said. Thanks for the correction, Tom, and my apology to all for the error.

Roy Lewallen, W7EL

1431. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 08:12:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <kNadnUFZYMpLJy7VnZ2dnUVZ_qfinZ2d@posted.easystreetonline>
Source record: 23055

Jim-NN7K wrote:
> Hi- was searching Amazon , and see several books on Strip Line Antennas
> my biggie is: Eznec will take WIRE DIA, and Dial. Constant, and
> Thickness in inches of that dialectric. Does this mean that EZNEC is
> useable to substrate material (G-10, Teflon, ect) to model Printed
> Circuit antennas?

No.

> . . .

Roy Lewallen, W7EL

1432. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 15:39:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9183kotf1@news.albasani.net>
Source record: 23056

Jim-NN7K wrote:
> Hi- was searching Amazon , and see several books on Strip Line Antennas
> my biggie is: Eznec will take WIRE DIA, and Dial. Constant, and
> Thickness in inches of that dialectric. Does this mean that EZNEC is
> useable to substrate material (G-10, Teflon, ect) to model Printed
> Circuit antennas?
> IF so, how do you go from a WIRE Diameter, to a Rectangular wire,
> (say 3 MM X width of 5 MM,by x cm long), on a plane of G-10 ?
> Or is this beyond its capabilities? Just curious if can handle this!
> Maybe am halucinateing, again!
>
> Comments, please! Jim NN7K

Imagine attempting to model these masks of DLM antennas:

http://assemblywizard.fr33webhost.com/masklayout.pdf

;-)

Regards,
JS

1433. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 16:54:06 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g91cfe$t32$2@news.jpl.nasa.gov>
Source record: 23057

>
> The minimum depth is provided by the building code. Since the footer
> must be below the frost line the resultant Ufer Ground is also below the
> frost line. If it's not it will be ineffective.

To split hairs a bit, you can build a Ufer ground that isn't a
structural footer, and so, may not be subject to the frost line rules.

1434. Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 17:02:47 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <dc86aa77-4288-4bda-8e8c-8147789db3f1@p31g2000prf.googlegroups.com>
Source record: 23058
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Hello,

Most formulas for microstrip transmission line assume that there is
dielectric all over the ground plane.

Does somebody know a formula (or graphical solution) for the
characteristic impedance of a microstrip where there is only
dielectric material under the strip (so you can see the ground
plane)?

Best regards,

Wim
PA3DJS
www.tetech.nl
The mail address is valid when you remove abc

1435. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 17:04:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g91d2ttld1@news.albasani.net>
Source record: 23059

Jim Lux wrote:

> ...
> To split hairs a bit, you can build a Ufer ground that isn't a
> structural footer, and so, may not be subject to the frost line rules.
>

In California, in the central valleys, the question is simply, "What
frost-line? 8-)

Regards,
JS

1436. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 17:05:19 UTC
From: Jim-NN7K
Message-ID: <RJWsk.20398$89.19139@nlpi069.nbdc.sbc.com>
Source record: 23060

Thanks- just was curious- while still working had sites with wedge
shaped antennas- one broke its ray-dome - these (Scala?) were on
960MHz , and the antenna itself appeared to be a Log-Periodic ,
on a double sided Printed Circuit board- Just curious as to the effects
on impedence, and element lengths-spacing , as to how this antenna
was designed. Jim NN7K

Roy Lewallen wrote:
> Jim-NN7K wrote:
>> Hi- was searching Amazon , and see several books on Strip Line Antennas
>> my biggie is: Eznec will take WIRE DIA, and Dial. Constant, and
>> Thickness in inches of that dialectric. Does this mean that EZNEC is
>> useable to substrate material (G-10, Teflon, ect) to model Printed
>> Circuit antennas?
>
> No.
>
>> . . .
>
> Roy Lewallen, W7EL

1437. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 17:38:33 UTC
From: qrk <SpamTrap@spam.net>
Message-ID: <lmf8b45h8p547i07sk5am1mkhc0ufa4raa@4ax.com>
Source record: 23061
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Tue, 26 Aug 2008 10:02:47 -0700 (PDT), Wimpie <wimabctel@tetech.nl>
wrote:

>Hello,
>
>Most formulas for microstrip transmission line assume that there is
>dielectric all over the ground plane.
>
>Does somebody know a formula (or graphical solution) for the
>characteristic impedance of a microstrip where there is only
>dielectric material under the strip (so you can see the ground
>plane)?
>
>Best regards,
>
>Wim
>PA3DJS
>www.tetech.nl
>The mail address is valid when you remove abc

http://atlc.sourceforge.net/
The above link is a wonderful arbitrary solver for transmission lines.
This is primarily a Unix program. If you need a Windows build of the
program, I probably have version 4.4 somewhere.

--
Mark

1438. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 17:40:09 UTC
From: dplatt@radagast.org
Message-ID: <pordo5-mgt.ln1@radagast.org>
Source record: 23063

In article <hpvxiBDcD6sIFAN0@ifwtech.co.uk>,
Ian White GM3SEK <gm3sek@ifwtech.co.uk> wrote:

>Earlier, someone wrote:
>>>>> Renting a back hoe is out.
>
>I just skim-read that as "Renting a black hole is out"... well, why not?

Getting your cash deposit back is hell, in those cases. It's as if
the rental agency dropped it down... well, you get the idea.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1439. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 18:02:15 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <1e35af08-048f-48a9-ab48-ec56ad2662e8@n33g2000pri.googlegroups.com>
Source record: 23062
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On 26 ago, 19:38, qrk <SpamT...@spam.net> wrote:
> On Tue, 26 Aug 2008 10:02:47 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
> wrote:
>
>
>
> >Hello,
>
> >Most formulas for microstrip transmission line assume that there is
> >dielectric all over the ground plane.
>
> >Does somebody know a formula (or graphical solution) for the
> >characteristic impedance of a microstrip where there is only
> >dielectric material under the strip (so you can see the ground
> >plane)?
>
> >Best regards,
>
> >Wim
> >PA3DJS
> >www.tetech.nl
> >The mail address is valid when you remove abc
>
> http://atlc.sourceforge.net/
> The above link is a wonderful arbitrary solver for transmission lines.
> This is primarily a Unix program. If you need a Windows build of the
> program, I probably have version 4.4 somewhere.
>
> --
> Mark

Hello Mark,

This is good one (I found it via google also). You can enter both
metallics and dielectrics as you want. It would be very nice when you
can mail me a Windows Build (I hope it is not that big). A link would
also be useful.

My address is valid when you remove abc.

Best regards and thanks,

Wim
PA3DJS
www.tetech.nl

1440. Re: E-Field between 2 parallel wires

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 18:22:19 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <0560952f-10e0-4983-9c8c-ec16335062d4@t1g2000pra.googlegroups.com>
Source record: 23064

On Aug 22, 2:49 pm, Jon Mcleod <jonmcleod2...@yahoo.com> wrote:
> MAYBE NOT EXACTLY THE RIGHT GROUP, but..
>
> If I tape 2 insulated, parallel wires to the wall, x cm apart, and then
> drive a sinewave into them (Vo p-p), how can I calculate the field
> strength between the 2 wires?
>
> For instance, 120KHz, 100V, 5cm apart, what is the field in V/cm between
> the two wires?
>
> Any references or information on how to calculate this would be greatly
> appreciated.

I'm tempted to make some statements that I can't quite prove without doing a bit of math, but I'll refrain...

But I will recommend the program ATLC ("Arbitrary Transmission Line Calculator"), which does calculate the electric and magnetic fields numerically.

Except for changes in the current distribution because of changes in skin depth versus frequency and changes the dielectric versus frequency, I don't think there's any effect of frequency on the fields distribution for a TEM-type line, where the current in the two conductors is equal amplitude but opposite direction and the line is in a uniform dielectric. Taping it to a wall will make is "quasi-TEM" but you can expect the electric field direction to be very close to being in a plane perpendicular to the axis of the wires.

Cheers,
Tom

1441. Modified G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 18:31:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <rZXsk.5047$zv7.1825@flpi143.ffdc.sbc.com>
Source record: 23065

I've been playing around with EZNEC instead of mowing the yard.
A standard G5RV works well on 75m, 40m, 20m, and 12m. My
favorite band is 17m. If the G5RV dipole length is changed to
94 feet, and the series section changed to 40 feet of 450 ohm
ladder-line, the resulting configuration will work well on
40m, 20m, 17m, 12m, and 10m, according to EZNEC.
--
73, Cecil http://www.w5dxp.com

1442. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 18:49:13 UTC
From: JB <nospam@goofball.net>
Message-ID: <JeYsk.710$482.529@trnddc06>
Source record: 23066
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

"Wimpie" <wimabctel@tetech.nl> wrote in message
news:1e35af08-048f-48a9-ab48-ec56ad2662e8@n33g2000pri.googlegroups.com...
> On 26 ago, 19:38, qrk <SpamT...@spam.net> wrote:
> > On Tue, 26 Aug 2008 10:02:47 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
> > wrote:
> >
> >
> >
> > >Hello,
> >
> > >Most formulas for microstrip transmission line assume that there is
> > >dielectric all over the ground plane.
> >
> > >Does somebody know a formula (or graphical solution) for the
> > >characteristic impedance of a microstrip where there is only
> > >dielectric material under the strip (so you can see the ground
> > >plane)?
> >
> > >Best regards,
> >
> > >Wim
> > >PA3DJS
> > >www.tetech.nl
> > >The mail address is valid when you remove abc
> >
> > http://atlc.sourceforge.net/
> > The above link is a wonderful arbitrary solver for transmission lines.
> > This is primarily a Unix program. If you need a Windows build of the
> > program, I probably have version 4.4 somewhere.
> >
> > --
> > Mark
>
> Hello Mark,
>
> This is good one (I found it via google also). You can enter both
> metallics and dielectrics as you want. It would be very nice when you
> can mail me a Windows Build (I hope it is not that big). A link would
> also be useful.
>
> My address is valid when you remove abc.
>
> Best regards and thanks,

>
> Wim
> PA3DJS
> www.tetech.nl

AFAIK dielectric between the strip and GP is the most significant unless stripline is to couple to other stuff. Anytime you change board material there are subtle changes in VF. For proto, I always like to allow for trimming where it has to be critical, but best to make it less critical so you don't have to spend time on every board. Air is better, but spacing variations come into play, and what will happen if you drop it. The calculations only get you so far unless you have your constants handy.

1443. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 19:17:06 UTC
From: JB <nospam@goofball.net>
Message-ID: <SEYsk.862$lf2.801@trnddc07>
Source record: 23067

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9183kotf1@news.albasani.net...
> Jim-NN7K wrote:
> > Hi- was searching Amazon , and see several books on Strip Line Antennas
> > my biggie is: Eznec will take WIRE DIA, and Dial. Constant, and
> > Thickness in inches of that dialectric. Does this mean that EZNEC is
> > useable to substrate material (G-10, Teflon, ect) to model Printed
> > Circuit antennas?
> > IF so, how do you go from a WIRE Diameter, to a Rectangular wire,
> > (say 3 MM X width of 5 MM,by x cm long), on a plane of G-10 ?
> > Or is this beyond its capabilities? Just curious if can handle this!
> > Maybe am halucinateing, again!
> >
> > Comments, please! Jim NN7K
>
> Imagine attempting to model these masks of DLM antennas:
>
> http://assemblywizard.fr33webhost.com/masklayout.pdf
>
> ;-)
>
> Regards,
> JS

So how would they be fed? Monopole needs a GP or fed as doublet. I have
anxiety just looking at it.

Inverted L is soo much easier.

1444. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 19:18:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g91kuc$7ba$1@news.albasani.net>
Source record: 23068
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Wimpie wrote:
> Hello,
>
> Most formulas for microstrip transmission line assume that there is
> dielectric all over the ground plane.
>
> Does somebody know a formula (or graphical solution) for the
> characteristic impedance of a microstrip where there is only
> dielectric material under the strip (so you can see the ground
> plane)?
>
> Best regards,
>
> Wim
> PA3DJS
> www.tetech.nl
> The mail address is valid when you remove abc

This is a bit off topic in direct relation to your post; however, I built this antenna as an external to my wifi router/switch to increase coverage of the net:

http://www.centurion.com/home/pdf/wp_omni_wireless.pdf

Fig. 1-5 and the plot of the radiation pattern (fig. 1-7) I found particularly interesting ...

Regards,
JS

1445. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 19:24:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g91l8m$817$1@news.albasani.net>
Source record: 23069

JB wrote:
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:g9183kotf1@news.albasani.net...
>> Jim-NN7K wrote:
>>> Hi- was searching Amazon , and see several books on Strip Line Antennas
>>> my biggie is: Eznec will take WIRE DIA, and Dial. Constant, and
>>> Thickness in inches of that dialectric. Does this mean that EZNEC is
>>> useable to substrate material (G-10, Teflon, ect) to model Printed
>>> Circuit antennas?
>>> IF so, how do you go from a WIRE Diameter, to a Rectangular wire,
>>> (say 3 MM X width of 5 MM,by x cm long), on a plane of G-10 ?
>>> Or is this beyond its capabilities? Just curious if can handle this!
>>> Maybe am halucinateing, again!
>>>
>>> Comments, please! Jim NN7K
>> Imagine attempting to model these masks of DLM antennas:
>>
>> http://assemblywizard.fr33webhost.com/masklayout.pdf
>>
>> ;-)
>>
>> Regards,
>> JS
>
> So how would they be fed? Monopole needs a GP or fed as doublet. I have
> anxiety just looking at it.
>
> Inverted L is soo much easier.
>
>

They would be fed though a series capacitance to a tap on the lower
coil, at a point to obtain a 50 ohm feed point, generally ... and
considering the 1/2 wave design.

A 1/4 wave design would simply be fed at the base of the lower coil with
a sufficient ground plane provided ...

... in the monopole models.

A T or Delta match could/would be implemented on a dipole version.

Regards,
JS

1446. Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 21:19:42 UTC
From: Bubblesdee <Bubblesdee.2fa4e6b@radiobanter.com>
Message-ID: <Bubblesdee.2fa4e6b@radiobanter.com>
Source record: 23071

Hi

I am new to this forum and have a (most likely) dumb question

I recently aquired a S350DL receiver. I will be using this rig until I can buy a rela communications receiver. I will be using it to receive Shortwave only. I have constructed a T2FD (Tilted, terminated, folded dipole) with a design feed point impedance of 300 ohms. The S350 DL only has an unbalance high impedance external antenna point and a ground on it. How can I attach the T2Fd to the S350Dl and acheive a good impedance match.

1) Is the whip antenna on the S350DL a low impedance feed point (i.e. 50 or 75 ohms)? If so, could I use a 4:1 balun at the feedpoint of the T2FD to convert the feed line to 75 ohm coax (which would be unbalance line now) and just clip the center conductor to the whip and the sheild to a grounding rod?

2) I could use 300 ohm ladder line to connect to the T2FD but the problem is that the S350DL does not have a balanced esternal input point on it.

I guess what I am asking is what would be the best way to couple A 300 ohm T2FD antenna to a Crappy Radioshack S350DL receiver and achieve reasonable impedance matching.

I do not what to use an end fed long wire.

Any help would be appreciated.

--
Bubblesdee

1447. Swan 1040 V Trap Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-26 23:39:05 UTC
From: "wb6wqa@hotmail.com" <wb6wqa@hotmail.com>
Message-ID: <556c52ff-7358-480d-b9ce-e70d69359210@s1g2000pra.googlegroups.com>
Source record: 23070

Hello,

Wondering if anyone can explain to me how to grid-dip trap coils to determine which coil is for which band to be used in the 10 thru 40 meter 1/4 wave trap vertical originally made by Swan. The antenna was completely disassembled and, since it is so old, the markings on the metal sleeves of each trap has weathered away. For me, it would be much easier to dip the traps to determine the frequency rather than climb up on the roof to do the cut-and-try method for each band (small back yard, no room to ground-mount the antenna).

Any help greatly appreciated. Thank you,

Tim Watkins
W6WQA

1448. Re: Modified G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 00:08:35 UTC
From: Cheers <moussa_el@hotmail.com>
Message-ID: <MPG.231f1bdb47acf7e2989872@freenews.iinet.net.au>
Source record: 23072

Hi Cecile

In article <rZXsk.5047$zv7.1825@flpi143.ffdc.sbc.com>, nospam@w5dxp.com
says...
> I've been playing around with EZNEC instead of mowing the yard.
> A standard G5RV works well on 75m, 40m, 20m, and 12m. My
> favorite band is 17m. If the G5RV dipole length is changed to
> 94 feet, and the series section changed to 40 feet of 450 ohm
> ladder-line, the resulting configuration will work well on
> 40m, 20m, 17m, 12m, and 10m, according to EZNEC.
>
any chance to compare both the carolina windom dipole (short version)
ant the G5RV I have built both, the carolina windom seems to perform bit
better for my location on all bands without need for a tuner, have said
that, the T2FD seems to beat both.
wish I could know how to use eznec :-(

Moussa
--
The information contained in this post is copyright of
the poster, and specifically may not be published in,
or used by http://www.jlaforums.com

1449. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 02:22:46 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <sbd9b4hsov5rbmqu2s1nm781it8chj8u5t@4ax.com>
Source record: 23073
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Tue, 26 Aug 2008 12:18:37 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>This is a bit off topic in direct relation to your post; however, I
>built this antenna as an external to my wifi router/switch to increase
>coverage of the net:
>
>http://www.centurion.com/home/pdf/wp_omni_wireless.pdf
>
>Fig. 1-5 and the plot of the radiation pattern (fig. 1-7) I found
>particularly interesting ...

Drifting further off topic.... Here's the commercial incantation of
that antenna (the three photos on the right) from Tecom:
<http://802.11junk.com/jeffl/antennas/tecom/index.html>
PCB losses make it a rather marginal performer.

Note the added decoupling sleeve. That somewhat beam uptilt due to
the effects of the mounting hardware.

The worst part of the design is that 1/2 the RF is radiated in the
first half wave (bottom two elements). 1/4th is radiated from the
next half wave. 1/8th from the next dipole, and so on. By the time
what's left gets to the top element, there's not much left. With all
the RF coming from the base of the antenna, and with the uptilt
problem, it's often best to mount the antenna in an inverted position.

I have an NEC2 model somewhere but it has problems. Sorry.

However, I do agree with the article's conclusions. It is a cheap
antenna to build.

As for the original question, ATLC is certainly the right answer for
modeling a rather unusual microstrip configuration. The program can
allegedly be built using Cygwin for Windoze. I haven't tried it:
<http://atlc.sourceforge.net/installing.html>
Note the spelling of Windoze on that page. I looked through the
ported package list, but didn't find ATLC.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1450. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 02:59:19 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <kof9b4h8oi4ssmei6q0ojnhe8752vt9krh@4ax.com>
Source record: 23074

On Tue, 26 Aug 2008 10:05:19 -0700, Jim-NN7K <nn7kexk7zfg@noway.net.>
wrote:

>Thanks- just was curious- while still working had sites with wedge
>shaped antennas- one broke its ray-dome - these (Scala?) were on
>960MHz , and the antenna itself appeared to be a Log-Periodic ,
>on a double sided Printed Circuit board- Just curious as to the effects
>on impedence, and element lengths-spacing , as to how this antenna
>was designed. Jim NN7K

Would a photo help? This is the guts of a Sinclair SRL441-2P:
<http://11junk.com/jeffl/antennas/Sinclair%20SRL441-2P/index.html>

Data sheet at:
<http://www.sinclairtechnologies.com/catalog/product.aspx?id=962>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1451. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 05:37:40 UTC
From: No Spam <no@spam.com>
Message-ID: <IlednYaWG9e5dSnVnZ2dnUVZ_jGdnZ2d@comcast.com>
Source record: 23075

On Tue, 26 Aug 2008 22:19:42 +0100, Bubblesdee wrote:

> Hi
>
> I am new to this forum and have a (most likely) dumb question
>
> I recently aquired a S350DL receiver. I will be using this rig until I
> can buy a rela communications receiver. I will be using it to receive
> Shortwave only. I have constructed a T2FD (Tilted, terminated, folded
> dipole) with a design feed point impedance of 300 ohms. The S350 DL
> only has an unbalance high impedance external antenna point and a ground
> on it. How can I attach the T2Fd to the S350Dl and acheive a good
> impedance match.
>
> 1) Is the whip antenna on the S350DL a low impedance feed point (i.e. 50
> or 75 ohms)? If so, could I use a 4:1 balun at the feedpoint of the
> T2FD to convert the feed line to 75 ohm coax (which would be unbalance
> line now) and just clip the center conductor to the whip and the sheild
> to a grounding rod?
>
> 2) I could use 300 ohm ladder line to connect to the T2FD but the
> problem is that the S350DL does not have a balanced esternal input point
> on it.
>
> I guess what I am asking is what would be the best way to couple A 300
> ohm T2FD antenna to a Crappy Radioshack S350DL receiver and achieve
> reasonable impedance matching.
>

On HF, matching imp for receiving should not make much difference give-or-
take a few 100%

I suspect whip antenna is high imp. ~2k and unbalanced. You would need
to make a one2one or four2one matching xformer placed near the radio with
ladder line coming from antenna. This will stop common mode noise from
entering your radio via feedline. Two 300->75 ohm TV xformers back to
back should work.

twinlead 300 xformer 75 short coax 75 -> 300 twinlead

gator clip the xformer output to your collapsed whip
antenna and ear jack ground.

If you get allot of intermod from front end overload, place some
resistors between between whip and ear jack ground.

1452. Re: Modified G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 10:48:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Rhatk.38480$ZE5.21914@nlpi061.nbdc.sbc.com>
Source record: 23076

Cheers wrote:
> wish I could know how to use eznec :-(

If you run MSWindows, why not download the free
demo version of EZNEC? It comes with antenna examples
that you can load and look at without having to
design anything.
--
73, Cecil http://www.w5dxp.com

1453. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 15:26:23 UTC
From: Jim-NN7K
Message-ID: <bnetk.11101$L_.5580@flpi150.ffdc.sbc.com>
Source record: 23077

Jeff Liebermann wrote:
> On Tue, 26 Aug 2008 10:05:19 -0700, Jim-NN7K <nn7kexk7zfg@noway.net.>
> wrote:
>
>> Thanks- just was curious- while still working had sites with wedge
>> shaped antennas- one broke its ray-dome - these (Scala?) were on
>> 960MHz , and the antenna itself appeared to be a Log-Periodic ,
>> on a double sided Printed Circuit board- Just curious as to the effects
>> on impedence, and element lengths-spacing , as to how this antenna
>> was designed. Jim NN7K
>
> Would a photo help? This is the guts of a Sinclair SRL441-2P:
> <http://11junk.com/jeffl/antennas/Sinclair%20SRL441-2P/index.html>
>
> Data sheet at:
> <http://www.sinclairtechnologies.com/catalog/product.aspx?id=962>
>
Yep, Thats the Beast! These used by railroad, for double track
installations, for boxcar readers (Automatic Equipment Identification)
and mounted at ground level, aimed up about 30 degree angle,to read
ID tags.
Thanks, Jim NN7K

1454. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 16:34:38 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <bkuab4lqp3ckk4nfj5lt0pnk8th5i8eo76@4ax.com>
Source record: 23078

On Wed, 27 Aug 2008 08:26:23 -0700, Jim-NN7K <nn7kexk7zfg@noway.net.>
wrote:

>Jeff Liebermann wrote:
>> On Tue, 26 Aug 2008 10:05:19 -0700, Jim-NN7K <nn7kexk7zfg@noway.net.>
>> wrote:
>>
>>> Thanks- just was curious- while still working had sites with wedge
>>> shaped antennas- one broke its ray-dome - these (Scala?) were on
>>> 960MHz , and the antenna itself appeared to be a Log-Periodic ,
>>> on a double sided Printed Circuit board- Just curious as to the effects
>>> on impedence, and element lengths-spacing , as to how this antenna
>>> was designed. Jim NN7K
>>
>> Would a photo help? This is the guts of a Sinclair SRL441-2P:
>> <http://11junk.com/jeffl/antennas/Sinclair%20SRL441-2P/index.html>
>>
>> Data sheet at:
>> <http://www.sinclairtechnologies.com/catalog/product.aspx?id=962>

>Yep, Thats the Beast! These used by railroad, for double track
>installations, for boxcar readers (Automatic Equipment Identification)
>and mounted at ground level, aimed up about 30 degree angle,to read
>ID tags.
>Thanks, Jim NN7K

We'll, there's not much that I can tell you about the design. It's a
log-periodic antenna built onto a PCB. It's not G10/FR4 and might be
Polysulfone. Like the LPDA acronym suggests, it's nothing but a mess
of dipoles at varying frequencies, which results in lots of bandwidth
and not much gain.

This might help with the numbers:
<http://www.changpuak.ch/electronics/lpda.html>
Use Frequency 800-1000MHz and 180mm boom length.
It's not exactly the same as the Sinclair LPDA uses staggered
elements.

Other calculators:
<http://www.fortunecity.com/skyscraper/jolt/345/LogCalc.html>
LPDA Excel Spreadsheet calcs:
<http://www.astro.hr/ucionica/radioastronomy/antenna/lpda.zip>
Another LPDA calculator (that I haven't tried):
<http://www.astro.hr/ucionica/radioastronomy/antenna/lpcad23.zip>

More light reading:
<http://www.wolfgang-rolke.de/antennas/ant_400.htm>
<http://en.wikipedia.org/wiki/Log-periodic_antenna>

A $40 commerical LPDA for 400-1000GHz.
<http://www.ramseyelectronics.com/cgi-bin/commerce.exe?preadd=action&key=LPY41>

If you want to see the effects of juggling spacing, element count, and
boom length, it's probably best to use an antenna modeling program.
Looks like you have EZNEC, which will work. If you download the 4NEC2
antenna modeling program, you'll also get a mess of example NEC2
files. There's a directory under:
c:\4nec2\models\logper\
with 4 log periodic antennas, mostly for HF. EZNEC can read them. I
can probably conjur my bad guess of a model of the Sinclair antenna,
but I'm playing vacation and would rather be doing something else.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1455. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 17:22:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <xKqdncdy3-LRECjVnZ2dnUVZ_r3inZ2d@posted.easystreetonline>
Source record: 23080

I routinely use EZNEC to design antennas printed on a substrate. I do the basic design then apply a fudge factor to the conductor width and length derived from comparisons between model results and measurements of real antennas. Final designs usually take some adjustment even at that. However, I haven't tried this for any antenna that depends strongly on coupling between elements, such as a Yagi, because the mutual coupling will also be affected by the substrate and won't be so easy to approximate. In the case of a log periodic, I'd adjust the model transmission line to try and get the same Z0 and velocity factor as the line on the substrate, which you might have to determine by measurement. That would help, but you'd still be lacking accurate mutual coupling information. At best, I think, a model would get you in the ballpark, with a final design requiring some tweaking.

Roy Lewallen, W7EL

1456. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 17:22:26 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <0t2bb4p78holnhpmiklf5dho75flne6lmt@4ax.com>
Source record: 23079

On Wed, 27 Aug 2008 09:34:38 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>I
>can probably conjur my bad guess of a model of the Sinclair antenna,
>but I'm playing vacation and would rather be doing something else.

No, I can't. Neither EZNEC or 4NEC2 will model dielectrics.

Also, this might be useful:
<http://www.antennex.com/shack/Feb06/lpcad.html>
LPCAD 3.0 will generate an NEC file that can be analyzed by your
favorite modeling program.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1457. Re: Mounting an Antron 99 in a tricky spot. HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 17:30:07 UTC
From: Michael <micoder@sbcglobal.net>
Message-ID: <yagtk.373612$0O3.340718@fe02.news.easynews.com>
Source record: 23081
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.policy

Don't count yourself out on a general license. You don't have to be smart. You just have to be committed. I got my general when I was 11. I did not understand the theory at all. However, I was committed and memorized all of the questions.

I realize that this was probably a poor way to get my license, but I really wanted it and I was too young and stupid to understand the theory.

Lloyd Davies wrote:
> "Ron" <anon @anon> wrote in message news:24qia4.phl.17.1@news.alt.net...
>> Back when I had this problem I used a loop of copper wire around the
>> ceiling of my apartment. I put another loop around the floor around the
>> base boards for a radial and I was actually able to transmit quite well
>> and didn't cause any interference to my neighbors televisions.
>>
>> But I was only runnning 25 watts out.
>>
>>
> I still run that setup in my apartment and I'm too stupid to pass the
> no-code test so I'll remain a technichian for life!
>
>

1458. Re: Mounting an Antron 99 in a tricky spot. HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 17:39:55 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <f6f08ba6-ae80-4e00-9085-927cfd85fe29@a70g2000hsh.googlegroups.com>
Source record: 23082
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.policy

On Aug 27, 1:30 pm, Michael <mico...@sbcglobal.net> wrote:
> Don't count yourself out on a general license. You don't have to be
> smart. You just have to be committed. I got my general when I was 11. I
> did not understand the theory at all. However, I was committed and
> memorized all of the questions.
>
> I realize that this was probably a poor way to get my license, but I
> really wanted it and I was too young and stupid to understand the theory.

sorry ole boy but you are not responding to lloyd davies but somebody
faking being him thinking (after years of trying the same things over
and over) that he can humilate lloyd by posting in his name this
stupid notes everywhere he can

the most likely posters is Roger Wisemen AB8MQ

OTOH the license is not that hard to get I agree my wife manged and on
that and something of a lucky draw of questions
>
> Lloyd Davies wrote:
> > "Ron" <anon @anon> wrote in messagenews:24qia4.phl.17.1@news.alt.net...
> >> Back when I had this problem I used a loop of copper wire around the
> >> ceiling of my apartment. I put another loop around the floor around the
> >> base boards for a radial and I was actually able to transmit quite well
> >> and didn't cause any interference to my neighbors televisions.
>
> >> But I was only runnning 25 watts out.
>
> > I still run that setup in my apartment and I'm too stupid to pass the
> > no-code test so I'll remain a technichian for life!

1459. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 17:55:56 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <el3bb41tusrnvbs3ubcbifphe20ruokdiq@4ax.com>
Source record: 23083

On Wed, 27 Aug 2008 10:22:19 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>I routinely use EZNEC to design antennas printed on a substrate. I do
>the basic design then apply a fudge factor to the conductor width and
>length derived from comparisons between model results and measurements
>of real antennas. Final designs usually take some adjustment even at
>that. However, I haven't tried this for any antenna that depends
>strongly on coupling between elements, such as a Yagi, because the
>mutual coupling will also be affected by the substrate and won't be so
>easy to approximate.

I once tried scaling a similar antenna for a PCB dielectric and ran
into that problem. I had G10 on one side of the elements and air on
the other, each with its own dielectric constant. Another version
used glass as a substrate. I made a simple breadboard for testing and
found that a good first guess was the geometric average (sqrt of the
sum of the squares) of the dielectric constants. However, when I
actually built the antenna, I had to do considerable tweaking and
guesswork. It's been many years, but I don't think my models and
reality ever agreed.

I also tried to use MSTRIP40 for modeling a dipole array on a PCB.
<http://rze-falbala.rz.e-technik.fh-kiel.de/~splitt/html/mstrip.htm>
It's intended to do patch and panel antennas, and works well for
those. It can also do a dielectric sandwitch, which might be handy.
However, when I tried to do a simple dipole array, I got bizarre
results, probably due to some mistakes on my part. A single dipole
works fine (it's supplied as a sample file), but I just couldn't get
arrays to work. I just noticed there's a later version available, so
I may try again. However, I'm playing vacation this week so it will
have to wait.

>In the case of a log periodic, I'd adjust the model
>transmission line to try and get the same Z0 and velocity factor as the
>line on the substrate, which you might have to determine by measurement.
>That would help, but you'd still be lacking accurate mutual coupling
>information. At best, I think, a model would get you in the ballpark,
>with a final design requiring some tweaking.

Did you notice the odd patches at the ends of the elements in the
photographs?
<http://11junk.com/jeffl/antennas/Sinclair%20SRL441-2P/index.html>
Methinks Sincair may have also done some tweaking.

Thanks for the hints.

>Roy Lewallen, W7EL

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1460. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 18:25:21 UTC
From: qrk <SpamTrap@spam.net>
Message-ID: <is6bb4l86if6mch2hipshcmrf4c15b668l@4ax.com>
Source record: 23084
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Tue, 26 Aug 2008 11:02:15 -0700 (PDT), Wimpie <wimabctel@tetech.nl>
wrote:

>On 26 ago, 19:38, qrk <SpamT...@spam.net> wrote:
>> On Tue, 26 Aug 2008 10:02:47 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
>> wrote:
>>
>>
>>
>> >Hello,
>>
>> >Most formulas for microstrip transmission line assume that there is
>> >dielectric all over the ground plane.
>>
>> >Does somebody know a formula (or graphical solution) for the
>> >characteristic impedance of a microstrip where there is only
>> >dielectric material under the strip (so you can see the ground
>> >plane)?
>>
>> >Best regards,
>>
>> >Wim
>> >PA3DJS
>> >www.tetech.nl
>> >The mail address is valid when you remove abc
>>
>> http://atlc.sourceforge.net/
>> The above link is a wonderful arbitrary solver for transmission lines.
>> This is primarily a Unix program. If you need a Windows build of the
>> program, I probably have version 4.4 somewhere.
>>
>> --
>> Mark
>
>Hello Mark,
>
>This is good one (I found it via google also). You can enter both
>metallics and dielectrics as you want. It would be very nice when you
>can mail me a Windows Build (I hope it is not that big). A link would
>also be useful.
>
>My address is valid when you remove abc.
>

>Best regards and thanks,
>
>Wim
>PA3DJS
>www.tetech.nl

I will keep this on the web site for a few days. About 3MB download.
http://qrkwiggles.googlepages.com/atlc-4.4.4_Win32.zip

This version has problems with muliple dielectrics. I works fine with
two dielectrics, air and one of your choosing.

--
Mark

1461. fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 19:04:14 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B077ACA0133Huckleberrybigvalley@198.186.192.196>
Source record: 23085

Anyone have suggestions on a method I might try to "twist" and collapse some sections of my telescoping fiberglass mast? I put it up several days ago with perhaps a bit too much "vigor" in making sure it would not collapse on its own and now that I want to stow it away there are a couple of sections I can not unlock. My grip is good, but the sections are really tight. I hate to use something mechanical for fear of cracking the fiberglass and I hate to use a lubricant since the locking requires friction.

Thoughts ?

Ed K7AAT

1462. Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 19:11:21 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1813d1ae-8fd0-49e4-b9f0-3fdca6467d80@k30g2000hse.googlegroups.com>
Source record: 23086

www.unwinantennas.com

By this week end a revised version on antenna design and the
implications of
equilibrium, static particles and the influence of the "weak" force
will be described in
their entirety, together with used computer program layouts where the
reader can check their
own antenna computor programs for correctness. This page is rewritten
so that naysayers
skilled in the art of antennas and physics can specifically address,
in detail, their thoughts
without the generalized thinking that all is known about antennas for
group discussion
as the basis for their analysis, such that we can all move forward
away from the constant
bickering and further advance the hobby.
AC6XG I haven't forgotten you.
The time will come,.....eventually !

Art, KB9MZ

1463. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 19:31:56 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <JemdnckLvqkvNijVnZ2dnUVZ8j-dnZ2d@pipex.net>
Source record: 23089

Ed wrote:
> Anyone have suggestions on a method I might try to "twist" and collapse
> some sections of my telescoping fiberglass mast? I put it up several days
> ago with perhaps a bit too much "vigor" in making sure it would not
> collapse on its own and now that I want to stow it away there are a couple
> of sections I can not unlock. My grip is good, but the sections are really
> tight. I hate to use something mechanical for fear of cracking the
> fiberglass and I hate to use a lubricant since the locking requires
> friction.
>
> Thoughts ?
>
> Ed K7AAT
>
======
Immerse outer end (only)in hot water. Hopefully it will expand slightly
,but not the inner mast part .

Alternatively cover outer end with insulation material and 'cool' inner
mast tube with evaporating CO2 'ice' hopefully causing it to shrink
slightly.

Of course success is not guaranteed but worth trying .....at least it is
non-destructive.

Frank GM0CSZ / KN6WH

1464. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 19:37:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g94adj$j66$1@news.albasani.net>
Source record: 23087

Art Unwin wrote:
> www.unwinantennas.com
>
> By this week end a revised version on antenna design and the
> implications of
> equilibrium, static particles and the influence of the "weak" force
> will be described in
> their entirety, together with used computer program layouts where the
> reader can check their
> own antenna computor programs for correctness. This page is rewritten
> so that naysayers
> skilled in the art of antennas and physics can specifically address,
> in detail, their thoughts
> without the generalized thinking that all is known about antennas for
> group discussion
> as the basis for their analysis, such that we can all move forward
> away from the constant
> bickering and further advance the hobby.
> AC6XG I haven't forgotten you.
> The time will come,......eventually !
>
> Art, KB9MZ

All I get is "Unwin Antennas" an "ABC logo" and "Home" ...

The rest of the page is a blank ???

Regards,
JS

1465. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 19:38:10 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <p0itk.8703$cn7.8450@flpi145.ffdc.sbc.com>
Source record: 23088
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

qrk wrote:
> On Tue, 26 Aug 2008 11:02:15 -0700 (PDT), Wimpie <wimabctel@tetech.nl>
> wrote:
>
>> On 26 ago, 19:38, qrk <SpamT...@spam.net> wrote:
>>> On Tue, 26 Aug 2008 10:02:47 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
>>> wrote:
>>>
>>>
>>>
>>>> Hello,
>>>> Most formulas for microstrip transmission line assume that there is
>>>> dielectric all over the ground plane.
>>>> Does somebody know a formula (or graphical solution) for the
>>>> characteristic impedance of a microstrip where there is only
>>>> dielectric material under the strip (so you can see the ground
>>>> plane)?
>>>> Best regards,
>>>> Wim
>>>> PA3DJS
>>>> www.tetech.nl
>>>> The mail address is valid when you remove abc
>>> http://atlc.sourceforge.net/
>>> The above link is a wonderful arbitrary solver for transmission lines.
>>> This is primarily a Unix program. If you need a Windows build of the
>>> program, I probably have version 4.4 somewhere.
>>>
>>> --
>>> Mark
>> Hello Mark,
>>
>> This is good one (I found it via google also). You can enter both
>> metallics and dielectrics as you want. It would be very nice when you
>> can mail me a Windows Build (I hope it is not that big). A link would
>> also be useful.
>>
>> My address is valid when you remove abc.
>>
>> Best regards and thanks,
>>
>> Wim
>> PA3DJS
>> www.tetech.nl

>
>
> I will keep this on the web site for a few days. About 3MB download.
> http://qrkwiggles.googlepages.com/atlc-4.4.4_Win32.zip
>
> This version has problems with muliple dielectrics. I works fine with
> two dielectrics, air and one of your choosing.
>

Thanks for sharing this, Mark. I'll try it out as well, just not right now.

--
Regards, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

1466. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 19:48:31 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <j7bbb4pnt0ttqccu82d9512s1tijfak7rn@4ax.com>
Source record: 23090

On 27 Aug 2008 19:04:14 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

> Anyone have suggestions on a method I might try to "twist" and collapse
>some sections of my telescoping fiberglass mast? I put it up several days
>ago with perhaps a bit too much "vigor" in making sure it would not
>collapse on its own and now that I want to stow it away there are a couple
>of sections I can not unlock. My grip is good, but the sections are really
>tight. I hate to use something mechanical for fear of cracking the
>fiberglass and I hate to use a lubricant since the locking requires
>friction.

Let me guess. You extended the pole when the air temperature was cold
and are now trying to collapse it when the air temperature is hot? The
coefficient of thermal expansion is about the same as glass or
1.1x10^-5 inch/inch/F which is enough to expand the inner tubing into
the outer sleeve almost permanently. After a few field days of having
exactly the same problem, I sorta learned my lesson.

The easiest is to wait until it cools down at night. You can also
splash cold water on the joints, which might help. If you want to
prevent the problem in the future, I found that ordinary Ivory soap
smeared on the joint, makes a decent lube that will not cause
premature collapse. If you apply too much, just wash it off.

Also, do NOT beat on the ends in an attempt to release the seized
joint. The twist type telescoping locks will just lock even harder.

If brute force is your forte, you might try a rubber pipe strap wrench
as used to remove an automobile spin on oil filter. Wrap the strap
around a few times and put something under the gripper teeth to
distribute the force. I've never tried this but it seems like it
might work.

Also, make sure you're turning in the correct direction. I did that
once with a window washer pole with predictable results and
embarrassment.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1467. Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 20:17:39 UTC
From: dbc254 <dallas25@voicenet.com>
Message-ID: <110c0833-aa68-4266-b599-4a5565eb2416@8g2000hse.googlegroups.com>
Source record: 23091

Everyone makes fun of newbies buying ready-built dipoles on eBay, but nobody can direct you to where to buy baluns? Searched hi and lo online, and what I found, was more expensive than buying a ready-made dipole! I'd like to buy a balun, and attach my own cut-to-length wire, but can't find cheap baluns ANYWHERE.

Where are you Elmers buying your baluns?

1468. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 20:27:47 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <5Nitk.22915$N87.7320@nlpi068.nbdc.sbc.com>
Source record: 23092

dbc254 wrote:
> Where are you Elmers buying your baluns?

How about balun kits from Amidon?
https://www.amidoncorp.com/categories/12?page_number=2
--
73, Cecil http://www.w5dxp.com

1469. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 20:38:59 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <8ccb8357-1994-4a16-97a3-efc530fb0de4@c65g2000hsa.googlegroups.com>
Source record: 23093
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On 26 ago, 19:38, qrk <SpamT...@spam.net> wrote:
> On Tue, 26 Aug 2008 10:02:47 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
> wrote:
>
>
>
> >Hello,
>
> >Most formulas for microstrip transmission line assume that there is
> >dielectric all over the ground plane.
>
> >Does somebody know a formula (or graphical solution) for the
> >characteristic impedance of a microstrip where there is only
> >dielectric material under the strip (so you can see the ground
> >plane)?
>
> >Best regards,
>
> >Wim
> >PA3DJS
> >www.tetech.nl
> >The mail address is valid when you remove abc
>
> http://atlc.sourceforge.net/
> The above link is a wonderful arbitrary solver for transmission lines.
> This is primarily a Unix program. If you need a Windows build of the
> program, I probably have version 4.4 somewhere.
>
> --
> Mark

Hello Mark,

I received a windows build via Tom and created a .bmp file with the structure (with MSPaint, save as .bmp, not .jpg). Result is OK (I use Win2000 SP4). My hand calculation closely matches the simulated result.

As long as ground (green color) surrounds your structure completely, results are OK. If not (for example a real microstrip line), results are unreliable.

I will make the line and check the VSWR with 50 Ohms termination.

Best regards,

Wim
PA3DJS
www.tetech.nl
when you remove abc, the address is valid.

1470. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 20:43:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g94e96njg1@news.albasani.net>
Source record: 23094

dbc254 wrote:
> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
> nobody can direct you to where to buy baluns? Searched hi and lo
> online, and what I found, was more expensive than buying a ready-made
> dipole! I'd like to buy a balun, and attach my own cut-to-length
> wire, but can't find cheap baluns ANYWHERE.
>
> Where are you Elmers buying your baluns?

They are simply too simple to build to buy!

http://www.universal-radio.com/CATALOG/misc/amidon.html

Pick your core, grab a few feet of wire ...

Regards,
JS

1471. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 20:50:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g94enj$o7e$1@news.albasani.net>
Source record: 23095

dbc254 wrote:
> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
> nobody can direct you to where to buy baluns? Searched hi and lo
> online, and what I found, was more expensive than buying a ready-made
> dipole! I'd like to buy a balun, and attach my own cut-to-length
> wire, but can't find cheap baluns ANYWHERE.
>
> Where are you Elmers buying your baluns?

Oh yeah, you probably guessed ... but just in case -- we make fun of
newbies buying baluns too! (well, unun's also) 8-)

Regards,
JS

1472. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:05:21 UTC
From: Dave <noone@nowhere.com>
Message-ID: <lkjtk.948$lf2.471@trnddc07>
Source record: 23096

i like it just as it is now, an empty page... probably the most
representative presentation of your ideas i have seen yet.

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:1813d1ae-8fd0-49e4-b9f0-3fdca6467d80@k30g2000hse.googlegroups.com...
> www.unwinantennas.com
>
> By this week end a revised version on antenna design and the
> implications of
> equilibrium, static particles and the influence of the "weak" force
> will be described in
> their entirety, together with used computer program layouts where the
> reader can check their
> own antenna computor programs for correctness. This page is rewritten
> so that naysayers
> skilled in the art of antennas and physics can specifically address,
> in detail, their thoughts
> without the generalized thinking that all is known about antennas for
> group discussion
> as the basis for their analysis, such that we can all move forward
> away from the constant
> bickering and further advance the hobby.
> AC6XG I haven't forgotten you.
> The time will come,......eventually !
>
> Art, KB9MZ

1473. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:05:35 UTC
From: Bubblesdee <Bubblesdee.2fb9fe8@radiobanter.com>
Message-ID: <Bubblesdee.2fb9fe8@radiobanter.com>
Source record: 23109

No Spam;643798 Wrote:
> On Tue, 26 Aug 2008 22:19:42 +0100, Bubblesdee wrote:
> -
> Hi
>
> I am new to this forum and have a (most likely) dumb question
>
> I recently aquired a S350DL receiver. I will be using this rig until
> I
> can buy a rela communications receiver. I will be using it to
> receive
> Shortwave only. I have constructed a T2FD (Tilted, terminated,
> folded
> dipole) with a design feed point impedance of 300 ohms. The S350 DL
> only has an unbalance high impedance external antenna point and a
> ground
> on it. How can I attach the T2Fd to the S350Dl and acheive a good
> impedance match.
>
> 1) Is the whip antenna on the S350DL a low impedance feed point (i.e.
> 50
> or 75 ohms)? If so, could I use a 4:1 balun at the feedpoint of the
> T2FD to convert the feed line to 75 ohm coax (which would be
> unbalance
> line now) and just clip the center conductor to the whip and the
> sheild
> to a grounding rod?
>
> 2) I could use 300 ohm ladder line to connect to the T2FD but the
> problem is that the S350DL does not have a balanced esternal input
> point
> on it.
>
> I guess what I am asking is what would be the best way to couple A
> 300
> ohm T2FD antenna to a Crappy Radioshack S350DL receiver and achieve
> reasonable impedance matching.
> -
>
> On HF, matching imp for receiving should not make much difference
> give-or-
> take a few 100%
>
> I suspect whip antenna is high imp. ~2k and unbalanced. You would need

>
> to make a one2one or four2one matching xformer placed near the radio
> with
> ladder line coming from antenna. This will stop common mode noise from
>
> entering your radio via feedline. Two 300-75 ohm TV xformers back to
> back should work.
>
> twinlead 300 xformer 75 short coax 75 - 300 twinlead
>
> gator clip the xformer output to your collapsed whip
> antenna and ear jack ground.
>
> If you get allot of intermod from front end overload, place some
> resistors between between whip and ear jack ground.

Thanks for your reply No Spam.

I was wondering if you might be able to clarify some points that you made.

1) Since I will be feeding the antenna via 300 ohm feedline, transforming it down to 75 ohms (coax) to eliminate noise and then transforming it back to 300 ohms, could I not just take one leg of the output of the transformer and connect it to the External antenna connector on the back of the radio instead of the whip? and then connect the other leg from the transformer to the ear jack ground. and then finally ground the radio via the GROUND connecter on the back of the set.

2) when you refer to to the ear jack ground, are you referring to the ground of the headphone jack. Is this the same point as the GROUND connector on the back of the radio or are the two points different?

Thanks again

--
Bubblesdee

1474. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:10:01 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ac873424-99d0-439c-b6bd-b128b3e10983@e53g2000hsa.googlegroups.com>
Source record: 23097

On Aug 27, 2:37 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> >www.unwinantennas.com
>
> > By this week end a revised version on antenna design and the
> > implications of
> > equilibrium, static particles and the influence of the "weak" force
> > will be described in
> > their entirety, together with used computer program layouts where the
> > reader can check their
> > own antenna computor programs for correctness. This page is rewritten
> > so that naysayers
> > skilled in the art of antennas and physics can specifically address,
> > in detail, their thoughts
> > without the generalized thinking that all is known about antennas for
> > group discussion
> > as the basis for their analysis, such that we can all move forward
> > away from the constant
> > bickering and further advance the hobby.
> > AC6XG I haven't forgotten you.
> > The time will come,......eventually !
>
> > Art, KB9MZ
>
> All I get is "Unwin Antennas" an "ABC logo" and "Home" ...
>
> The rest of the page is a blank ???
>
> Regards,
> JS

But I had to take the page off for revisions in progress!

1475. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:18:55 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f735f29a-e4cf-4404-8dd6-7caa8d15c75d@x41g2000hsb.googlegroups.com>
Source record: 23098

On Aug 27, 4:10 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Aug 27, 2:37 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
>
>
> > Art Unwin wrote:
> > >www.unwinantennas.com
>
> > > By this week end a revised version on antenna design and the
> > > implications of
> > > equilibrium, static particles and the influence of the "weak" force
> > > will be described in
> > > their entirety, together with used computer program layouts where the
> > > reader can check their
> > > own antenna computor programs for correctness. This page is rewritten
> > > so that naysayers
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> > > in detail, their thoughts
> > > without the generalized thinking that all is known about antennas for
> > > group discussion
> > > as the basis for their analysis, such that we can all move forward
> > > away from the constant
> > > bickering and further advance the hobby.
> > > AC6XG I haven't forgotten you.
> > > The time will come,......eventually !
>
> > > Art, KB9MZ
>
> > All I get is "Unwin Antennas" an "ABC logo" and "Home" ...
>
> > The rest of the page is a blank ???
>
> > Regards,
> > JS
>
> But I had to take the page off for revisions in progress!

David, the page is not for the likes of you.
I will specifically state that it for the benefit of those
skilled in the art of antennas and physics . Certainly not for
yokels with loose mouths tho the blank page is typical of
your facial expressions when involved with antennas

1476. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:19:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g94gcbpje3@news.albasani.net>
Source record: 23099

Art Unwin wrote:

> ...
> But I had to take the page off for revisions in progress!

Well, you will simply have to excuse me; I am not psychic! 8-)

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1477. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:21:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g94gglpje4@news.albasani.net>
Source record: 23100

Art Unwin wrote:

> ...
> David, the page is not for the likes of you.
> I will specifically state that it for the benefit of those
> skilled in the art of antennas and physics . Certainly not for
> yokels with loose mouths tho the blank page is typical of
> your facial expressions when involved with antennas

How about those skilled in the art of magic and divination? You
prejudiced to them also?

Regards,
JS

Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1478. Re: Mounting an Antron 99 in a tricky spot. HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:22:51 UTC
From: Mark Morgasm kb8rqz <kosherspammerkb9rqz@gmail.com>
Message-ID: <9a814716-76bc-4ec8-a79d-19f8a52c74fc@1g2000pre.googlegroups.com>
Source record: 23101
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.policy

On Aug 27, 1:39 pm, an_old_friend <konst...@hotmail.com> wrote:
> On Aug 27, 1:30 pm, Michael <mico...@sbcglobal.net> wrote:
>
> > Don't count yourself out on a general license. You don't have to be
> > smart. You just have to be committed. I got my general when I was 11. I
> > did not understand the theory at all. However, I was committed and
> > memorized all of the questions.
>
> > I realize that this was probably a poor way to get my license, but I
> > really wanted it and I was too young and stupid to understand the theory.
>
> sorry ole boy but you are not responding to lloyd davies but somebody
> faking being him thinking (after years of trying the same things over
> and over) that he can humilate lloyd by posting in his name this
> stupid notes everywhere he can

Just like Mark Morgan uses lots of sockpuppets under others' names.

> the most likely <Wrong as usual, Morgan.>

Just like YOU wedre the most likely susopect in sending a fake SOS
call on 20 meters.

>OTOH

You and your shemale wife Gav blew the VE team so that General license
could be passed.

1479. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:29:13 UTC
From: Bob <bobasko@hotmail.com>
Message-ID: <e5405$48b5c72e$4c0a840c$19108@TEKSAVVY.COM-Free>
Source record: 23102

why this two companies? Keep for yourself.

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g94e96njg1@news.albasani.net...
> dbc254 wrote:
>> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
>> nobody can direct you to where to buy baluns? Searched hi and lo
>> online, and what I found, was more expensive than buying a ready-made
>> dipole! I'd like to buy a balun, and attach my own cut-to-length
>> wire, but can't find cheap baluns ANYWHERE.
>>
>> Where are you Elmers buying your baluns?
>
> They are simply too simple to build to buy!
>
> http://www.universal-radio.com/CATALOG/misc/amidon.html
>
> Pick your core, grab a few feet of wire ...
>
> Regards,
> JS

1480. Re: Mounting an Antron 99 in a tricky spot. HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:29:43 UTC
From: an old friend <kb9rqz@yahoo.com>
Message-ID: <d1952fb8-9a4d-4591-a29b-7ad7020b5062@a1g2000hsb.googlegroups.com>
Source record: 23103
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.policy

On Aug 27, 5:22 pm, Mark Morgasm kb8rqz
<kosherspammerkb9...@gmail.com> wrote:
>

> You and your shemale wife Gav blew the VE team so that General license
> could be passed.

why do you libel the VE's fake

1481. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 21:31:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g94h3uqdi1@news.albasani.net>
Source record: 23104

Bob wrote:
> why this two companies? Keep for yourself.
>

why you "talk" so? Speak him not me! 8-)

Regards,
JS

Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1482. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 22:14:43 UTC
From: Dave <noone@nowhere.com>
Message-ID: <nlktk.864$UX.475@trnddc03>
Source record: 23105

"dbc254" <dallas25@voicenet.com> wrote in message
news:110c0833-aa68-4266-b599-4a5565eb2416@8g2000hse.googlegroups.com...
> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
> nobody can direct you to where to buy baluns? Searched hi and lo
> online, and what I found, was more expensive than buying a ready-made
> dipole! I'd like to buy a balun, and attach my own cut-to-length
> wire, but can't find cheap baluns ANYWHERE.
>
> Where are you Elmers buying your baluns?

you have coax? split one end, connect center conductor to one wire, shield to the other. wind a bunch of turns (there is a web site somewhere with numbers) around a piece of pvc pipe, and voila, instant balun. you want to pay for off the shelf stuff, expect to pay for the ferrites that can handle 1500w all the way down to 160m, plus construction, packaging, shipping, and marketting... that stuff is more expensive than the rest of the antenna.

want to be even cheaper? use twin lead, connect it directly to the wire and run it down to a tuner that includes a balun... do it all in one place with less loss.

1483. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 23:13:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1805dea6-eabf-40dd-ae12-6a38614f6111@r66g2000hsg.googlegroups.com>
Source record: 23107

On Aug 27, 4:21 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > David, the page is not for the likes of you.
> > I will specifically state that it for the benefit of those
> > skilled in the art of antennas and physics . Certainly not for
> > yokels with loose mouths tho the blank page is typical of
> > your facial expressions when involved with antennas
>
> How about those skilled in the art of magic and divination? You
> prejudiced to them also?
>
> Regards,
> JS
>
> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

First John I stated right up frount "by this weekend"
Secondly divination is practiced on this group. How else can say they
don't understand it but
it won't work?
I now have to detail every step in a physics form not only to educate
the perceived experts but at the same time bring them up to par
with the physic that I espouse. At the same time I will supply antenna
program inputs
that will give an answer of 100% efficiency which is unknown to those
who use planar
designs for antennas where the answers are only approximate.
Ofcourse there will still be the naysayers
who say it is all bulXXXX but this time I am hoping for some more
intelligent
people to come forward that can follow known pats of physics.
For you I will tryand make a quick start so you will have some reading
matter
for tomorrow and complete construction for the week end. Aren't I a
nice guy?
Art

1484. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-27 23:42:20 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9d099836-716e-4824-8a6f-8bd13ac8159a@c58g2000hsc.googlegroups.com>
Source record: 23108

On Aug 27, 4:21 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > David, the page is not for the likes of you.
> > I will specifically state that it for the benefit of those
> > skilled in the art of antennas and physics . Certainly not for
> > yokels with loose mouths tho the blank page is typical of
> > your facial expressions when involved with antennas
>
> How about those skilled in the art of magic and divination? You
> prejudiced to them also?
>
> Regards,
> JS
>
> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

John, I will give you some things about antennas for you to ponder
upon
or to google for the answers.
Why is the skin depth not on a a piece of aluminum that you buy in the
store?
Why do people have difficulty in identifying the "weak" force?
Einstein failed
and Feynman is just guessing with his "w" vector.
Where do the charges go on the surface of a fractional wave length
vertical
when the charge reaches the top of the antenna?
Why are antennas all straight when the helix antenna do the same job?
How can you get more gain from a vertical antenna that is not at right
angles to the earth"
What method did the early masters of electricity and mechanics use to
ensure that a
subject was in equilibrium?
John, these points and many more will be answered on my page with
known facts that confirm.
Start googling now so you can get a feel for things when the page
comes out plus seeing a
computor program for 100% efficiency radiators and not just close
approximations.
Surely such things will tickle your curiousity about radiation which I
will divulge which
has never been provided to the world of physics..... until now!
Art

1485. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 00:02:05 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <SeidnZaJfr0gQSjVnZ2dnUVZ_tCdnZ2d@earthlink.com>
Source record: 23106

"Dave" <noone@nowhere.com> wrote in message
news:nlktk.864$UX.475@trnddc03...
>
> "dbc254" <dallas25@voicenet.com> wrote in message
> news:110c0833-aa68-4266-b599-4a5565eb2416@8g2000hse.googlegroups.com...
>> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
>> nobody can direct you to where to buy baluns? Searched hi and lo
>> online, and what I found, was more expensive than buying a ready-made
>> dipole! I'd like to buy a balun, and attach my own cut-to-length
>> wire, but can't find cheap baluns ANYWHERE.
>>
>> Where are you Elmers buying your baluns?
>
> you have coax? split one end, connect center conductor to one wire,
> shield to the other. wind a bunch of turns (there is a web site somewhere
> with numbers) around a piece of pvc pipe, and voila, instant balun. you
> want to pay for off the shelf stuff, expect to pay for the ferrites that
> can handle 1500w all the way down to 160m, plus construction, packaging,
> shipping, and marketting... that stuff is more expensive than the rest of
> the antenna.
>

Price the 20 or 30 feet of coax to wind the balun (choke) and it may be
cheeper to buy a balun.

I don't see wasting time or money on a balun for just a simple dipole .
Sure it may make the patern vary from the normal textbook, but who cares
most of the time. Most people have to put the antenna up wherever they can
and lots of time it is not in the desired direction anyway.

NOw a beam or some other antenna design is differant.

1486. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 00:04:19 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <5a619cc6-d0d5-4ab3-a098-fc9e72aca0f4@w1g2000prk.googlegroups.com>
Source record: 23110
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Aug 27, 11:25 am, qrk <SpamT...@spam.net> wrote:
> On Tue, 26 Aug 2008 11:02:15 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
> wrote:
>
>
>
> >On 26 ago, 19:38, qrk <SpamT...@spam.net> wrote:
> >> On Tue, 26 Aug 2008 10:02:47 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
> >> wrote:
>
> >> >Hello,
>
> >> >Most formulas for microstrip transmission line assume that there is
> >> >dielectric all over the ground plane.
>
> >> >Does somebody know a formula (or graphical solution) for the
> >> >characteristic impedance of a microstrip where there is only
> >> >dielectric material under the strip (so you can see the ground
> >> >plane)?
>
> >> >Best regards,
>
> >> >Wim
> >> >PA3DJS
> >> >www.tetech.nl
> >> >The mail address is valid when you remove abc
>
> >>http://atlc.sourceforge.net/
> >> The above link is a wonderful arbitrary solver for transmission lines.
> >> This is primarily a Unix program. If you need a Windows build of the
> >> program, I probably have version 4.4 somewhere.
>
> >> --
> >> Mark
>
> >Hello Mark,
>
> >This is good one (I found it via google also). You can enter both
> >metallics and dielectrics as you want. It would be very nice when you
> >can mail me a Windows Build (I hope it is not that big). A link would
> >also be useful.
>
> >My address is valid when you remove abc.

>
> >Best regards and thanks,
>
> >Wim
> >PA3DJS
> >www.tetech.nl
>
> I will keep this on the web site for a few days. About 3MB
download.http://qrkwiggles.googlepages.com/atlc-4.4.4_Win32.zip
>
> This version has problems with muliple dielectrics. I works fine with
> two dielectrics, air and one of your choosing.
>
> --
> Mark

The version I have, which I sent to Wim, is 4.6.0. I'm not sure about the differences, but if anyone is interested, I have it in a zip file I can send. The zip file is encrypted, so it will pass through at least some of the email filters that take out executables or zips with embedded executables; I'll supply the password of course (just my call...).

Cheers,
Tom

1487. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 00:14:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g94qkl$3l1$1@news.albasani.net>
Source record: 23111

Bubblesdee wrote:

> Thanks for your reply No Spam.
>
> I was wondering if you might be able to clarify some points that you
> made.
>
> 1) Since I will be feeding the antenna via 300 ohm feedline,
> transforming it down to 75 ohms (coax) to eliminate noise and then
> transforming it back to 300 ohms, could I not just take one leg of the
> output of the transformer and connect it to the External antenna
> connector on the back of the radio instead of the whip? and then
> connect the other leg from the transformer to the ear jack ground. and
> then finally ground the radio via the GROUND connecter on the back of
> the set.
>
> 2) when you refer to to the ear jack ground, are you referring to the
> ground of the headphone jack. Is this the same point as the GROUND
> connector on the back of the radio or are the two points different?
>
> Thanks again

My S350DL has unbalanced, 500 ohm antenna terminals on the back; I
would imagine yours to be the same.

A 1:1 balun (balanced-to-unbalanced) at the dipole and coax (75 ohm) and
a 6.666:1 UNUN (unbalaced-to-unbalanced) between the coax and the S350DL
would be the ideal setup.

Regards,
JS

Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1488. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 00:16:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g94qpc$3kp$1@news.albasani.net>
Source record: 23112

John Smith wrote:

>
> My S350DL has unbalanced, 500 ohm antenna terminals on the back; I
> would imagine yours to be the same.
>
> A 1:1 balun (balanced-to-unbalanced) at the dipole and coax (75 ohm) and
> a 6.666:1 UNUN (unbalaced-to-unbalanced) between the coax and the S350DL
> would be the ideal setup.
>
> Regards,
> JS
>
>
> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

Oh chit, it is folded dipole, duh!

A 1:1 current choke and forget the slight mismatch!

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1489. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 00:22:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g94r3v$46d$1@news.albasani.net>
Source record: 23113

John Smith wrote:
> John Smith wrote:
>
>>
>> My S350DL has unbalanced, 500 ohm antenna terminals on the back; I
>> would imagine yours to be the same.
>>
>> A 1:1 balun (balanced-to-unbalanced) at the dipole and coax (75 ohm)
>> and a 6.666:1 UNUN (unbalaced-to-unbalanced) between the coax and the
>> S350DL would be the ideal setup.
>>
>> Regards,
>> JS
>>
>>
>> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!
>
> Oh chit, it is folded dipole, duh!
>
> A 1:1 current choke and forget the slight mismatch!
>
> Regards,
> JS
> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

Actually, that is in error. Since the folded dipole is balanced and the
500 ohm terminals on the receiver show they are unbalanced, the 1:1
balun should suffice. It seems you will be going from 300 twinlead
(balanced) to the 500 ohm terminals.

450 ohm feedline with a 1:1 balun is yet another option ...

Regards,
JS

Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1490. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 00:22:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4mqbb49inb5oe4m9instrp4fuftco54fhh@4ax.com>
Source record: 23114

On Wed, 27 Aug 2008 22:05:35 +0100, Bubblesdee
<Bubblesdee.2fb9fe8@radiobanter.com> wrote:

>
>No Spam;643798 Wrote:
>> On Tue, 26 Aug 2008 22:19:42 +0100, Bubblesdee wrote:
>> -
>> Hi
>>
>> I am new to this forum and have a (most likely) dumb question
>>
>> I recently aquired a S350DL receiver. I will be using this rig until
>> I
>> can buy a rela communications receiver. I will be using it to
>> receive
>> Shortwave only. I have constructed a T2FD (Tilted, terminated,
>> folded
>> dipole) with a design feed point impedance of 300 ohms.

We can only presume this 300 Ohms comes from a resistor, otherwise an
antenna does NOT present one impedance across all frequencies; and not
even across the bandwidth around 10% of 1 frequency.

>>The S350 DL
>> only has an unbalance high impedance external antenna point and a
>> ground
>> on it. How can I attach the T2Fd to the S350Dl and acheive a good
>> impedance match.

This begs the question: "Why do you want a match, when you have
already inserted a resistor that absorbs the power?" Another
question: "A match to what?"

>> 1) Is the whip antenna on the S350DL a low impedance feed point (i.e.
>> 50
>> or 75 ohms)? If so, could I use a 4:1 balun at the feedpoint of the
>> T2FD to convert the feed line to 75 ohm coax (which would be
>> unbalance
>> line now) and just clip the center conductor to the whip and the
>> sheild
>> to a grounding rod?

This would presume a match to the resistor on the T2FD. However, is
the receiver a 75(50)Ohm input? 50 Ohms source Z is a convention of
transmitters, and specified as so; but it is not always a given for
receivers' input Z. Some literally supply the 50 Ohm resistor

internally and at the gate or base of the input transistor. The gate
or base is functionally a much higher Z, but the necessity of bias and
other considerations sets this characteristic to something lower (but
may still be quite high).

Hence, without knowing this characteristic, you maybe discarding your
effort.

>>
>> 2) I could use 300 ohm ladder line to connect to the T2FD but the
>> problem is that the S350DL does not have a balanced esternal input
>> point
>> on it.

Being a "tilted" antenna, it will NEVER be balanced either!

>> I guess what I am asking is what would be the best way to couple A
>> 300
>> ohm T2FD antenna to a Crappy Radioshack S350DL receiver and achieve
>> reasonable impedance matching.

I think what you are asking is can you improve performance - matching
be damned. A receiver demands much less attention to this as there is
usually excess capacity in gain within it.

>> On HF, matching imp for receiving should not make much difference
>> give-or-
>> take a few 100%
>>
>> I suspect whip antenna is high imp. ~2k and unbalanced. You would need
>>
>> to make a one2one or four2one matching xformer placed near the radio
>> with
>> ladder line coming from antenna. This will stop common mode noise from
>>
>> entering your radio via feedline.

A matching transformer is not always a choke. A choke is not always a
matching transformer. A choke reduces common mode currents, but it
has to present an impedance that is in excess of the impedance of your
input (still little understood). Chokes and transformers do not
reduce noise without also reducing signal - UNLESS that noise arrives
from your home, and travels into your receiver through the inherent
imbalance of the system. A choke WILL aid you here, but it won't cut
down on the crackle of tropical storms.

73's
Richard Clark, KB7QHC

1491. Re: Mounting an Antron 99 in a tricky spot. HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 01:59:15 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <1Entk.18905$Rs1.15567@newsfe08.iad>
Source record: 23115
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.policy

"Michael" <micoder@sbcglobal.net> wrote in message
news:yagtk.373612$0O3.340718@fe02.news.easynews.com...

< snip >

> I got my general when I was 11. I
> did not understand the theory at all. However, I was committed and
> memorized all of the questions.
>
> I realize that this was probably a poor way to get my license, but I
> really wanted it and I was too young and stupid to understand the theory.

But you overcame that (or you'd not be in this NG). Good for you.

Some older adult hams show a similar lack of understanding and, being in
their sixties and seventies, will probably not become technically savvy.
For a few, the gear cannot be made automatic enough. They need constant
coaching.

[I had to delete a rambling, ill-mannered rant from here. Everything I said
applied to me at some point, too.]

1492. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 02:52:49 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B07E97644D62mcoslocomcastnet@216.196.97.136>
Source record: 23116

Jeff Liebermann <jeffl@cruzio.com> wrote in
news:j7bbb4pnt0ttqccu82d9512s1tijfak7rn@4ax.com:

> If brute force is your forte, you might try a rubber pipe strap wrench
> as used to remove an automobile spin on oil filter. Wrap the strap
> around a few times and put something under the gripper teeth to
> distribute the force. I've never tried this but it seems like it
> might work.

Those strap wrenches work pretty well, Jeff.

- 73 de Mike N3LI -

1493. Re: Mounting an Antron 99 in a tricky spot. HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 02:53:36 UTC
From: JB <nospam@goofball.net>
Message-ID: <Qqotk.1016$w51.1003@trnddc01>
Source record: 23117
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.policy

> But you overcame that (or you'd not be in this NG). Good for you.
>
> Some older adult hams show a similar lack of understanding and, being in
> their sixties and seventies, will probably not become technically savvy.
> For a few, the gear cannot be made automatic enough. They need constant
> coaching.
>
> [I had to delete a rambling, ill-mannered rant from here. Everything I
said
> applied to me at some point, too.]
>
It's like the guy that buys a sailboat and can't find the start button. Too
late to realize you need a Capt., 1st mate, Navigator, Engineer,
Electrician, Bilge Rat, Chief, Cook and bottle washer on board. If not you
better bring a friend who is.

1494. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 03:59:20 UTC
From: JB <nospam@goofball.net>
Message-ID: <soptk.1095$Ro1.614@trnddc04>
Source record: 23118

> Regards,
> JS
>
>
> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

I thought as much-- Your problem is obvious.

1495. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 04:19:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g95905fec1@news.albasani.net>
Source record: 23119

JB wrote:
>> Regards,
>> JS
>>
>>
>> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!
>
>
> I thought as much-- Your problem is obvious.
>
>

What?

You think yours is hidden? :-|

Regards,
JS

Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1496. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 04:30:08 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B07DABA41108Huckleberrybigvalley@198.186.192.196>
Source record: 23120

> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
> nobody can direct you to where to buy baluns? Searched hi and lo
> online, and what I found, was more expensive than buying a ready-made
> dipole! I'd like to buy a balun, and attach my own cut-to-length
> wire, but can't find cheap baluns ANYWHERE.
>
> Where are you Elmers buying your baluns?

Every major amateur radio dealer I have bought from had baluns in their inventory, Ham Radio Outlet and Amateur Electronic Supply, to name two.

However, you might find a wider selection from
http://www.radioworks.com

Ed K7AAT

1497. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 04:45:29 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <lracb4p55kli8nqr8vtjls98jc8qb2f068@4ax.com>
Source record: 23121

On Wed, 27 Aug 2008 13:17:39 -0700 (PDT), dbc254
<dallas25@voicenet.com> wrote:

>Where are you Elmers buying your baluns?

I build my own. Some reading material:
<http://www.dxzone.com/catalog/Antennas/Baluns/>

However, if you wanna stimulate the economy, there are 7 commercial
balun reviews on eHam:
<http://www.eham.net/reviews/products/1>

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

1498. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 04:52:01 UTC
From: JB <nospam@goofball.net>
Message-ID: <R9qtk.1024$w51.621@trnddc01>
Source record: 23122

"dbc254" <dallas25@voicenet.com> wrote in message
news:110c0833-aa68-4266-b599-4a5565eb2416@8g2000hse.googlegroups.com...
> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
> nobody can direct you to where to buy baluns? Searched hi and lo
> online, and what I found, was more expensive than buying a ready-made
> dipole! I'd like to buy a balun, and attach my own cut-to-length
> wire, but can't find cheap baluns ANYWHERE.
>
> Where are you Elmers buying your baluns?

I don't bother with them. The ionosphere goofs up my pattern anyway.

1499. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 05:08:15 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B0899F41215Dnonenowhere@61.9.191.5>
Source record: 23123

dbc254 <dallas25@voicenet.com> wrote in news:110c0833-aa68-4266-b599-4a5565eb2416@8g2000hse.googlegroups.com:

> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
> nobody can direct you to where to buy baluns? Searched hi and lo
> online, and what I found, was more expensive than buying a ready-made
> dipole! I'd like to buy a balun, and attach my own cut-to-length
> wire, but can't find cheap baluns ANYWHERE.
>
> Where are you Elmers buying your baluns?
>

I think you haven't tried very hard.

No endorsement:

http://www.thewireman.com/baluns.html

The above will have components you can use to make your own... a real learning exercise.

dxengineering.com

Owen

1500. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 05:41:01 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <_Tqtk.11821$4s1.6414@newsfe06.iad>
Source record: 23124

"dbc254" <dallas25@voicenet.com> wrote in message
news:110c0833-aa68-4266-b599-4a5565eb2416@8g2000hse.googlegroups.com...
> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
> nobody can direct you to where to buy baluns? Searched hi and lo
> online, and what I found, was more expensive than buying a ready-made
> dipole! I'd like to buy a balun, and attach my own cut-to-length
> wire, but can't find cheap baluns ANYWHERE.
>
> Where are you Elmers buying your baluns?

My last purchase was from HRO, about $25 for a 1:1 to use with a wire dipole. Go to www.hamradio.com, enter balun in the search box and step through the offerings with Adobe Reader.

Many hams will recommend you try a home-made balun, multiple turns of coax cable wound neatly around a cylindrical form. Exact requirements and effectiveness may vary with frequency and the antenna as installed. You might want to look at http://www.qsl.net/ta1dx/amator/broadband_baluns.htm. (It bothered me to see the letter W used for "ohms" in two places. I didn't spot any other errors/typos but ...)

Also: http://www.hamuniverse.com/balun.html (many pictures)

1501. Re: Mounting an Antron 99 in a tricky spot. HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 05:59:27 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <g9rtk.14604$_s1.2210@newsfe07.iad>
Source record: 23125
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.policy

"JB" <nospam@goofball.net> wrote in message
news:Qqotk.1016$w51.1003@trnddc01...
> > But you overcame that (or you'd not be in this NG). Good for you.
> >
> > Some older adult hams show a similar lack of understanding and, being in
> > their sixties and seventies, will probably not become technically savvy.
> > For a few, the gear cannot be made automatic enough. They need constant
> > coaching.
> >
> > [I had to delete a rambling, ill-mannered rant from here. Everything I
> said
> > applied to me at some point, too.]
> >
> It's like the guy that buys a sailboat and can't find the start button.
Too
> late to realize you need a Capt., 1st mate, Navigator, Engineer,
> Electrician, Bilge Rat, Chief, Cook and bottle washer on board. If not
you
> better bring a friend who is.

Oh, that reminds me of a radio call I heard on a VHF Marine radio. Bunch
of happy young drunks offshore on somebody's Dad's boat, lost at night, in
the fog off Dana Point CA.

NOBODY knew a whit about navigation. Asked the USCG to come get them.
CG radio op said he could refer them to a commercial tow outfit for big
bucks.
They figured it out.

1502. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 06:26:22 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <YOQU9UDOUktIFAB2@ifwtech.co.uk>
Source record: 23126

Ralph Mowery wrote:
>
> I don't see wasting time or money on a balun for just a simple dipole
>. Sure it may make the patern vary from the normal textbook, but who
>cares most of the time. Most people have to put the antenna up
>wherever they can and lots of time it is not in the desired direction
>anyway.
>
Very often, those are the same people who complain of "poor conditions" and "noisy bands", and operate in constant fear of causing RFI. Many of these problems are simply due to common-mode feedline currents bringing RF back into the shack and coupling into the mains wiring.

In other words, people with limited antenna opportunities are often the ones who need a balun - or more accurately, a common-mode choke - the MOST.

The problems of desperate antenna locations cannot be entirely cured, but they *can* be improved. Almost always, feedline chokes and/or baluns will have a valuable part to play.

>NOw a beam or some other antenna design is differant.

The largest difference is in the attitudes of the users. No matter what your antenna is, or where you're forced to install it, it all comes down to one simple question: do you want to give this antenna the best possible chance to work correctly... or not?

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1503. What about antenna? see this page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 08:52:49 UTC
From: spergeon <porkodirose@gmail.com>
Message-ID: <b312c757-5575-48ef-9b79-32ed5cf23d21@a2g2000prm.googlegroups.com>
Source record: 23127

www.richworld8.blogspot.com

1504. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 09:31:49 UTC
From: nm5k@wt.net
Message-ID: <a98b72e3-7b5b-4b05-a1ad-3cecac9bedbd@i20g2000prf.googlegroups.com>
Source record: 23128

On Aug 27, 6:13 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>. At the same time I will supply antenna
> program inputs
> that will give an answer of 100% efficiency which is unknown to those
> who use planar
> designs for antennas where the answers are only approximate.
> Ofcourse there will still be the naysayers
> who say it is all bulXXXX but this time I am hoping for some more
> intelligent
> people to come forward that can follow known pats of physics.

http://home.comcast.net/~nm5k/bsmeter.gif

1505. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 10:04:51 UTC
From: ukmonitor@hotmail.com
Message-ID: <61de47e9-cf5b-4e6c-9e05-a80535261ae7@d1g2000hsg.googlegroups.com>
Source record: 23129

On Aug 28, 3:52 am, Mike Coslo <mco...@youknow.comcast.net> wrote:
> Jeff Liebermann <je...@cruzio.com> wrote
innews:j7bbb4pnt0ttqccu82d9512s1tijfak7rn@4ax.com:
>
> > If brute force is your forte, you might try a rubber pipe strap wrench
> > as used to remove an automobile spin on oil filter. Wrap the strap
> > around a few times and put something under the gripper teeth to
> > distribute the force. I've never tried this but it seems like it
> > might work.
>
> Those strap wrenches work pretty well, Jeff.
>
>   - 73 de Mike N3LI -

You could try holding the pole vertical and let the whole lot drop a
few feet so that the base falls onto a hard surface (assuming it has
some sort of bump cap on the base).

This inertia and rapid deceleration usually releases even the most
stubborn joints.

UKM

1506. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 11:00:19 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <c7idnSj09ovWGCvVRVnyiwA@pipex.net>
Source record: 23130

> Many hams will recommend you try a home-made balun, multiple turns of coax
> cable wound neatly around a cylindrical form. Exact requirements and
> effectiveness may vary with frequency and the antenna as installed. You
> might want to look at http://www.qsl.net/ta1dx/amator/broadband_baluns.htm.
> (It bothered me to see the letter W used for "ohms" in two places. I didn't
> spot any other errors/typos but ...)

>
> Also: http://www.hamuniverse.com/balun.html (many pictures)

==========

Nice URL with excellent info
tnx

Frank GM0CSZ / KN6WH

1507. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 11:07:01 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <12GfTdRVbotIFAnp@ifwtech.co.uk>
Source record: 23131

>> > If brute force is your forte, you might try a rubber pipe strap wrench
>> > as used to remove an automobile spin on oil filter. ï¿½Wrap the strap
>> > around a few times and put something under the gripper teeth to
>> > distribute the force. ï¿½I've never tried this but it seems like it
>> > might work.
>>
>> Those strap wrenches work pretty well, Jeff.
>>
>> ï¿½ ï¿½ ï¿½ ï¿½ - 73 de Mike N3LI -
>
>You could try holding the pole vertical and let the whole lot drop a
>few feet so that the base falls onto a hard surface (assuming it has
>some sort of bump cap on the base).
>
>This inertia and rapid deceleration usually releases even the most
>stubborn joints.
>
I have used these poles a lot, and the 'bump' method usually works for
me. Start on grass to cushion the blow, and gradually increase the
impact force until the joint comes free.

Twisting usually does not work, though a little soapy water and heating
might help.

Be very careful about using any kind of wrench or vice jaws, as these
thin-walled poles are VERY vulnerable to crushing. On the other hand,
I've never damaged one by end-on impact.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1508. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 12:45:35 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <O5xtk.38585$ZE5.21765@nlpi061.nbdc.sbc.com>
Source record: 23132

Highland Ham wrote:
>> Also: http://www.hamuniverse.com/balun.html (many pictures)
> ================
> Nice URL with excellent info

The problem with ugly baluns is their limited frequency
ranges. In the following measurements, the choking
impedance was over 1k ohms for only small ranges of
frequencies, 19-29 MHz, 10-22 MHz, 16-25 MHz, 8-16 MHz,
5-8 MHz - frequency ranges of 2/1 or less. HF covers
a 10/1 frequency range.

http://www.k1ttt.net/technote/airbalun.html
--
73, Cecil http://www.w5dxp.com

1509. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 15:51:36 UTC
From: JB <nospam@goofball.net>
Message-ID: <cQztk.1123$Ro1.665@trnddc04>
Source record: 23133

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g95905fec1@news.albasani.net...
> JB wrote:
> >> Regards,
> >> JS
> >>
> >>
> >> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!
> >
> >
> > I thought as much-- Your problem is obvious.
> >
> >
>
> What?
>
> You think yours is hidden? :-|
>
The Devil deceives many and jeers at the truth. But those who call on the
Lord in prayer keep him at bay. The sun shines on the wicked and the
righteous.

1510. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 16:01:06 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <55hdb4d7bvaehhojc292r6c9oi4ufar1b8@4ax.com>
Source record: 23134

On Thu, 28 Aug 2008 12:07:01 +0100, Ian White GM3SEK
<gm3sek@ifwtech.co.uk> wrote:

>On the other hand,
>I've never damaged one by end-on impact.

I have. It split the tubing just below the locking area. The problem is that there are many types of locking mechanisms. You need to know what's inside and how it works before applying the traditional brute force.

For example, some poles use external compression or cam type locking mechanisms:
<http://www.telescopingpoles.com/specs.html>
<http://www.briarwoodproducts.com/newtools.htm>
These do not jam and will respond properly to the inertial hammer (brute force) disconnect method. However, they add width which is often undesireable.

Internal locks, with expanding cores, cams, or wedges are a different story. To prevent collapse, most become tighter when loaded in compression, especiallyl those that take advantage of a slight conical taper in the tubing:
<http://www.google.com/patents?id=78duAAAAEBAJ>
<http://www.google.com/patents?id=fvc5AAAAEBAJ>
<http://www.google.com/patents?id=i2ZMAAAAEBAJ>
<http://www.google.com/patents?id=_hMBAAAAEBAJ>
(Look at the drawings). Banging on these internal locks will jam them only worse.

I couldn't find a picture of the inside of the common window washer fiberglass pole. It has partial threads molded into the fiberglass. 1/4 turn to lock. Bang on that design, and you'll split the tubing (like I did).

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1511. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 17:40:08 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B086C834FD60Huckleberrybigvalley@198.186.192.196>
Source record: 23135

This mast is smooth all the way, no cams, locks, etc. The tubes must be "slightly" tapered such that as you pull one out of the other it locks in place by sheer friction.

I have tried heat on the outer, cooling the inner tube and considerable twist/pushing force with my hands to get the stuck sections to unlock, all to no avail.

Yesterday I resorted to applying some Teflon Lubricant (Tri-Flo) to a stuck joint but it would still not budge. Maybe today when I go out to the garage the lubricant may have seeped its way down in to the junction.... will try again....

Hate to toss the thing as junk, but its not looking very positive so far. It was a cheap "flag / banner" type import so at least I won't be out as much as a quality unit would have cost me.

Ed K7AAT

1512. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 17:55:52 UTC
From: qrk <SpamTrap@spam.net>
Message-ID: <r5pdb45mr0dhqs1i45imf7rhu87c5d7taj@4ax.com>
Source record: 23136
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Wed, 27 Aug 2008 17:04:19 -0700 (PDT), K7ITM <k7itm@msn.com> wrote:

>On Aug 27, 11:25ï¿½am, qrk <SpamT...@spam.net> wrote:
>> On Tue, 26 Aug 2008 11:02:15 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
>> wrote:
>>
>>
>>
>> >On 26 ago, 19:38, qrk <SpamT...@spam.net> wrote:
>> >> On Tue, 26 Aug 2008 10:02:47 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
>> >> wrote:
>>
>> >> >Hello,
>>
>> >> >Most formulas for microstrip transmission line assume that there is
>> >> >dielectric all over the ground plane.
>>
>> >> >Does somebody know a formula (or graphical solution) for the
>> >> >characteristic impedance of a microstrip where there is only
>> >> >dielectric material under the strip (so you can see the ground
>> >> >plane)?
>>
>> >> >Best regards,
>>
>> >> >Wim
>> >> >PA3DJS
>> >> >www.tetech.nl
>> >> >The mail address is valid when you remove abc
>>
>> >>http://atlc.sourceforge.net/
>> >> The above link is a wonderful arbitrary solver for transmission lines.
>> >> This is primarily a Unix program. If you need a Windows build of the
>> >> program, I probably have version 4.4 somewhere.
>>
>> >> --
>> >> Mark
>>
>> >Hello Mark,
>>
>> >This is good one (I found it via google also). You can enter both
>> >metallics and dielectrics as you want. ï¿½It would be very nice when you
>> >can mail me a Windows Build (I hope it is not that big). ï¿½A link would
>> >also be useful.

>>
>> >My address is valid when you remove abc.
>>
>> >Best regards and thanks,
>>
>> >Wim
>> >PA3DJS
>> >www.tetech.nl
>>
>> I will keep this on the web site for a few days. About 3MB
download.http://qrkwiggles.googlepages.com/atlc-4.4.4_Win32.zip
>>
>> This version has problems with muliple dielectrics. I works fine with
>> two dielectrics, air and one of your choosing.
>>
>> --
>> Mark
>
>The version I have, which I sent to Wim, is 4.6.0. I'm not sure about
>the differences, but if anyone is interested, I have it in a zip file
>I can send. The zip file is encrypted, so it will pass through at
>least some of the email filters that take out executables or zips with
>embedded executables; I'll supply the password of course (just my
>call...).
>
>Cheers,
>Tom

4.6.0 is the latest version which fixes the multiple dielectric
problem. I believe this version is had multiple processor support
removed since the author had problems getting it running properly.

Where did you get the Windows build from? My work colleague was the
last one to supply Dr. Kirkby a windows build which was ver 4.4.4. It
would be great if you could give Dr. Kirkby the latest windows build
so he can post it.

--
Mark

1513. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 17:59:38 UTC
From: dplatt@radagast.org
Message-ID: <al5jo5-e7r.ln1@radagast.org>
Source record: 23137

>Many hams will recommend you try a home-made balun, multiple turns of coax
>cable wound neatly around a cylindrical form. Exact requirements and
>effectiveness may vary with frequency and the antenna as installed.

I saw an interesting talk at a local ham-club, at which the presenter gave an explanation for one reason that the "effectiveness may vary" with these sorts of choke baluns.

The common-mode impedance created by many such chokes is primarily inductive (below the choke's self-resonant frequency, at least).

The impedance of the unwanted current path (e.g. from the antenna feedpoint, back along the outside of the feedline, to the transceiver chassis or to the point at which the coax is grounded) will depend on the frequency and the length of the coax. It'll have a resistive component (from loss resistance and from radiation resistance) and will usually have a reactive component as well... either inductive or capacitive.

If the feedline-path reactance is inductive or near zero, all is well... the choke balun's inductive reactance will (if sufficiently high) block most current flow along this path.

On the other hand, if the feedline-path reactance is capacitive, and happens to be close in absolute value to the inductive reactance of the choke... then you've got a series-resonant circuit. The two reactances will largely cancel, the choke will "vanish", and you can actually have more current flow back along the feedline than you would without the choke.

If you change the length of the feedline, the choke's performance can get better, or worse.

His prescription: if you want choking that's going to be effective at a wide range of frequencies and won't be sensitive to the feedline length, you need to use a choke which will introduce a significant amount of resistive loss into the choked path (but not, of course, into the differential path that feeds the antenna). The usual solution is a ferrite.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1514. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 18:34:56 UTC
From: Tom Horne <hornetd@verizon.net>
Message-ID: <kdCtk.1080$w51.55@trnddc01>
Source record: 23138

Jim Lux wrote:
>>
>> The minimum depth is provided by the building code. Since the footer
>> must be below the frost line the resultant Ufer Ground is also below
>> the frost line. If it's not it will be ineffective.
>
>
> To split hairs a bit, you can build a Ufer ground that isn't a
> structural footer, and so, may not be subject to the frost line rules.
>

Yes Jim he can. But if he does will frost heaves likely destroy it.
When I was younger I spent a lot of time building duct banks and they
were always built with the base of the bank below the frost line so that
the formation of ice in the soil during a hard winter would not destroy
them. Remember that even a ground ring composed of straight wire is
buried a minimum of thirty inches deep. The objective in constructing
grounding electrodes is to get them down below the permanent moisture
level well into the so called water table.

I know that the subject area is Texas and the strata he's dealing with
is quite hard but he didn't seem to be asking how to install what looks
like an electrode but rather what will function as an electrode.
--
Tom Horne

"This alternating current stuff is just a fad. It is much too dangerous
for general use." Thomas Alva Edison

1515. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 19:01:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <4ECtk.8004$np7.4772@flpi149.ffdc.sbc.com>
Source record: 23139

Dave Platt wrote:
> On the other hand, if the feedline-path reactance is capacitive, and
> happens to be close in absolute value to the inductive reactance of
> the choke... then you've got a series-resonant circuit.

This is one reason why an ugly choke only works well over
approximately a 2:1 frequency range. Below that range,
the inductive reactance is too small and above that
range, series resonance defeats the purpose.
--
73, Cecil http://www.w5dxp.com

1516. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 19:26:40 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <qhudb4h7caidcss3bdm1saejmip979dtma@4ax.com>
Source record: 23140

On 28 Aug 2008 17:40:08 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

> This mast is smooth all the way, no cams, locks, etc. The tubes must
>be "slightly" tapered such that as you pull one out of the other it locks
>in place by sheer friction.

I don't think so. Such tapered devices have an irritating habit of
collapsing. There's usually some manner of locking mechanism, usually
activated by twisting.

Any way to look inside and determine the type of mechanism? If you
don't have a handy x-ray machine, perhaps a strong light will show
something.

Could you disclose the maker and model number? If there are any
patent numbers listed, that would be helpful to determine the
mechanism.

> I have tried heat on the outer, cooling the inner tube and
>considerable twist/pushing force with my hands to get the stuck sections
>to unlock, all to no avail.

You don't want to heat the outside. That will cause the outer tube to
expand, which will increase its compression on the inner tube. You
want to cool both tubes causing both to contract. If you can remove
an end cap, pour in some ice water.

> Yesterday I resorted to applying some Teflon Lubricant (Tri-Flo) to a
>stuck joint but it would still not budge. Maybe today when I go out to
>the garage the lubricant may have seeped its way down in to the
>junction.... will try again....

Well, that might help if you can get it into the joint. My guess(tm)
is that it will cause the uncoated parts of the joint to swell, which
might increase its grip. If you must lube the joint, perhaps
penetrating oil would be best.

Did you try the rubber strap wrench(s) idea? That should give plenty
of torque to rotate the sections.

> Hate to toss the thing as junk, but its not looking very positive so
>far. It was a cheap "flag / banner" type import so at least I won't be
>out as much as a quality unit would have cost me.

Maker and model number? Photo?

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1517. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 20:14:59 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <16355fad-2db7-414a-9b48-118cb84b33ac@b38g2000prf.googlegroups.com>
Source record: 23141
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Aug 28, 10:55 am, qrk <SpamT...@spam.net> wrote:
> On Wed, 27 Aug 2008 17:04:19 -0700 (PDT), K7ITM <k7...@msn.com> wrote:
> >On Aug 27, 11:25 am, qrk <SpamT...@spam.net> wrote:
> >> On Tue, 26 Aug 2008 11:02:15 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
> >> wrote:
>
> >> >On 26 ago, 19:38, qrk <SpamT...@spam.net> wrote:
> >> >> On Tue, 26 Aug 2008 10:02:47 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
> >> >> wrote:
>
> >> >> >Hello,
>
> >> >> >Most formulas for microstrip transmission line assume that there is
> >> >> >dielectric all over the ground plane.
>
> >> >> >Does somebody know a formula (or graphical solution) for the
> >> >> >characteristic impedance of a microstrip where there is only
> >> >> >dielectric material under the strip (so you can see the ground
> >> >> >plane)?
>
> >> >> >Best regards,
>
> >> >> >Wim
> >> >> >PA3DJS
> >> >> >www.tetech.nl
> >> >> >The mail address is valid when you remove abc
>
> >> >>http://atlc.sourceforge.net/
> >> >> The above link is a wonderful arbitrary solver for transmission lines.
> >> >> This is primarily a Unix program. If you need a Windows build of the
> >> >> program, I probably have version 4.4 somewhere.
>
> >> >> --
> >> >> Mark
>
> >> >Hello Mark,
>
> >> >This is good one (I found it via google also). You can enter both
> >> >metallics and dielectrics as you want. It would be very nice when you
> >> >can mail me a Windows Build (I hope it is not that big). A link would
> >> >also be useful.
>
> >> >My address is valid when you remove abc.

>
> >> >Best regards and thanks,
>
> >> >Wim
> >> >PA3DJS
> >> >www.tetech.nl
>
> >> I will keep this on the web site for a few days. About 3MB
download.http://qrkwiggles.googlepages.com/atlc-4.4.4_Win32.zip
>
> >> This version has problems with muliple dielectrics. I works fine with
> >> two dielectrics, air and one of your choosing.
>
> >> --
> >> Mark
>
> >The version I have, which I sent to Wim, is 4.6.0. I'm not sure about
> >the differences, but if anyone is interested, I have it in a zip file
> >I can send. The zip file is encrypted, so it will pass through at
> >least some of the email filters that take out executables or zips with
> >embedded executables; I'll supply the password of course (just my
> >call...).
>
> >Cheers,
> >Tom
>
> 4.6.0 is the latest version which fixes the multiple dielectric
> problem. I believe this version is had multiple processor support
> removed since the author had problems getting it running properly.
>
> Where did you get the Windows build from? My work colleague was the
> last one to supply Dr. Kirkby a windows build which was ver 4.4.4. It
> would be great if you could give Dr. Kirkby the latest windows build
> so he can post it.
>
> --
> Mark

Ah, OK; I thought from the atlc website that we'd just all be on our
own to do it. I'm an analog guy; I enlisted the help of a digital/
software friend. He had no trouble building it to run in a DOS
shell. I'll drop David a note, letting him know that I have it, to
see if he'd like it there.

Cheers,
Tom

1518. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 21:35:32 UTC
From: Bubblesdee <Bubblesdee.2fcf16a@radiobanter.com>
Message-ID: <Bubblesdee.2fcf16a@radiobanter.com>
Source record: 23150

Richard Clark;643968 Wrote:
> On Wed, 27 Aug 2008 22:05:35 +0100, Bubblesdee
> Bubblesdee.2fb9fe8@radiobanter.com wrote:
> -
>
> No Spam;643798 Wrote: -
> On Tue, 26 Aug 2008 22:19:42 +0100, Bubblesdee wrote:
> -
> Hi
>
> I am new to this forum and have a (most likely) dumb question
>
> I recently aquired a S350DL receiver. I will be using this rig until
> I
> can buy a rela communications receiver. I will be using it to
> receive
> Shortwave only. I have constructed a T2FD (Tilted, terminated,
> folded
> dipole) with a design feed point impedance of 300 ohms. --
>
> We can only presume this 300 Ohms comes from a resistor, otherwise an
> antenna does NOT present one impedance across all frequencies; and not
> even across the bandwidth around 10% of 1 frequency.
> --
> The S350 DL
> only has an unbalance high impedance external antenna point and a
> ground
> on it. How can I attach the T2Fd to the S350Dl and acheive a good
> impedance match.--
>
> This begs the question: "Why do you want a match, when you have
> already inserted a resistor that absorbs the power?" Another
> question: "A match to what?"
> --
> 1) Is the whip antenna on the S350DL a low impedance feed point (i.e.
> 50
> or 75 ohms)? If so, could I use a 4:1 balun at the feedpoint of the
> T2FD to convert the feed line to 75 ohm coax (which would be
> unbalance
> line now) and just clip the center conductor to the whip and the
> sheild
> to a grounding rod?--
>
> This would presume a match to the resistor on the T2FD. However, is

> the receiver a 75(50)Ohm input? 50 Ohms source Z is a convention of
> transmitters, and specified as so; but it is not always a given for
> receivers' input Z. Some literally supply the 50 Ohm resistor
> internally and at the gate or base of the input transistor. The gate
> or base is functionally a much higher Z, but the necessity of bias and
> other considerations sets this characteristic to something lower (but
> may still be quite high).
>
> Hence, without knowing this characteristic, you maybe discarding your
> effort.
> --
>
> 2) I could use 300 ohm ladder line to connect to the T2FD but the
> problem is that the S350DL does not have a balanced esternal input
> point
> on it.--
>
> Being a "tilted" antenna, it will NEVER be balanced either!
> --
> I guess what I am asking is what would be the best way to couple A
> 300
> ohm T2FD antenna to a Crappy Radioshack S350DL receiver and achieve
> reasonable impedance matching.--
>
> I think what you are asking is can you improve performance - matching
> be damned. A receiver demands much less attention to this as there is
> usually excess capacity in gain within it.
> --
> On HF, matching imp for receiving should not make much difference
> give-or-
> take a few 100%
>
> I suspect whip antenna is high imp. ~2k and unbalanced. You would
> need
>
> to make a one2one or four2one matching xformer placed near the radio
> with
> ladder line coming from antenna. This will stop common mode noise
> from
>
> entering your radio via feedline. --
>
> A matching transformer is not always a choke. A choke is not always a
> matching transformer. A choke reduces common mode currents, but it
> has to present an impedance that is in excess of the impedance of your
> input (still little understood). Chokes and transformers do not
> reduce noise without also reducing signal - UNLESS that noise arrives
> from your home, and travels into your receiver through the inherent
> imbalance of the system. A choke WILL aid you here, but it won't cut
> down on the crackle of tropical storms.

>
> 73's
> Richard Clark, KB7QHC

Hi

Thanks to everyone that responded.

I am a little confused but this is most likely my fault.

So i will simplify the question.

How could I transform from 300 ohm balanced antenna to 300 ohm unbalanced line without using coax. I will do the transformation right before the balanced (one antenna and one ground connector) on the S350DL.

I think that all I need to do is come off the T2FD with 300 ohm Twin lead and then into a 1:1 balun that does not use coax inside it but a ferrite choke. Does this sound right? If so, then my next question is DOES anyone know how to build a 1:1 balun not using coax to transform 300 ohm balanced to 300 ohm unbalanced?

Thanks again

--
Bubblesdee

1519. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 21:46:22 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <2797949c-c3e0-42ef-bd1b-ec78a7e47e56@n38g2000prl.googlegroups.com>
Source record: 23142
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

qrk wrote:
>>>>>http://atlc.sourceforge.net/
>>>>>[...]arbitrary solver for transmission lines.
>>>>>This is primarily a Unix program. If you need a Windows build[...]
>>>>>
>>>I will keep this on the web site for a few days. About 3MB download.
>>>http://qrkwiggles.googlepages.com/atlc-4.4.4_Win32.zip
>>>This version has problems with muliple dielectrics.
>>>
>K7ITM wrote:
>>The version I have, which I sent to Wim, is 4.6.0
>> Tom
>>
Note to Tom:
If you are going to continue to post via Google, you should read this:
http://groups.google.com/group/sci.electronics.design/browse_frm/thread/bad6531ce8b26df3?q
=as-well-as-other-things+THE-TRICK+Google.blockquotes.them+long-links+get.butchered

qrk wrote:
>4.6.0 is the latest version
>which fixes the multiple dielectric problem.
>Where did you get the Windows build[ ]?

Pursuing this via Google,
http://www.google.com/search?q=%2Batlc+%2BWin32+-4.4.4+mdtlc
(Why they won't give you, by default, WHAT YOU ASK FOR
http://www.google.com/search?q=atlc+Win32+-4.4.4
really pisses me off.)

Anyway, I discovered !!!
http://www.google.com/search?q=cache:KigcP6g2IC4J:mdtlc.sourceforge.net+Mdtl.builds.on-*-a
tlc-*+Comparison-to-other-*+*-GUI-based-*-*-can.run-*-win32-platforms+multi+skin+pdf+Multi
ple.Dielectric.Transmission.Line.Calculator

1520. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 21:46:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <arydnc6uDfgsgSrVnZ2dnUVZ_oWdnZ2d@posted.easystreetonline>
Source record: 23143

Jeff Liebermann wrote:
> . . .
> You don't want to heat the outside. That will cause the outer tube to
> expand, which will increase its compression on the inner tube. You
> want to cool both tubes causing both to contract. If you can remove
> an end cap, pour in some ice water.
> . . .

If you heat a ring of material, both the OD and ID increase in proportion. This loosens, not tightens, its hold on an inner object.

I recall from freshman physics that if you heat two concentric rings made of the same material (having a positive coefficient of expansion), all dimensions increase by exactly the same proportion. A little geometry shows that any gap, even microscopic, between them will therefore also increase proportionally. Cooling both objects of course has the opposite effect, reducing the size of any gap and tightening the fit. Heating the outer one and cooling the inner one, as Ed did, gives you the best of both, increasing the ID of the outer tube and decreasing the OD of the inner tube.

Roy Lewallen, W7EL

1521. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 22:01:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g97775hia1@news.albasani.net>
Source record: 23144

JB wrote:

>> ...
> The Devil deceives many and jeers at the truth. But those who call on the
> Lord in prayer keep him at bay. The sun shines on the wicked and the
> righteous.
>
>

Is there some vending machine which dispenses such as you? Are you a
"Pod Person" that is grown from some plant from Mars and attempts to
mimic humans? Do you think you a member of the church of satan, are
insane, and this motivates you?

You are an idiot with no shame, I will grant you that ...

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1522. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 22:10:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g977oa$ia7$1@news.albasani.net>
Source record: 23145

Dave Platt wrote:

> ...
> I saw an interesting talk at a local ham-club, at which the presenter
> gave an explanation for one reason that the "effectiveness may vary"
> with these sorts of choke baluns.
> ...

In 1982, when I worked for Boeing, they flew us to New York to attend some lectures ...

Anyway, I remember one guy who gave an hour-and-a-half talk, complete with slides, charts, models and other presentation aids on why the bumblebee can't possibly fly ... it was totally fascinating, the data looked absolutely real!--even though everyone (well, most) in the room realized they were being "put on."

To anyone who has wound and used a few dozen chokes/baluns/ununs of varying designs, I highly recommend the "Bumblebee Lecture."

Now, I am off to watch a few bumblebees crawl about ...

Regards,
JS

1523. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 22:26:55 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <f74bc31c-82b9-45b0-abec-3769ecd376ba@z66g2000hsc.googlegroups.com>
Source record: 23146

On Aug 28, 8:45 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Highland Ham wrote:
> >> Also: http://www.hamuniverse.com/balun.html (many pictures)
> > ================
> > Nice URL with excellent info
>
> The problem with ugly baluns is their limited frequency
> ranges. In the following measurements, the choking
> impedance was over 1k ohms for only small ranges of
> frequencies, 19-29 MHz, 10-22 MHz, 16-25 MHz, 8-16 MHz,
> 5-8 MHz - frequency ranges of 2/1 or less. HF covers
> a 10/1 frequency range.
>
> http://www.k1ttt.net/technote/airbalun.html
> --
> 73, Cecil http://www.w5dxp.com

I noticed the use of a lot of tie wraps. Its never a good idea to use
these exposed to sun light.

Jimmie

1524. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 23:27:13 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <tdbeb4977ls4svogd1og8sb1pl6c65mfek@4ax.com>
Source record: 23148

On Thu, 28 Aug 2008 14:46:23 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Jeff Liebermann wrote:
>> . . .
>> You don't want to heat the outside. That will cause the outer tube to
>> expand, which will increase its compression on the inner tube. You
>> want to cool both tubes causing both to contract. If you can remove
>> an end cap, pour in some ice water.
> > . . .
>
>If you heat a ring of material, both the OD and ID increase in
>proportion. This loosens, not tightens, its hold on an inner object.

I did this with an aluminum torus way back in college daze. You're
mostly correct. The O.D. does most of the radial expanding, but there
may be a small amount of expansion in the I.D. depending on the
compressibility of the material. If the material is soft, the I.D.
will shrink slightly. If the material is hard and incompressible,
then the I.D. will expand slightly. This illustrates it fairly well
(for incompressible materials):
<http://hyperphysics.phy-astr.gsu.edu/hbase/thermo/thexp2.html>

What I'm counting on is NOT the change in radius cause by a change in
temperature. I'm looking for a slight change in length, which with a
taper, has a somewhat similar effect on releasing the jam than a
radial change. In that case, the inner taper shrinks, while the outer
taper lengthens.

>I recall from freshman physics that if you heat two concentric rings
>made of the same material (having a positive coefficient of expansion),
>all dimensions increase by exactly the same proportion. A little
>geometry shows that any gap, even microscopic, between them will
>therefore also increase proportionally. Cooling both objects of course
>has the opposite effect, reducing the size of any gap and tightening the
>fit.

Apparently, I'm not the only one having problems with the concept.
See:
<http://www.eng-tips.com/viewthread.cfm?qid=99646>

>Heating the outer one and cooling the inner one, as Ed did, gives
>you the best of both, increasing the ID of the outer tube and decreasing
>the OD of the inner tube.

Maybe. If the ID of the outer tube does not change with temperature, then heating the outer tube is a waste of effort. If the material is sufficiently incompressible, then it will expand slightly as you suggest. I'm not sure how fiberglass reacts as it depends heavily on the glass weave pattern and composition. If the pole bends, it may have some compressibility.

Drivel: If the surface roughness is more than the heated or cooled radial expansion of the tubing, it may still remain stuck.

>Roy Lewallen, W7EL
--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1525. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 23:33:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <f6deb4584b9euus6jkk9op3l0rujqmshki@4ax.com>
Source record: 23149

On 28 Aug 2008 17:40:08 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

> This mast is smooth all the way, no cams, locks, etc. The tubes must
>be "slightly" tapered such that as you pull one out of the other it locks
>in place by sheer friction.

After stuffing myself with a near-terminally fattening ice cream, I
realized that we may be talking about two different types of masts.
I'm thinking of a telescoping mast, where each smaller section fits
inside a somewhat larger diameter section. Kinda like a telescoping
metal whip antenna (i.e. rabbit ears). However, there are also masts
made of equal diameter tubing, with some sort of coupler at the ends.
Your initial posting clearly said "telescoping" but I'm wondering how
one makes a self supporting telescoping mast without an internal or
external locking mechanism.

Which type to you have?

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1526. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-28 23:58:47 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <ol2dnRBhUc3xsCrVnZ2dnUVZ_s7inZ2d@earthlink.com>
Source record: 23147

>"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in I >noticed the use of a lot of
>tie wraps. Its never a good >idea to use
>these exposed to sun light.

Most of the white tie wraps will not withstand sunlight. The black ones are
more UV ray resistant and do beter.

I sometimes use the white ones, but cover them with tape.
Scotch 33 tape.

1527. Labor Day Party for Antenna Aficionados

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 00:29:18 UTC
From: Yuri Blanarovich <K3BU@optonline.net>
Message-ID: <48b742e4$0$29505$607ed4bc@cv.net>
Source record: 23001

Yuri, K3BU and Verkhovyna, MountainView Resort in Glen Spey, NY are hosting Labor Day Party with BBQ and live music on Sunday August 31, 2007 at 2:00 pm at the Ardmore Mansion. Special table reserved for antenna aficionados. Check out this enchanting location for the future HamConvention NE. Come and tell the lies and have a great time.

Our famous All-You-Can-Eat Gourmet BBQ featuring:
Sliced Marinated Steak on a Bun
MV Smoked Sausage - Kobasa, Kapusta, Rye bread
Pyrohy, Sour Cream, Onions
Fried Chicken Basket, Fish & Chips, Fries
Hamburger, Cheeseburger, Bean Salad
Hot Dog, Sauerkraut
Coffee, Tea, Desert

Dance or enjoy the Music of the "Udech" band
Have a great time for only $20/person
Cash Bar: Beer, Wine, Drinks

Come and see the newly renovated
Ardmore Mansion at MountainView
The elegant choice for your wedding,
banquets, retreats & special events
and bring a friend!

Weekend camping at the lake.
Rooms available for rental, call for reservation.

For more info and color poster please see
http://www.mvresort.com/events.htm

Ardmore Mansion, MountainView resort, 369 High Rd., Glen Spey, NY
Tel. 845 856-1105
Please contact Yuri, K3BU@optimum.net or cell 973 220-0087 for space reservation.

1528. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 01:26:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9ojeb4p7ru4bo5l622rc8uviubc6fi6os1@4ax.com>
Source record: 23002

On Thu, 28 Aug 2008 22:35:32 +0100, Bubblesdee
<Bubblesdee.2fcf16a@radiobanter.com> wrote:

>I think that all I need to do is come off the T2FD with 300 ohm Twin
>lead

Fine enough.

>and then into a 1:1 balun that does not use coax inside it but a
>ferrite choke. Does this sound right?

Not as stated. Ferrite is a material, the line running through it
becomes choked because of that material.

>my next question is
>DOES anyone know how to build a 1:1 balun not using coax to transform
>300 ohm balanced to 300 ohm unbalanced?

Stuff the (insulated paired) wires through the ferrite bead/torus/tube
just like you would a coaxial line. Total length of ferrite (a
combination of about 40-60 beads or equivalent) on the order of a
foot. A large torus can support several wraps through it to the same
effect.

73's
Richard Clark, KB7QHC

1529. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 02:36:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g97ncb$vi7$1@news.albasani.net>
Source record: 23003

dbc254 wrote:
> Everyone makes fun of newbies buying ready-built dipoles on eBay, but
> nobody can direct you to where to buy baluns? Searched hi and lo
> online, and what I found, was more expensive than buying a ready-made
> dipole! I'd like to buy a balun, and attach my own cut-to-length
> wire, but can't find cheap baluns ANYWHERE.
>
> Where are you Elmers buying your baluns?

Here are diagrams of one type of balun which will server you well:

http://assemblywizard.fr33webhost.com/balun1.jpg

http://assemblywizard.fr33webhost.com/balun2.jpg

You will need to pick the proper material you need for the core, and
compute the turns necessary for the freqs in question (lowest freq will
determine these), there are abundant design pages on the web ... google
is your friend.

Regards,
JS

Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1530. Re: Dumb question about EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 02:37:54 UTC
From: Jim-NN7K
Message-ID: <WfJtk.25710$Ri.22731@flpi146.ffdc.sbc.com>
Source record: 23004

Thanks folks Got me curious about adapting this to 1296, or 2404 MHz for quick and dirty antenna to use in contests! tho its an interesting design, by the time you create this, feed this, and with the loss's envolved, probably NOT worth the effort! An interesting use of PC material, non -the-less ! Maybe the Log Periodiotic is less critical to Board Xc, and Spaceing, then other antenna types? But, then the (stripline) feedline loss's alone would probably cancel any gain from the antenna. Again folks , thanks!
When I start thinking- it gets Dangerous out there!

Jeff Liebermann wrote:
> On Wed, 27 Aug 2008 10:22:19 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
>> I routinely use EZNEC to design antennas printed on a substrate. I do
>> the basic design then apply a fudge factor to the conductor width and
>> length derived from comparisons between model results and measurements
>> of real antennas. Final designs usually take some adjustment even at
>> that. However, I haven't tried this for any antenna that depends
>> strongly on coupling between elements, such as a Yagi, because the
>> mutual coupling will also be affected by the substrate and won't be so
>> easy to approximate.

1531. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 03:47:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <dICdnUmk_Mmn7CrVnZ2dnUVZ_oTinZ2d@posted.easystreetonline>
Source record: 23005

Richard Clark wrote:
> . . .
> Stuff the (insulated paired) wires through the ferrite bead/torus/tube
> just like you would a coaxial line. Total length of ferrite (a
> combination of about 40-60 beads or equivalent) on the order of a
> foot. A large torus can support several wraps through it to the same
> effect.

Bear in mind that the impedance of multiple turns is proportional to the square of the number of turns. So 5 turns, for example, through a single core gives you the same impedance as 25 cores strung along the line.

Roy Lewallen, W7EL

1532. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 04:29:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g97tvi$55e$1@news.albasani.net>
Source record: 23006

Bubblesdee wrote:

> Hi
>
> Thanks to everyone that responded.
>
> I am a little confused but this is most likely my fault.
>
> So i will simplify the question.
>
> How could I transform from 300 ohm balanced antenna to 300 ohm
> unbalanced line without using coax. I will do the transformation right
> before the balanced (one antenna and one ground connector) on the
> S350DL.
>
> I think that all I need to do is come off the T2FD with 300 ohm Twin
> lead and then into a 1:1 balun that does not use coax inside it but a
> ferrite choke. Does this sound right? If so, then my next question is
> DOES anyone know how to build a 1:1 balun not using coax to transform
> 300 ohm balanced to 300 ohm unbalanced?
>
> Thanks again

This should get you started ...

Here are diagrams of one type of balun which will serve you well:

http://assemblywizard.fr33webhost.com/balun1.jpg

http://assemblywizard.fr33webhost.com/balun2.jpg

You will need to pick the proper material you need for the core, and compute the turns necessary for the freqs in question (lowest freq will determine these), there are abundant design pages on the web ... google is your friend.

Regards,
JS

1533. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 06:31:32 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <CuZsS8JEf5tIFAwS@ifwtech.co.uk>
Source record: 23007

Jeff Liebermann wrote:
>On Thu, 28 Aug 2008 12:07:01 +0100, Ian White GM3SEK
><gm3sek@ifwtech.co.uk> wrote:
>
>>On the other hand,
>>I've never damaged one by end-on impact.
>
>I have. It split the tubing just below the locking area. The problem
>is that there are many types of locking mechanisms. You need to know
>what's inside and how it works before applying the traditional brute
>force.
>
That's a fair point. From what Ed did (and did not) say, I was assuming his pole had a simplest kind of tapered friction lock... which turns out to be so. These often can be freed by end-on impact when twisting doesn't work and squeezing might crush the thin walls.

>For example, some poles use external compression or cam type locking
>mechanisms:
><http://www.telescopingpoles.com/specs.html>
><http://www.briarwoodproducts.com/newtools.htm>
>These do not jam and will respond properly to the inertial hammer
>(brute force) disconnect method. However, they add width which is
>often undesireable.
>
>Internal locks, with expanding cores, cams, or wedges are a different
>story. To prevent collapse, most become tighter when loaded in
>compression, especiallyl those that take advantage of a slight conical
>taper in the tubing:
><http://www.google.com/patents?id=78duAAAAEBAJ>
><http://www.google.com/patents?id=fvc5AAAAEBAJ>
><http://www.google.com/patents?id=i2ZMAAAAEBAJ>
><http://www.google.com/patents?id=_hMBAAAAEBAJ>
>(Look at the drawings). Banging on these internal locks will jam them
>only worse.
>
>I couldn't find a picture of the inside of the common window washer
>fiberglass pole. It has partial threads molded into the fiberglass.
>1/4 turn to lock. Bang on that design, and you'll split the tubing
>(like I did).
>

But even so... hitting something with a hammer shouldn't always be condemned as "brute" force. Sometimes it *is* the most intelligent thing to do.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1534. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 10:49:46 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <O9KdnSj0CITFSSrVnZ2dnUVZ8rKdnZ2d@pipex.net>
Source record: 23008

JIMMIE wrote:

> I noticed the use of a lot of tie wraps. Its never a good idea to use
> these exposed to sun light.
==========
Black tie wraps contain carbon black and are hence UV resistant and
almost last forever.

Coloured or non pigmented plastic will indeed deteriorate due to UV
radiation.

Polypropylene rope , for example ,is usually coloured but never black.
Reason : If black it would not deteriorate due to exposure to UV ,hence
it would last far too long and the manufacturers would only need to
produce a fraction of their current production.
That's commercial life.

If you use rope other then polyester (sailing boats etc) try to find a
black plastic variety (not easy).
My 40 ft mast has (blue)polypropylene guys which need to be replaced
every 8 -9 years (even here in northern Scotland) ,but it is cheap
compared with polyester rope.

Frank GM0CSZ / KN6WH

1535. Re: Microstrip formula for non-standard geometry

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 11:07:06 UTC
From: TheM <DontNeedSpam@test.com>
Message-ID: <7OQtk.1$x84.32@news.siol.net>
Source record: 23010
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

"JeffM" <jeffm_@email.com> wrote in message
news:2797949c-c3e0-42ef-bd1b-ec78a7e47e56@n38g2000prl.googlegroups.com...

> Anyway, I discovered !!!
> http://www.google.com/search?q=cache:KigcP6g2IC4J:mdtlc.sourceforge.net+Mdtl.builds.on-*-atlc-*+Comparison-to-other-*+*-GUI-based-*-*-can.run-*-win32-platforms+multi+skin+pdf+Multiple.Dielectric.Transmission.Line.Calculator

I'm just downloading mdtl from sourceforge, will give it a try as soon as I find some free time.
Cool link, thanks for some detective work :)

M

1536. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 11:09:25 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <VPQtk.8062$np7.6068@flpi149.ffdc.sbc.com>
Source record: 23009

Roy Lewallen wrote:
> Bear in mind that the impedance of multiple turns is proportional to the
> square of the number of turns. So 5 turns, for example, through a single
> core gives you the same impedance as 25 cores strung along the line.

Something that fooled me is the way Amidon specifies
"one-turn" impedance for beads in their brochure. Their
"one-turn" for beads is a wire running through the center
hole, wrapped around the outside, and back through the
center hole. (I would count that as two turns and
would say one-turn is just a wire running straight
through the core.)

As a result, for their FB-77-5621 bead, for instance,
they specify 270 ohms per turn. If one simply threads
these beads over RG-58, the impedance is about 1/4
of that amount, i.e. about 67 ohms per bead, requiring
about 15 of them to get to 1000 ohms.

As Roy says, ten turns of coax on an FT-240-77 core
is roughly equivalent to 100 FB-77-5621 beads strung
over coax.

Interestingly enough, Amidon specifies "one-turn" on
an FT-240-77 core to be 76 ohms, obviously a different
kind of "one-turn" than that of the 270 ohms for an
FB-77-5621.
--
73, Cecil http://www.w5dxp.com

1537. lot #3 old radio estate sale items-tube CB's-RF generator-SWR/RF meter-more

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 11:11:21 UTC
From: "Dwight D. Eisenhower" <rottedHonda@yahoo.com>
Message-ID: <22875627-9a97-4173-af08-56840be373e9@r66g2000hsg.googlegroups.com>
Source record: 23011

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZ66Q2dcatalina

SILVERTONE VINTAGE ANTIQUE TUBE RADIO-BAKELITE-works-$$ - $9.98
$20.00 6d 14h 28m
STARLITE MINI ANTIQUE VINTAGE TUBE RADIO-powersup-works - $9.98
$10.00 6d 14h 28m
RCA VINTAGE ANTIQUE HI-FI AM/FM TUNER-TUBE AMPED-RARE-$ - $9.98
$20.00 6d 14h 28m
FIRESTONE VINTAGE WOOD RADIO-TUBE AMPED-POWERS UP-$$$$$ - $9.98
$20.00 6d 14h 28m
VINTAGE PLASTIC BAKELITE OLYMPIC TUBE RADIO-IT WORKS !! - $9.98
$20.00 6d 14h 28m
ARVIN MOD.544A WHITE BAKELITE TUBE RADIO-AM/FM-c.1947-$ - $9.98
$15.00 6d 14h 28m
EMERSON BAKELITE TUBE RADIO-tested/working-antique-$$$$ - $9.98
$15.00 6d 14h 28m
RADIOLA PLASTIC BAKELITE RADIO-TUBE-model 61-8-powersUP - $9.98
$20.00 6d 14h 28m
STROMBERG CARLSON ANTIQUE TUBE RADIO-PARTS/FIX-$$$$$$$$ - $9.98
$15.00 6d 14h 28m
ADMIRAL 6Q12N VINTAGE ANTIQUE BAKELITE RADIO-TUBES-$$$$ - $9.98
$15.00 6d 14h 28m
RCA VICTOR TUBE AMPED RADIO-mod 1X592-clear sound-works - $9.98
$20.00 6d 14h 28m
ANTIQUE ZENITH BAKELITE PLASTIC RADIO-IT WORKS !!-$$$$$ - $9.98
$20.00 6d 14h 28m
MOTOROLA BAKELITE PLASTIC RADIO/CHASSIS-for parts/fix-$ - $9.98
$15.00 6d 14h 28m
HEATHKIT PRECISION FIELD STRENTH-SWR-XTAL METER-HAM/CB- - $24.99
$15.00 6d 14h 28m
HEATHKIT PRECISION FIELD STRENTH-SWR-XTAL METER-HAM/CB- - $24.99
$15.00 6d 14h 28m
DELCO AM/FM/SHORTWAVE FRONT DIAL GLASS/PANEL-NICE-$$$$$ - $9.98
$20.00 6d 14h 28m
DEVRY RF SIGNAL GENERATOR-RADIO HOBBYIST ESTATE SALE-$$ - $9.98
$15.00 6d 14h 28m
DEVRY RF SIGNAL GENERATOR-RADIO HOBBYIST ESTATE SALE-$$ - $9.98
$15.00 6d 14h 28m
(2) VINTAGE TUBE CLOCK RADIOS-GE and ARVIN-both working - $9.98
$25.00 6d 14h 28m
LAFAYETTE HB-111 VINTAGE ANTIQUE TUBE AMPED CB RADIO-$$ - $9.98
$20.00 6d 14h 28m
LAFAYETTE COMSTAT-25 VINTAGE TUBE CB RADIOS-8 CHANNEL-$ - $9.98

$20.00 6d 14h 28m

1538. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 12:55:44 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <vIVJpjGQH$tIFwnh@g3ohx.demon.co.uk>
Source record: 23012

In message <VPQtk.8062$np7.6068@flpi149.ffdc.sbc.com>, Cecil Moore
<nospam@w5dxp.com> writes
>Roy Lewallen wrote:
>> Bear in mind that the impedance of multiple turns is proportional to
>>the square of the number of turns. So 5 turns, for example, through a
>>single core gives you the same impedance as 25 cores strung along the
>>
>
>Something that fooled me is the way Amidon specifies
>"one-turn" impedance for beads in their brochure. Their
>"one-turn" for beads is a wire running through the center
>hole, wrapped around the outside, and back through the
>center hole. (I would count that as two turns and
>would say one-turn is just a wire running straight
>through the core.)
>
>As a result, for their FB-77-5621 bead, for instance,
>they specify 270 ohms per turn. If one simply threads
>these beads over RG-58, the impedance is about 1/4
>of that amount, i.e. about 67 ohms per bead, requiring
>about 15 of them to get to 1000 ohms.
>
>As Roy says, ten turns of coax on an FT-240-77 core
>is roughly equivalent to 100 FB-77-5621 beads strung
>over coax.
>
>Interestingly enough, Amidon specifies "one-turn" on
>an FT-240-77 core to be 76 ohms, obviously a different
>kind of "one-turn" than that of the 270 ohms for an
>FB-77-5621.

Yes, '1 turn' on a torroid is 'once through the centre'. For any coil to
work as an inductor, there must be a return path somewhere. For a
torroid, this has to be 'around the outside'. As the permeability of the
core is generally much greater than that of air, it doesn't matter much
whether the wire is close to the surface of the ferrite, or very slack
indeed. With a single turn, the return path could be quite circuitous
(literally).
--
Ian

1539. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 15:27:49 UTC
From: n2xwv@arrl.net
Message-ID: <3c5661b0-9e0a-40da-978e-08a48fbe1642@b2g2000prf.googlegroups.com>
Source record: 23013

Hi andy, i have a MA5B with s-9 noise, after much sniffing it was a tv
on the same ac line as some radio equipment, i switched the outlet and
the noise 90% disapeared, hope this helps,73 john
Andy wrote:
> I have finally got my Cushcraft MA5B up in the air. But I am very
> disappointed with it.
>
> Is it normal for this antenna to have a lot of background noise behind
> strong signals 9+?
>
> The reason I ask is that I also own a cobwebb antenna and the side by side
> comparison between them, there is no background hiss on the same strong
> signals on the cobwebb S4 - 9+ but there is on the same signal on the MA5B
> and it is enough to make listening on the MA5B very unpleasant even at S9+.
>
> Is this normal?
>
> 73 Andy

1540. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 20:37:47 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B098AA66B8BBHuckleberrybigvalley@198.186.192.196>
Source record: 23014

>> This mast is smooth all the way, no cams, locks, etc. The tubes
>> must
>>be "slightly" tapered such that as you pull one out of the other it
>>locks in place by sheer friction.
>
> After stuffing myself with a near-terminally fattening ice cream, I
> realized that we may be talking about two different types of masts.
> I'm thinking of a telescoping mast, where each smaller section fits
> inside a somewhat larger diameter section. Kinda like a telescoping
> metal whip antenna (i.e. rabbit ears). However, there are also masts
> made of equal diameter tubing, with some sort of coupler at the ends.
> Your initial posting clearly said "telescoping" but I'm wondering how
> one makes a self supporting telescoping mast without an internal or
> external locking mechanism.
>
> Which type to you have?
>

Very cheap plain fiberglass tubes, slightly tapered so that as an inner tube is pulled up in its outer tube, the taper reaches a point of great friction. Incidently, the tubes on the outside are all coated glossy smooth except for a couple inches at the bottom where the inner and outer tubes meet.... raw fiberglass has great friction coeficient, apparently.

Also, I suspect my problem is that the extended mast was left out in the rain a week when it rained a bit and water got in the joints causing swelling?

There is no make / model number on this. Its a cheap generic made-in-China flag banner pole for RVers, etc.

I managed to loosen one of the frozen connections, but the two others, one of which I tried the lubricant are yet to be unfrozen.

I have a strong feeling that the use of those rubber type wrenchs would simply apply enough torque to the tubes to fracture them.

I am letting the stuck sections sit in my garage in hopes that eventually they will dry out on the inside and then perhaps I can get them unstuck with further application of hand pressure.

I may stuff myself with terminally fattening ice cream, too, while waiting..... :^)

My thanks to all who have provided suggestions, etc.

Ed K7AAT

1541. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 21:38:09 UTC
From: JB <nospam@goofball.net>
Message-ID: <5%Ztk.29$Af3.22@trnddc06>
Source record: 23015

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g97775hia1@news.albasani.net...
> JB wrote:
>
> >> ...
> > The Devil deceives many and jeers at the truth. But those who call on
the
> > Lord in prayer keep him at bay. The sun shines on the wicked and the
> > righteous.
> >
> >
>
> Is there some vending machine which dispenses such as you? Are you a
> "Pod Person" that is grown from some plant from Mars and attempts to
> mimic humans? Do you think you a member of the church of satan, are
> insane, and this motivates you?
>
> You are an idiot with no shame, I will grant you that ...
>
> Regards,
> JS
> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

I will pray for you that your heart might be opened to Jesus some day. Then
with the blinders off you might truly discern the enemy and his devices.

"But I say unto you, That whosoever is angry with his brother without a
cause shall be in danger of the judgment: and whosoever shall say to his
brother, Raca, shall be in danger of the council: but whosoever shall say,
Thou fool, shall be in danger of hell fire." Mathew 5:22

1542. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 22:04:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <9l_tk.25770$Ri.25135@flpi146.ffdc.sbc.com>
Source record: 23016

JB wrote:
> I will pray for you that your heart might be opened to Jesus some day.

Why would people who don't believe in magic antennas
believe in magic human beings?
--
73, Cecil http://www.w5dxp.com

1543. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 22:22:43 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <TE_tk.38713$ZE5.12970@nlpi061.nbdc.sbc.com>
Source record: 23017

Jim Kelley wrote:
> Cecil Moore wrote:
>> Ptotal = P1 + P2 + 2*SQRT(P1*P2)*cos(A)
>
> According to fig. 7.1 in Born and Wolf, that's useful for showing how
> light intensity varies as a function of phase, and hence position. It's
> just that there's no valid way to multiply by the cosine of the angle
> between two scalars.

I suspect you knew if I ever found my Born and Wolf after my
move, you would be in trouble - and you are.

You previously said that Born and Wolf did not agree with
Hecht, but they do, contrary to your assertions.

Their equation for irradiance (intensity) agrees with Hecht.

Itot = I1 + I2 + J12

where J12 = 2<E1*E2> = 2*SQRT(I1*I2)*cos(A)

On page 258 of "Principles of Optics", by Born and Wolf,
4th edition, they label J12 as the *interference term*,
contrary to your assertions. (Hecht labels that term I12)
--
73, Cecil http://www.w5dxp.com

1544. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 22:31:58 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <AN_tk.35999$co7.16740@nlpi066.nbdc.sbc.com>
Source record: 23018

JB wrote:
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:g97775hia1@news.albasani.net...
>> JB wrote:
>>
>> >> ...
>>> The Devil deceives many and jeers at the truth. But those who call on
> the
>>> Lord in prayer keep him at bay. The sun shines on the wicked and the
>>> righteous.
>>>
>>>
>> Is there some vending machine which dispenses such as you? Are you a
>> "Pod Person" that is grown from some plant from Mars and attempts to
>> mimic humans? Do you think you a member of the church of satan, are
>> insane, and this motivates you?
>>
>> You are an idiot with no shame, I will grant you that ...
>>
>> Regards,
>> JS
>> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!
>
> I will pray for you that your heart might be opened to Jesus some day. Then
> with the blinders off you might truly discern the enemy and his devices.
>
> "But I say unto you, That whosoever is angry with his brother without a
> cause shall be in danger of the judgment: and whosoever shall say to his
> brother, Raca, shall be in danger of the council: but whosoever shall say,
> Thou fool, shall be in danger of hell fire." Mathew 5:22
>
>

"John Smith" is certainly going to end up in hell, no doubt about that.
73,
Tom Donaly, KA6RUH

1545. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 22:33:25 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <WO_tk.36000$co7.14053@nlpi066.nbdc.sbc.com>
Source record: 23019

Cecil Moore wrote:
> JB wrote:
>> I will pray for you that your heart might be opened to Jesus some day.
>
> Why would people who don't believe in magic antennas
> believe in magic human beings?

Maybe it's because magic is a lot easier to understand than quantum electrodynamics.
73,
Tom Donaly, KA6RUH

1546. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 22:52:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g99uj7$ej8$1@news.albasani.net>
Source record: 23020

JB wrote:

>> ...
>> Regards,
>> JS
>> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!
>
> I will pray for you that your heart might be opened to Jesus some day. Then
> with the blinders off you might truly discern the enemy and his devices.
>
> "But I say unto you, That whosoever is angry with his brother without a
> cause shall be in danger of the judgment: and whosoever shall say to his
> brother, Raca, shall be in danger of the council: but whosoever shall say,
> Thou fool, shall be in danger of hell fire." Mathew 5:22
>
>

Hey, I think I remember the movie you are quoting; It was by Stephen
King, wasn't it? :-|

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1547. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 22:54:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g99umh$ej8$2@news.albasani.net>
Source record: 23021

Tom Donaly wrote:

> ...
> "John Smith" is certainly going to end up in hell, no doubt about that.
> 73,
> Tom Donaly, KA6RUH

Krist, I thought I was already there!

That is certainly bad news ... :-(

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1548. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-29 23:00:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g99v1g$ej8$3@news.albasani.net>
Source record: 23022

John Smith wrote:

> ...
> Hey, I think I remember the movie you are quoting; It was by Stephen
> King, wasn't it? :-|
>
> Regards,
> JS
> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

I probably should make that point a bit "more clear."

A race of aliens a mere few hundred years ahead of us would be difficult
for us to discern from Gods.

A race 1000 years, 10,000 years, 100,000 years, 1,000,000 years,
100,000,000 years would probably, most likely, be GOD!

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1549. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 00:04:21 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <10eddd8e-8f78-418c-abff-8dabcaa23dbe@a70g2000hsh.googlegroups.com>
Source record: 23023

On Aug 29, 6:49 am, Highland Ham <abcgm0csz.kn6wh...@dsl.pipex.com>
wrote:
> JIMMIE wrote:
> > I noticed the use of a lot of tie wraps. Its never a good idea to use
> > these exposed to sun light.
>
> ============================
> Black tie wraps contain carbon black and are hence UV resistant and
> almost last forever.
>
> Coloured or non pigmented plastic will indeed deteriorate due to UV
> radiation.
>
> Polypropylene rope , for example ,is usually coloured but never black.
> Reason : If black it would not deteriorate due to exposure to UV ,hence
> it would last far too long and the manufacturers would only need to
> produce a fraction of their current production.
> That's commercial life.
>
> If you use rope other then polyester (sailing boats etc) try to find a
> black plastic variety (not easy).
> My 40 ft mast has (blue)polypropylene guys which need to be replaced
> every 8 -9 years (even here in northern Scotland) ,but it is cheap
> compared with polyester rope.
>
> Frank   GM0CSZ / KN6WH

Sorry I should have said "white tie wraps as shown on the website".
Black tie wraps dont last forever, they still get brittle and break
just from being in the sun. I wouldnt use them either unless they got
regular inspections. I tie wrapped coax to an antenna mast down in
Florida about 5 years ago and they are breaking. No doubt they would
last a lot longer in Scotland.

Jimmie

1550. Re: fiberglass mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 04:31:33 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B09DAF9DBCC6Huckleberrybigvalley@198.186.192.196>
Source record: 23024

> That's a fair point. From what Ed did (and did not) say, I was assuming
> his pole had a simplest kind of tapered friction lock... which turns out
> to be so. These often can be freed by end-on impact when twisting
> doesn't work and squeezing might crush the thin walls.
>
>

I guess if I use a somewhat soft wood as a backstop, I may resort to
that. I'm going to give the tubes another week to dry out before resorting
to further violence! :^)

Ed

1551. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 04:41:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2efcf354-c467-4ce4-a503-e126d5b650d2@26g2000hsk.googlegroups.com>
Source record: 23025

On Aug 27, 6:42 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Aug 27, 4:21 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
> > Art Unwin wrote:
> > > ...
> > > David, the page is not for the likes of you.
> > > I will specifically state that it for the benefit of those
> > > skilled in the art of antennas and physics . Certainly not for
> > > yokels with loose mouths tho the blank page is typical of
> > > your facial expressions when involved with antennas
>
> > How about those skilled in the art of magic and divination? You
> > prejudiced to them also?
>
> > Regards,
> > JS
>
> > Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!
>
> John, I will give you some things about antennas for you to ponder
> upon
> or to google for the answers.
> Why is the skin depth not on a a piece of aluminum that you buy in the
> store?
> Why do people have difficulty in identifying the "weak" force?
> Einstein failed
> and Feynman is just guessing with his "w" vector.
> Where do the charges go on the surface of a fractional wave length
> vertical
> when the charge reaches the top of the antenna?
> Why are antennas all straight when the helix antenna do the same job?
> How can you get more gain from a vertical antenna that is not at right
> angles to the earth"
> What method did the early masters of electricity and mechanics use to
> ensure that a
> subject was in equilibrium?
> John, these points and many more will be answered on my page with
> known facts that confirm.
> Start googling now so you can get a feel for things when the page
> comes out plus seeing a
> computor program for 100% efficiency radiators and not just close
> approximations.
> Surely such things will tickle your curiousity about radiation which I
> will divulge which

> has never been provided to the world of physics..... until now!
> Art

I have been advised not to publish until I get permission from the
patent examiner.
As a private entity the examiner can advise on write up and claims so
until that is finalized
my hands are tied. Sorry about that but moneystakes are involved .
Regards
Art

1552. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 06:26:25 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <mK5uk.1842$Fm6.596@newsfe02.iad>
Source record: 23026

"JB" <nospam@goofball.net> wrote in message news:5%Ztk.29$Af3.22@trnddc06...
whosoever shall say,
> Thou fool, shall be in danger of hell fire." Mathew 5:22

Verily, he who sits upon a hot iron shall be branded in the end.

-- Alfred
E. Newman

1553. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 09:45:11 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <Z8adnfnbF5sziyTVnZ2dneKdnZydnZ2d@pipex.net>
Source record: 23027

> I have been advised not to publish until I get permission from the
> patent examiner.
> As a private entity the examiner can advise on write up and claims so
> until that is finalized
> my hands are tied. Sorry about that but moneystakes are involved .
> Regards
> Art
==========
As a (presumably) radio 'amateur' you could have made your 'invention'
available under a General Public Licence , like the GPL applicable to
open source software (ref Linux)

The number of people now making a good living by developing open source
software under the GPL show that personal benefit and sharing can go
hand in hand.

Frank GM0CSZ / KN6WH

1554. Re: Virginie gervais

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 10:20:26 UTC
From: lwbyoyo1 <lwbyoyo1.2feeba1@radiobanter.com>
Message-ID: <lwbyoyo1.2feeba1@radiobanter.com>
Source record: 23028

Nice topic,up up
up.----------[image:
http://img.photo.163.com/BEnhY9PsbXcUT9IZ4aCzyA==/785315185024039169.jpg]'wow
power leveling' (http://www.wow-powerleveler.com/),'wow powerleveling'
(http://www.wow-powerleveler.com/),'world of warcraft power leveling'
(http://www.wow-powerleveler.com/),'world of warcraft powerleveling'
(http://www.wow-powerleveler.com/),'wow gold'
(http://www.wow-powerleveler.com/wowgold.php)

--
lwbyoyo1

1555. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 12:35:47 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <g9ber8qbb1@news.netins.net>
Source record: 23029

Dave, In the upper midwest we use a waterhose and keep the area damp so it drives easily. Sometimes the rod will go in with very light hammer blows. Hope it works for you.. Lots of luck, Rollie

<Dave Lemper> wrote in message news:b2b0b45h4rfvs3b1ng9n7435707586hh8j@4ax.com...
> The soil in central Texas is called Caliche with a lot of clay,
> CaCO3 & shale. Attempting to drive in a ground rod
> yielded only a mushroom on top & blisters on me.
> Local tool rental place has concrete bits, but maximum
> length of 18 inches. Possibly longer bits are available in
> a larger city.
>
> Renting a back hoe is out.
> Any suggestions appreciated.
> Dave WB3DWE pdlemper@earthlink.net

1556. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 14:17:52 UTC
From: JB <nospam@goofball.net>
Message-ID: <kEcuk.69$393.25@trnddc05>
Source record: 23030

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:mK5uk.1842$Fm6.596@newsfe02.iad...
>
> "JB" <nospam@goofball.net> wrote in message
news:5%Ztk.29$Af3.22@trnddc06...
> whosoever shall say,
> > Thou fool, shall be in danger of hell fire." Mathew 5:22
>
>
>
> Verily, he who sits upon a hot iron shall be branded in the end.
>
> -- Alfred
> E. Newman
>
At least we found someone with a sense of humor.

1557. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 14:25:58 UTC
From: JB <nospam@goofball.net>
Message-ID: <WLcuk.70$393.47@trnddc05>
Source record: 23031

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g99v1g$ej8$3@news.albasani.net...
> John Smith wrote:
>
> > ...
> > Hey, I think I remember the movie you are quoting; It was by Stephen
> > King, wasn't it? :-|
> >
> > Regards,
> > JS
> > Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!
>
> I probably should make that point a bit "more clear."
>
> A race of aliens a mere few hundred years ahead of us would be difficult
> for us to discern from Gods.
>
When have you ever met a race of aliens? None? Then your statement is a
fantasy construct.
The would likely be assassinated in the Media.

1558. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 14:29:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9blgq$8s6$1@news.albasani.net>
Source record: 23032

JB wrote:

>> ...
> When have you ever met a race of aliens? None? Then your statement is a
> fantasy construct.
> The would likely be assassinated in the Media.
>
>

Well, I have never met "a new energy source" either. Does this mean I
can now dismiss all possibilities and go out into the world preaching
that all sources of energy have now been discovered and we are doomed?

Funny, where I come from, logic just doesn't work like that ...

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1559. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 14:33:25 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <IRcuk.5313$zv7.4562@flpi143.ffdc.sbc.com>
Source record: 23033

JB wrote:
> When have you ever met a race of aliens? None? Then your statement is a
> fantasy construct.

Couldn't the same thing be said about God?
--
73, Cecil http://www.w5dxp.com

1560. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 14:37:43 UTC
From: JB <nospam@goofball.net>
Message-ID: <XWcuk.71$393.16@trnddc05>
Source record: 23034

> Well, I have never met "a new energy source" either. Does this mean I
> can now dismiss all possibilities and go out into the world preaching
> that all sources of energy have now been discovered and we are doomed?
>
> Funny, where I come from, logic just doesn't work like that ...
>
> Regards,
> JS
> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

At least you are able to wrestle with your own logic.

1561. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 14:46:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9bmg9$a8c$1@news.albasani.net>
Source record: 23035

JB wrote:

>> ...
> When have you ever met a race of aliens? None? Then your statement is a
> fantasy construct.
> The would likely be assassinated in the Media.
>
>

Believe me, I have already intuited that you believe in the "religion of evolution", as opposed to a religion believing in a God.

It is obvious, at this point, one has only two religions to believe in:

1) A thinking mind created "all."

2) ALL spontaneously came into being.

The first requires a belief in God.

The second requires a belief that living organisms (or, biological "machines") can spontaneously come into being, and that the elements in the universe can spontaneously come into being from a space composed of "absolute nothing."

On close examination, an intelligent would most likely deny the possibility of either.

However, it is obvious one is correct ...

Why any one individual would choose one over the other, with no proof being available, is simply a function of human nature ... then, for someone having chosen one over the other, to ridicule the other possibility--well, that is simply insanity!

Occams' Razor is clear on which would be chosen ... the aliens, at least for the short term explanation ...

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1562. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 15:22:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9bb1c5e8-a69e-4977-89a3-4e7c6e42c12f@w7g2000hsa.googlegroups.com>
Source record: 23036

On Aug 30, 4:45 am, Highland Ham <abcgm0csz.kn6wh...@dsl.pipex.com>
wrote:
> > I have been advised not to publish until I get permission from the
> > patent examiner.
> > As a private entity the examiner can advise on write up and claims so
> > until that is finalized
> > my hands are tied. Sorry about that but moneystakes are involved .
> > Regards
> > Art
>
> ==
> As a (presumably) radio 'amateur' you could have made your 'invention'
> available under a General Public Licence , like the GPL applicable to
> open source software (ref Linux)
>
> The number of people now making a good living by developing open source
> software under the GPL show that personal benefit and sharing can go
> hand in hand.
>
> Frank GM0CSZ / KN6WH

I have not heard of that. I have always shared my work with amateurs
even tho
it makes you a target for naysayers and loudmouths. But to give out
how one can make a
an efficient small antenna before it is cleared by the patent office
puts a lot of money at stake
and with the sunspot activety at it's lowpoint it does not hurt to
wait a couple of months which extends time for loud mouths to spew.
Cheers
Art

1563. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 16:26:10 UTC
From: JB <nospam@goofball.net>
Message-ID: <Cweuk.112$1a2.85@trnddc04>
Source record: 23037

> Well, I have never met "a new energy source" either. Does this mean I
> can now dismiss all possibilities and go out into the world preaching
> that all sources of energy have now been discovered and we are doomed?
>
> Funny, where I come from, logic just doesn't work like that ...

Just because God knows how everything will turn out, doesn't mean our choises are of no value.

I don't know where you are getting your ideas, but since the subject is changed again:

I would like to see a new energy source. I have some doubt I will find it on YouTube, but those chances are greater than if I built it out of my junk box. Such things will likely come at great expense. My solar experiments only account for a small percentage of my electric usage but I have managed to cut my gas bill drastically. Some could argue it is the oldest energy source out there. Everyday we are bombarded by a whole lot of energy that just heats up the roof. I have cut my bill by simply putting to use the energy that would have only heated up my roof or my South side.

The point is we should all be thinking about such things rather than expecting some government "fall guy" to fix it for us by digging deeper into our pockets for "party money". What we have when we foist our responsibilities on the government, are big screwups by people who are too removed from the problem to have a hope to fix anything by throwing money on scam artists. The Castro government comes to mind as a perfect example. Just throw money at the government and it becomes fat, and lazy and a burden to those who see a need and fulfill it. The job of a President should be to inspire rather than shoulder incessant ridicule that cripples our nation's credibility in the world. Those who ridicule should stop and provide some useful input or shoulder responsibility themselves rather than hoping for disaster to vindicate their bad attitude.

If we ever do find a race of aliens, I would hope we would hear from them by radio first. There is no reason to think there couldn't be, but if they were close enough for it to matter, we should have heard from them by now.

Unless they consider on-off keying (or radio in general) to be obsolete, beneath them, and hate everyone who uses it because they won't waste their time learning it, then look out.

Since our subject is still baluns, I have used Fiberglass tape on Torroids and solenoid windings because they heat up. Other things deteriorate. I use that because I have some. I couldn't tell anyone what would be best in the long run for UV. It is a big problem. Heat means loss. I prefer to do

away with the need for baluns and other elements that don't contribute to radiating the energy.

1564. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 16:42:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9btajhtn1@news.albasani.net>
Source record: 23038

JB wrote:

> ...
> Since our subject is still baluns, I have used Fiberglass tape on Torroids
> and solenoid windings because they heat up. Other things deteriorate. I
> use that because I have some. I couldn't tell anyone what would be best in
> the long run for UV. It is a big problem. Heat means loss. I prefer to do
> away with the need for baluns and other elements that don't contribute to
> radiating the energy.
>
>

Go to a larger core, stack large cores to lower power density per cubic centimeter of core material--adjust core material to compensate for increased inductance, etc.

Proper functioning of the balun hinges on proper design/material, of course ...

Now is one is designing an electric heater, ni-chrome wire might be implemented in the design--perhaps a "ceramic tape", etc. ... 8-)

Regards,
JS

Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1565. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 18:52:55 UTC
From: JB <nospam@goofball.net>
Message-ID: <bGguk.63$Dj1.42@trnddc02>
Source record: 23039

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9bmg9$a8c$1@news.albasani.net...
> JB wrote:
>
> >> ...
> > > When have you ever met a race of aliens? None? Then your statement is
a
> > > fantasy construct.
> > > The[y] would likely be assassinated in the Media.
A little dry humor
Fantasy isn't harmfull unless we base conclusions on it.
> >
> >
>
> Believe me, I have already intuited that you believe in the "religion of
> evolution", as opposed to a religion believing in a God.

Wrong. You are correct though in characterizing evolution as a religion.

Evolution theory functions as centerpiece of some wonder, but there are
glaring problems: No evidence of missing links in the face of Tons of
fossil evidence of a great variety of unique species (notwithstanding
sub-species that are obviously related). Evidence suggest that species
would have had to spontaneously come into being en masse from extreme
outbreaks of very specific mutation. Creation would make more sense than
that because mutation overwhelmingly is a deterioration resulting in a loss
of viability. Additionally, Life even in what we would consider simple
one-celled organisms are in fact highly organized and cooperative
communities of seemingly intelligently flexible or single purpose
mechanisms. None of which would survive without the viability of the whole
organism. So which came first, the chicken or the egg? Neither could have
been viable or accidentally come into being on their own. Then where are
the fossils of the supposed transitional species. We know there is some
flexibility within the species for adaptation, but new species are a great
leap over a nonexistent bridge. The evolution theory was actually based only
on observations and wrong conclusions and even Darwin thought to abandon it.
It might not have survived to this day if it were not commandeered for it's
political value to justify revolution, genocide and a notion that in order
for an idea to be viable, all others must be destroyed. The notion that
apes transitioned into humans is more farfetched than if we were evolved
from ferns or fruit flies, if we were to compare the DNA structures. Today
we have youth wearing "natural selection" T-shirts going on shooting sprees
and random gang killings for tatoos so don't tell me about evolution.
>
> It is obvious, at this point, one has only two religions to believe in:

>
> 1) A thinking mind created "all."
>
> 2) ALL spontaneously came into being.
>
> The first requires a belief in God.
>
> The second requires a belief that living organisms (or, biological
> "machines") can spontaneously come into being, and that the elements in
> the universe can spontaneously come into being from a space composed of
> "absolute nothing."

OK, essentially GOD or No GOD.
>
> On close examination, an intelligent would most likely deny the
> possibility of either.
>
> However, it is obvious one is correct ...

It is obvious that life operates with great intelligence despite our
conscous will, so we have that much proof of intelligence although not much
of it comes to our awareness with that much regularity.

>
> Why any one individual would choose one over the other, with no proof
> being available, is simply a function of human nature ... then, for
> someone having chosen one over the other, to ridicule the other
> possibility--well, that is simply insanity!
>
> Occams' Razor is clear on which would be chosen ... the aliens, at least
> for the short term explanation ...

So Aliens created the universe? Occam's Razor is only an expedient. It
only works for simplicity's sake and calls us to make assumptions where our
understanding fails. The scientific mind would ponder and record the
evidence allowing for lack of understanding rather than summarily executing
God, or constructing explanations simply to deny God. All too often I see
experiments that are discredited because the results cannot be
satisfactorily explained by the answer sought. A belief in God should not
be such a problem for those who don't believe unless their wicked nature
makes it so.

1566. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 19:11:49 UTC
From: JB <nospam@goofball.net>
Message-ID: <VXguk.77$jE1.34@trnddc03>
Source record: 23040

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:IRcuk.5313$zv7.4562@flpi143.ffdc.sbc.com...
> JB wrote:
> > When have you ever met a race of aliens? None? Then your statement is
a
> > fantasy construct.
>
> Couldn't the same thing be said about God?

Then couldn't the same be said of all recorded history
where the witnesses can no longer be cross-examined, ruined, executed?

I more subscribe to the theory that witnesses who died defending their own observation, are more compelling than those who would have written for any other reason. Also that witnesses may not have fully understood all they heard or saw, but reported because it was noteworthy. This also lends to credibility, because those with a hidden agenda usually restrain themselves from presenting testimony that doesn't contribute to their argument.

There is more evidence to support much of what is recorded in the Bible, than required to convict someone of Murder. I would suggest a book by Lee Strobel, "The Case for Christ" as a method to ordering and initiating their own logical investigation. In the end you will have to be open to the Holy Spirit before anything can come of it. Salvation comes by invitation only. My own conclusions came when I realized the teachings of Christ were the only hope of saving the human race from it's own self-destruction. Further, that it could succeed against the odds.

1567. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 20:23:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <clajb4pr6kb5ar80jahesdf5kc7m6o7a2u@4ax.com>
Source record: 23041

On Sat, 30 Aug 2008 19:11:49 GMT, "JB" <nospam@goofball.net> wrote:

>I more subscribe to the theory that witnesses who died defending their own
>observation, are more compelling than those who would have written for any
>other reason.

This would be profound, if it weren't coming from an "anonymous"
source replying in other side threads to an "anonymous" source.

Two such "anonymous" sources in a series of dialog is very much less
than compelling and lacks all reason.

73's
Richard Clark, KB7QHC

1568. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 21:03:45 UTC
From: JB <nospam@goofball.net>
Message-ID: <RAiuk.67$Af3.22@trnddc06>
Source record: 23042

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:clajb4pr6kb5ar80jahesdf5kc7m6o7a2u@4ax.com...
> On Sat, 30 Aug 2008 19:11:49 GMT, "JB" <nospam@goofball.net> wrote:
>
> >I more subscribe to the theory that witnesses who died defending their
own
> >observation, are more compelling than those who would have written for
any
> >other reason.
>
> This would be profound, if it weren't coming from an "anonymous"
> source replying in other side threads to an "anonymous" source.
>
> Two such "anonymous" sources in a series of dialog is very much less
> than compelling and lacks all reason.
>
> 73's
> Richard Clark, KB7QHC

I simply prefer not to attract tons of V-agra spam. These newsgroups are seriously mined and my actual e-mail address associated with this login is set to dump all mail because of that.

The truth speaks for itself. You can come up with any excuse to deny it.

BTW Gustav is picking up strength

1569. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 21:15:05 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <GLiuk.19594$jl5.3607@flpi148.ffdc.sbc.com>
Source record: 23043

Richard Clark wrote:
> On Sat, 30 Aug 2008 19:11:49 GMT, "JB" <nospam@goofball.net> wrote:
>
>> I more subscribe to the theory that witnesses who died defending their own
>> observation, are more compelling than those who would have written for any
>> other reason.
>
> This would be profound, if it weren't coming from an "anonymous"
> source replying in other side threads to an "anonymous" source.
>
> Two such "anonymous" sources in a series of dialog is very much less
> than compelling and lacks all reason.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,
Both sources need the tinfoil changed on their respective
hats. They also need to find a newsgroup where they can discuss popular
theology without danger of being withered by ridicule from the other
participants.
73,
Tom Donaly, KA6RUH

1570. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 21:34:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <akejb4dvgqrujdjo0dhoih2ck0m50kmqqj@4ax.com>
Source record: 23044

On Sat, 30 Aug 2008 21:03:45 GMT, "JB" <nospam@goofball.net> wrote:

>I simply prefer not to attract tons of V-agra spam. These newsgroups are
>seriously mined and my actual e-mail address associated with this login is
>set to dump all mail because of that.

I have transmited in the clear here for the past 13 years.

Since May, I have received all of 2 spams - from the son of Charles
Taylor in Africa. The amount of spam that predated that is of like
proportion.

>The truth speaks for itself. You can come up with any excuse to deny it.

In those same 13 years I've often heard the same excuse you are using.

Anyone who is willing to quote the Bible, but refusing to testify is
obviously of little faith - a Xerox can do as much and "anonymous"
sources lean on that copy button freely without conviction.

73's
Richard Clark, KB7QHC

1571. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 22:23:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9ch91$81t$1@news.albasani.net>
Source record: 23045

JB wrote:

> ...
> I simply prefer not to attract tons of V-agra spam. These newsgroups are
> seriously mined and my actual e-mail address associated with this login is
> set to dump all mail because of that.
>
> The truth speaks for itself. You can come up with any excuse to deny it.
>
> BTW Gustav is picking up strength
>
>

You will have to forgive Richard and allow for his limitations ...
without a personality to attack, he is like a fish out of water.

Unable to form properly formatted text to argue text on its' merits
alone, you will frequently encounter these "dead ends" in exchanges with
him ... undoubtedly, you will learn to adapt.

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1572. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 22:29:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9chji$88c$1@news.albasani.net>
Source record: 23046

Tom Donaly wrote:

> ...
> Hi Richard,
> Both sources need the tinfoil changed on their respective
> hats. They also need to find a newsgroup where they can discuss popular
> theology without danger of being withered by ridicule from the other
> participants.
> 73,
> Tom Donaly, KA6RUH

TRANSLATION FOR THE MASSES:

Discuss what Tom wishes to discuss, within the scope and boundaries Tom specifies or else risk subscription to his "Chit List!"

This ain't no hobby group! Yanno? Here we subscribe to the "arrl Professionals Standards!" :-P

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1573. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 23:05:37 UTC
From: dfinn1@nc.rr.com
Message-ID: <a918ea4d-026f-426b-bc08-ba62ab85be52@56g2000hsm.googlegroups.com>
Source record: 23047

I use an ugly balun with an attic GRrV and do not suffer significant back-RFI to my transceiver in the regular frequency ranges. I think that by chosing 1Kohm that may be a bit conservative. In (old) engineering school, we tended to use an order of magnitude (X10) as our highly arbitrary :) cut-off point for impedances that have a significant effect. You are doing that too but by using 1000 ohms, you are using (X10 times 2) as your arbitrary cutoff point. Since the filter is an exponential curve, if you chose 500 ohms instead of 1000 ohms, you might even get a 4 or 5 to 1 frequency range. In my case I use two different turns chokes so that is why I think I am covered pretty well. Your information is very interesting; good to see people are actually measuring things!

On Aug 28, 8:45 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Highland Ham wrote:
> >> Also: http://www.hamuniverse.com/balun.html (many pictures)
> > ================
> > Nice URL with excellent info
>
> The problem with ugly baluns is their limited frequency
> ranges. In the following measurements, the choking
> impedance was over 1k ohms for only small ranges of
> frequencies, 19-29 MHz, 10-22 MHz, 16-25 MHz, 8-16 MHz,
> 5-8 MHz - frequency ranges of 2/1 or less. HF covers
> a 10/1 frequency range.
>
> http://www.k1ttt.net/technote/airbalun.html
> --
> 73, Cecil http://www.w5dxp.com

1574. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-30 23:14:32 UTC
From: dfinn1@nc.rr.com
Message-ID: <c2a78f6b-eded-4547-ae32-bc8ccd60e186@m73g2000hsh.googlegroups.com>
Source record: 23048

Technically I would have to disagree with calling even a 1:1 balun the
same thing as a common mode choke. A CM choke is an EMI prevention
device intended to filter out RF components generated in a circuit,
away from the feed of a power source, usually an electrical mains. A
balun is intended to change the feed from an unbalanced transmission
line to a balanced output, for example, for connection to a balanced
transmission line or to an antenna such as a dipole. With the balun,
we wany NO reduction in RF current flow. I agree that the effect is
the same, semantically, ie one side effect of the use of a balun is
less CM interference from coming down a balanced feedline but it is
there for a different reason.

Dan

On Aug 28, 2:26 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>
> In other words, people with limited antenna opportunities are often the
> ones who need a balun - or more accurately, a common-mode choke - the
> MOST.

1575. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 01:00:50 UTC
From: JOHN PASSANEAU <w3jxp@arrl.net>
Message-ID: <Xns9B0AD5C377D32JXP16PSUEDU@216.196.97.136>
Source record: 23049

"JB" <nospam@goofball.net> wrote in news:kEcuk.69$393.25@trnddc05:

>
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
> news:mK5uk.1842$Fm6.596@newsfe02.iad...
>>
>> "JB" <nospam@goofball.net> wrote in message
> news:5%Ztk.29$Af3.22@trnddc06...
>> whosoever shall say,
>> > Thou fool, shall be in danger of hell fire." Mathew 5:22
>>
>>
>>
>> Verily, he who sits upon a hot iron shall be branded in the end.
>>
>> --
>> Alfred
>> E. Newman
>>
> At least we found someone with a sense of humor.
>
>
>

The way I heard that was, He who sits upon a hot iron shall rise again..

John W3JXP

1576. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 01:02:42 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B0AD6CBF4D98mcoslocomcastnet@216.196.97.136>
Source record: 23050

"JB" <nospam@goofball.net> wrote in news:bGguk.63$Dj1.42@trnddc02:

>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:g9bmg9$a8c$1@news.albasani.net...
>> JB wrote:
>>
>> >> ...
>> > When have you ever met a race of aliens? None? Then your
>> > statement is
> a
>> > fantasy construct.
>> > The[y] would likely be assassinated in the Media.
> A little dry humor
> Fantasy isn't harmfull unless we base conclusions on it.
>> >
>> >
>>
>> Believe me, I have already intuited that you believe in the "religion
>> of evolution", as opposed to a religion believing in a God.
>
> Wrong. You are correct though in characterizing evolution as a
> religion.

Oh joy, another "Evolution is a religion" person.

> Evolution theory functions as centerpiece of some wonder, but there
> are glaring problems: No evidence of missing links in the face of
> Tons of fossil evidence of a great variety of unique species
> (notwithstanding sub-species that are obviously related).

Where do you get this from, some textbook from the late 1800's?
There is so much evidence of linkage today that your statement is 100
percent incorrect.

> Evidence
> suggest that species would have had to spontaneously come into being
> en masse from extreme outbreaks of very specific mutation.

Citations please?

> Creation
> would make more sense than that because mutation overwhelmingly is a
> deterioration resulting in a loss of viability.

While "mutation" can often be detrimental, we have to determine if you
define mutations as genetic variability. Is a person who is efficent at

storing fat a mutation as compared to one with a fast metabolism? Natural selection selects for that efficient person in times of little food.

> Additionally, Life
> even in what we would consider simple one-celled organisms are in fact
> highly organized and cooperative communities of seemingly
> intelligently flexible or single purpose mechanisms.

Check out Lipid cells - they are a significant step in self organizing structures.

> None of which
> would survive without the viability of the whole organism.

Organisms that have become more complex do depend on that complexity.

> So which
> came first, the chicken or the egg?

Now this is the zenith of science!

At any given time since "chickens have come into existance, they just lay eggs, and more chickens come about. If there was some way to pinpointa pre-chicke, the egg would be the first part. The pre-chicken hatches the first chicken. But it doesn't work that way.

> Neither could have been viable or
> accidentally come into being on their own.

That is the supposition of the answer.

> Then where are the fossils
> of the supposed transitional species. We know there is some
> flexibility within the species for adaptation, but new species are a
> great leap over a nonexistent bridge.

So, are you saying that every possible fossil has been discovered?

Where did all those animals go anyhow, and why are not modern men's fossils in the earliest stratum?

> The evolution theory was
> actually based only on observations and wrong conclusions and even
> Darwin thought to abandon it. It might not have survived to this day
> if it were not commandeered for it's political value to justify
> revolution, genocide and a notion that in order for an idea to be
> viable, all others must be destroyed.

Citations please?

> The notion that apes
> transitioned into humans is more farfetched than if we were evolved
> from ferns or fruit flies, if we were to compare the DNA structures.

Wrong. Humans did not descend from apes. We did not evolve from apes.

It is exceptionally difficult to make a rational argument when the same old LIE is repeated over and over again.

> Today we have youth wearing "natural selection" T-shirts going on
> shooting sprees and random gang killings for tatoos so don't tell me
> about evolution.

Are you serious? Quite the non-sequitar.

>> It is obvious, at this point, one has only two religions to believe
>> in:
>>
>> 1) A thinking mind created "all."
>>
>> 2) ALL spontaneously came into being.
>>
>> The first requires a belief in God.
>>
>> The second requires a belief that living organisms (or, biological
>> "machines") can spontaneously come into being, and that the elements
>> in the universe can spontaneously come into being from a space
>> composed of "absolute nothing."
>
> OK, essentially GOD or No GOD.

If you are serious about this, you are listening to the wrong people. There is no reason that a god could not create a universe in which every singel evolutionary concept would appear as we have seen. This god could also create every being as wildly different in structure, different cellular metabolism, or even more effective, create everything as sacs of goo with no perceptable means of "living" but living none the less.

>> On close examination, an intelligent would most likely deny the
>> possibility of either.
>>
>> However, it is obvious one is correct ...

Wrong. There is the third possibility that something created the universe and the life in it, and allowed it to go it's way. If it eveloved fine, if not, fine.

> It is obvious that life operates with great intelligence despite our
> conscous will, so we have that much proof of intelligence although not
> much of it comes to our awareness with that much regularity.

>>
>> Why any one individual would choose one over the other, with no proof
>> being available, is simply a function of human nature ... then, for
>> someone having chosen one over the other, to ridicule the other
>> possibility--well, that is simply insanity!

Different folks have a different definition of insanity. You have so many wrong suppositions in your beliefs, such as evolution as the beginning of life - it makes no such claims. The no transitional forms - there are

plenty, and more showing up all the time. The idea of irreducable complexity as you point out in your earlier cellular part. Many of the things that are presumably too complex, such as the human eye, can be shown to have many present day light sensing processes that run the gamut from simple sensing, to rudimentary lenses, to the human eye, to those of raptors.

To qoute oft repeated and very wrong precepts is disingenuous at best. In extreme cases, it starts to look as if a person is "lying for God". And he doesn't like that!

- 73 de Mike N3LI -

1577. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 01:50:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9ctcujvn1@news.albasani.net>
Source record: 22951

JB wrote:
>> ... The notion that
> apes transitioned into humans is more farfetched than if we were evolved
> from ferns or fruit flies, if we were to compare the DNA structures. Today
> we have youth wearing "natural selection" T-shirts going on shooting sprees
> and random gang killings for tatoos so don't tell me about evolution.
>> ...

If one were to tear apart a mud hut, and then a state-of-the-art
building, he/she would only find the basic building blocks are more
similar then dissimilar ... most likely, 99%+ of the elements in the
state of the art building can also be found in the mud-hut ... I see no
reason why someone should expect different in the basic building blocks
of life.

First there is a prototype, then improved designs, and at some point in
the future, or far-far-future, a finished design (maybe.)

We are all looking at the same "evidence" alright, the crux of the
matter is in the interpretation(s.)

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1578. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 07:08:29 UTC
From: JB <nospam@goofball.net>
Message-ID: <Nrruk.131$393.7@trnddc05>
Source record: 22952

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9ctcujvn1@news.albasani.net...
> JB wrote:
> >> ... The notion that
> > apes transitioned into humans is more farfetched than if we were evolved
> > from ferns or fruit flies, if we were to compare the DNA structures.
Today
> > we have youth wearing "natural selection" T-shirts going on shooting
sprees
> > and random gang killings for tatoos so don't tell me about evolution.
> >> ...
>
> If one were to tear apart a mud hut, and then a state-of-the-art
> building, he/she would only find the basic building blocks are more
> similar then dissimilar ... most likely, 99%+ of the elements in the
> state of the art building can also be found in the mud-hut ... I see no
> reason why someone should expect different in the basic building blocks
> of life.

Vast differences John. Were not talking about bricks here. We're talking about a skyscraper in Hong Kong and the hut is one of it's droppings. Vast difference in design and complexity but both would be sufficient to be viable in there own element. Mud huts are not strong or expensive but stay much cooler without any kind of power or energy. The mud hut will not evolve into a Hong Kong skyscraper no matter how long you watch.

Were talking about complex molecules that do specific jobs and drive complex machinery. Think of a cell as a city with numerous factories to make it self sufficient. DNA decides not only how the factories will be built but what factories are needed and how they will all interact to make the cell self-sufficient, and some of the factories will be build only as needed from parts from other factories that are deemed surplus as they too can be rebuild as necessary. All the Plans are in the DNA but how does the cell or any part of it know when or what plans to consult and who or what redraws the plans as necessary. Still the DNA is very specific in what capabilities are available so that the fly cant grow a human foot or the frog won't grow a hoof. The DNA is limited only to minor changes. Any more and things needed to survive aren't there. Splice too much and the different parts fight each other.

Now consider that all members/parts/factories/roads/power/lights/political parties in the system have to work together and if one part is out of place the system crashes and the organism never happens.

Here is another puzzlement. It seems that the difference between Man and Woman are that one end of the structure is slightly goofed so that between the woman and man several traits are either activated or not. Other than that they are the same structure. But how can you say that one is evolved differently from the other?!? With out the difference, the species would never have been so it could have nothing to do with evolution, leading one to expect a spontaneous event {*POP*} where both could continue as one flesh so to speak as there would never have been time for an evolutionary change to allow them both to evolve into a viable species.

Consider this: One translation says "You formed me even in the womb from the lower parts of the earth" Or to that effect. could the translation as easily be designed and programmed elementally in the womb. Certainly fits what is actually happening, but what does a sheppard boy know of DNA?

> First there is a prototype, then improved designs, and at some point in
> the future, or far-far-future, a finished design (maybe.)
>
> We are all looking at the same "evidence" alright, the crux of the
> matter is in the interpretation(s.)
>
> Regards,
> JS
> Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1579. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 09:40:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9dou8$f1t$1@news.albasani.net>
Source record: 22953

JB wrote:

> ...
> Vast differences John. Were not talking about bricks here. We're talking
> about a skyscraper in Hong Kong and the hut is one of it's droppings. Vast
> difference in design and complexity but both would be sufficient to be
> viable in there own element. Mud huts are not strong or expensive but stay
> much cooler without any kind of power or energy. The mud hut will not
> evolve into a Hong Kong skyscraper no matter how long you watch.
>

Absolutely no difference in the context which the point is being made,
you are confusing basic building blocks with technology--apples and
oranges ...

> Were talking about complex molecules that do specific jobs and drive complex
> machinery. Think of a cell as a city with numerous factories to make it
> self sufficient. DNA decides not only how the factories will be built but
> what factories are needed and how they will all interact to make the cell
> self-sufficient, and some of the factories will be build only as needed from
> parts from other factories that are deemed surplus as they too can be
> rebuild as necessary. All the Plans are in the DNA but how does the cell or
> any part of it know when or what plans to consult and who or what redraws
> the plans as necessary. Still the DNA is very specific in what capabilities
> are available so that the fly cant grow a human foot or the frog won't grow
> a hoof. The DNA is limited only to minor changes. Any more and things
> needed to survive aren't there. Splice too much and the different parts
> fight each other.
>

A toy serves a different purpose than a diesel truck. Those purposes
cannot be confused with what they are built from--a dung beetle is
constructed for a different purpose than a human ...

>> ...

You argument contains more your agenda than rational debate in a quest
for answers... colleges are constructed just for such purposes--to
educate you in the differences ...

Regards,
JS
Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

1580. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 14:59:45 UTC
From: What me worry? <danlx@tampabay.rr.com>
Message-ID: <l6clb41vdrr798mhlpi69upgva2i6gh933@4ax.com>
Source record: 22954

On Sun, 24 Aug 2008 17:57:32 -0500, Mike Coslo
<mcoslo@youknow.comcast.net> wrote:

>"Wayne" <mygarbagecan@verizon.net> wrote in
>news:BdXrk.527$482.222@trnddc06:
>
>
>>> As a last resort I will hack a trench with a pick and lay in the rod
>>> at a shallow angle to the surface. Would this give an adequate
>>> ground ? I could also bond it to an outdoor brass spigot
>>> 10 yards away or even to an anchor fence in the other direction.
>>> Dave WB3DWE
>> -
>> In my opinion the trench would be ok, but I'll leave that to the
>> experts on the group.
>>
>> However, I remember chiseling through the caliche to be annoying, but
>> not that difficult with the right tools. It can be done with a
>> "shooter" style shovel, but that is a bit more effort. However, I
>> doubt if you would ever get a copper rod driven through without some
>> major damage to the rod.
>
>
>
>
>If the soil is permiable to water, you could try another of my hack
>methods. Sweat a garden hose connection onto a piece of copper tubing.
>Attach a garden hose to the fitting, and point the rod down in the place
>you want to sink int. Then let it rip. In my area, we have a few inches
>of topsoil, than a really hard clay, then rocky clay, followed by sandy
>clay/sand. It will even move some rocks out of the way. The tubing
>becomes the ground rod of course.
>
> - 73 de Mike N3LI -

Water worked ok for me and I replaced the Steel pipe I used with a
clad ground rod after I made the "hole". Now on the job I see
electricians using a neat tool. I think Milwaukee makes it. It
attaches to the rod and hangs off the side and appears to be able to
be clamped on anywhere and hammers it into the ground. Seems to work
very well under different conditions. Try rental houses first. If ya
belong to a club it would be a good club buy.

Dan, N9JBF

1581. Re: Burying coax idea

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 15:01:59 UTC
From: What me worry? <danlx@tampabay.rr.com>
Message-ID: <pgclb4hmusbe74fth1j5bf6mq3oldji522@4ax.com>
Source record: 22955

On Sun, 24 Aug 2008 16:29:41 -0700, "Joel Koltner"
<zapwireDASHgroups@yahoo.com> wrote:

>"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
>news:f5483730-c565-4072-8ab3-33513cf489d0@i76g2000hsf.googlegroups.com...
>"I have also known of people putting a concrete cutting blade on an
>edger and cutting through a curb with it."
>
>Seems like a concrete blade on a regular old Skillsaw would be easier and have
>more torque? Is there any advantage to the edger other than (1) not having to
>get down on your hands and feet and (2) you may not actually have a Skillsaw?
>

The guard on the skill saw is there for a reason...There isn't one on
a edger. Rent a target saw and put a concrete blade on it. Done is a
matter of minutes.

dan, N9JBF

1582. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 16:49:43 UTC
From: JB <nospam@goofball.net>
Message-ID: <HYzuk.116$Dj1.89@trnddc02>
Source record: 22956

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9dou8$f1t$1@news.albasani.net...
> JB wrote:
>
> > ...
> > Vast differences John. Were not talking about bricks here. We're
talking
> > about a skyscraper in Hong Kong and the hut is one of it's droppings.
Vast
> > difference in design and complexity but both would be sufficient to be
> > viable in there own element. Mud huts are not strong or expensive but
stay
> > much cooler without any kind of power or energy. The mud hut will not
> > evolve into a Hong Kong skyscraper no matter how long you watch.
> >
>
> Absolutely no difference in the context which the point is being made,
> you are confusing basic building blocks with technology--apples and
> oranges ...
>
I lost your context then. The only thing in common between the skyscraper
and mud hut is that they have a maker and some plan. Maybe some wood. If
you are talking Chemistry, then you are getting specific and I doubt they
use the same mud formula in the skyscraper anywhere but in the flower pots.
The only thing
in common with various different species are proteins, and they aren't
even life. I contend that the complexities involved are too astronomical to
be accidental because outside of minor adaptability that are wired for,
changes from one species to another couldn't happen one step at a time, it
would be just as probable if male and female of a species popped out ready
made. You cant make a semi out of a VW bug without recycling and
redesigning it from the ground up.

> You argument contains more your agenda than rational debate in a quest
> for answers... colleges are constructed just for such purposes--to
> educate you in the differences ...

There is no place for rational debate on this subject (and many others) in
most colleges. It conflicts with the agenda to promote Globalism, Marxism
and
homosexuality, and especially the denial of God, national unity, or any
authority above the Global Socialist state. Karl Marx was a seminary
student when he stumbled onto Darwin's book. After reading it, he lost his
faith and went to formulate his own theories of life and revolution. Hitler
also read Darwin's book and made references to it in Mein Kamph and other

works to justify ridding the world of "inferior species" in order to promote evolution. Darwin became an Atheist because he couldn't bear the thought of his Father going to Hell for committing suicide and sought to promote Atheism. Interesting to note, several of his children had birth defects.

I present this in the context that Darwin promoted:
1. That all life on the planet evolved from mud and through slow evolution,
2. All species evolved from a single celled organism that evolved spontaneously from mixtures of "primordial ooze" and inevitably,
3. There is no god, no purpose in life but to be killed and eaten by another organism.

In fact, there is no more proof of those ideas, than of the idea that a great
number of species spontaneously emerged over a short time and make environmental changes within the limitations of the DNA and viability.

However, since there is no research money for God, the Darwin theory persists because the alternative is unthinkable.

1583. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 18:08:36 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <Ubr3NwCk4tuIFw4K@g3ohx.demon.co.uk>
Source record: 22957

In message <g9ctcujvn1@news.albasani.net>, John Smith
<assemblywizard@gmail.com> writes
>JB wrote:
>>> ... The notion that
>> apes transitioned into humans is more farfetched than if we were evolved
>> from ferns or fruit flies, if we were to compare the DNA structures. Today
>> we have youth wearing "natural selection" T-shirts going on shooting sprees
>> and random gang killings for tatoos so don't tell me about evolution.
>>> ...
>
>If one were to tear apart a mud hut, and then a state-of-the-art
>building, he/she would only find the basic building blocks are more
>similar then dissimilar ... most likely, 99%+ of the elements in the
>state of the art building can also be found in the mud-hut ... I see no
>reason why someone should expect different in the basic building blocks
>of life.
>
>First there is a prototype, then improved designs, and at some point in
>the future, or far-far-future, a finished design (maybe.)
>
>We are all looking at the same "evidence" alright, the crux of the
>matter is in the interpretation(s.)
>
>Regards,
>JS
>Half-a-Brain-McCain'n Insane; So Lawdy Mama, It Looks Like Obama!

John,
You have a typo in the slogan after your 'signature'. [At least, I
presume it's a typo.] It's annoying me intensely. Please would you
correct it.
--
Ian

1584. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 18:21:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <71olb4pqpln69goepqab7l01df2o8u1f6v@4ax.com>
Source record: 22958

On Sun, 31 Aug 2008 19:08:36 +0100, Ian Jackson
<ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:

>John,
>You have a typo in the slogan after your 'signature'. [At least, I
>presume it's a typo.] It's annoying me intensely. Please would you
>correct it.

Hi Ian,

Are you referring to the minstrel baiting term? It's bad enough to
tolerate this anonymous carnival of religious cliches with their
dialog of obscene pandering.

73's
Richard Clark, KB7QHC

1585. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 19:07:40 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <ybPeGva8vuuIFAdd@ifwtech.co.uk>
Source record: 22959

Dan wrote:
>On Aug 28, 2:26ï¿½am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>>
>> In other words, people with limited antenna opportunities are often the
>> ones who need a balun - or more accurately, a common-mode choke - the
>> MOST.

>Technically I would have to disagree with calling even a 1:1 balun the
>same thing as a common mode choke. A CM choke is an EMI prevention
>device intended to filter out RF components generated in a circuit,
>away from the feed of a power source, usually an electrical mains.

That is too far narrow a definition of a "common mode choke",
especially the reference to electrical mains. The term is widely applied
to transmission line for both digital data and analog RF signals.

>A
>balun is intended to change the feed from an unbalanced transmission
>line to a balanced output, for example, for connection to a balanced
>transmission line or to an antenna such as a dipole. With the balun,
>we wany NO reduction in RF current flow.

What exactly do you mean by that?

And also, what exactly do you mean by "balanced" in the context of a
feedline?

>I agree that the effect is
>the same, semantically, ie one side effect of the use of a balun is
>less CM interference from coming down a balanced feedline but it is
>there for a different reason.

Not in my station. My motivation for using common-mode chokes is
specifically to control any incoming and outgoing interference that
may be caused by common-mode currents on the feedline.

When the common-mode component of the feedline is reduced, it will also
be accompanied by an improvement in "balance" on the antenna, because
the two things go together (or at least, they do for some definitions of
that word). But "balance" is never my primary goal because I don't find
the concept helpful, either when deciding what to do next or when
evaluating the results.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1586. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 21:43:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9f3aehd1@news.albasani.net>
Source record: 22960

Ian Jackson wrote:

> John,
> You have a typo in the slogan after your 'signature'. [At least, I
> presume it's a typo.] It's annoying me intensely. Please would you
> correct it.

Ian:

How about just disabling it, that was really enough of that anyway ... ;-)

Regards,
JS

1587. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 21:53:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9f3sf$1nd$1@news.albasani.net>
Source record: 22961

JB wrote:

>> ...
> I lost your context then. The only thing in common between the skyscraper
> and mud hut is that they have a maker and some plan. Maybe some wood. If
> you are talking Chemistry, then you are getting specific and I doubt they
> use the same mud formula in the skyscraper anywhere but in the flower pots.
>> ...

Iron is iron, whether in a pure form, alloys, rust or other ferric compounds. Silicon is silicon, whether in a window pane, silicon oxide, or some other compound of silicon. Calcium is calcium, whether in limestone, cement, earth, or other calcium compounds, etc., etc. ...

Back when I was in college, someone did some computations of how the body of Plato would have decayed and been dispersed throughout the world in the thousands of years since his death. They arrived at the conclusion that everyone on the planet would have at least 6 molecules from Platos' body in their own bodies (mostly water molecules since that is the major component of the human body) ... I cannot verify the accuracy of those computations--however, you get the drift--I am part Plato! <grin>

Regards,
JS

1588. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 21:59:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9f47e$21t$1@news.albasani.net>
Source record: 22962

Richard Clark wrote:

> ...
> Hi Ian,
>
> Are you referring to the minstrel baiting term? It's bad enough to
> tolerate this anonymous carnival of religious cliches with their
> dialog of obscene pandering.
>
> 73's
> Richard Clark, KB7QHC

Has someone snuck into this forum and now lies under the bleachers bellowing for help? I thought I heard some inane and insane rantings from an individual out of his mind with pain!

Reminds me of that poor b*st*ard which used to go around mumbling quotes from Shakespeare in reply to technical discussions ... at least he is gone for the moment, or so it might seem. :-)

Regards,
JS

1589. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-08-31 23:04:53 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <hX36O$OVOyuIFwOL@g3ohx.demon.co.uk>
Source record: 22963

In message <g9f3aehd1@news.albasani.net>, John Smith
<assemblywizard@gmail.com> writes
>Ian Jackson wrote:
>
>> John,
>> You have a typo in the slogan after your 'signature'. [At least, I
>>presume it's a typo.] It's annoying me intensely. Please would you
>>correct it.
>
>Ian:
>
>How about just disabling it, that was really enough of that anyway ... ;-)
>
>Regards,
>JS

No, I like the sentiment expressed. It's just the typo that is getting
to me!!!
--
Ian

1590. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 00:55:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9fei5$f79$1@news.albasani.net>
Source record: 22964

Richard Clark wrote:

> ...
> Hi Ian,
>
> Are you referring to the minstrel baiting term? It's bad enough to
> tolerate this anonymous carnival of religious cliches with their
> dialog of obscene pandering.
>
> 73's
> Richard Clark, KB7QHC

Hmmm, playing, "I am taking the high road game, huh?

Ok. Well, here is my favorite version:

Fee-fi-fo-fum
I smell the blood of an Englishman.
Be he alive or be he dead
I'll grind his bones to make my bread. -- "Jack the Giant Killer."

Now, one sure to be your fav:

"Child Roland to the dark tower came,
His word was still, Fie, foh, and fum,
I smell the blood of a British man." -- Shakespeare, "King Lear."

And, for those finding neither to their liking:

"O, tis a precious apothegmatical Pedant, who will find matter enough to
dilate a whole day of the first invention of Fy, fa, fum, I smell the
blood of an English-man". -- Thomas Nashe, "Have with you to
Saffron-walden."

Ahhh, remember the good-ole-days when you could write this
gooble-de-gook for yourself? A burden which has now befell my
shoulders--I only thank God they are broad (my shoulders of course, not
the women!) :-(

However, Shakespeare does seem to befit some as more appropiate
"trolling lines" than myself ...

Regards,
JS

1591. Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 02:16:14 UTC
From: sangeo <w2agr@msn.com>
Message-ID: <fd5a333a-9fe8-428a-8daa-30506539c395@25g2000hsx.googlegroups.com>
Source record: 22965

I came across a good 2 meter 12 element beam. The boom is aprox 19 ft
long. It has 4 driven elements in a "log" or lattice configuration. I
need info to make the coax connection. Does anyone have an Idea as to
Mfg? The driven elements are spaced about 7 inches apart. It is in
good shape except for the missing connection points.
Thanks, 73's
George

1592. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 05:12:00 UTC
From: dfinn1@nc.rr.com
Message-ID: <a59f2521-a5f8-4ad2-b0b7-688ab9642c92@c58g2000hsc.googlegroups.com>
Source record: 22966

On Aug 31, 3:07 pm, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
> Dan wrote:
> >On Aug 28, 2:26 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>
> >> In other words, people with limited antenna opportunities are often the
> >> ones who need a balun - or more accurately, a common-mode choke - the
> >> MOST.
> >Technically I would have to disagree with calling even a 1:1 balun the
> >same thing as a common mode choke. A CM choke is an EMI prevention
> >device intended to filter out RF components generated in a circuit,
> >away from the feed of a power source, usually an electrical mains.
>
> That is too far narrow a definition of a "common mode choke",
> especially the reference to electrical mains. The term is widely applied
> to transmission line for both digital data and analog RF signals.

A common mode choke is used in RF applications, very true, but it
serves a filtering purpose,
not a conversion of unbalanced to balanced energy transfer or vice
versa. A common mode choke that operates well will turn
unwanted RF into heat or cause it to dissipate in its core or a
resistor etc..

>
> >A
> >balun is intended to change the feed from an unbalanced transmission
> >line to a balanced output, for example, for connection to a balanced
> >transmission line or to an antenna such as a dipole. With the balun,
> >we wany NO reduction in RF current flow.
>
> What exactly do you mean by that?

You do not want the balun to operate hot (ir to dissipate heat as you
do with a CM choke filter). You strive for 100% transfer of energy and
settle for the best
you can get. With a CM choke, you try to filter and dissipate unwanted
back-RF. Any back RF from your balun
should be converted to unbalanced transfer back to the source. You
reduce back-RF by matching impedances (which can also involve baluns
but not the 1:1 application discussed here). If you try to filter it
the unwanted back-RF, you will also end up filtering the forward
energy transfer. Of course, that would be an undersirable situation.

>
> And also, what exactly do you mean by "balanced" in the context of a

> feedline?

For a 2 conductor feedline, the V in each conductor is 180 degrees out
of phase with each other. Same with I. One conductor is +90 degrees
and the other is -90 degrees with respect to earth. At any given
instant and location the summation of both conductors with respect to
each other is equal to the magnitude it would be on the inner
conductor on the unbalanced (coax) with respect to ground (shield).
Since magnitude of the V on each conductor of the balanced line are
equal and opposite in phase, the term "balanced" is appropriate. Same
with I.

>
> >I agree that the effect is
> >the same, semantically, ie one side effect of the use of a balun is
> >less CM interference from coming down a balanced feedline but it is
> >there for a different reason.
>
> Not in my station. My motivation for using common-mode chokes is
> *specifically* to control any incoming and outgoing interference that
> may be caused by common-mode currents on the feedline.

Of course. But it is not due to filtering unwanted RF, it is due to
the conversion of balancing your energy so
that the coax properly acts as a shielded unbalanced line with no
energy in the shield and all energy in the inner conductor
(assuming perfect conditions). Your dipole will try to balance when
fed as a dipole directly from a coax.. Without the balun, any
reflected energy will
partially come down the shield to ground causing interference. The
balun simply unbalances the reflected energy, if any, to that it all
returns through
the inner conductor eliminating RFI if the radio and the shield are
properly earthed.

>
> When the common-mode component of the feedline is reduced, it will also
> be accompanied by an improvement in "balance" on the antenna, because
> the two things go together (or at least, they do for some definitions of
> that word).

But think of your dipole as a balanced transmission line. That's what
it is, with a lot of loss (into radiation resistance).
You WANT common mode on THAT that lossy transmission line and you do
not want it filtered away.

But "balance" is never my primary goal because I don't find
> the concept helpful, either when deciding what to do next or when
> evaluating the results.

I say "balanced" is your primary goal though you do not realize it.
You want to balance the energy propagation in your dipole "lossy

transmission line", when feeding it with an unbalanced coax. The balun should accomplish that. Anything reflected is not good but at least it is reflected "unbalanced" inside the grounded shield causing less EMI.

1593. Re: Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 05:24:24 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <j0Luk.19067$_s1.13221@newsfe07.iad>
Source record: 22967

"sangeo" <w2agr@msn.com> wrote in message
news:fd5a333a-9fe8-428a-8daa-30506539c395@25g2000hsx.googlegroups.com...
> I came across a good 2 meter 12 element beam. The boom is aprox 19 ft
> long. It has 4 driven elements in a "log" or lattice configuration. I
> need info to make the coax connection. Does anyone have an Idea as to
> Mfg? The driven elements are spaced about 7 inches apart. It is in
> good shape except for the missing connection points.
> Thanks, 73's
> George

The manufacturer of your antenna may be KLM (SK). I sniffed this out:

http://lists.contesting.com/_towertalk/2007-11/msg00259.html

Some KLM products rolled into M2 Antenna Systems
http://www.m2inc.com/index2.html It doesn't look like M2 offers any antennas fed through sleeve baluns or sells any sleeve baluns separately.

Also, I have a two 440 beams with the closely spaced "lattice" configuration of multiple driven elements -- as you described. They are fed through quarter sleeve baluns. 16/17 cm long, cut on an angle at the open end, if it matters. One of the baluns still has the mfr sticker on it. Would you believe "KLM"? I could post a picture.

From this, I suspect the feed point impedance is close to 50 ohms. I mention impedance only in passing, as I encountered some references to impedance transformation through half-wave sleeve baluns. I haven't investigated that aspect.

I googled for "sleeve balun"and at first glance, this looks OK.

http://www.vhfman.freeuk.com/radio/sleeve.html

Making your own sleeve balun looks easy enough. However, I saw more than the "normal" share of weird s**t on the 'net about making sleeve baluns. Sleeve baluns are good -- don't misunderstand. Just be careful. Read a lot.

Multiple toroids slid onto the coax also form a balun. IIRC, advice was posted here recently regarding fifty toroids for HF. Could be that toroids also work well for VHF. Others will know. Good luck and report back.

1594. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 07:25:38 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B0CB13EC6D64nonenowhere@61.9.191.5>
Source record: 22968

dfinn1@nc.rr.com wrote in news:c2a78f6b-eded-4547-ae32-bc8ccd60e186
@m73g2000hsh.googlegroups.com:

> Technically I would have to disagree with calling even a 1:1 balun the
> same thing as a common mode choke. A CM choke is an EMI prevention

I suggest that a reasonable definition of a balun is any device that facilitates or assists transition from unbalanced to balanced mode of operation. That definition permits a wide range of devices that may have characteristics suited to specific applications.

(Keeping in mind that an unbalanced feedline is often not ideal in application, ie one where common mode current is exactly half of the differential current, and a two wire open line is often not ideal in application, ie where common mode current is zero.)

Most people naturally think of balance in terms of voltages wrt some common reference, eg ground. It is equally legitimate, and often more appropriate to the antenna / feedline scenario, to seek balance in terms of current, ie to minimise common mode current.

Owen

1595. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 08:20:01 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <BDXf2bJxW6uIFA6v@ifwtech.co.uk>
Source record: 22969

Dan wrote:
>On Aug 31, 3:07ï¿½pm, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>> Dan wrote:
>> >On Aug 28, 2:26ï¿½am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>>
>> >> In other words, people with limited antenna opportunities are often the
>> >> ones who need a balun - or more accurately, a common-mode choke - the
>> >> MOST.
>> >Technically I would have to disagree with calling even a 1:1 balun the
>> >same thing as a common mode choke. ï¿½A CM choke is an EMI prevention
>> >device intended to filter out RF components generated in a circuit,
>> >away from the feed of a power source, usually an electrical mains.
>>
>> That is too far narrow a definition ï¿½of a "common mode choke",
>> especially the reference to electrical mains. The term is widely applied
>> to transmission line for both digital data and analog RF signals.
>
>A common mode choke is used in RF applications, very true, but it
>serves a filtering purpose,
>not a conversion of unbalanced to balanced energy transfer or vice
>versa. A common mode choke that operates well will turn
>unwanted RF into heat or cause it to dissipate in its core or a
>resistor etc..
>

Common-mode chokes, and filters in general, do NOT aim to "turn unwanted RF into heat"! That is a total misunderstanding of the whole concept.

An ideal common-mode choke would dissipate zero heat energy, and a successful real-life choke will dissipate only a tiny fraction of the available RF power.

When you insert a common-mode choke, you are inserting a large impedance into the pathway of the common-mode current. The RF current distribution throughout the entire antenna/feedline/ground system will adjust to take account of this new impedance. As a result, most of the common-mode current will be DIVERTED away from its former pathway, and will flow instead in the antenna.

The details are complicated, but the concept that the choke DIVERTS common-mode current away from the feedline is reasonably accurate. (By contrast, the concept that it "turns unwanted RF current into heat" is just plain wrong.)

If the choke is doing its job, the new value of common-mode current (I_cm) flowing through the choke will be much less than the previous

value. The power dissipation in the choke will then be (I_cm)-squared x R, where R is the resistive part of the choke's impedance at that frequency. Note that I_cm is the small amount of common-mode current that remains *after* having inserted the choke - not the value before! The practical outcome is that a higher choke impedance will give *lower* heat dissipation in the choke itself.

If a common-mode choke is getting hot, it isn't working. Unfortunately there are many chokes that don't have a high enough impedance to handle the full range of real-life situations. If a choke is not able to suppress the common-mode current to a low enough value, then in some situations it will get hot [1, 2]. But PLEASE don't imagine that is how common-mode chokes are intended to work!

[1] http://www.w8ji.com/Baluns/balun_test.htm

[2] http://audiosystemsgroup.com/NCDXACoaxChokesPPT.pdf

Also see other pages and publications from the same authors.

>>
>> >A
>> >balun is intended to change the feed from an unbalanced transmission
>> >line to a balanced output, for example, for connection to a balanced
>> >transmission line or to an antenna such as a dipole. With the balun,
>> >we wany NO reduction in RF current flow.
>>
>> What exactly do you mean by that?
>
>You do not want the balun to operate hot (ir to dissipate heat as you
>do with a CM choke filter). You strive for 100% transfer of energy and
>settle for the best
>you can get. With a CM choke, you try to filter and dissipate unwanted
>back-RF. Any back RF from your balun
>should be converted to unbalanced transfer back to the source. You
>reduce back-RF by matching impedances (which can also involve baluns
>but not the 1:1 application discussed here). If you try to filter it
>the unwanted back-RF, you will also end up filtering the forward
>energy transfer. Of course, that would be an undersirable situation.
>

Sorry, but that is so confused I can't even begin to unpick it... except by pointing to "you try to filter and dissipate unwanted back-RF". In so many different ways, that is NOT what we're trying to do. Tug on that loose strand, and the whole thing unravels.

>>
>> And also, what exactly do you mean by "balanced" in the context of a
>> feedline?
>
>For a 2 conductor feedline, the V in each conductor is 180 degrees out
>of phase with each other. Same with I.

Yes.

>One conductor is +90 degrees
>and the other is -90 degrees with respect to earth.

No. Earth and 90 degrees don't come into this at all.

>At any given
>instant and location the summation of both conductors with respect to
>each other is equal to the magnitude it would be on the inner
>conductor on the unbalanced (coax) with respect to ground (shield).
>Since magnitude of the V on each conductor of the balanced line are
>equal and opposite in phase, the term "balanced" is appropriate. Same
>with I.
>
Yes... but this definition of "balanced" also REQUIRES that the
common-mode current is zero. The two are locked together, so if
"balance" is your aim, the practical way to achieve it is to force the
common-mode current to a lower value.

We have some direct leverage on common-mode current, because it's a
real, measurable thing. But "balance" is only a concept, and there isn't
any *direct* leverage that we can apply to it.

So even though a "common-mode choke" and a "current balun" are two
different names for the same physical device, it does make a difference
which name you choose. Think "common-mode choke", and you can see the
levers that will make your antenna/feedline system perform the way you
want it to. Think "balun", and all you see is a label that covers those
levers up.

[...]
>But think of your dipole as a balanced transmission line. That's what
>it is, with a lot of loss (into radiation resistance).
>You WANT common mode on THAT that lossy transmission line and you do
>not want it filtered away.
>
Again, that is all so misconceived - at every turn, it clashes with
obvious, measurable physical reality; or else it contradicts itself.
I'm sorry, but you really do need to do a clean wipe and start again
with a good textbook.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1596. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 14:21:12 UTC
From: JB <nospam@goofball.net>
Message-ID: <sTSuk.219$1a2.93@trnddc04>
Source record: 22970

"Ian Jackson" <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote in message
news:hX36O$OVOyuIFwOL@g3ohx.demon.co.uk...
> In message <g9f3aehd1@news.albasani.net>, John Smith
> <assemblywizard@gmail.com> writes
> >Ian Jackson wrote:
> >
> >> John,
> >> You have a typo in the slogan after your 'signature'. [At least, I
> >>presume it's a typo.] It's annoying me intensely. Please would you
> >>correct it.
> >
> >Ian:
> >
> >How about just disabling it, that was really enough of that anyway ...
;-)
> >
> >Regards,
> >JS
>
> No, I like the sentiment expressed. It's just the typo that is getting
> to me!!!
> --
> Ian

So who makes up the slogans for the dems? Is it some kind of secret code?
Except for the fact that they hold peoples jobs and freedoms with an iron
fist and treat us all like school children, the candidates don't seem to do
anything of merit. Is it really all about blaming the other guy about what
your people are getting away with under their watch?

1597. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 14:38:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9gup5$rm9$1@news.albasani.net>
Source record: 22971

JB wrote:

> ...
> So who makes up the slogans for the dems? Is it some kind of secret code?
> Except for the fact that they hold peoples jobs and freedoms with an iron
> fist and treat us all like school children, the candidates don't seem to do
> anything of merit. Is it really all about blaming the other guy about what
> your people are getting away with under their watch?
>
>

Do you really think the "men" behind the curtain(s) pulling the puppets strings are from different groups? i.e., Republicrats vs. Democans.

Fat chance; Me thinks the game is fixed. However, the "Laws of Illusion(s)" dictates it is only that which is perceived which counts ...

Regards,
JS

1598. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 15:11:47 UTC
From: JB <nospam@goofball.net>
Message-ID: <TCTuk.163$Dj1.134@trnddc02>
Source record: 22972

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:akejb4dvgqrujdjo0dhoih2ck0m50kmqqj@4ax.com...
> On Sat, 30 Aug 2008 21:03:45 GMT, "JB" <nospam@goofball.net> wrote:
>
> >I simply prefer not to attract tons of V-agra spam. These newsgroups are
> >seriously mined and my actual e-mail address associated with this login
is
> >set to dump all mail because of that.
>
> I have transmited in the clear here for the past 13 years.
>
> Since May, I have received all of 2 spams - from the son of Charles
> Taylor in Africa. The amount of spam that predated that is of like
> proportion.

I've heard the same arguments from kids who do drugs or refuse to wear seat
belts.
"It won't happen to me". I wouldn't want to lose my e-mail account or my
callsign to a spoof binge.
>
> >The truth speaks for itself. You can come up with any excuse to deny it.
>
> In those same 13 years I've often heard the same excuse you are using.
>
> Anyone who is willing to quote the Bible, but refusing to testify is
> obviously of little faith - a Xerox can do as much and "anonymous"
> sources lean on that copy button freely without conviction.
>
> 73's
> Richard Clark, KB7QHC

What do you want? A new book of the Bible? How's this for testimony -
I must be a thorn in the side of the devil or he wouldn't have been trying
to take me and my dad out all our lives. The Lord has delivered me over and
over and even set a table before me in front of my enemies. My dad now
rests in Jesus. My rest is yet to come. Maybe if I was a poet or a
songwriter I could add to the Psalms but I leave that to others with that
gift.

1599. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 15:35:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bt2ob45u6spet86a5p0gq2r1s3kms8f7ip@4ax.com>
Source record: 22973

On Mon, 01 Sep 2008 15:11:47 GMT, "JB" <nospam@goofball.net> wrote:

> How's this for testimony

It isn't.

73's
Richard Clark, KB7QHC

1600. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 15:53:23 UTC
From: JB <nospam@goofball.net>
Message-ID: <TdUuk.166$Dj1.29@trnddc02>
Source record: 22974

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9gup5$rm9$1@news.albasani.net...
> JB wrote:
>
> > ...
> > So who makes up the slogans for the dems? Is it some kind of secret
code?
> > Except for the fact that they hold peoples jobs and freedoms with an
iron
> > fist and treat us all like school children, the candidates don't seem to
do
> > anything of merit. Is it really all about blaming the other guy about
what
> > your people are getting away with under their watch?
> >
> >
>
> Do you really think the "men" behind the curtain(s) pulling the puppets
> strings are from different groups? i.e., Republicrats vs. Democans.
>
> Fat chance; Me thinks the game is fixed. However, the "Laws of
> Illusion(s)" dictates it is only that which is perceived which counts ...
>
> Regards,
> JS

I have often considered the Good Cop Bad Cop theory of the Rep - Dem scam on the people. The fact that they go to the same parties and get-togethers means they share the same thoughts. It doesn't mean there is a conspiracy per-se. Think of it as one big party that everyone has to go to or be left out, and even though everyone goes kissy-kissy, they are knifing in the back. Distrust and polite smack is all around. Rather than conspiracy though, there is convergence in thought on matters brought to light to be wrestled over while more important matters are forgotten for the moment. We the People get left behind.

Who do you vote for though... Obama has been hanging around the Rev. kill whitey bunch for too long. No telling what disease he might have picked up. There also seems to be some overcompensation, the way he so desperately needs to validate himself with every group that he forgets who he is from day to day. By the same token, what damage was done to McCain while being thrashed in the POW camp. But he does seem to have tolerance and compassion even though he sticks to his guns.

The fact we are narrowed to two parties smacks of some kind of collusion. Especially in the light of certain travesties of the Dems that the Reps are curiously silent on. Perhaps McCain is so attractive due to the fact he has proven to be less of a party lapdog.

1601. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 16:07:39 UTC
From: JB <nospam@goofball.net>
Message-ID: <frUuk.168$Dj1.49@trnddc02>
Source record: 22975

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:bt2ob45u6spet86a5p0gq2r1s3kms8f7ip@4ax.com...
> On Mon, 01 Sep 2008 15:11:47 GMT, "JB" <nospam@goofball.net> wrote:
>
> > How's this for testimony
>
> It isn't.
>
> 73's
> Richard Clark, KB7QHC

Oh it's you again. You don't seem to do much other than poke the fire.

1602. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 16:26:26 UTC
From: dfinn1@nc.rr.com
Message-ID: <7891e589-0336-4c3b-a090-a2512f41c1a7@m36g2000hse.googlegroups.com>
Source record: 22976

On Sep 1, 4:20 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
> Dan wrote:
> >On Aug 31, 3:07 pm, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
> >> Dan wrote:
> >> >On Aug 28, 2:26 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>
> >> >> In other words, people with limited antenna opportunities are often the
> >> >> ones who need a balun - or more accurately, a common-mode choke - the
> >> >> MOST.
> >> >Technically I would have to disagree with calling even a 1:1 balun the
> >> >same thing as a common mode choke. A CM choke is an EMI prevention
> >> >device intended to filter out RF components generated in a circuit,
> >> >away from the feed of a power source, usually an electrical mains.
>
> >> That is too far narrow a definition of a "common mode choke",
> >> especially the reference to electrical mains. The term is widely applied
> >> to transmission line for both digital data and analog RF signals.
>
> >A common mode choke is used in RF applications, very true, but it
> >serves a filtering purpose,
> >not a conversion of unbalanced to balanced energy transfer or vice
> >versa. A common mode choke that operates well will turn
> >unwanted RF into heat or cause it to dissipate in its core or a
> >resistor etc..
>
> Common-mode chokes, and filters in general, do NOT aim to "turn unwanted
> RF into heat"! That is a total misunderstanding of the whole concept.

A CM choke aims to present a high impedence to unintentional RF. Once
"choked" by the high impedance,
the enrgey must either reflect or be aborbed somewhere in the circuit
or the core as real power. What is it that you cannot
understand about the term "choke"?

>
> An ideal common-mode choke would dissipate zero heat energy, and a
> successful real-life choke will dissipate only a tiny fraction of the
> available RF power.

CM choke is a filter, not an energy transfer device. Do you have any
formal education in electrical engineering?

>
> When you insert a common-mode choke, you are inserting a large impedance
> into the pathway of the common-mode current. The RF current

> distribution throughout the entire antenna/feedline/ground system will
> adjust to take account of this new impedance. As a result, most of the
> common-mode current will be DIVERTED away from its former pathway, and
> will flow instead in the antenna.

Whew. You sort of describe a balun except that the balun is an
impedance matching device, in this discussion 1:1.
What new impedance does your 1:1 balun change you transmission line
and antenna feedpoint to ;-)

>
> The details are complicated, but the concept that the choke DIVERTS
> common-mode current away from the feedline is reasonably accurate. (By
> contrast, the concept that it "turns unwanted RF current into heat" is
> just plain wrong.)

Strawman. I didn't say that! RF current or voltage at the antenna is
not unwanted. You are the one who says you use a common choke choke at
your antenna feedpoint, not I.

>
> If the choke is doing its job, the new value of common-mode current
> (I_cm) flowing through the choke will be much less than the previous
> value. The power dissipation in the choke will then be (I_cm)-squared x
> R, where R is the resistive part of the choke's impedance at that
> frequency. Note that I_cm is the small amount of common-mode current
> that remains *after* having inserted the choke - not the value before!
> The practical outcome is that a higher choke impedance will give *lower*
> heat dissipation in the choke itself.

I cannot believe you are serious. You actually insert a choke at your
antenna input? I insert an efficient balun ;-)
Have you ever thought that there might be a reason for people
differentiating the use of a balun by use of the term "balun"?
There is a reason. On paper, it looks the same as a balun. In
operation, the CM choke presents a high impedance to
unwanted RF where the balun presents a MATCHED impedance to
intentional RF.

>
> If a common-mode choke is getting hot, it isn't working.

It is working quite well if the filtered RF is dissipating in the
intentionally lossy core. (Such as powdered iorn).

Unfortunately
> there are many chokes that don't have a high enough impedance to handle
> the full range of real-life situations. If a choke is not able to
> suppress the common-mode current to a low enough value, then in some
> situations it will get hot [1, 2]. But PLEASE don't imagine that is
> how common-mode chokes are intended to work!
>
> [1] http://www.w8ji.com/Baluns/balun_test.htm

>
> [2]http://audiosystemsgroup.com/NCDXACoaxChokesPPT.pdf
>
> Also see other pages and publications from the same authors.
>
> >> >A
> >> >balun is intended to change the feed from an unbalanced transmission
> >> >line to a balanced output, for example, for connection to a balanced
> >> >transmission line or to an antenna such as a dipole. With the balun,
> >> >we wany NO reduction in RF current flow.
>
> >> What exactly do you mean by that?

Umm, we do not want to reduce power from the transceiver to the
antenna?

>
> >You do not want the balun to operate hot (ir to dissipate heat as you
> >do with a CM choke filter). You strive for 100% transfer of energy and
> >settle for the best
> >you can get. With a CM choke, you try to filter and dissipate unwanted
> >back-RF. Any back RF from your balun
> >should be converted to unbalanced transfer back to the source. You
> >reduce back-RF by matching impedances (which can also involve baluns
> >but not the 1:1 application discussed here). If you try to filter it
> >the unwanted back-RF, you will also end up filtering the forward
> >energy transfer. Of course, that would be an undersirable situation.
>
> Sorry, but that is so confused I can't even begin to unpick it...

It sounds like you have reached the plateau of your ability to
understand RF and transmission lines. THAT is the reason for
you confusion. Sorry.

except
> by pointing to "you try to filter and dissipate unwanted back-RF". In so
> many different ways, that is NOT what we're trying to do. Tug on that
> loose strand, and the whole thing unravels.

Continue the metaphor. Tug on that loose strand and what do you
discover, thus unraveling what?
>
>
>
> >> And also, what exactly do you mean by "balanced" in the context of a
> >> feedline?
>
> >For a 2 conductor feedline, the V in each conductor is 180 degrees out
> >of phase with each other. Same with I.
>
> Yes.
>

> >One conductor is +90 degrees
> >and the other is -90 degrees with respect to earth.
>
> No. Earth and 90 degrees don't come into this at all.

Yes it does! This reveals a large part of your confusion. The shield
on the coax is at earth. Earth is always involved. Do you know that
you could connect an earthing point exactly half way down the
"balanced" winding of the balun and have no effect on the operation of
the balun? There is no reason to do that of course but it illustrates
what the balun does. The center portion of the balanced winding is an
isolated 'earth' connection (that does need to be isolated but it is).
One side is -90, center is 0 (earth) and the other side is +90. On the
unbalanced side, there is no phase shift of course; you only have 0
(shield) and inner conductor voltage/current.
>
> >At any given
> >instant and location the summation of both conductors with respect to
> >each other is equal to the magnitude it would be on the inner
> >conductor on the unbalanced (coax) with respect to ground (shield).
> >Since magnitude of the V on each conductor of the balanced line are
> >equal and opposite in phase, the term "balanced" is appropriate. Same
> >with I.
>
> Yes... but this definition of "balanced" also REQUIRES that the
> common-mode current is zero.

In a perfect situation, with a balanced feedline, the only kind of
current and voltage you have IS common mode!

I give up! You need some education in this area.

1603. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 16:43:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9h63h$56p$2@news.albasani.net>
Source record: 22977

JB wrote:

>> ...
>> 73's
>> Richard Clark, KB7QHC
>
> Oh it's you again. You don't seem to do much other than poke the fire.
>
>

Give him a personality to "poke" (no gay pun intended! :-)), things
will turn into a real riot then!

Regards,
JS

I was just wondering, "Could Jesus possibly have pointed ears like
spock?" 8-)

1604. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 16:55:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9h6ph$6bo$1@news.albasani.net>
Source record: 22978

JB wrote:

> ...
> I have often considered the Good Cop Bad Cop theory of the Rep - Dem scam on
> the people. The fact that they go to the same parties and get-togethers
> means they share the same thoughts. It doesn't mean there is a conspiracy
> per-se. Think of it as one big party that everyone has to go to or be left
> out, and even though everyone goes kissy-kissy, they are knifing in the
> back. Distrust and polite smack is all around. Rather than conspiracy
> though, there is convergence in thought on matters brought to light to be
> wrestled over while more important matters are forgotten for the moment. We
> the People get left behind.
>
> Who do you vote for though... Obama has been hanging around the Rev. kill
> whitey bunch for too long. No telling what disease he might have picked up.
> There also seems to be some overcompensation, the way he so desperately
> needs to validate himself with every group that he forgets who he is from
> day to day. By the same token, what damage was done to McCain while being
> thrashed in the POW camp. But he does seem to have tolerance and compassion
> even though he sticks to his guns.
>
> The fact we are narrowed to two parties smacks of some kind of collusion.
> Especially in the light of certain travesties of the Dems that the Reps are
> curiously silent on. Perhaps McCain is so attractive due to the fact he has
> proven to be less of a party lapdog.

When Martin Luther King got them to promise, "OK, we are going to cut you in on a piece of the pie ..." They suddenly kicked open the doors on immigration from starving/impoverished 3rd world nations and added the words, to the above, "NOW, grab yourself a piece of that pie!"

"That is 'IT', in a nutshell." However, there are whole books which would could be written to fill in what the above doesn't mention.

Many have good reason to fear Obama. If he cuts in his friends, relatives and people of his like color, ethnicity and background(s), we are all in for "sharing a piece of our pie!" And, we all know it has to happen, we were just hoping to put it off and let our children deal with it (like deficit spending, where we have put off our bills for our children to pay.)

Now, that is enough, I am done with this sub-off-topic-thread ... you will excuse my leave ...

Regards,
JS

I was just wondering, "Could Jesus possibly have pointed ears like spock?" 8-)

1605. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 17:11:13 UTC
From: JB <nospam@goofball.net>
Message-ID: <RmVuk.234$393.202@trnddc05>
Source record: 22979

My take on CM chokes is that they are best on TV coax to keep energy on the shield from bringing trouble to the TV chassis. On a transmitting antenna, the idea is to enforce a high impedance bump somewhere to set the resonant length other than what it wants to be. That might not contribute to efficiency even if it prevents the coax from being part of the antenna. If the antenna is in resonance, there won't be any coax radiation and no Choke is really needed. My point is, you are best not needing one, but if that is what you need to put the current out on the wire, or out of the shack. OK. Of course high gain antennas have a pattern to protect, but does it matter all that much for anything up to a 3 element yagi? High currents and voltages on the coax are to be avoided because that is where your loss will be.

1606. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 17:16:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9h80j$7kc$1@news.albasani.net>
Source record: 22980

JB wrote:
> My take on CM chokes is that they are best on TV coax to keep energy on the
> shield from bringing trouble to the TV chassis. On a transmitting antenna,
> the idea is to enforce a high impedance bump somewhere to set the resonant
> length other than what it wants to be. That might not contribute to
> efficiency even if it prevents the coax from being part of the antenna. If
> the antenna is in resonance, there won't be any coax radiation and no Choke
> is really needed. My point is, you are best not needing one, but if that is
> what you need to put the current out on the wire, or out of the shack. OK.
> Of course high gain antennas have a pattern to protect, but does it matter
> all that much for anything up to a 3 element yagi? High currents and
> voltages on the coax are to be avoided because that is where your loss will
> be.
>
>

That is so bizarre; I just don't know where to begin in the description
of how and how much!

Regards,
JS

1607. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 17:45:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0n9ob41jdf34f2iaf4gq3ob60r7lbirsi9@4ax.com>
Source record: 22981

On Mon, 01 Sep 2008 16:07:39 GMT, "JB" <nospam@goofball.net> wrote:
>> > How's this for testimony
>>
>> It isn't.

>Oh it's you again. You don't seem to do much other than poke the fire.

There weren't even sparks left in those dead ashes.

73's
Richard Clark, KB7QHC

1608. Re: Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 19:00:11 UTC
From: Jim-NN7K
Message-ID: <qZWuk.18596$LG4.13014@nlpi065.nbdc.sbc.com>
Source record: 22982

Most likely, KLM (formerly owned by Mike Stahl K6MYC , out of business, last heard) And feed Point is 50 Ohm, Balanced (Unless you also have the 1/4 wave Balun. The Insulators for the elements, are no longer available (I Tried to obtain some several years back), and may be brittle (might want to reinforce them with Epoxy) the feed point of these was at the element closest to the center of the antenna (boom). These, if remember were based on the Oliver Swan Patents (he also used log periodic feed point in his basic antenna, tho think Swan only made them for 6 meters-- as info, Jim NN7k

sangeo wrote:
> I came across a good 2 meter 12 element beam. The boom is aprox 19 ft
> long. It has 4 driven elements in a "log" or lattice configuration. I
> need info to make the coax connection. Does anyone have an Idea as to
> Mfg? The driven elements are spaced about 7 inches apart. It is in
> good shape except for the missing connection points.
> Thanks, 73's
> George

1609. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 19:14:41 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <XcXuk.8274$np7.862@flpi149.ffdc.sbc.com>
Source record: 22983

JB wrote:
> Just because God knows how everything will turn out, doesn't mean our
> choises are of no value.

Actually, if God knows the future, the future is fixed,
everything is predestined, and we do not have free will.
If God already knew everything about this posting of
mine before I made it, I had no choice but to make it
using these exact words.
--
73, Cecil http://www.w5dxp.com

1610. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 19:18:41 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <FgXuk.8275$np7.328@flpi149.ffdc.sbc.com>
Source record: 22984

JB wrote:
> In the end you will have to be open to the Holy
> Spirit before anything can come of it.

Please prove that the "Holy Spirit" exists outside
of the human mind.
--
73, Cecil http://www.w5dxp.com

1611. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 19:25:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <3nXuk.8276$np7.6794@flpi149.ffdc.sbc.com>
Source record: 22985

dfinn1@nc.rr.com wrote:
> I use an ugly balun with an attic GRrV and do not suffer significant
> back-RFI to my transceiver in the regular frequency ranges. I think
> that by chosing 1Kohm that may be a bit conservative. In (old)
> engineering school, we tended to use an order of magnitude (X10) as
> our highly arbitrary :) cut-off point for impedances that have a
> significant effect. You are doing that too but by using 1000 ohms, you
> are using (X10 times 2) as your arbitrary cutoff point. Since the
> filter is an exponential curve, if you chose 500 ohms instead of 1000
> ohms, you might even get a 4 or 5 to 1 frequency range. In my case I
> use two different turns chokes so that is why I think I am covered
> pretty well. Your information is very interesting; good to see people
> are actually measuring things!

Actually, 1000 ohms is pretty liberal. For instance, on
15m, the G5RV coax sees 36+j230 ohms or about 233 ohms.
The balun needs to be 10x that value or 2330 ohms.
--
73, Cecil http://www.w5dxp.com

1612. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 19:31:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <vsXuk.8278$np7.7315@flpi149.ffdc.sbc.com>
Source record: 22986

dfinn1@nc.rr.com wrote:
> A common mode choke is used in RF applications, very true, but it
> serves a filtering purpose, not a conversion of unbalanced to
> balanced energy transfer or vice
> versa. A common mode choke that operates well will turn
> unwanted RF into heat or cause it to dissipate in its core or a
> resistor etc..

The common "W2DU balun" works well as both choke and
balun function.
--
73, Cecil http://www.w5dxp.com

1613. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 19:54:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <ot2dnaGme5QU1SHVnZ2dnUVZ_trinZ2d@posted.easystreetonline>
Source record: 22987

Readers interested in baluns might take a look at "Baluns: What They Do and How They Do It" in the _ARRL Antenna Compendium_, Vol. 1 or at http://eznec.com/Amateur/Articles/Baluns.pdf.

Roy Lewallen, W7EL

1614. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 19:54:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9hhajmnb1@news.albasani.net>
Source record: 22988

Cecil Moore wrote:

> ...
> Actually, if God knows the future, the future is fixed,
> everything is predestined, and we do not have free will.
> If God already knew everything about this posting of
> mine before I made it, I had no choice but to make it
> using these exact words.

Actually, I have heard this argument(s)/discussion(s) since a very early age.

I see no conflict between me having complete free choice and the ability to control my destiny exactly as I see fit, or change my mind to fit me--right along side an all-knowing mind who has already seen every decision and change of heart I will have in my lifetime (the future is there for me to discover and make my decisions to influence--but he/she/it/the-aliens has/have already "been there, seen that!" ...)

What am I missing?

Regards,
JS

1615. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 19:59:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9hhj1mtd1@news.albasani.net>
Source record: 22989

Cecil Moore wrote:
> JB wrote:
>> In the end you will have to be open to the Holy
>> Spirit before anything can come of it.
>
> Please prove that the "Holy Spirit" exists outside
> of the human mind.

Well, "Grain Spirits" exist outside my mind (and body), until I drink them--then suddenly, I feel like I am "FILLED WITH THE HOLY SPIRIT!"--well, if I drink enough anyway ... ;-)

Obviously, in the above, that "HOLY SPIRIT" was not originally there, so it had to be outside, somewhere! :-|

Regards,
JS

1616. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 20:07:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9hi25ngj1@news.albasani.net>
Source record: 22990

Cecil Moore wrote:

> ...
> Please prove that the "Holy Spirit" exists outside
> of the human mind.

Remember, "Holy" and "Grain" both have the same name. Most likely come
from the same lineage; they might even be brothers!

Some ancient text from the bible I once read, if I remember correctly,
said something akin to, " ... take a little wine for the spirit ..."
Obviously a toast to one, or both, of those brothers!

Regards,
JS

1617. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 21:07:22 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <eQYuk.19789$jl5.3732@flpi148.ffdc.sbc.com>
Source record: 22991

John Smith wrote:
> What am I missing?

Even if an omnipotent being is not omniscient, he is.:-)
--
73, Cecil http://www.w5dxp.com

1618. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 21:27:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9hmoi$t9u$1@news.albasani.net>
Source record: 22992

Cecil Moore wrote:

> ...
> Even if an omnipotent being is not omniscient, he is.:-)

As soon as I "cement" what can happen in my mind, or the realm of possibilities, I also change what will happen ...

How can I limit a God (aliens, etc.) I cannot even begin to fathom, indeed, how can anyone?

Perhaps time is like an infinite building of rooms, the past is but a series of rooms in one direction from the "present room", the future an endless series of rooms stretching the other direction. And, perhaps God walks these rooms with the ease I do my own home ...

I hate to even do this speculation, as I begin to place limits which may divert me away from envisioning other possibilities ... when we know more about time, we will finally be able to make far better guesstimates.

When something is truly "unknown", it is truly unknown ...

Regards,
JS

1619. Multi wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 21:31:35 UTC
From: sboe07@gmail.com
Message-ID: <2fe6eaf1-fc2f-409c-b46c-62812bb84d9e@25g2000hsx.googlegroups.com>
Source record: 22993

I have a lot of space available for antenna installation and i am wondering if installing a 4 or 8 wavelength antenna would provide increased performance or problems. For instance, instead of a 120 ft dipole for 3900 khz a 480 ft or 960 ft.

I would be installing across a valley so ends would be about 25-30 ft off the ground and the center would be about 80-90 ft off the ground.

Thanks

1620. Re: Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 21:32:09 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <Zqmdncb_1tbOwiHVnZ2dnUVZ_tzinZ2d@comcast.com>
Source record: 22994

"sangeo" <w2agr@msn.com> wrote in message
news:fd5a333a-9fe8-428a-8daa-30506539c395@25g2000hsx.googlegroups.com...
>I came across a good 2 meter 12 element beam. The boom is aprox 19 ft
> long. It has 4 driven elements in a "log" or lattice configuration. I
> need info to make the coax connection. Does anyone have an Idea as to
> Mfg? The driven elements are spaced about 7 inches apart. It is in
> good shape except for the missing connection points.
> Thanks, 73's
> George
I would connect a feedline to the mounting screws of the front most DE and measure the SWR. If you get anything like 4:1 it is 200 Ohms. The KLM 6m beam with 2 driven elements requires a 4:1 balun. I have not seen the KLM 2m.

According to an old AES catalog, 2m KLM antennas in this range had boom lengths of 15.33, 21.5, 12.9, 28 , and a circularly polarized 22 element on a 19 foot boom; nothing with 12 elements, but it could be older.

Tam/WB2TT

1621. Re: Multi wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 23:28:21 UTC
From: nm5k@wt.net
Message-ID: <df9d00ca-7a2e-498a-b782-366c29a7eeac@s20g2000prd.googlegroups.com>
Source record: 22995

On Sep 1, 4:31 pm, sbo...@gmail.com wrote:
> I have a lot of space available for antenna installation and i am
> wondering if installing a 4 or 8 wavelength antenna would provide
> increased performance or problems. For instance, instead of a 120 ft
> dipole for 3900 khz a 480 ft or 960 ft.
>
> I would be installing across a valley so ends would be about 25-30 ft
> off the ground and the center would be about 80-90 ft off the ground.
>
> Thanks

Wouldn't help efficiency, but would alter the pattern. Being you may
well
need a matching device, I don't see much point unless you want gain in
certain directions.
You would want to model the antenna on the various bands to see
how the pattern would look.
On the higher bands, you might be better off feeding as a longwire
rather than a dipole if you wanted gain.
But beware of static buildup, etc.. Ground the wire out when not in
use, and consider a gas tube or whatever. A friend of mine ran a
longwire years ago when he was a novice. You could often draw a
good sized arc to ground if conditions were right.
Anytime you get gain in certain directions, you lose gain in some
other directions. So on 75m, I generally prefer as omnidirectional
an antenna as possible, while maximizing system efficiency.
But I'm usually talking to more than one at a time, in various
directions. I want to avoid nulls. I just use coax fed dipoles on
75m.
A turnstile, if I'm feeling fancy. That's what I've had for that band
here at
the house for the last few years. I started using those back in the
80's, and it's still about my favorite antenna for 75m NVIS type
stuff.
BTW, if you did decide to string out a lot of wire, you might also
consider a flat loop. Again, you would want to model it for all the
bands
to get an idea what it would do.

1622. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 23:39:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <l0%uk.12005$vn7.10960@flpi147.ffdc.sbc.com>
Source record: 22996

John Smith wrote:
> When something is truly "unknown", it is truly unknown ...

Unfortunately, with an omniscient God, the future is known
and cannot be changed by your "free will".
--
73, Cecil http://www.w5dxp.com

1623. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 23:42:21 UTC
From: dfinn1@nc.rr.com
Message-ID: <d5bf07b7-7a14-4874-ac76-262b9035b4eb@w7g2000hsa.googlegroups.com>
Source record: 22997

On Sep 1, 3:31 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > A common mode choke is used in RF applications, very true, but it
> > serves a filtering purpose, not a conversion of unbalanced to
> > balanced energy transfer or vice
> > versa. A common mode choke that operates well will turn
> > unwanted RF into heat or cause it to dissipate in its core or a
> > resistor etc..
>
> The common "W2DU balun" works well as both choke and
> balun function.
> --
> 73, Cecil http://www.w5dxp.com

Yes and I have to partially take back what I said; a balun CAN double
as a CM "choke" and a CM choke can double as a balun. If
one wishes to balance an unbalanced line with a CM choke, then the
impedance of the CM choke must match the source and the load, which
makes the CM choke a balun and no longer a choke :-)

1624. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-01 23:43:21 UTC
From: dfinn1@nc.rr.com
Message-ID: <6f4f9e36-af26-4f1b-9244-383494f77b26@c58g2000hsc.googlegroups.com>
Source record: 22998

On Sep 1, 3:25 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > I use an ugly balun with an attic GRrV and do not suffer significant
> > back-RFI to my transceiver in the regular frequency ranges. I think
> > that by chosing 1Kohm that may be a bit conservative. In (old)
> > engineering school, we tended to use an order of magnitude (X10) as
> > our highly arbitrary :) cut-off point for impedances that have a
> > significant effect. You are doing that too but by using 1000 ohms, you
> > are using (X10 times 2) as your arbitrary cutoff point. Since the
> > filter is an exponential curve, if you chose 500 ohms instead of 1000
> > ohms, you might even get a 4 or 5 to 1 frequency range. In my case I
> > use two different turns chokes so that is why I think I am covered
> > pretty well. Your information is very interesting; good to see people
> > are actually measuring things!
>
> Actually, 1000 ohms is pretty liberal. For instance, on
> 15m, the G5RV coax sees 36+j230 ohms or about 233 ohms.
> The balun needs to be 10x that value or 2330 ohms.
> --
> 73, Cecil http://www.w5dxp.com

Why not 500 ohms, assuming a 50 ohm source and transmission line?

1625. Re: Multi wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 00:06:50 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9B0CAE05D91B2doldridgsprintca@64.59.135.159>
Source record: 22999

sboe07@gmail.com wrote in news:2fe6eaf1-fc2f-409c-b46c-62812bb84d9e@25g2000hsx.googlegroups.com:

> I have a lot of space available for antenna installation and i am
> wondering if installing a 4 or 8 wavelength antenna would provide
> increased performance or problems. For instance, instead of a 120 ft
> dipole for 3900 khz a 480 ft or 960 ft.
>
> I would be installing across a valley so ends would be about 25-30 ft
> off the ground and the center would be about 80-90 ft off the ground.

The pattern looks best for a 960 foot wire. Feed it a the end with a quarter-wave (or 3/4 wave) open wire or ladder line and use a tuner. Be prepared for some lossiness in the feed in wet weather.

It should actually be fairly good for DX off the ends.

--
Dave Oldridge+
ICQ 1800667

1626. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 01:21:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9i4fk$b75$1@news.albasani.net>
Source record: 23000

Cecil Moore wrote:
> John Smith wrote:
>> When something is truly "unknown", it is truly unknown ...
>
> Unfortunately, with an omniscient God, the future is known
> and cannot be changed by your "free will".

Well, we are now focused on the crux of the matter, alright.

However, I see him/her/it/the-aliens only being able to view the after effects of my free will ... in my speculation(s) of how-this-all-works, of course.

I see the mind of God as having similarities to my own (man created in Gods' image--it is most difficult for me to see it any other way.) He would not conduct an "experiment" in which he controlled all action; the reason? Too boring. The variable is my freewill which provides the seed-of-chaos, however, one piece of equipment in "his laboratory" allows him to view the final outcome(s), and ahead of me experiencing the same.

But then, I have nothing to argue against the way you would envision it ... can we agree to wonder until some point in the future offers a proof worth extrapolating from?

Or, in other words, the only horse I have in the race is curiosity of "the truth."

Regards,
JS

1627. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 01:32:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9i533$bd3$1@news.albasani.net>
Source record: 22901

dfinn1@nc.rr.com wrote:

> ...
> Yes and I have to partially take back what I said; a balun CAN double
> as a CM "choke" and a CM choke can double as a balun. If
> one wishes to balance an unbalanced line with a CM choke, then the
> impedance of the CM choke must match the source and the load, which
> makes the CM choke a balun and no longer a choke :-)
>
>

Although this URL:

http://www.radioelectronicschool.net/files/downloads/ocfdipole.pdf

deals with a Windom Antenna, his text on the design, construction,
function and implementation of baluns is well worth the read.

Regards,
JS

1628. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 01:52:11 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B0D78B64377Bnonenowhere@61.9.191.5>
Source record: 22902

dfinn1@nc.rr.com wrote in news:6f4f9e36-af26-4f1b-9244-383494f77b26
@c58g2000hsc.googlegroups.com:

> On Sep 1, 3:25 pm, Cecil Moore <nos...@w5dxp.com> wrote:
>> dfi...@nc.rr.com wrote:
...
>> Actually, 1000 ohms is pretty liberal. For instance, on
>> 15m, the G5RV coax sees 36+j230 ohms or about 233 ohms.
>> The balun needs to be 10x that value or 2330 ohms.
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Why not 500 ohms, assuming a 50 ohm source and transmission line?
>

The common mode impedance of the balun acts in the common mode
transmission line (which is mutually coupled to the nominal radiator).

How is the differential mode transmission line characteristic impedance
relevant to the determination of common mode current in the antenna
system scenario described?

Owen

1629. Re: Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 01:58:18 UTC
From: Jim-NN7K
Message-ID: <q51vk.23591$N87.10307@nlpi068.nbdc.sbc.com>
Source record: 22903

Tam sez:
>
> "sangeo" <w2agr@msn.com> wrote in message
> news:fd5a333a-9fe8-428a-8daa-30506539c395@25g2000hsx.googlegroups.com...
>> I came across a good 2 meter 12 element beam. The boom is aprox 19 ft
>> long. It has 4 driven elements in a "log" or lattice configuration. I
>> need info to make the coax connection. Does anyone have an Idea as to
>> Mfg? The driven elements are spaced about 7 inches apart. It is in
>> good shape except for the missing connection points.
>> Thanks, 73's
>> George
> I would connect a feedline to the mounting screws of the front most DE
> and measure the SWR. If you get anything like 4:1 it is 200 Ohms. The
> KLM 6m beam with 2 driven elements requires a 4:1 balun. I have not seen
> the KLM 2m.
>
> According to an old AES catalog, 2m KLM antennas in this range had boom
> lengths of 15.33, 21.5, 12.9, 28 , and a circularly polarized 22 element
> on a 19 foot boom; nothing with 12 elements, but it could be older.
>
> Tam/WB2TT

The 2 meter one s I had were 50 ohm (2 meter 14 el) somewhere in this
mess I have the "Manual" (more like 3 pages) for it. IF can find ,
can e-mail. Jim NN7K

1630. correction Re: Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 02:14:05 UTC
From: Jim-NN7K
Message-ID: <dk1vk.23594$N87.21714@nlpi068.nbdc.sbc.com>
Source record: 22904

Found the Demension sheet (only) Anyone needs, I'll scan and send. Jim
NN7K

Jim-NN7K wrote:
> Tam sez:
>>
>> "sangeo" <w2agr@msn.com> wrote in message
>> news:fd5a333a-9fe8-428a-8daa-30506539c395@25g2000hsx.googlegroups.com...
>>> I came across a good 2 meter 12 element beam. The boom is aprox 19 ft
>>> long. It has 4 driven elements in a "log" or lattice configuration. I
>>> need info to make the coax connection. Does anyone have an Idea as to
>>> Mfg? The driven elements are spaced about 7 inches apart. It is in
>>> good shape except for the missing connection points.
>>> Thanks, 73's
>>> George
>> I would connect a feedline to the mounting screws of the front most DE
>> and measure the SWR. If you get anything like 4:1 it is 200 Ohms. The
>> KLM 6m beam with 2 driven elements requires a 4:1 balun. I have not
>> seen the KLM 2m.
>>
>> According to an old AES catalog, 2m KLM antennas in this range had
>> boom lengths of 15.33, 21.5, 12.9, 28 , and a circularly polarized 22
>> element on a 19 foot boom; nothing with 12 elements, but it could be
>> older.
>>
>> Tam/WB2TT
>
>
> The 2 meter one s I had were 50 ohm (2 meter 14 el) somewhere in this
> mess I have the "Manual" (more like 3 pages) for it. IF can find ,
> can e-mail. Jim NN7K

1631. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 02:26:32 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <qw1vk.12241$3A4.10991@newsfe04.iad>
Source record: 22905

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9i533$bd3$1@news.albasani.net...
> dfinn1@nc.rr.com wrote:
>
> > ...
> > Yes and I have to partially take back what I said; a balun CAN double
> > as a CM "choke" and a CM choke can double as a balun. If
> > one wishes to balance an unbalanced line with a CM choke, then the
> > impedance of the CM choke must match the source and the load, which
> > makes the CM choke a balun and no longer a choke :-)
> >
> >
>
> Although this URL:
>
> http://www.radioelectronicschool.net/files/downloads/ocfdipole.pdf
>
> deals with a Windom Antenna, his text on the design, construction,
> function and implementation of baluns is well worth the read.
>
> Regards,
> JS

It's a trivial point, I agree, but there is one error in the url JS provided above that needs correcting. The VK author tells us that the Windom antenna was invented by Loren G. Windom. Tain't so. It was invented (developed) by William Everitt, then the Dean of the EE Dept at Ohio State U. Everitt was doing the grunt work and taking measurements along with another OSU professor. However. Loren Windom was a student of Everitt's, and was tagging along and observing. Then, later on he wrote up the experiment and had it published in QST sometime in 1929, and as well as I can remember, he failed to give Everitt any credit for having done the actual work. Consequently, readers of QST assumed it was Windom's invention, while it actually was not.

Walt, W2DU

1632. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 03:10:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9iart$fr8$1@news.albasani.net>
Source record: 22906

Walter Maxwell wrote:

> ...
> It's a trivial point, I agree, but there is one error in the url JS provided
> above that needs correcting. The VK author tells us that the Windom antenna was
> invented by Loren G. Windom. Tain't so. It was invented (developed) by William
> Everitt, then the Dean of the EE Dept at Ohio State U. Everitt was doing the
> grunt work and taking measurements along with another OSU professor. However.
> Loren Windom was a student of Everitt's, and was tagging along and observing.
> Then, later on he wrote up the experiment and had it published in QST sometime
> in 1929, and as well as I can remember, he failed to give Everitt any credit for
> having done the actual work. Consequently, readers of QST assumed it was
> Windom's invention, while it actually was not.
>
> Walt, W2DU
>
>

Walter:

Thank you for that clarification, it was also interesting and
enlightening--I was ignorant to that info.

Warm regards,
JS

1633. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 03:23:23 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <HI2vk.8004$676.478@newsfe01.iad>
Source record: 22907

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9iart$fr8$1@news.albasani.net...
> Walter Maxwell wrote:
>
> > ...
> > It's a trivial point, I agree, but there is one error in the url JS provided
> > above that needs correcting. The VK author tells us that the Windom antenna
was
> > invented by Loren G. Windom. Tain't so. It was invented (developed) by
William
> > Everitt, then the Dean of the EE Dept at Ohio State U. Everitt was doing the
> > grunt work and taking measurements along with another OSU professor.
However.
> > Loren Windom was a student of Everitt's, and was tagging along and
observing.
> > Then, later on he wrote up the experiment and had it published in QST
sometime
> > in 1929, and as well as I can remember, he failed to give Everitt any credit
for
> > having done the actual work. Consequently, readers of QST assumed it was
> > Windom's invention, while it actually was not.
> >
> > Walt, W2DU
> >
> >
>
> Walter:
>
> Thank you for that clarification, it was also interesting and
> enlightening--I was ignorant to that info.
>
> Warm regards,
> JS

Hi John, glad I could make that microcontribution.

Walt

1634. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 03:57:00 UTC
From: JB <nospam@goofball.net>
Message-ID: <gQ2vk.206$Af3.111@trnddc06>
Source record: 22908

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:l0%uk.12005$vn7.10960@flpi147.ffdc.sbc.com...
> John Smith wrote:
> > When something is truly "unknown", it is truly unknown ...
>
> Unfortunately, with an omniscient God, the future is known
> and cannot be changed by your "free will".
> --
> 73, Cecil http://www.w5dxp.com

Now I realize that some of you are non-believers, so for you this is an exercise.

It's would be pretty arrogant to consider that you have the ability to screw up God's plan. We can't even be sure that Satan screwed up God's plan, but it appears that there is some contention that is/was/does exist in the heavenly realm.

Now consider that he allowed your being to come into existence perhaps for a purpose. OK that is implied in scripture.

Now consider that you don't know what your future is even if God pre-ordained it. If you did, what good would it do you and wouldn't that influence your choices? Only Jesus was in on His future from the beginning and knew how his life would play out and even tipped off the Disciples piece by piece throughout his ministry. Even told them in real time what was happening as it happened and how it was foretold in earlier scriptures by the profits. This shows him to be familiar with numerous events in time and how they play out together and the significance. It has been postulated in a regular radio series that the Bible is a sophisticated messaging system outside of our time domain planted by God to relay information about our past present and future to future generations.

Now consider that Moses negotiated with God over who would do the talking to Pharaoh and God relented and let Arron do the talking while Moses did the signs. But God revealed to Moses how Pharaoh would respond and how the whole scene would play out. That's a real mind blower. This shows that some could actually have been doomed while some obstinate and sinful people could still negotiate some things with God and even make bad choices, although risking serious consequences for some of those choices.

So were left with this:

God's plan won't be usurped, but we can petition Him with prayer over some points. This leads us to another possible conclusion.

Perhaps there are parts of his plan designed to allow for us to make a variety of choices despite his intention for us. So you DO have free will even if he already knows how you will choose. It has been stated by Jesus that He came so that none should perish but all could come to repentance, have life everlasting, have life abundantly and other statements to that effect given the shortcomings of language. This implies that we really DO have choices even though it doesn't quite make sense unless Jesus really did make a change where someone like Moses' Pharaoh could now have a choice. It also allows the possibility that if one missed an opportunity, there could be an infinite number of others that do his will anyway.

I don't like to delve too deep into this because there is a lot to learn bit by bit and we run risks by jumping to conclusions beyond our understanding. I merely note some interesting points from Genesis, Exodus, Matthew, Mark, Luke, John. I'm not much for citation of scripture and verse because I believe context is far more important than throwing one liners at people.

1635. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 05:24:05 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B0D9CA2C43D0nonenowhere@61.9.191.5>
Source record: 22909

"Walter Maxwell" <walt@w2du.com> wrote in
news:qw1vk.12241$3A4.10991@newsfe04.iad:

>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:g9i533$bd3$1@news.albasani.net...
>> dfinn1@nc.rr.com wrote:
...
>> deals with a Windom Antenna, his text on the design, construction,
>> function and implementation of baluns is well worth the read.

Doesn't that article espouse the Guanella 4:1 current balun built on a
single toroid?

The extent to which such a construction works is due to flux leakage,
rather than the principles described by Guanella.

Owen

1636. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 10:26:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <W6adnfkVs-hCiSDVnZ2dneKdnZydnZ2d@pipex.net>
Source record: 22910

Roy Lewallen wrote:
> Readers interested in baluns might take a look at "Baluns: What They Do
> and How They Do It" in the _ARRL Antenna Compendium_, Vol. 1 or at
> http://eznec.com/Amateur/Articles/Baluns.pdf.
>
> Roy Lewallen, W7EL
==========
Thank you Roy , A treasured tutorial.

Frank GM0CSZ / KN6WH

1637. Re: Multi wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 10:54:53 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <3bOdnZO--eochiDVnZ2dnUVZ8jydnZ2d@pipex.net>
Source record: 22911

sboe07@gmail.com wrote:
> I have a lot of space available for antenna installation and i am
> wondering if installing a 4 or 8 wavelength antenna would provide
> increased performance or problems. For instance, instead of a 120 ft
> dipole for 3900 khz a 480 ft or 960 ft.
>
> I would be installing across a valley so ends would be about 25-30 ft
> off the ground and the center would be about 80-90 ft off the ground.
==========
With so much space and assuming you talk dipole ,if you make each half
of the dipole an odd number of quarter wave lengths ,the impedance at
the feeder connecting point would be low.
Then you can either have a coax feeder (with 1:1 balun at dipole centre)
or a twin feeder preferably but not necessarily having a (electrical)
length of half a wave length or a multiple thereof resulting in a low
impedance at the matching box (tuner if you like) .

Frank GM0CSZ / KN6WH

1638. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 11:26:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <yp9vk.19825$jl5.17836@flpi148.ffdc.sbc.com>
Source record: 22912

dfinn1@nc.rr.com wrote:
> Yes and I have to partially take back what I said; a balun CAN double
> as a CM "choke" and a CM choke can double as a balun. If
> one wishes to balance an unbalanced line with a CM choke, then the
> impedance of the CM choke must match the source and the load, which
> makes the CM choke a balun and no longer a choke :-)

Actually, a balun without a large choking impedance
is not very useful for ham antenna system applications.
The method that a W2DU balun uses to balance currents
at a dipole feedpoint *IS* nothing more than a large
choking impedance which discourages common-mode current
from flowing through the higher-the-better impedance.
I usually refer to the W2DU balun as a choke-balun.
--
73, Cecil http://www.w5dxp.com

1639. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 11:51:32 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <6N9vk.19826$jI5.14315@flpi148.ffdc.sbc.com>
Source record: 22913

dfinn1@nc.rr.com wrote:
> On Sep 1, 3:25 pm, Cecil Moore <nos...@w5dxp.com> wrote:
>> Actually, 1000 ohms is pretty liberal. For instance, on
>> 15m, the G5RV coax sees 36+j230 ohms or about 233 ohms.
>> The balun needs to be 10x that value or 2330 ohms.
>
> Why not 500 ohms, assuming a 50 ohm source and transmission line?

Be the current making a choice of paths at a junction.
How much of you would flow through 500 ohms and how much
would flow through 233 ohms? (If 500 ohms is the total
impedance seen by the shield current looking back toward
the source, about 1/3 of the current would flow back
through the 500 ohms down the coax.)

http://eznec.com/Amateur/Articles/Baluns.pdf
--
73, Cecil http://www.w5dxp.com

1640. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 11:53:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <YO9vk.19827$jl5.488@flpi148.ffdc.sbc.com>
Source record: 22914

John Smith wrote:
> However, I see him/her/it/the-aliens only being able to view the after
> effects of my free will ... in my speculation(s) of how-this-all-works,
> of course.

Then, by definition, he/she/it/the-aliens are not omniscient.
--
73, Cecil http://www.w5dxp.com

1641. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 12:20:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Vcavk.19911$cW3.7679@nlpi064.nbdc.sbc.com>
Source record: 22915

JB wrote:
> So you DO have free will
> even if he already knows how you will choose.

"Not only does God play dice, He throws them where
we cannot see them." Steven Hawkings
--
73, Cecil http://www.w5dxp.com

1642. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 13:30:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9jf5c$m5r$1@news.albasani.net>
Source record: 22916

Cecil Moore wrote:
> John Smith wrote:
>> However, I see him/her/it/the-aliens only being able to view the after
>> effects of my free will ... in my speculation(s) of
>> how-this-all-works, of course.
>
> Then, by definition, he/she/it/the-aliens are not omniscient.

Cecil:

Or, put simply, "The only think know for certain is, I (or, anyone for
that matter) don't know for certain!"

Regards,
JS

1643. Re: Multi wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 13:47:23 UTC
From: ltdoc@yahoo.com
Message-ID: <a56254b7-df80-44d2-8623-5b7cd515e00c@w7g2000hsa.googlegroups.com>
Source record: 22917

Would it increase 'performance' or just cause problems? Probably
both. The performance increase may or may not be present when
compared to what you're using now. Problems? You can bet on it.
Mechanical ones mostly. What conductor will you use that will hold up
it's own weight at 480 or 900 + feet? And since there will be 'sag'
no matter what you use, will the end points be high enough to keep
from 'clothes-lining' yourself on the antenna? Certainly not
impossible to put up such an antenna, but not exactly as simple as it
sounds.
- 'Doc

Do it! See what happens.

1644. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 13:49:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9jg9l$ne0$1@news.albasani.net>
Source record: 22918

Owen Duffy wrote:
> "Walter Maxwell" <walt@w2du.com> wrote in
> news:qw1vk.12241$3A4.10991@newsfe04.iad:
>
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:g9i533$bd3$1@news.albasani.net...
>>> dfinn1@nc.rr.com wrote:
> ...
>>> deals with a Windom Antenna, his text on the design, construction,
>>> function and implementation of baluns is well worth the read.
>
> Doesn't that article espouse the Guanella 4:1 current balun built on a
> single toroid?
>
> The extent to which such a construction works is due to flux leakage,
> rather than the principles described by Guanella.
>
> Owen

Owen:

You might have missed this part from the Windom URL:

"As far as the forward power to the antenna is
concerned there is no ferrite core. This is
because we have transmission “through two
transmission lines”. There is no external flux
around transmission lines. However if the
antenna is unbalanced there will be leakage or
common mode current flow through the
balun. These currents are not transmission line
mode currents. These currents will see a
choking reactance presented by the balun and
be stopped or significantly reduced. These
leakage currents if extremely excessive can
cause heating of the balun (but you have
probably got a serious problem that you need
to fix). Very high SWR can cause voltage
dielectric loss and even flashover between the
windings. Again this would indicate a more
serious problem with the antenna."

I should think a single core would be superior in relation to the above
stated phenomenon. Indeed, I suspect it to be preferable to two cores.
However, if such "leakage" is occuring, the author indicates you have

a problem with the antenna proper which needs a fix ...

However, this URL:

http://www.n0ss.net/qrp_4-1_guanella-type_balun.pdf

in the include pick 4-1_schematic.jpg, in the URL, contains a "blurb" on how to move a single core design on to two cores.

Regards,
JS

1645. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 14:22:20 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <SLyeYFTcwUvIFARW@ifwtech.co.uk>
Source record: 22919

Dan wrote:
>On Sep 1, 4:20ï¿½am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>> Dan wrote:
>> >On Aug 31, 3:07ï¿½pm, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>> >> Dan wrote:
>> >> >On Aug 28, 2:26ï¿½am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>>
>> >> >> In other words, people with limited antenna opportunities are often the
>> >> >> ones who need a balun - or more accurately, a common-mode choke - the
>> >> >> MOST.
>> >> >Technically I would have to disagree with calling even a 1:1 balun the
>> >> >same thing as a common mode choke. ï¿½A CM choke is an EMI prevention
>> >> >device intended to filter out RF components generated in a circuit,
>> >> >away from the feed of a power source, usually an electrical mains.
>>
>> >> That is too far narrow a definition ï¿½of a "common mode choke",
>> >> especially the reference to electrical mains. The term is widely applied
>> >> to transmission line for both digital data and analog RF signals.
>>
>> >A common mode choke is used in RF applications, very true, but it
>> >serves a filtering purpose,
>> >not a conversion of unbalanced to balanced energy transfer or vice
>> >versa. A common mode choke that operates well will turn
>> >unwanted RF into heat or cause it to dissipate in its core or a
>> >resistor etc..
>>
>> Common-mode chokes, and filters in general, do NOT aim to "turn unwanted
>> RF into heat"! That is a total misunderstanding of the whole concept.
>
>A CM choke aims to present a high impedence to unintentional RF. Once
>"choked" by the high impedance,
>the enrgey must either reflect or be aborbed somewhere in the circuit
>or the core as real power. What is it that you cannot
>understand about the term "choke"?
>

I'm slightly encouraged that the key word "reflected" has now crept into
your description. It wasn't there in what you wrote previously.

[Snip similar]

>In a perfect situation, with a balanced feedline, the only kind of
>current and voltage you have IS common mode!
>

What??? You know that statement didn't come out right, so how much of the rest did you really mean?

>I give up! You need some education in this area.
>

I give up too - at last, something we can agree about.

My main worry is that anyone *else* might have tried to gain some education from your confused statements on this particular topic.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1646. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 14:28:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9jiho$pt7$1@news.albasani.net>
Source record: 22920

Owen Duffy wrote:
> "Walter Maxwell" <walt@w2du.com> wrote in
> news:qw1vk.12241$3A4.10991@newsfe04.iad:
>
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:g9i533$bd3$1@news.albasani.net...
>>> dfinn1@nc.rr.com wrote:
> ...
>>> deals with a Windom Antenna, his text on the design, construction,
>>> function and implementation of baluns is well worth the read.
>
> Doesn't that article espouse the Guanella 4:1 current balun built on a
> single toroid?
>
> The extent to which such a construction works is due to flux leakage,
> rather than the principles described by Guanella.
>
> Owen

Here is an article which includes text on the use of ferrite rods in
place of toroids.

Someone who has a couple of rods from some old am radios, etc. may
already have the stuff in his junk box to throw together an introductory
prototype?

Regards,
JS

1647. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 15:07:22 UTC
From: JB <nospam@goofball.net>
Message-ID: <KEcvk.308$jE1.212@trnddc03>
Source record: 22921

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9h80j$7kc$1@news.albasani.net...
> JB wrote:
> > My take on CM chokes is that they are best on TV coax to keep energy on
the
> > shield from bringing trouble to the TV chassis. On a transmitting
antenna,
> > the idea is to enforce a high impedance bump somewhere to set the
resonant
> > length other than what it wants to be. That might not contribute to
> > efficiency even if it prevents the coax from being part of the antenna.
If
> > the antenna is in resonance, there won't be any coax radiation and no
Choke
> > is really needed. My point is, you are best not needing one, but if
that is
> > what you need to put the current out on the wire, or out of the shack.
OK.
> > Of course high gain antennas have a pattern to protect, but does it
matter
> > all that much for anything up to a 3 element yagi? High currents and
> > voltages on the coax are to be avoided because that is where your loss
will
> > be.
> >
> >
>
> That is so bizarre; I just don't know where to begin in the description
> of how and how much!
>
> Regards,
> JS

Ya I know, I didn't get into the how. How much is the first thing you need
to be aware of.

1648. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 15:20:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9jlke$t9k$1@news.albasani.net>
Source record: 22922

JB wrote:

> ...
> Ya I know, I didn't get into the how. How much is the first thing you need
> to be aware of.
>
>

Then this work:

http://www.hep.princeton.edu/~mcdonald/examples/EM/sevick_ieee_standards_93.pdf

by Jerry Sevick, may be of significant interest to you ...

Regards,
JS

1649. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 15:27:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9jm26trj1@news.albasani.net>
Source record: 22923

JB wrote:

> ...
> Ya I know, I didn't get into the how. How much is the first thing you need
> to be aware of.
>
>

You may also find this picture of a 1:1 guanella balun of interest.
Notice the "crossover" which alters the direction of the common winding
between sides of the core ...

Regards,
JS

1650. Why am I a dumbass named John Smith

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 15:32:53 UTC
From: "John Smith assemblywizard@gmail.com" <jackmeoffwithabreastpump@gmail.com>
Message-ID: <eb952d9b-187b-4724-8911-8b71825506bc@x35g2000hsb.googlegroups.com>
Source record: 22924

John Smith was born that way and his momma is to blame. Too many pills
from the corner pusher......and too many pokes in the head while still
in the womb from her customers. Confusion for John means Father's
Day!

1651. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 15:41:00 UTC
From: "John Smith assemblywizard@gmail.com" <jackmeoffwithabreastpump@gmail.com>
Message-ID: <3eb3c7be-9226-4e21-95f0-81544f980d4c@m3g2000hsc.googlegroups.com>
Source record: 22925

On Aug 28, 5:10 pm, John Smith <assemblywiz...@gmail.com> danced
around naked pulling on his meat:
snip a lot of John Smiths bullshit diatribe
>
> Now, I am off to watch my momma crawl about ...

Momma still selling her pussy on the corner huh John? I bet she still
has nightmares over your conception from the guy that donated her his
half of your egg! I guess the old saying that you get what you pay
for is true and its a shame your momma had to pay for the other half
from some old whino in Bakersfield, living under the freeway ramp in a
box!
>
> Regards,
> JS

1652. Re: Why am I a dumbass named John Smith

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 16:25:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9jpet$1l6$1@news.albasani.net>
Source record: 22926

John Smith assemblywizard@gmail.com wrote:
> John Smith was born that way and his momma is to blame. Too many pills
> from the corner pusher......and too many pokes in the head while still
> in the womb from her customers. Confusion for John means Father's
> Day!

Finally, a well-educated, well-mannered and well-spoken individual which one can have meaningful dialog with! ROFLOL

plonk ...

Regards,
JS

1653. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 16:32:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9jps0$27s$1@news.albasani.net>
Source record: 22927

John Smith assemblywizard@gmail.com wrote:
> On Aug 28, 5:10 pm, John Smith <assemblywiz...@gmail.com> danced
> around naked pulling on his meat:
> snip a lot of John Smiths bullshit diatribe
>> Now, I am off to watch my momma crawl about ...
>
> Momma still selling her pussy on the corner huh John? I bet she still
> has nightmares over your conception from the guy that donated her his
> half of your egg! I guess the old saying that you get what you pay
> for is true and its a shame your momma had to pay for the other half
> from some old whino in Bakersfield, living under the freeway ramp in a
> box!
>> Regards,
>> JS
>

Does make you wonder:

1) Some disgruntled ham with mental problems?

2) Some wino with a stolen laptop and wifi link?

3) Individual that is a product of the current school system?

4) Local/county/state/federal politician?

5) Religious devotee of the arrl?

6) Someone bored with the traffic on a moderated news group?

7) Retarded relative/family-member of a group member here--sneaking
about and gaining unauthorized access to his/her computer?

8) ...

plonk ...

Regards,
JS

1654. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 17:23:30 UTC
From: JB <nospam@goofball.net>
Message-ID: <mEevk.357$393.16@trnddc05>
Source record: 22928

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9jm26trj1@news.albasani.net...
> JB wrote:
>
> > ...
> > Ya I know, I didn't get into the how. How much is the first thing you
need
> > to be aware of.
> >
> >
>
> You may also find this picture of a 1:1 guanella balun of interest.
> Notice the "crossover" which alters the direction of the common winding
> between sides of the core ...
>
> Regards,
> JS

There ya go.
One of the problems of breaking up the path to ground on the shield is that now static can build up. If you can provide a way to bleed off the charges that build up on both halves, while breaking up the shield currents, now you have made it worthwhile. But when you guys start discussing off center fed dipoles, I step aside. I have computers in the shack. I have better luck with fan dipoles. Also running a Butternut vertical. Works a lot better than a 4btv, but a pain to get it right on all bands.

Thanks

Also liked the other pdfs presented. I never have time to read them all because of constant interruption around here. Back to work.

1655. http://www.electronicsshoping.com BlackBerry 8830 Smartphone (Verizon Wireless) €180

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 17:26:48 UTC
From: blackhorse002@gmail.com
Message-ID: <933777be-77b6-4c5c-b10a-3367d295951d@r35g2000prm.googlegroups.com>
Source record: 22929

http://www.electronicsshoping.com/views.asp?hw_id=243#

Contact us :
7*24 hour On-line service:
MSN/Email:electronicsbestseller200808@hotmail.com
Our website: http://www.electronicsshoping.com

Product Features and Technical Details
Product Features
Dual-network Blackberry for access to Verizon's CDMA network in the US, and GSM networks when travelling abroad
Fast 3G access using Verizon's EV-DO data network; GPS for VZ Navigator turn-by-turn direction service
Bluetooth for communication headsets, MicroSD memory expansion up to 4 GB, integrated digital audio player
Up to 220 minutes (3.7 hours) of talk time, up to 216 hours (9 days) of standby time; measures 4.5 x 2.6 x 0.55 inches (HxWxD)
Includes: handset, rechargeable battery, travel charger, international travel charger adapters, USB cable, VZAccess Manager CD, printed documentation, quick start guide
Dimensions

Size (LWH): 4.49 inches, 2.28 inches, 0.77 inches
Weight: 5.31252204585538 ounces
Product Features

Network Compatibility: CDMA

Product Description
With the BlackBerry 8830 World Edition smartphone, you'll enjoy fast, clear communication from Verizon here in the United States as well as seamless voice connectivity as you roam the globe. It's the first CDMA BlackBerry smartphone capable of roaming globally on GSM/GPRS networks, so you can travel the world with full mobile voice and data coverage without having to change smartphones, phone numbers or email addresses.

This sleek and performance-driven smartphone has been redesigned with trackball navigation and a new backlit QWERTY keyboard. It also offers support for Verizon's high-speed EV-DO data network and built-in GPS so you can take advantage of Verizon's optional VZ Navigator turn-by-turn direction service. And it continues to offer all the communication features that you've come to expect from Blackberry smartphones, including email served up by the BlackBerry Internet Service and a full menu of messaging options (SMS, MMS, and IM). Other

features include Bluetooth for communication headsets, MicroSD memory expansion up to 4 GB, and an integrated digital audio player.

1656. http://www.electronicsshoping.com BlackBerry Curve 8320 Smartphone Pale Gold (T-Mobile) €160

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 17:49:01 UTC
From: blackhorse002@gmail.com
Message-ID: <87269cc1-4f70-484b-a9ab-080a196f178c@w39g2000prb.googlegroups.com>
Source record: 22930

http://www.electronicsshoping.com/views.asp?hw_id=241#

Contact us :
7*24 hour On-line service:
MSN/Email:electronicsbestseller200808@hotmail.com
Our website: http://www.electronicsshoping.com

Product Features and Technical Details
Product Features
Smallest, lightest BlackBerry with full QWERTY keyboard--weighs just 3.9 ounces
Wi-Fi connectivity for Web browsing and access to T-Mobile's Hotspot @Home unlimited calling service
2.0 megapixel camera with flash and 5x digital zoom; Bluetooth wireless connectivity with with stereo headset support
Next-generation media player with audio and video playback in a variety of formats; expandable via MicroSD memory cards
Includes: Battery, Charger, Stereo Hands-free Headset, USB Cable, Carrying Case and BlackBerry Desktop Software
Dimensions

Size (LWH): 4.2 inches, 2.4 inches, 0.6 inches
Weight: 3.91534391534392 ounces
Product Features

Network Compatibility: GSM

Product Description
Adding a fashionable touch to Research in Motion's formidable arsenal of telephonic, PIM, and media tools, the BlackBerry 8320 Curve for T-Mobile is also the smallest, lightest BlackBerry phone that includes a full QWERTY keyboard. This amalgam of the svelte BlackBerry Pearl and the more business-oriented 8800 combines RIM's long-valued corporate email and messaging platform with a host of advanced multimedia features, including a 2-megapixel camera and stereo Bluetooth (for listening to music via wireless headphones). In addition to its quad-band GSM and EDGE connectivity, it also offers Wi-Fi connectivity for access to the Internet and email as well as access to T-Mobile's Hotspot @Home service.

1657. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 17:54:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9jul8$7ip$1@news.albasani.net>
Source record: 22931

JB wrote:

> ...
> There ya go.
> One of the problems of breaking up the path to ground on the shield is that
> now static can build up. If you can provide a way to bleed off the charges
> that build up on both halves, while breaking up the shield currents, now you
> have made it worthwhile. But when you guys start discussing off center fed
> dipoles, I step aside. I have computers in the shack. I have better luck
> with fan dipoles. Also running a Butternut vertical. Works a lot better
> than a 4btv, but a pain to get it right on all bands.
>
> Thanks
>
> Also liked the other pdfs presented. I never have time to read them all
> because of constant interruption around here. Back to work.
>
>

OCF antennas were not fully appreciated by me, a few of Cecils' helpful insights and encouragement and I built one and was rather surprised ... I do not have one right now but that is only due to neighbors/property constraints.

Here is a URL for design/implementation of "non-standard" baluns/transformers, but of a highly useable and desirable nature--or, Dr. Sevick strikes again!:

http://www.highfrequencyelectronics.com/Archives/Nov04/HFE1104_Sevick.pdf

Fig. 6(A) is very interesting. A 5-winding, 1:1.56 bootstrap transformer which provides 50/75 ohm connections/substitutions. Perfect for allowing one to use 75 ohm "junk" (or found in dumpsters) tv coax in place of more expensive 50 ohm coax.

I have made good use of this since I have thousands of feet of NEW 75 ohm coax I purchased from a scrap dealer for next-to-nothing! A lot of large dia coax and hard-line mixed in!

Regards,
JS

1658. Re: Multi wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 18:16:31 UTC
From: nm5k@wt.net
Message-ID: <8195e7a1-65b5-4f10-807a-62414ca6f2c8@i24g2000prf.googlegroups.com>
Source record: 22932

On Sep 2, 8:47 am, lt...@yahoo.com wrote:
> Would it increase 'performance' or just cause problems? Probably
> both. The performance increase may or may not be present when
> compared to what you're using now. Problems? You can bet on it.
> Mechanical ones mostly. What conductor will you use that will hold up
> it's own weight at 480 or 900 + feet? And since there will be 'sag'
> no matter what you use, will the end points be high enough to keep
> from 'clothes-lining' yourself on the antenna? Certainly not
> impossible to put up such an antenna, but not exactly as simple as it
> sounds.
> - 'Doc
>
> Do it! See what happens.

For that length, I imagine you would need multiple supports along
the way to deal with the sag. Of course, you could use real light
gauge
wire to reduce the tension needed to sag, but then the first real
storm that comes along and it will be most likely toast and he will
have to do it over again.
Unless there is a real need for the directive gain, I'd tend to avoid
the
real long wires.. Can be more trouble than they are worth, considering
I can use a yagi and be able to steer the thing at will. With a wire,
you are stuck with one or two directions, depending if terminated or
not.
I've considered running long wires as a beverage receiving antenna,
and even it can be prone to damage after a while with all the trees
whipping in storms, etc.
But at least the usual beverage is low to the ground, and fairly easy
to install and repair if needed.
Long wires can be interesting, but I would not want them as an
"everyday" antenna. I'd always have the standard dipoles, etc for
everyday use. I might play with a long wire, but it would be an
"extra"
antenna used more as an experiment.
Being there is no real efficiency advantage to using extended dipoles,
the only reason to really consider one is if you want some gain in
certain directions. Being that there will be directions where the
gain is less, and you can't control the pattern, any advantages
would be totally up to the user and who they work.
It would generally be a disadvantage to me on the lower bands.
I want to be as loud as possible in all directions.. :)
I have used a few extended double zepps with good results, but

that's only .64 wave per leg. Or about 150 feet +- per leg of the dipole. "about 300 feet total". Anything longer than that, and the pattern becomes more X shaped, and the gain is no longer broadside to the wire.
Anyway, to make a long story short, I would not use extended dipoles if it were me building "everyday" use antennas.
I'd stick with the standard dipoles, etc, and leave the long wire stuff as "experimental or DX" antennas. With that much room, seems to me he could have both.

1659. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 18:56:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9k293$bc9$1@news.albasani.net>
Source record: 22933

Owen Duffy wrote:

> ...
> I suggest that a reasonable definition of a balun is any device that
> facilitates or assists transition from unbalanced to balanced mode of
> operation. That definition permits a wide range of devices that may have
> characteristics suited to specific applications.
> ...
> Owen

Baluns and Ununs use a transmission line mode to accomplish their tasks
... anything else is just a RF xfrmr ...

However, there are the 180 degree hybrid baluns ...

Regards,
JS

1660. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 20:42:10 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <g9k8f2$1jt$1@news.service.uci.edu>
Source record: 22934

Cecil Moore wrote:
> Jim Kelley wrote:
>> Cecil Moore wrote:
>>> Ptotal = P1 + P2 + 2*SQRT(P1*P2)*cos(A)
>>
>> According to fig. 7.1 in Born and Wolf, that's useful for showing how
>> light intensity varies as a function of phase, and hence position.
>> It's just that there's no valid way to multiply by the cosine of the
>> angle between two scalars.
>
> I suspect you knew if I ever found my Born and Wolf after my
> move, you would be in trouble - and you are.

No. I assumed you could find fig 7.1 and see it for yourself. The plot has phase on the X-axis and intensity on the Y-axis. The caption reads Interference of two beams of equal intensity; variation of intensity with phase difference. " At the top of the page: "Let us consider the distribution of intensity resulting from the superposition of two waves which are propagated in the z-direction...."

The relation is useful for precisely the reason I indicated. That is why Heckt also includes it in his book.

I deleted the rhetorical blithering from your post. And again, please quote my remarks directly whenever you wish to discuss them.

73, ac6xg

1661. Re: Phase array question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 21:58:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <CGivk.21318$uE5.21014@flpi144.ffdc.sbc.com>
Source record: 22935

Jim Kelley wrote:
> The relation is useful for precisely the reason I indicated. That is
> why Heckt also includes it in his book.

Your Freudian slip concerning your feelings about Hecht
is more than apparent, i.e. "To Heck with Hecht"! :-)

One wonders why you said something to the effect that
Hecht had been discredited in favor of Born and Wolf.
When I recommended the 57 page chapter on interference
in "Optics", by Hecht, you said something to the effect
that interference is unimportant, yet Born and Wolf's
chapter on interference is 113 pages long and mostly
agrees with Hecht's writings.
--
73, Cecil http://www.w5dxp.com

1662. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 23:31:07 UTC
From: Owen <none@no.where>
Message-ID: <%0kvk.33242$IK1.28580@news-server.bigpond.net.au>
Source record: 22936

John Smith wrote:

> However, this URL:
>
> http://www.n0ss.net/qrp_4-1_guanella-type_balun.pdf
>
> in the include pick 4-1_schematic.jpg, in the URL, contains a "blurb" on
> how to move a single core design on to two cores.

Did you mean a two core design onto one core?

Here is an analysis of the single core version:
http://www.vk1od.net/balun/gsc/index.htm .

Guanella did not show the 4:1 balun on a shared magnetic circuit, and it
is an error on the part of those who think that the two independent TLTs
in Guanella's circuit can be coupled without changing the behaviour
significantly (basically, ruining it).

Owen

1663. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-02 23:55:05 UTC
From: JB <nospam@goofball.net>
Message-ID: <tnkvk.359$sq3.99@trnddc07>
Source record: 22937

> Here is a URL for design/implementation of "non-standard"
> baluns/transformers, but of a highly useable and desirable nature--or,
> Dr. Sevick strikes again!:
>
> http://www.highfrequencyelectronics.com/Archives/Nov04/HFE1104_Sevick.pdf
>
> Fig. 6(A) is very interesting. A 5-winding, 1:1.56 bootstrap
> transformer which provides 50/75 ohm connections/substitutions. Perfect
> for allowing one to use 75 ohm "junk" (or found in dumpsters) tv coax in
> place of more expensive 50 ohm coax.
>
> I have made good use of this since I have thousands of feet of NEW 75
> ohm coax I purchased from a scrap dealer for next-to-nothing! A lot of
> large dia coax and hard-line mixed in!
>
> Regards,
> JS

A little mismatch isn't such a problem. At least if you can get the loss down. I wouldn't even worry about it, the internal tuner would make short work of that. Look out for water damage on that stuff though. Especially the Aluminum braid/foil shield stuff like LMR. Even a little bit of moisture percolates all through the braid.and turns it into aluminum oxide powder and extremely noisy with power on it. It could look brand new and you would keep cutting it back, then find a foot of new braid but keep cutting and its back to chalk. We would routinely assume it bad and throw it away. At least with the Hardline, you can sweep it and put some power to it to check the loss Only hardline allowed on towers.

1664. Re: Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 00:09:57 UTC
From: arsw2agr@gmail.com
Message-ID: <090df680-33e7-44b7-b3bd-c29b23b967e7@m44g2000hsc.googlegroups.com>
Source record: 22938

On Sep 1, 8:58 pm, Jim-NN7K <nn7kexk7...@noway.net.> wrote:
> Tam sez:
>
>
>
>
>
>
>
> > "sangeo" <w2...@msn.com> wrote in message
> >news:fd5a333a-9fe8-428a-8daa-30506539c395@25g2000hsx.googlegroups.com...
> >> I came across a good 2 meter 12 element beam. The boom is aprox 19 ft
> >> long. It has 4 driven elements in a "log" or lattice configuration. I
> >> need info to make the coax connection. Does anyone have an Idea as to
> >> Mfg? The driven elements are spaced about 7 inches apart. It is in
> >> good shape except for the missing connection points.
> >> Thanks, 73's
> >> George
> > I would connect a feedline to the mounting screws of the front most DE
> > and measure the SWR. If you get anything like 4:1 it is 200 Ohms. The
> > KLM 6m beam with 2 driven elements requires a 4:1 balun. I have not seen
> > the KLM 2m.
>
> > According to an old AES catalog, 2m KLM antennas in this range had boom
> > lengths of 15.33, 21.5, 12.9, 28 , and a circularly polarized 22 element
> > on a 19 foot boom; nothing with 12 elements, but it could be older.
>
> > Tam/WB2TT
>
> The 2 meter one s I had were 50 ohm (2 meter 14 el) somewhere in this
> mess I have the "Manual" (more like 3 pages) for it. IF can find ,
> can e-mail. Jim NN7K- Hide quoted text -
>
> - Show quoted text -

Jim, I would appreciate the diagram you have, Any info is good info,
Thanks 73's George w2agr

1665. Re: Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 00:11:10 UTC
From: arsw2agr@gmail.com
Message-ID: <bf99c95d-7ca1-4718-b463-a8f6342b17f4@59g2000hsb.googlegroups.com>
Source record: 22939

On Sep 1, 8:58 pm, Jim-NN7K <nn7kexk7...@noway.net.> wrote:
> Tam sez:
>
>
>
>
>
>
>
> > "sangeo" <w2...@msn.com> wrote in message
> >news:fd5a333a-9fe8-428a-8daa-30506539c395@25g2000hsx.googlegroups.com...
> >> I came across a good 2 meter 12 element beam. The boom is aprox 19 ft
> >> long. It has 4 driven elements in a "log" or lattice configuration. I
> >> need info to make the coax connection. Does anyone have an Idea as to
> >> Mfg? The driven elements are spaced about 7 inches apart. It is in
> >> good shape except for the missing connection points.
> >> Thanks, 73's
> >> George
> > I would connect a feedline to the mounting screws of the front most DE
> > and measure the SWR. If you get anything like 4:1 it is 200 Ohms. The
> > KLM 6m beam with 2 driven elements requires a 4:1 balun. I have not seen
> > the KLM 2m.
>
> > According to an old AES catalog, 2m KLM antennas in this range had boom
> > lengths of 15.33, 21.5, 12.9, 28 , and a circularly polarized 22 element
> > on a 19 foot boom; nothing with 12 elements, but it could be older.
>
> > Tam/WB2TT
>
> The 2 meter one s I had were 50 ohm (2 meter 14 el) somewhere in this
> mess I have the "Manual" (more like 3 pages) for it. IF can find ,
> can e-mail. Jim NN7K- Hide quoted text -
>
> - Show quoted text -

My email is w2agr@msn.com

1666. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 00:11:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9kkn7$6mb$1@news.albasani.net>
Source record: 22940

JB wrote:

>> ...
> A little mismatch isn't such a problem. At least if you can get the loss
> down. I wouldn't even worry about it, the internal tuner would make short
> work of that. Look out for water damage on that stuff though. Especially
> the Aluminum braid/foil shield stuff like LMR. Even a little bit of
> moisture percolates all through the braid.and turns it into aluminum oxide
> powder and extremely noisy with power on it. It could look brand new and
> you would keep cutting it back, then find a foot of new braid but keep
> cutting and its back to chalk. We would routinely assume it bad and throw
> it away. At least with the Hardline, you can sweep it and put some power to
> it to check the loss Only hardline allowed on towers.
>

Since it was on spools, and dusty, had no concern with that. LOL

Regards,
JS
--
It is like a nightmare where the public servants are people which the
police are supposed to protect you from!

1667. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 00:25:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9klhp$7n5$1@news.albasani.net>
Source record: 22941

Owen wrote:

> ...
> Did you mean a two core design onto one core?
>
> Here is an analysis of the single core version:
> http://www.vk1od.net/balun/gsc/index.htm .
>
> Guanella did not show the 4:1 balun on a shared magnetic circuit, and it
> is an error on the part of those who think that the two independent TLTs
> in Guanella's circuit can be coupled without changing the behaviour
> significantly (basically, ruining it).
>
> Owen

Let's cut the crap, currents in one winding which cause lines of force in the toroid/ferrite-core, should only assist the lines of force generated in the core by the other winding on the opposite side of the core--in the single core model of the guanella balun--composed of two 1:1s in a 1:4 configuration (or guanella TLT, since you seem to prefer acronyms.) At least TLT get the transmission line requirement out in the open ...

Since toroids naturally demonstrate "economy of loss" in the magnetic lines of force within their structure, few, if any, lines of force would be shared between two separate cores, stacked.

Now, wasn't it Einstein who recommended that things only be made as complex as necessary and not one iota more?--Or, watch out for the gray haired man who keeps attempting to sneak behind the curtains in this train ride though Oz--and KEEP HIM AWAY FROM THE LEVERS! ;-P

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1668. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 02:07:46 UTC
From: dfinn1@nc.rr.com
Message-ID: <1010b20b-9c6b-4778-80c3-688d9bf31f7e@25g2000hsx.googlegroups.com>
Source record: 22942

On Sep 1, 9:52 pm, Owen Duffy <n...@no.where> wrote:
> dfi...@nc.rr.com wrote in news:6f4f9e36-af26-4f1b-9244-383494f77b26
> @c58g2000hsc.googlegroups.com:
>
>
>
> > On Sep 1, 3:25 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> >> dfi...@nc.rr.com wrote:
> > ...
> >> Actually, 1000 ohms is pretty liberal. For instance, on
> >> 15m, the G5RV coax sees 36+j230 ohms or about 233 ohms.
> >> The balun needs to be 10x that value or 2330 ohms.
> >> --
> >> 73, Cecil http://www.w5dxp.com
>
> > Why not 500 ohms, assuming a 50 ohm source and transmission line?
>
> The common mode impedance of the balun acts in the common mode
> transmission line (which is mutually coupled to the nominal radiator).
>
> How is the differential mode transmission line characteristic impedance
> relevant to the determination of common mode current in the antenna
> system scenario described?
>
> Owen

For a balanced transmission line, the characteristic impedance is not
expressed in differential mode terms, it IS common mode so I do
not know why you ask about differential mode characteristic impedance.
I never mentioned it. The characteristic impedance of a ladder line
for example
might be expressed as 600 ohms. That 600 ohms assumes common mode
conduction, as charateristically transmitted in a balanced line,
Differential mode impedance is assumed for un balanced transmission
line conditions.

1669. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 02:19:28 UTC
From: dfinn1@nc.rr.com
Message-ID: <8d20367e-0417-47b5-b1a3-e93ad35b8c51@m45g2000hsb.googlegroups.com>
Source record: 22943

On Sep 2, 7:26 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > Yes and I have to partially take back what I said; a balun CAN double
> > as a CM "choke" and a CM choke can double as a balun. If
> > one wishes to balance an unbalanced line with a CM choke, then the
> > impedance of the CM choke must match the source and the load, which
> > makes the CM choke a balun and no longer a choke :-)
>
> Actually, a balun without a large choking impedance
> is not very useful for ham antenna system applications.
> The method that a W2DU balun uses to balance currents
> at a dipole feedpoint *IS* nothing more than a large
> choking impedance which discourages common-mode current
> from flowing through the higher-the-better impedance.
> I usually refer to the W2DU balun as a choke-balun.
> --
> 73, Cecil http://www.w5dxp.com

I disagree. There is no choking, there is merely a polarity and phase shift between the "primary" and "secondary" of the 1:1 balun "transformer".

The best way I can easily express this is to consider a 1:1 240V 60 Hz isolation transformer (yes, the balun acts theoretically in the same manner). At the unbalanced input you connect 240V on one terminal and earthed neutral on the other terminal. Now consider the isolated secondary each feeding an equal resistive load to the center tap of the secondary (analagous to radiation resistance). Across each load we see 120V, 180 degrees out of phase. This is a balanced transmission. Correct, this is not RF but it illustrates what the balun is supposed to be doing. There is NO choking function at all if it is working properly. There cannot be a choke when impedances are matched, only when they are significantly mismatched.

1670. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 02:28:25 UTC
From: dfinn1@nc.rr.com
Message-ID: <de4ba50a-b3ff-4641-a45a-ebf987a5fed6@z72g2000hsb.googlegroups.com>
Source record: 22944

On Sep 2, 7:51 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > On Sep 1, 3:25 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> >> Actually, 1000 ohms is pretty liberal. For instance, on
> >> 15m, the G5RV coax sees 36+j230 ohms or about 233 ohms.
> >> The balun needs to be 10x that value or 2330 ohms.
>
> > Why not 500 ohms, assuming a 50 ohm source and transmission line?
>
> Be the current making a choice of paths at a junction.
> How much of you would flow through 500 ohms and how much
> would flow through 233 ohms? (If 500 ohms is the total
> impedance seen by the shield current looking back toward
> the source, about 1/3 of the current would flow back
> through the 500 ohms down the coax.)
>
> http://eznec.com/Amateur/Articles/Baluns.pdf
> --
> 73, Cecil http://www.w5dxp.com

I got confused as to whether we were talking "choke" or "balun". For the balun, you want to be as close to 50 ohms as possible. Actually 233 ohms is not that bad. 1K would be really bad and illustrate that the balun is not working well. It 233 ohms, it is sort of OK, especially with a tuner, which you use with a G5RV anyway, along with the ugly balun. In priciople, the frequency works OK for my G5RV/ugly balun system.

By the way, I have seen so many articles about baluns written by other hams and they tend to repeat the same mistakes and assumptions. Most hams do not understand how a balun works. Some even think you do not need a balun if the antenna is at resonance which is totally untrue. Anytime you feed a dipole directly with an unbalanced coax, the balanced dipole "load" forces current down your ground shield and into your radio and makes your radio part of your transmitting antenna. Inserting a balun does not "choke" the current in the shield, it merely shifts the output phases so that the current (voltage) is directed towards the dipole at all times (see my other post in this thread).

1671. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 02:31:18 UTC
From: dfinn1@nc.rr.com
Message-ID: <7eacec64-4115-410a-b447-f7e0a6827140@m45g2000hsb.googlegroups.com>
Source record: 22945

On Sep 2, 10:22 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
> Dan wrote:
> >On Sep 1, 4:20 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
> >> Dan wrote:
> >> >On Aug 31, 3:07 pm, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
> >> >> Dan wrote:
> >> >> >On Aug 28, 2:26 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>
> >> >> >> In other words, people with limited antenna opportunities are often the
> >> >> >> ones who need a balun - or more accurately, a common-mode choke - the
> >> >> >> MOST.
> >> >> >Technically I would have to disagree with calling even a 1:1 balun the
> >> >> >same thing as a common mode choke. A CM choke is an EMI prevention
> >> >> >device intended to filter out RF components generated in a circuit,
> >> >> >away from the feed of a power source, usually an electrical mains.
>
> >> >> That is too far narrow a definition of a "common mode choke",
> >> >> especially the reference to electrical mains. The term is widely applied
> >> >> to transmission line for both digital data and analog RF signals.
>
> >> >A common mode choke is used in RF applications, very true, but it
> >> >serves a filtering purpose,
> >> >not a conversion of unbalanced to balanced energy transfer or vice
> >> >versa. A common mode choke that operates well will turn
> >> >unwanted RF into heat or cause it to dissipate in its core or a
> >> >resistor etc..
>
> >> Common-mode chokes, and filters in general, do NOT aim to "turn unwanted
> >> RF into heat"! That is a total misunderstanding of the whole concept.
>
> >A CM choke aims to present a high impedence to unintentional RF. Once
> >"choked" by the high impedance,
> >the enrgey must either reflect or be aborbed somewhere in the circuit
> >or the core as real power. What is it that you cannot
> >understand about the term "choke"?
>
> I'm slightly encouraged that the key word "reflected" has now crept into
> your description. It wasn't there in what you wrote previously.
>
> [Snip similar]
>
> >In a perfect situation, with a balanced feedline, the only kind of
> >current and voltage you have IS common mode!
>

> What??? You know that statement didn't come out right, so how much of
> the rest did you really mean?
>
> >I give up! You need some education in this area.
>
> I give up too - at last, something we can agree about.
>
> My main worry is that anyone *else* might have tried to gain some
> education from your confused statements on this particular topic.
>
> --
>
> 73 from Ian GM3SEK   'In Practice' columnist for RadCom
(RSGB)http://www.ifwtech.co.uk/g3sek- Hide quoted text -
>
> - Show quoted text -

Many US amateurs do not understand how a balun works. I expected
something better from our European counterparts who seem to understand
power transmission
concepts better than their US counterparts.

1672. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 02:43:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9ktjsfti1@news.albasani.net>
Source record: 22946

dfinn1@nc.rr.com wrote:

> ...
> I disagree. There is no choking, there is merely a polarity and phase
> shift between the "primary" and "secondary" of the 1:1 balun
> "transformer".
>
> The best way I can easily express this is to consider a 1:1 240V 60 Hz
> isolation transformer (yes, the balun acts theoretically in the same
> manner). ...

No. But you have focused on your error in thinking/logic/function. An RF Transformers does what you state, lengths of transmission line carrying RF behave in a different "mode." (uh, I hate that word ...)

Now, if you do some research, you can correct your error(s) ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1673. Two Meter Longwire Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 03:06:01 UTC
From: Spin <noemail@alone.invalid>
Message-ID: <tanvk.364$1a2.205@trnddc04>
Source record: 22947

I would like to make/experiment with a longwire antenna
specifically for the two meter fm band. Is there an optimum length to try &
still keep an omnidirectional pattern? Also the optimum amount of radials
and will i need a matching unit?

1674. Re: Two Meter Longwire Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 03:38:12 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <kk0sb4tb5fdvvbm353pbjcop311m66onnb@4ax.com>
Source record: 22948

On Wed, 03 Sep 2008 03:06:01 GMT, "Spin" <noemail@alone.invalid>
wrote:

>I would like to make/experiment with a longwire antenna
>specifically for the two meter fm band. Is there an optimum length to try &
>still keep an omnidirectional pattern? Also the optimum amount of radials
>and will i need a matching unit?

The nice things about VHF and UHF wire antennas is that they can be
easily built and easily modeled with one of the numerous NEC2 programs
available. The short wavelength means that you can generally ignore
ground effects. However, you do have to consider the mounting
structure (i.e. tower) in your calculations. I have no way to answer
your questions as you didn't specify what you're trying to accomplish
or what you have to work with. Optimum for what? VSWR, gain,
radiation angle, pattern, what? Not enough info.

As penitence for this capital crime, you are sentenced to download and
install EZNEC, 4NEC2, or other NEC2 modeling program:
http://www.eznec.com (Free demo is good for simple antennas)
http://home.ict.nl/~arivoors/ (lots of good examples included)
http://www.si-list.net/swindex.html (old list but still useful)
Plug your proposed antenna into these programs, and see what it will
do in the way of pattern, VSWR, radiation efficiency, bandwidth, etc.
Incidentally, the 3D antenna patterns are cool. Yes, you will have to
learn a bit about antennas, learn how to run the program, and learn a
few new profane incantations to get it working. However, I assure you
that it's worth the effort. Once you get something reasonable on the
computah, then built it and do some measuring.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

1675. Re: Two Meter Longwire Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 03:45:10 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B0E8BDDF901Anonenowhere@61.9.191.5>
Source record: 22949

"Spin" <noemail@alone.invalid> wrote in news:tanvk.364$1a2.205@trnddc04:

> I would like to make/experiment with a longwire antenna
> specifically for the two meter fm band. Is there an optimum length to
> try & still keep an omnidirectional pattern? Also the optimum amount
> of radials and will i need a matching unit?
>
>
>

I am guessing that you want vertical polarisation, and omni directional pattern in the H plane (azimuth).

As an end fed unloaded vertical wire over perfect ground is lengthened than about 60% of a wavelength, the low angle major lobe splits and significant power is radiated in higher angle lobes. You probably don't want that.

So, in the sense that a longwire is an endfire antenna, it is not suited to your need for a vertically polarised omni antenna for FM operations.

A 5/8 wave ground plane isn't a bad antenna, and about as long as is useful in a straight radiator. It is an example of a good antenna that is not resonant, debunking the myth that resonant antennas always work best. It does not have a 50 ohm feedpoint, and is reactive, so some impedance matching is needed for 50 ohm line, but it is not difficult.

For higher gain with omni pattern, you should consider a colinear array. They are very popular, but mostly of commercial manufacture.

Owen

1676. r7 vertical resonates too high

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 04:33:58 UTC
From: coyotevergreen <coyotevergreen.303dd39@radiobanter.com>
Message-ID: <coyotevergreen.303dd39@radiobanter.com>
Source record: 22851

my r7 vertical resonates about 450khz too high on ALL bands. This antenna is 15 years old, all dimensions are correct, and it suddenly jumped in resonance after working perfectly for years...nothing has changed physically...just resonates way too high all of a sudden...cap problem in matching network?...something else in the black box?...any ideas?...contact direct at coyotevergreen at q dot com. Thanx. K0SDC

--
coyotevergreen

1677. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 05:24:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <eq7sb4l86mpnp0h5qo8uo8chtk4nrrp0mn@4ax.com>
Source record: 22950

On Tue, 2 Sep 2008 19:31:18 -0700 (PDT), dfinn1@nc.rr.com wrote:

>> >In a perfect situation, with a balanced feedline, the only kind of
>> >current and voltage you have IS common mode!
>
>Many US amateurs do not understand how a balun works.

How true - not even fundamental terminology.

73's
Richard Clark, KB7QHC

1678. Re: r7 vertical resonates too high

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 06:02:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d1asb41ln302jv8bkpobemm07rk8ebn8m3@4ax.com>
Source record: 22852

On Wed, 3 Sep 2008 05:33:58 +0100, coyotevergreen
<coyotevergreen.303dd39@radiobanter.com> wrote:

>any ideas?

Radials/counterpoise went south.

73's
Richard Clark, KB7QHC

1679. Re: r7 vertical resonates too high

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 07:47:28 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <g9lfeo$5k5$1@registered.motzarella.org>
Source record: 22853

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:d1asb41ln302jv8bkpobemm07rk8ebn8m3@4ax.com...
> On Wed, 3 Sep 2008 05:33:58 +0100, coyotevergreen
> <coyotevergreen.303dd39@radiobanter.com> wrote:
>
>>any ideas?
>
> Radials/counterpoise went south.
>
> 73's
> Richard Clark, KB7QHC

The R7 doesn't use radials or a counterpoise. It is the electrical equivalent of a 1/2 wave antenna on all bands. That was one of the reasons that it was so popular.

Like the OP, I tend to agree that the problem is in the black box.

There were several articles published on how to restore the black box to original specs. Anyone know of their location?

Ed, NM2K

1680. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 10:35:10 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <DxUS3LGehmvIFwh6@g3ohx.demon.co.uk>
Source record: 22854

In message <g9jul8$7ip$1@news.albasani.net>, John Smith
<assemblywizard@gmail.com> writes
>JB wrote:
>
>> ...
>> There ya go.
>> One of the problems of breaking up the path to ground on the shield is that
>> now static can build up. If you can provide a way to bleed off the charges
>> that build up on both halves, while breaking up the shield currents, now you
>> have made it worthwhile. But when you guys start discussing off center fed
>> dipoles, I step aside. I have computers in the shack. I have better luck
>> with fan dipoles. Also running a Butternut vertical. Works a lot better
>> than a 4btv, but a pain to get it right on all bands.
>> Thanks
>> Also liked the other pdfs presented. I never have time to read them
>>all
>> because of constant interruption around here. Back to work.
>>
>
>OCF antennas were not fully appreciated by me, a few of Cecils' helpful
>insights and encouragement and I built one and was rather surprised ...
>I do not have one right now but that is only due to neighbors/property
>constraints.
>
>Here is a URL for design/implementation of "non-standard"
>baluns/transformers, but of a highly useable and desirable nature--or,
>Dr. Sevick strikes again!:
>
>http://www.highfrequencyelectronics.com/Archives/Nov04/HFE1104_Sevick.pdf
>
>Fig. 6(A) is very interesting. A 5-winding, 1:1.56 bootstrap
>transformer which provides 50/75 ohm connections/substitutions.
>Perfect for allowing one to use 75 ohm "junk" (or found in dumpsters)
>tv coax in place of more expensive 50 ohm coax.
>
>I have made good use of this since I have thousands of feet of NEW 75
>ohm coax I purchased from a scrap dealer for next-to-nothing! A lot of
>large dia coax and hard-line mixed in!
>
>Regards,
>JS

What about the loss in the balun? You need to decide if the loss in the
balun is less than that you would get if you simply used the 75 ohm coax

direct. And ask yourself 'In my application, why would 75 ohm be more lossy?' Also, with similar physical dimensions, construction etc, 75 ohm coax is slightly less lossy than 50 ohm (current is less, so 'I squared R' loss is less).
--
Ian

1681. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 11:03:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9lqu8$hh0$1@news.albasani.net>
Source record: 22855

Ian Jackson wrote:

> ...
> What about the loss in the balun? You need to decide if the loss in the
> balun is less than that you would get if you simply used the 75 ohm coax
> direct. And ask yourself 'In my application, why would 75 ohm be more
> lossy?' Also, with similar physical dimensions, construction etc, 75 ohm
> coax is slightly less lossy than 50 ohm (current is less, so 'I squared
> R' loss is less).

Simple solution, I trust my S-meter!

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1682. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 11:05:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9lr1a$hh0$2@news.albasani.net>
Source record: 22856

Richard Clark wrote:

> ...
> How true - not even fundamental terminology.
>
> 73's
> Richard Clark, KB7QHC

When you are right, you are right; and, YOU GOT THAT ONE RIGHT! :-)

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1683. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 11:18:53 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <wouvk.36418$co7.28194@nlpi066.nbdc.sbc.com>
Source record: 22857

dfinn1@nc.rr.com wrote:
> For a balanced transmission line, the characteristic impedance is not
> expressed in differential mode terms, it IS common mode so I do
> not know why you ask about differential mode characteristic impedance.

Well, there's your problem. In a properly functioning
transmission line, whether balanced or unbalanced, the
currents in the two conductors are differential, not
common-mode. The two currents are equal in magnitude
and 180 degrees out of phase and their fields tend
to cancel which minimizes radiation.

Common-mode currents only occur when the two currents
are not perfectly differential, i.e. not equal amplitudes
and/or not 180 degrees out of phase.
--
73, Cecil http://www.w5dxp.com

1684. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 11:29:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Pyuvk.21325$uE5.16761@flpi144.ffdc.sbc.com>
Source record: 22858

dfinn1@nc.rr.com wrote:
> I disagree. There is no choking, there is merely a polarity and phase
> shift between the "primary" and "secondary" of the 1:1 balun
> "transformer".

In a w2du balun, zero flux in the beads is introduced
by the transmission line currents. All of the flux in
the beads is introduced by common-mode currents. Thus
the impedance of the beads *IS* a choking impedance
aimed only at the common-mode currents.

My choke-balun is ten turns of RG-400 on an FT-240-77
toroid. It's only purpose is to provide a choking
impedance to common-mode current. That choke-balun
doesn't know if it is being used as a UNUN or as a
BALUN.

Most baluns are designed such that near-zero flux
is introduced in the ferrite toroid by the differential
mode currents. Essentially, the only flux introduced
in the toroid is due to common-mode. The resulting
impedance *IS* a choking impedance.
--
73, Cecil http://www.w5dxp.com

1685. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 11:44:37 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <EMuvk.21326$uE5.14921@flpi144.ffdc.sbc.com>
Source record: 22859

dfinn1@nc.rr.com wrote:
> By the way, I have seen so many articles about baluns written by other
> hams and they tend to repeat the same mistakes and assumptions. Most
> hams do not understand how a balun works.

Your following statement puts you in that category.

> Inserting a balun does not "choke" the current in the shield, it
> merely shifts the output phases so that the current (voltage) is
> directed towards the dipole at all times (see my other post in this
> thread).

This applies to a W2DU balun. Why would you want
differential current fields to be introduced into
the #77 ferrite beads? Their entire purpose is to
provide a large choking impedance and dissipate
common-mode power.
--
73, Cecil http://www.w5dxp.com

1686. Fiberglass Statues

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 11:52:57 UTC
From: AndyTao <22265737@qq.com>
Message-ID: <a48ef198-e73c-4823-8e39-084f0096f1e8@a2g2000prm.googlegroups.com>
Source record: 22860

Statues lifesize & small, animals cows, lions, tigers, custom work
http://www.ogogo123sina.cn

1687. Re: Fiberglass Statues

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 11:59:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9lu6t$ks3$1@news.albasani.net>
Source record: 22861

AndyTao wrote:
> Statues lifesize & small, animals cows, lions, tigers, custom work
> http://www.ogogo123sina.cn

So, do they contain stealth antennas? What bands do they cover? How can they increase my enjoyment of "the radio experience?"

I am afraid you are going to have to help me out here; your post appears to be a complete waste of time for all here ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1688. Re: Fiberglass Statues

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 12:00:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9lu8h$ks3$2@news.albasani.net>
Source record: 22862

John Smith wrote:
> AndyTao wrote:
>> Statues lifesize & small, animals cows, lions, tigers, custom work
>> http://www.ogogo123sina.cn
>
> So, do they contain stealth antennas? What bands do they cover? How
> can they increase my enjoyment of "the radio experience?"
>
> I am afraid you are going to have to help me out here; your post
> appears to be a complete waste of time for all here ...
>
> Regards,
> JS
>

Oh yeah, almost forgot--thread plonk!

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1689. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 12:04:44 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <u3vvk.40190$ZE5.16772@nlpi061.nbdc.sbc.com>
Source record: 22863

dfinn1@nc.rr.com wrote:
> Many US amateurs do not understand how a balun works.

Quoting "The ARRL Antenna Book" re a w2du balun:
"Maxwell made a test balun by slipping 300 #73 beads
over a piece of RG-303 coaxial cable. The impedance
of the outer conductor of the cable measured
4500+j3800 at 4.0 MHz."

The differential current emerging from the inside
of the coax braid encounters, e.g. 30 ohms, looking
toward the antenna. It encounters 4500+j3800 = 5890
ohms looking back down the outside of the coax.
Ohm's law does the rest.

Without the beads, that differential current might
see an impedance lower than 30 ohms looking back
down the outside of the coax for certain unfortunate
lengths of coax. The common-mode choking impedance
forces ~equal currents in each dipole leg at the
BALanced antenna to UNbalanced coax junction. That
common-mode choking impedance causes the balun
function to occur.
--
73, Cecil http://www.w5dxp.com

1690. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 12:07:13 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <P5vvk.40191$ZE5.38077@nlpi061.nbdc.sbc.com>
Source record: 22864

Cecil Moore wrote:
> Most baluns are designed such that near-zero flux
> is introduced in the ferrite toroid by the differential
> mode currents.

That should have been, "Most 1:1 current baluns ..."
--
73, Cecil http://www.w5dxp.com

1691. Re: Fiberglass Statues.....John Smith uses for butt plugs!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 13:22:40 UTC
From: "John Smith assemblywizard@gmail.com" <jackmeoffwithabreastpump@gmail.com>
Message-ID: <f43a5a89-cf7f-4dd7-9ed9-ba45084eb2d3@l64g2000hse.googlegroups.com>
Source record: 22865
Cross-posted to: rec.radio.amateur.antenna,alt.callahans,alt.usenet.kooks,rec.ponds,alt.sex

On Sep 3, 6:52 am, AndyTao <22265...@qq.com> wrote:
> Statues lifesize & small, animals cows, lions, tigers, custom
workhttp://www.ogogo123sina.cn

No but odds are John Smith can use them as a fancey butt plug. HOw much does your momma charge for blow jobs John Smith? Last I heard she had to pay folks to take em. Staya the fuck out of thre fish groups with your bullshit and posts will stay out of these groups . You can thank John Smith for the crap posts he drug here......He is quite the pervert when it comes to little boys and tiny dicks

1692. Re: Two Meter Longwire Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 15:19:11 UTC
From: JB <nospam@goofball.net>
Message-ID: <PVxvk.448$393.54@trnddc05>
Source record: 22866

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B0E8BDDF901Anonenowhere@61.9.191.5...
> "Spin" <noemail@alone.invalid> wrote in news:tanvk.364$1a2.205@trnddc04:
>
> > I would like to make/experiment with a longwire antenna
> > specifically for the two meter fm band. Is there an optimum length to
> > try & still keep an omnidirectional pattern? Also the optimum amount
> > of radials and will i need a matching unit?
> >
> >
> >
>
> I am guessing that you want vertical polarisation, and omni directional
> pattern in the H plane (azimuth).
>
> As an end fed unloaded vertical wire over perfect ground is lengthened
> than about 60% of a wavelength, the low angle major lobe splits and
> significant power is radiated in higher angle lobes. You probably don't
> want that.
>
> So, in the sense that a longwire is an endfire antenna, it is not suited
> to your need for a vertically polarised omni antenna for FM operations.
>
> A 5/8 wave ground plane isn't a bad antenna, and about as long as is
> useful in a straight radiator. It is an example of a good antenna that is
> not resonant, debunking the myth that resonant antennas always work best.
> It does not have a 50 ohm feedpoint, and is reactive, so some impedance
> matching is needed for 50 ohm line, but it is not difficult.
>
> For higher gain with omni pattern, you should consider a colinear array.
> They are very popular, but mostly of commercial manufacture.
>
> Owen

If you increase a single monoples length beyond 1/4 wave, the takeoff angle
of radiation compresses closer to the horizon for a gain improvement. Of
course now it isn't resonant but so what, all you have to do is finish with
a loading coil to make it look like a 3/4 w antenna and it has a resonant
low impedance again. If you increase the length beyond 5/8w though, high
angle lobes begin to appear and the low angle lobes become less intense.

Another way is to stack elements and feed them in phase so that their
patterns reinforce. There is a point of diminishing returns though due to
losses in the matching and feed systems. Commercial base antennas up to
about 10db gain are commonly available. A favorite UHF mobile antenna has

2- 5/8 sections stacked one over the other. Because the 2m and 440 FM sections of the Ham bands are very close to harmonically related, this antenna can be constructed to double as a 2m antenna just short of 5/8 for that band too.

I bought a commercial #9007 KD4BUM vertical for $20 that is 5/8 over 1/4 wave collinear at about 9' long. Works great as the mount is interchangeable with HF hamsticks and CB whips and has quite a bit of gain. It is nothing but a fiberglass pole with #16 or 18 wire that goes up 1/4w then windings for a phase reversal + the matching section for the next 5/8 section to look like 3/4w. Very simple in construction for such excellent performance and still short enough for mobile use.

1693. Re: Fiberglass Statues

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 15:21:04 UTC
From: JB <nospam@goofball.net>
Message-ID: <AXxvk.449$393.73@trnddc05>
Source record: 22867

> > So, do they contain stealth antennas? What bands do they cover? How
> > can they increase my enjoyment of "the radio experience?"
> >
At least you don't have to worry about feeding and matching.

1694. Re: Two Meter Longwire Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 16:12:13 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <njdtb49q9b3jphv2lotb1tl8agad60rasj@4ax.com>
Source record: 22868

On Tue, 02 Sep 2008 20:38:12 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>As penitence for this capital crime, you are sentenced to download and
>install EZNEC, 4NEC2, or other NEC2 modeling program:
> http://www.eznec.com (Free demo is good for simple antennas)
> http://home.ict.nl/~arivoors/ (lots of good examples included)
> http://www.si-list.net/swindex.html (old list but still useful)

One more free antenna modeling program.
MMANA-GAL:
<http://mmhamsoft.amateur-radio.ca/mmana/>
I just blundered across this one. Plenty of examples to plagerize.
Optional NEC2 interface using engine from 4NEC2. Looks nice so far.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1695. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 18:10:22 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <OnAvk.9147$cn7.4184@flpi145.ffdc.sbc.com>
Source record: 22869

Richard Clark wrote:
> dfinn1@nc.rr.com wrote:
>> Many US amateurs do not understand how a balun works.
>
> How true - not even fundamental terminology.

http://en.wikipedia.org/wiki/Balun (see 1st photo)
"This is a simple RF *choke* which works as a *balun* by
preventing signals passing along the outside of the braid."

From "The IEEE Dictionary":
"balun (1) A network for the transformation from an
unbalanced line or system to a balanced line or system,
or vice versa."

From an Unabridged Webster's:
"balun - a device for converting a balanced line into
an unbalanced line and vice versa."

10 PRINT "A W2DU balun is both a choke and a balun!"
20 Goto 10
--
73, Cecil http://www.w5dxp.com

1696. Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 19:59:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <beltb4pg9kqqloi7ukjmioofetq4fkl7sr@4ax.com>
Source record: 22870

On Mon, 1 Sep 2008 09:26:26 -0700 (PDT), dfinn1@nc.rr.com wrote:

>In a perfect situation, with a balanced feedline, the only kind of
>current and voltage you have IS common mode!

This statement above contains a serious error of perception while trying to inhabit the debate over BalUns - and it probably corrupts that topic too.

First - a circuit has at a minimum two conductors extending from a source. A circuit by its nature is circular: for every charge carrier that enters it, one must exit it. Continuity is a necessary condition for a circuit. No continuity, no conduction, hence an "Open Circuit."

Second - those two conductors, if viewed at a remote point where they are joined, have equal and opposite paths of current conduction - to and from that point. This is from Kirchoff's law of currents.

Third - this is called Differential Mode current in anticipation of a common modality.

Fourth - if that remote point of connection is replaced with a load, there is a voltage across that load characterized by both the unaltered directions of current, and its now altered magnitude of current.

Fifth - this is called Differential Mode voltage in anticipation of a common modality.

This completes the discussion of the Differential Mode.

If we expand upon this simple model of a source, two wires, and a load and put it into the context of life as we know it; then the circuit operates in the proximity of ground. By convention, ground is called Common.

Ground, by convention is an infinite sink of charge of infinite extent. Hence as a conductor, it is available everywhere - Common. This ground may have either deliberate or accidental conductive relationships to the Differential Circuit.

First - the linkage of ground to the differential circuit can be through an Ohmic path, or by an inductive path, or by a capacitive path. To support conduction, the circuit must contain two conductive paths to ground through any combination of these linkages, and that path must be complete. The apparent source driving conduction through that path will be a combination of the differential source and the differential load as each will have some relationship to ground.

Second - those two conductive paths, if viewed at a remote point where they are joined, have equal and opposite paths of current conduction - to and from that point. This is from Kirchoff's law of currents.

Third - this is called Common Mode current.

Fourth - as the differential circuit is original and establishes both the source and the load; then through the introduction of ground, this Common Mode current is mixed with the original Differential Current and analysis must be performed by substitutions to separate them.

Fifth - the apparent source presents the Common Mode voltage.

This completes the discussion of Common Mode.

The applications of a choke to either circuit is commonplace to control each mode's current. It would appear through the context of discussion in other threads that there is some confusion in what is being choked, and how a choke is properly applied is confounded by that confusion.

It follows that if the transmission line from the source to load suffers from Common Mode currents, that this must be due to a Common Mode voltage gradient extending from the source to the load. If either lead of that transmission line pair were choked, this would disrupt the Differential Mode. If both leads of the transmission line pair were independently choked, this would only double the disruption. However, if both leads were choked in parallel (both lines either coiled as a pair rather than individually, or both lines penetrate a lossy core) then their fields would be contained between them in the Differential Mode, but their Common Mode path (they both share equal conduction in the same direction due to the Common Mode voltage gradient) will be snubbed.

Some BalUns employ these techniques - some don't. BalUns fail by the degree that they don't when Common Mode, as a problem, is injected into the circuit through imbalances. As balance in the proximity of earth and many confounding nearby structures is a forgone failure, choking is a practical necessity for correct BalUn performance. Any issues of BalUn heatings are proof of this choking necessity, and further proof of the demand for additional choking at that point (and frequently elsewhere at wavelength relationships along the affected line).

73's
Richard Clark, KB7QHC

1697. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 22:37:48 UTC
From: dfinn1@nc.rr.com
Message-ID: <7236ccc2-7386-403d-bae5-64d33d7df55c@s20g2000prd.googlegroups.com>
Source record: 22871

On Sep 2, 10:43 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > I disagree. There is no choking, there is merely a polarity and phase
> > shift between the "primary" and "secondary" of the 1:1 balun
> > "transformer".
>
> > The best way I can easily express this is to consider a 1:1 240V 60 Hz
> > isolation transformer (yes, the balun acts theoretically in the same
> > manner). ...
>
> No. But you have focused on your error in thinking/logic/function. An
> RF Transformers does what you state, lengths of transmission line
> carrying RF behave in a different "mode." (uh, I hate that word ...)
>
> Now, if you do some research, you can correct your error(s) ...
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

A 1:1 balun IS an RF transformer. Lengths of transmission line wound
an air core can function as a 1:1 RF transformer. Does this in any way
show you the error you are making? Transformers operate in the same
way whether at 60Hz or RF. So much for your "No" statement which seems
to demonstrate a certain confidence masked in senility.

1698. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 22:44:20 UTC
From: dfinn1@nc.rr.com
Message-ID: <87667096-c80c-4ac3-a535-bf2747640e3a@25g2000prz.googlegroups.com>
Source record: 22872

On Sep 3, 7:18 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > For a balanced transmission line, the characteristic impedance is not
> > expressed in differential mode terms, it IS common mode so I do
> > not know why you ask about differential mode characteristic impedance.
>
> Well, there's your problem. In a properly functioning
> transmission line, whether balanced or unbalanced, the
> currents in the two conductors are differential, not
> common-mode. The two currents are equal in magnitude
> and 180 degrees out of phase and their fields tend
> to cancel which minimizes radiation.
>
> Common-mode currents only occur when the two currents
> are not perfectly differential, i.e. not equal amplitudes
> and/or not 180 degrees out of phase.
> --
> 73, Cecil http://www.w5dxp.com

Nope. The CM choke works precisely because the common mode currents
are mirror images, 180 degrees out of phase. If they weren't, the CM
choke could not act to cancel them and you would need differential
mode chokes to get rid of them. On your balanced feedline, the voltage
at any point is delta between the amplitude of line 1 and 2.

1699. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 22:52:36 UTC
From: dfinn1@nc.rr.com
Message-ID: <2c6d22b5-0830-49c6-9e1e-43e470d3620f@p31g2000prf.googlegroups.com>
Source record: 22873

On Sep 3, 7:44 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > By the way, I have seen so many articles about baluns written by other
> > hams and they tend to repeat the same mistakes and assumptions. Most
> > hams do not understand how a balun works.
>
> Your following statement puts you in that category.
>
> > Inserting a balun does not "choke" the current in the shield, it
> > merely shifts the output phases so that the current (voltage) is
> > directed towards the dipole at all times (see my other post in this
> > thread).
>
> This applies to a W2DU balun. Why would you want
> differential current fields to be introduced into
> the #77 ferrite beads? Their entire purpose is to
> provide a large choking impedance and dissipate
> common-mode power.
> --
> 73, Cecil http://www.w5dxp.com

OK, next time I specify an EMC filter for a switching power supply, I will ensure that the CM choke impedance matches the impedances of the network and the loads so that I can most efficiently conduct RFI from the source to the power line, from common mode at the load to unbalanced load of the power line source. This will ensure maximum interference is imparted on the phase conductor. In fact, I think I will change my nomenclature by refering to the "choke" as a "balun" (they are one and the same; the source doesn't know the difference!) and promptly fail my next FCC submittal. Then I will be invited to retire and of course I will have much more time to be re-educated on rec.radio.amareur.antenna.

1700. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 22:57:56 UTC
From: dfinn1@nc.rr.com
Message-ID: <1eda23ce-cf5e-4fd0-9214-ba1c6ffa6212@q5g2000prf.googlegroups.com>
Source record: 22874

On Sep 3, 8:04 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > Many US amateurs do not understand how a balun works.
>
> Quoting "The ARRL Antenna Book" re a w2du balun:
> "Maxwell made a test balun by slipping 300 #73 beads
> over a piece of RG-303 coaxial cable. The impedance
> of the outer conductor of the cable measured
> 4500+j3800 at 4.0 MHz."
>
> The differential current emerging from the inside
> of the coax braid encounters, e.g. 30 ohms, looking
> toward the antenna. It encounters 4500+j3800 = 5890
> ohms looking back down the outside of the coax.
> Ohm's law does the rest.
>
> Without the beads, that differential current might
> see an impedance lower than 30 ohms looking back
> down the outside of the coax for certain unfortunate
> lengths of coax. The common-mode choking impedance
> forces ~equal currents in each dipole leg at the
> BALanced antenna to UNbalanced coax junction. That
> common-mode choking impedance causes the balun
> function to occur.
> --
> 73, Cecil http://www.w5dxp.com

Because the input and the out windings of the balun must be isolated
at least at RF of interest, OF COURSE there should be a high impedance
between the ballanced current flow and the unbalanced current flow.
However, the impedance of the source looking into the impedance from
the souurce should match source impedance and the impedance of the
load looking in the output winding of the balun should match the load
impedance (say 70 ohms, or 600 ohms or whatever your antenna or
trnasmission line impedance is. The impedence at frequency of interest
between input winding and output winding should be infinity for
isolation purposes (obviously you do not want to mix the unbalanced
input and balanced output currents.

1701. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 22:59:01 UTC
From: dfinn1@nc.rr.com
Message-ID: <1999049a-7443-4cc0-ac9a-8054c544defb@t1g2000pra.googlegroups.com>
Source record: 22875

On Sep 3, 2:10 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Richard Clark wrote:
> > dfi...@nc.rr.com wrote:
> >> Many US amateurs do not understand how a balun works.
>
> > How true - not even fundamental terminology.
>
> http://en.wikipedia.org/wiki/Balun(see 1st photo)
> "This is a simple RF *choke* which works as a *balun* by
> preventing signals passing along the outside of the braid."
>
> From "The IEEE Dictionary":
> "balun (1) A network for the transformation from an
> unbalanced line or system to a balanced line or system,
> or vice versa."
>
> From an Unabridged Webster's:
> "balun - a device for converting a balanced line into
> an unbalanced line and vice versa."
>
> 10 PRINT "A W2DU balun is both a choke and a balun!"
> 20 Goto 10
> --
> 73, Cecil http://www.w5dxp.com

I agree that a balun operating at 14 MHz would be a choke when
operating at 70MHz.

1702. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 23:12:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <RREvk.36501$co7.2989@nlpi066.nbdc.sbc.com>
Source record: 22876

dfinn1@nc.rr.com wrote:
> Nope. The CM choke works precisely because the common mode currents
> are mirror images, 180 degrees out of phase.

You are 100% wrong. From "The IEEE Dictionary":
"common-mode (1)(general) The instantaneous algebraic
average of two signals applied to a balanced circuit,
both signals referred to a common reference."

The "instantaneous algebraic average of two signals"
180 degrees out of phase is ZERO.
--
73, Cecil http://www.w5dxp.com

1703. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 23:14:23 UTC
From: dfinn1@nc.rr.com
Message-ID: <3fd89637-bede-4d7c-a357-d110796591d8@b2g2000prf.googlegroups.com>
Source record: 22877

On Sep 3, 3:59 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Mon, 1 Sep 2008 09:26:26 -0700 (PDT), dfi...@nc.rr.com wrote:
> >In a perfect situation, with a balanced feedline, the only kind of
> >current and voltage you have IS common mode!
>
> This statement above contains a serious error of perception while
> trying to inhabit the debate over BalUns - and it probably corrupts
> that topic too.
>
> First - a circuit has at a minimum two conductors extending from a
> source. A circuit by its nature is circular: for every charge carrier
> that enters it, one must exit it. Continuity is a necessary condition
> for a circuit. No continuity, no conduction, hence an "Open Circuit."
>
> Second - those two conductors, if viewed at a remote point where they
> are joined, have equal and opposite paths of current conduction - to
> and from that point. This is from Kirchoff's law of currents.
>
> Third - this is called Differential Mode current in anticipation of a
> common modality.
>
> Fourth - if that remote point of connection is replaced with a load,
> there is a voltage across that load characterized by both the
> unaltered directions of current, and its now altered magnitude of
> current.
>
> Fifth - this is called Differential Mode voltage in anticipation of a
> common modality.
>
> This completes the discussion of the Differential Mode.
>
> If we expand upon this simple model of a source, two wires, and a load
> and put it into the context of life as we know it; then the circuit
> operates in the proximity of ground. By convention, ground is called
> Common.
>
> Ground, by convention is an infinite sink of charge of infinite
> extent. Hence as a conductor, it is available everywhere - Common.
> This ground may have either deliberate or accidental conductive
> relationships to the Differential Circuit.
>
> First - the linkage of ground to the differential circuit can be
> through an Ohmic path, or by an inductive path, or by a capacitive
> path. To support conduction, the circuit must contain two conductive

> paths to ground through any combination of these linkages, and that
> path must be complete. The apparent source driving conduction through
> that path will be a combination of the differential source and the
> differential load as each will have some relationship to ground.
>
> Second - those two conductive paths, if viewed at a remote point
> where they are joined, have equal and opposite paths of current
> conduction - to and from that point. This is from Kirchoff's law of
> currents.
>
> Third - this is called Common Mode current.
>
> Fourth - as the differential circuit is original and establishes both
> the source and the load; then through the introduction of ground, this
> Common Mode current is mixed with the original Differential Current
> and analysis must be performed by substitutions to separate them.
>
> Fifth - the apparent source presents the Common Mode voltage.
>
> This completes the discussion of Common Mode.
>
> The applications of a choke to either circuit is commonplace to
> control each mode's current. It would appear through the context of
> discussion in other threads that there is some confusion in what is
> being choked, and how a choke is properly applied is confounded by
> that confusion.
>
> It follows that if the transmission line from the source to load
> suffers from Common Mode currents, that this must be due to a Common
> Mode voltage gradient extending from the source to the load. If
> either lead of that transmission line pair were choked, this would
> disrupt the Differential Mode. If both leads of the transmission line
> pair were independently choked, this would only double the disruption.
> However, if both leads were choked in parallel (both lines either
> coiled as a pair rather than individually, or both lines penetrate a
> lossy core) then their fields would be contained between them in the
> Differential Mode, but their Common Mode path (they both share equal
> conduction in the same direction due to the Common Mode voltage
> gradient) will be snubbed.
>
> Some BalUns employ these techniques - some don't. BalUns fail by the
> degree that they don't when Common Mode, as a problem, is injected
> into the circuit through imbalances. As balance in the proximity of
> earth and many confounding nearby structures is a forgone failure,
> choking is a practical necessity for correct BalUn performance. Any
> issues of BalUn heatings are proof of this choking necessity, and
> further proof of the demand for additional choking at that point (and
> frequently elsewhere at wavelength relationships along the affected
> line).
>

> 73's
> Richard Clark, KB7QHC

Let me put it this way (again very simplifed): How do you explain a residential 208V power source where you have 120 V from line 1 and line 2 to ground but 240V with respect to each other. You 240V household appliances operate this way. Ecept for the fact that the lines are 120 degrees out of phase phase (insread of 180 because we use a delta system instead of Y, but this is not that important for this discussion) this is nearly a BALANCED feed, where lines 1 and 2 degrees out of phase at 60 Hz and the voltage of interest is the summation of the two lines. Nearly every home in the USA operates this way. In Europe, 240 V is usually obtained by the voltage difference between line 1 (240V) and earth (0V). That is an unbalanced feed. You can insert a 1:1 isolation transformer using the European system at the input and create the balanced USA system at the output by drawing +120 and -120 at from the output windings assigning imaginary isolated earth at centertap. The isolated ground CANNOT conduct tio real ground if the winding to winding impedance is infinity. Basically, hams' 1:1 baluns do much the same thing: They isolate the real ground as such and prevent currents from flowing down the input ground shield. On this ng in a short space I cannot think of a simpler way to express this although I expect to see many statements (you can't equate 60Hz to RF!). Yes you can; a transformer operates as a transformer in the same wayat any frequency providing you design it properly for the frequency of interest. This subject is not nearly so complicated as some in this group makes it out to be and the topic certainly does not rate articles in amateur publications any more than basic application of ohm's law does.

1704. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 23:18:39 UTC
From: dfinn1@nc.rr.com
Message-ID: <c30f796c-75c1-4551-9193-457ef6b17ad1@a3g2000prm.googlegroups.com>
Source record: 22878

On Sep 3, 7:12 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > Nope. The CM choke works precisely because the common mode currents
> > are mirror images, 180 degrees out of phase.
>
> You are 100% wrong. From "The IEEE Dictionary":
> "common-mode (1)(general) The instantaneous algebraic
> average of two signals applied to a balanced circuit,
> both signals referred to a common reference."
>
> The "instantaneous algebraic average of two signals"
> 180 degrees out of phase is ZERO.
> --
> 73, Cecil http://www.w5dxp.com

So that means I get 0 volts when I touch one side of the 120V in my
electrical service to the 120V other side? I was afraid I might see
240V.

1705. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 23:18:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <8VEvk.9195$cn7.799@flpi145.ffdc.sbc.com>
Source record: 22879

dfinn1@nc.rr.com wrote:
> I agree that a balun operating at 14 MHz would be a choke when
> operating at 70MHz.

You would do well to agree that a well-designed W2DU balun
operating at 14 MHz is choking the heck out of the 14 MHz
common-mode current in order to achieve the balun function.

You seem to have the IEEE definitions of differential
signals and common-mode signals exactly reversed. Because
of that misconception, might you be the one who doesn't
understand how baluns work?
--
73, Cecil http://www.w5dxp.com

1706. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 23:25:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <q%Evk.9197$cn7.8549@flpi145.ffdc.sbc.com>
Source record: 22880

dfinn1@nc.rr.com wrote:
> So that means I get 0 volts when I touch one side of the 120V in my
> electrical service to the 120V other side? I was afraid I might see
> 240V.

If those signals are equal in amplitude and 180 degrees out
of phase, it means they are *differential*, you will see 240v,
and you had better not short them together. OTOH, if they are
common-mode signals, they are in-phase and you can short them
together to your heart's content - no current will flow.

Again, you seem to have the IEEE definitions of "differential"
and "common-mode" exactly reversed in your head.
--
73, Cecil http://www.w5dxp.com

1707. Re: r7 vertical resonates too high

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-03 23:37:24 UTC
From: Jim-NN7K
Message-ID: <0bFvk.9198$cn7.6802@flpi145.ffdc.sbc.com>
Source record: 22881

Richard Clark wrote:
> On Wed, 3 Sep 2008 05:33:58 +0100, coyotevergreen
> <coyotevergreen.303dd39@radiobanter.com> wrote:
>
>> any ideas?
>
> Radials/counterpoise went south.
>
> 73's
> Richard Clark, KB7QHC

Ill second that, OR, maybe a crudded joint below the point where the traps start (remove, clean, and coat with something like Noalox), then reassemble. Also, see : http://www.iol.ie/~bravo/r7_vertical.htm and: http://www.telusplanet.net/public/telwest/R7/cushcraft_trap.htm

for info on R-7 repair-- Jim NN7K

1708. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 00:05:32 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B0ECD1C33BD9mcoslocomcastnet@216.196.97.136>
Source record: 22882

"JB" <nospam@goofball.net> wrote in news:gQ2vk.206$Af3.111@trnddc06:

> God's plan won't be usurped, but we can petition Him with prayer over
> some points. This leads us to another possible conclusion.

I was listening to a preacher just last night.

According to him, All is preordinated. God knows the outcome of everything and every single thing that has and will ever happen. All is predestinated. This has been known from before he created the unuverse

Do your prayers make any difference, they really don't, because God knew you were going to pray, and he knew his response. You had no choice. You did what you did because God made you do it that way.

This of course means that God knows the predestination of every person he created, which means that he knew that he was knowingly condemming a whole lot of people to an eternity of torture.

Nice guy.

1709. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 00:43:03 UTC
From: dfinn1@nc.rr.com
Message-ID: <bf5f801a-b3ff-403b-9de4-cc34589a8922@z11g2000prl.googlegroups.com>
Source record: 22883

On Sep 3, 7:18 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > I agree that a balun operating at 14 MHz would be a choke when
> > operating at 70MHz.
>
> You would do well to agree that a well-designed W2DU balun
> operating at 14 MHz is choking the heck out of the 14 MHz
> common-mode current in order to achieve the balun function.

I wouldn't say it was choking the common mode.mode current, I would say it is isolating it from diff mode current by simply creating an isolated ground reference point (you could define it at centertap if you were so inclined). Of course I would agree that the impedance between diff mode current at the input and CM current in the output had better be very high, infinity would be best, but the finite impedances to load and source respectively should match the balun. If you want to call the ground isolation function "choking", that use of this colloquialism is fine with me but FYI that is not the traditional vernacular for that that application. Also, if the W2DU balun is referred to as the "ugly balun", I do believe the use of a bifilar winding around an air core to create an RF transformer has been around for more than 100 years so I do not understand why it is so-named after a contemporary ham. It is rather simple to go from bifilar enameled copper to using the shield and inner conductor of a coax as "bifilar" conductors. All of this stuff is pretty basic EE (Associate level, not even Bachelors) and I hesitate to spend much more time on it.

1710. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 00:46:56 UTC
From: dfinn1@nc.rr.com
Message-ID: <5a65d428-3c22-4bd1-966b-116e608b0356@k36g2000pri.googlegroups.com>
Source record: 22884

On Sep 3, 7:25 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > So that means I get 0 volts when I touch one side of the 120V in my
> > electrical service to the 120V other side? I was afraid I might see
> > 240V.
>
> If those signals are equal in amplitude and 180 degrees out
> of phase, it means they are *differential*, you will see 240v,
> and you had better not short them together.

OTOH, if they are
> common-mode signals, they are in-phase and you can short them
> together to your heart's content - no current will flow.
>
> Again, you seem to have the IEEE definitions of "differential"
> and "common-mode" exactly reversed in your head.
> --
> 73, Cecil http://www.w5dxp.com

Really? Do you believe the currents in a resonant 1/2 wave dipole are
common mode or differential mode?

1711. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:37:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nhlh$eb7$1@news.albasani.net>
Source record: 22885

Mike Coslo wrote:
> "JB" <nospam@goofball.net> wrote in news:gQ2vk.206$Af3.111@trnddc06:
> ...
> Nice guy.
>

Wow, just imagine, some guy (a God) claims to know all about "you."

Ain't much of a claim huh, a complex mind would be much more difficult,
huh? ROFLOL "He" might have to guess then ... ;-)

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1712. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:43:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nhvvefb1@news.albasani.net>
Source record: 22886

dfinn1@nc.rr.com wrote:

> ...
> I agree that a balun operating at 14 MHz would be a choke when
> operating at 70MHz.

Oh, gee, then you would also agree that a ferrite core around a power supply lead would begin to act as a reactance when the DC line had an AC component travel its' conductive route--you will be happy to realize most would concur! ROFLOL

Lame ... need I really add more?

Regards,
JS
--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1713. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:45:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9ni3keev1@news.albasani.net>
Source record: 22887

dfinn1@nc.rr.com wrote:

> ...
> I wouldn't say it was choking the common mode.mode current, I would
> say it is isolating it from diff mode current by simply creating an
> isolated ground reference point (you could define it at centertap if
> you were so inclined). Of course I would agree that the impedance
> between diff mode current at the input and CM current in the output
> had better be very high, infinity would be best, but the finite
> impedances to load and source respectively should match the balun. If
> you want to call the ground isolation function "choking", that use of
> this colloquialism is fine with me but FYI that is not the traditional
> vernacular for that that application. Also, if the W2DU balun is
> referred to as the "ugly balun", I do believe the use of a bifilar
> winding around an air core to create an RF transformer has been around
> for more than 100 years so I do not understand why it is so-named
> after a contemporary ham. It is rather simple to go from bifilar
> enameled copper to using the shield and inner conductor of a coax as
> "bifilar" conductors. All of this stuff is pretty basic EE (Associate
> level, not even Bachelors) and I hesitate to spend much more time on
> it.

One thing I can say for sure, you are an idiot ... good luck.

What an utter waste of time ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1714. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:47:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9ni92eev2@news.albasani.net>
Source record: 22888

dfinn1@nc.rr.com wrote:

> ...
> Because the input and the out windings of the balun must be isolated
> at least at RF of interest, OF COURSE there should be a high impedance
> between the ballanced current flow and the unbalanced current flow.
> However, the impedance of the source looking into the impedance from
> the souurce should match source impedance and the impedance of the
> load looking in the output winding of the balun should match the load
> impedance (say 70 ohms, or 600 ohms or whatever your antenna or
> trnasmission line impedance is. The impedence at frequency of interest
> between input winding and output winding should be infinity for
> isolation purposes (obviously you do not want to mix the unbalanced
> input and balanced output currents.

Hey, are you just a plain idot, or someone who lacks any ability at all
to apply logic? ROFLOL

In all my time here, years!, I have never seen as large an idiot as you!
My Gawd, you make the dummies here begin to seem logical!

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1715. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:49:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nicpeev3@news.albasani.net>
Source record: 22889

Richard Clark wrote:
> On Mon, 1 Sep 2008 09:26:26 -0700 (PDT), dfinn1@nc.rr.com wrote:
>
>> In a perfect situation, with a balanced feedline, the only kind of
>> current and voltage you have IS common mode!
>
> This statement above contains a serious error of perception while
> trying to inhabit the debate over BalUns - and it probably corrupts
> that topic too.
>
> First - a circuit has at a minimum two conductors extending from a
> source. A circuit by its nature is circular: for every charge carrier
> that enters it, one must exit it. Continuity is a necessary condition
> for a circuit. No continuity, no conduction, hence an "Open Circuit."
>
> Second - those two conductors, if viewed at a remote point where they
> are joined, have equal and opposite paths of current conduction - to
> and from that point. This is from Kirchoff's law of currents.
>
> Third - this is called Differential Mode current in anticipation of a
> common modality.
>
> Fourth - if that remote point of connection is replaced with a load,
> there is a voltage across that load characterized by both the
> unaltered directions of current, and its now altered magnitude of
> current.
>
> Fifth - this is called Differential Mode voltage in anticipation of a
> common modality.
>
> This completes the discussion of the Differential Mode.
>
> If we expand upon this simple model of a source, two wires, and a load
> and put it into the context of life as we know it; then the circuit
> operates in the proximity of ground. By convention, ground is called
> Common.
>
> Ground, by convention is an infinite sink of charge of infinite
> extent. Hence as a conductor, it is available everywhere - Common.
> This ground may have either deliberate or accidental conductive
> relationships to the Differential Circuit.
>
> First - the linkage of ground to the differential circuit can be
> through an Ohmic path, or by an inductive path, or by a capacitive

> path. To support conduction, the circuit must contain two conductive
> paths to ground through any combination of these linkages, and that
> path must be complete. The apparent source driving conduction through
> that path will be a combination of the differential source and the
> differential load as each will have some relationship to ground.
>
> Second - those two conductive paths, if viewed at a remote point
> where they are joined, have equal and opposite paths of current
> conduction - to and from that point. This is from Kirchoff's law of
> currents.
>
> Third - this is called Common Mode current.
>
> Fourth - as the differential circuit is original and establishes both
> the source and the load; then through the introduction of ground, this
> Common Mode current is mixed with the original Differential Current
> and analysis must be performed by substitutions to separate them.
>
> Fifth - the apparent source presents the Common Mode voltage.
>
> This completes the discussion of Common Mode.
>
> The applications of a choke to either circuit is commonplace to
> control each mode's current. It would appear through the context of
> discussion in other threads that there is some confusion in what is
> being choked, and how a choke is properly applied is confounded by
> that confusion.
>
> It follows that if the transmission line from the source to load
> suffers from Common Mode currents, that this must be due to a Common
> Mode voltage gradient extending from the source to the load. If
> either lead of that transmission line pair were choked, this would
> disrupt the Differential Mode. If both leads of the transmission line
> pair were independently choked, this would only double the disruption.
> However, if both leads were choked in parallel (both lines either
> coiled as a pair rather than individually, or both lines penetrate a
> lossy core) then their fields would be contained between them in the
> Differential Mode, but their Common Mode path (they both share equal
> conduction in the same direction due to the Common Mode voltage
> gradient) will be snubbed.
>
> Some BalUns employ these techniques - some don't. BalUns fail by the
> degree that they don't when Common Mode, as a problem, is injected
> into the circuit through imbalances. As balance in the proximity of
> earth and many confounding nearby structures is a forgone failure,
> choking is a practical necessity for correct BalUn performance. Any
> issues of BalUn heatings are proof of this choking necessity, and
> further proof of the demand for additional choking at that point (and
> frequently elsewhere at wavelength relationships along the affected
> line).

>
> 73's
> Richard Clark, KB7QHC

My gawd, an idiot which takes a hundrend sentences to say a simple point
is little better than an idiot which cannot even generate one sentence!

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1716. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:51:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nig8eev4@news.albasani.net>
Source record: 22890

dfinn1@nc.rr.com wrote:

>
> Let me put it this way (again very simplifed): How do you explain a
> residential 208V power source where you have 120 V from line 1 and
> line 2 to ground but 240V with respect to each other. You 240V
> household appliances operate this way. Ecept for the fact that the
> lines are 120 degrees out of phase phase (insread of 180 because we
> use a delta system instead of Y, but this is not that important for
> this discussion) this is nearly a BALANCED feed, where lines 1 and 2
> degrees out of phase at 60 Hz and the voltage of interest is the
> summation of the two lines. Nearly every home in the USA operates this
> way. In Europe, 240 V is usually obtained by the voltage difference
> between line 1 (240V) and earth (0V). That is an unbalanced feed. You
> can insert a 1:1 isolation transformer using the European system at
> the input and create the balanced USA system at the output by drawing
> +120 and -120 at from the output windings assigning imaginary isolated
> earth at centertap. The isolated ground CANNOT conduct tio real ground
> if the winding to winding impedance is infinity. Basically, hams' 1:1
> baluns do much the same thing: They isolate the real ground as such
> and prevent currents from flowing down the input ground shield. On
> this ng in a short space I cannot think of a simpler way to express
> this although I expect to see many statements (you can't equate 60Hz
> to RF!). Yes you can; a transformer operates as a transformer in the
> same wayat any frequency providing you design it properly for the
> frequency of interest. This subject is not nearly so complicated as
> some in this group makes it out to be and the topic certainly does not
> rate articles in amateur publications any more than basic application
> of ohm's law does.

Yanno, you really deserve richard. Did you ever thing about getting a
place in the "gay bay" together? ROFLOL!

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1717. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:54:16 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <s5Ivk.448$sq3.441@trnddc07>
Source record: 22891

<dfinn1@nc.rr.com> wrote in message
news:3fd89637-bede-4d7c-a357-d110796591d8@b2g2000prf.googlegroups.com...
On Sep 3, 3:59 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Mon, 1 Sep 2008 09:26:26 -0700 (PDT), dfi...@nc.rr.com wrote:
> >In a perfect situation, with a balanced feedline, the only kind of
> >current and voltage you have IS common mode!
>
> This statement above contains a serious error of perception while
> trying to inhabit the debate over BalUns - and it probably corrupts
> that topic too.
>
> First - a circuit has at a minimum two conductors extending from a
> source. A circuit by its nature is circular: for every charge carrier
> that enters it, one must exit it. Continuity is a necessary condition
> for a circuit. No continuity, no conduction, hence an "Open Circuit."
>
> Second - those two conductors, if viewed at a remote point where they
> are joined, have equal and opposite paths of current conduction - to
> and from that point. This is from Kirchoff's law of currents.
>
> Third - this is called Differential Mode current in anticipation of a
> common modality.
>
> Fourth - if that remote point of connection is replaced with a load,
> there is a voltage across that load characterized by both the
> unaltered directions of current, and its now altered magnitude of
> current.
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>
> Ground, by convention is an infinite sink of charge of infinite
> extent. Hence as a conductor, it is available everywhere - Common.
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> path. To support conduction, the circuit must contain two conductive
> paths to ground through any combination of these linkages, and that
> path must be complete. The apparent source driving conduction through
> that path will be a combination of the differential source and the
> differential load as each will have some relationship to ground.
>
> Second - those two conductive paths, if viewed at a remote point
> where they are joined, have equal and opposite paths of current
> conduction - to and from that point. This is from Kirchoff's law of
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>
> Third - this is called Common Mode current.
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> Fourth - as the differential circuit is original and establishes both
> the source and the load; then through the introduction of ground, this
> Common Mode current is mixed with the original Differential Current
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> control each mode's current. It would appear through the context of
> discussion in other threads that there is some confusion in what is
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> that confusion.
>
> It follows that if the transmission line from the source to load
> suffers from Common Mode currents, that this must be due to a Common
> Mode voltage gradient extending from the source to the load. If
> either lead of that transmission line pair were choked, this would
> disrupt the Differential Mode. If both leads of the transmission line
> pair were independently choked, this would only double the disruption.
> However, if both leads were choked in parallel (both lines either
> coiled as a pair rather than individually, or both lines penetrate a
> lossy core) then their fields would be contained between them in the
> Differential Mode, but their Common Mode path (they both share equal
> conduction in the same direction due to the Common Mode voltage
> gradient) will be snubbed.
>
> Some BalUns employ these techniques - some don't. BalUns fail by the
> degree that they don't when Common Mode, as a problem, is injected
> into the circuit through imbalances. As balance in the proximity of
> earth and many confounding nearby structures is a forgone failure,
> choking is a practical necessity for correct BalUn performance. Any
> issues of BalUn heatings are proof of this choking necessity, and
> further proof of the demand for additional choking at that point (and
> frequently elsewhere at wavelength relationships along the affected

> line).
>
> 73's
> Richard Clark, KB7QHC

Let me put it this way (again very simplifed): How do you explain a residential 208V power source where you have 120 V from line 1 and line 2 to ground but 240V with respect to each other. You 240V household appliances operate this way. Ecept for the fact that the lines are 120 degrees out of phase phase (insread of 180 because we use a delta system instead of Y, but this is not that important for this discussion) this is nearly a BALANCED feed, where lines 1 and 2 degrees out of phase at 60 Hz and the voltage of interest is the summation of the two lines. Nearly every home in the USA operates this way. In Europe, 240 V is usually obtained by the voltage difference between line 1 (240V) and earth (0V). That is an unbalanced feed. You can insert a 1:1 isolation transformer using the European system at the input and create the balanced USA system at the output by drawing +120 and -120 at from the output windings assigning imaginary isolated earth at centertap. The isolated ground CANNOT conduct tio real ground if the winding to winding impedance is infinity. Basically, hams' 1:1 baluns do much the same thing: They isolate the real ground as such and prevent currents from flowing down the input ground shield. On this ng in a short space I cannot think of a simpler way to express this although I expect to see many statements (you can't equate 60Hz to RF!). Yes you can; a transformer operates as a transformer in the same wayat any frequency providing you design it properly for the frequency of interest. This subject is not nearly so complicated as some in this group makes it out to be and the topic certainly does not rate articles in amateur publications any more than basic application of ohm's law does.

Hi Dfinn

I realize that you have asked this question to Richard, who is far better prepared to answer than I am. But, it seems that you are confused about how two sine waves add. Maybe I am wrong, and you do know how two sine wave voltages generated at different times and are connected in series combine to being other than 180 degrees from terminal to terminal.
All the 208 power lines I am familiar with *are* 208 from terminal to terminal when each leg is 120 "terminal to center". Where did you get the "240"?

Jerry KD6JDJ

1718. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:54:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nilceev5@news.albasani.net>
Source record: 22892

dfinn1@nc.rr.com wrote:

>
> A 1:1 balun IS an RF transformer. Lengths of transmission line wound
> an air core can function as a 1:1 RF transformer. Does this in any way
> show you the error you are making? Transformers operate in the same
> way whether at 60Hz or RF. So much for your "No" statement which seems
> to demonstrate a certain confidence masked in senility.

Actually, NO!

A 1:1 balun is a TLT, as stated, properly, by Ownen ...

But, what you speak of is frequently an RF Transformer ... how you keep repeating that mistake speaks to your in ability to do research and educate yourself ...

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1719. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:55:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nimaeev6@news.albasani.net>
Source record: 22893

Cecil Moore wrote:
> dfinn1@nc.rr.com wrote:
>> Nope. The CM choke works precisely because the common mode currents
>> are mirror images, 180 degrees out of phase.
>
> You are 100% wrong. From "The IEEE Dictionary":
> "common-mode (1)(general) The instantaneous algebraic
> average of two signals applied to a balanced circuit,
> both signals referred to a common reference."
>
> The "instantaneous algebraic average of two signals"
> 180 degrees out of phase is ZERO.

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1720. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 02:56:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nioqeev7@news.albasani.net>
Source record: 22894

Cecil Moore wrote:
> dfinn1@nc.rr.com wrote:
>> Nope. The CM choke works precisely because the common mode currents
>> are mirror images, 180 degrees out of phase.
>
> You are 100% wrong. From "The IEEE Dictionary":
> "common-mode (1)(general) The instantaneous algebraic
> average of two signals applied to a balanced circuit,
> both signals referred to a common reference."
>
> The "instantaneous algebraic average of two signals"
> 180 degrees out of phase is ZERO.

Cecil:

You must be getting old ... stop man! :-)

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1721. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 03:30:51 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B0F897019784nonenowhere@61.9.191.5>
Source record: 22895

"Jerry" <jerrymartes@verizon.net> wrote in
news:s5Ivk.448$sq3.441@trnddc07:
...
> I realize that you have asked this question to Richard, who is far
> better
> prepared to answer than I am. But, it seems that you are confused
> about how two sine waves add. Maybe I am wrong, and you do know how
> two sine wave voltages generated at different times and are connected
> in series combine to being other than 180 degrees from terminal to
> terminal.
> All the 208 power lines I am familiar with *are* 208 from terminal
> to
> terminal when each leg is 120 "terminal to center". Where did you
> get the "240"?
>
> Jerry KD6JDJ
>
>

Jerry, in the three wire system with 180° phase difference between Line1 and Line2 wrt Neutral (the centre wire) the voltage Line1 wrt Line2 is exactly twice the Line1 to Neutral voltage.

You probably don't use the word Neutral over there, it is the word used for four wire three phase systems and it is equally applicable for a three wire two phase system where the Neutral wire carries the "imbalance" current.

None of this is a good analogy to a two wire open transmission line at radio frequencies, principally because the length of conductors at power frequencies is usually a very small part of a wavelength and can be approximated well using a simpler analytical model than the traditional 'Telegrapher's' equations applied to transmission lines.

Those who resort to explaining radio frequency transmission lines and transformers using 60Hz models need to justify the accuracy / limits of the approximation. The low frequency model does not explain high frequency roll-off in RF transformers and inductors, so it is clearly incomplete.

Almost all of this discussion is using lumped circuit analysis (a low frequency model) to explain not just transmission lines, but conductors with significant mutual coupling (the nominal radiator and its feedline).

Owen

>

1722. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 03:42:54 UTC
From: dfinn1@nc.rr.com
Message-ID: <788d2c94-d44a-42d1-aadd-a8d2cdd97c0b@k36g2000pri.googlegroups.com>
Source record: 22896

On Sep 3, 10:56 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Cecil Moore wrote:
> > dfi...@nc.rr.com wrote:
> >> Nope. The CM choke works precisely because the common mode currents
> >> are mirror images, 180 degrees out of phase.
>
> > You are 100% wrong. From "The IEEE Dictionary":
> > "common-mode (1)(general) The instantaneous algebraic
> > average of two signals applied to a balanced circuit,
> > both signals referred to a common reference."
>
> > The "instantaneous algebraic average of two signals"
> > 180 degrees out of phase is ZERO.
>
> Cecil:
>
> You must be getting old ... stop man! :-)
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

Yes, ZERO with respect to the isolated reference point. They are
measured with respect to each other, not ground. No current should
flow through the ground line if the feed is perfectly balanced.

1723. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 03:47:08 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <0TIvk.485$jE1.136@trnddc03>
Source record: 22897

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B0F897019784nonenowhere@61.9.191.5...
> "Jerry" <jerrymartes@verizon.net> wrote in
> news:s5Ivk.448$sq3.441@trnddc07:
> ...
>> I realize that you have asked this question to Richard, who is far
>> better
>> prepared to answer than I am. But, it seems that you are confused
>> about how two sine waves add. Maybe I am wrong, and you do know how
>> two sine wave voltages generated at different times and are connected
>> in series combine to being other than 180 degrees from terminal to
>> terminal.
>> All the 208 power lines I am familiar with *are* 208 from terminal
>> to
>> terminal when each leg is 120 "terminal to center". Where did you
>> get the "240"?
>>
>> Jerry KD6JDJ
>>
>>
>
> Jerry, in the three wire system with 180° phase difference between Line1
> and Line2 wrt Neutral (the centre wire) the voltage Line1 wrt Line2 is
> exactly twice the Line1 to Neutral voltage.
>
> You probably don't use the word Neutral over there, it is the word used
> for four wire three phase systems and it is equally applicable for a
> three wire two phase system where the Neutral wire carries the
> "imbalance" current.
>
> None of this is a good analogy to a two wire open transmission line at
> radio frequencies, principally because the length of conductors at power
> frequencies is usually a very small part of a wavelength and can be
> approximated well using a simpler analytical model than the traditional
> 'Telegrapher's' equations applied to transmission lines.
>
> Those who resort to explaining radio frequency transmission lines and
> transformers using 60Hz models need to justify the accuracy / limits of
> the approximation. The low frequency model does not explain high
> frequency roll-off in RF transformers and inductors, so it is clearly
> incomplete.
>
> Almost all of this discussion is using lumped circuit analysis (a low

> frequency model) to explain not just transmission lines, but conductors
> with significant mutual coupling (the nominal radiator and its feedline).
>
> Owen
>
Hi Owen

My post to the other guy evidently read as though I was asking a question. Actually I read the original post as to have errors and was expecting some lanswer to justify how 120 degrees can be associated with a set of only 2 terminals. There is *no* 240 volt pair of terminals available in a 208/120 power system.
Here in "the states" 208/120 refers to a 3 phase system Y circuit. That means there are 3 sets of single phase 120 volt circuits available at the panel. Also available is a set of three terminals that are 208 volts 3 phase.

Jerry
>
>
>>
>

1724. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 03:47:17 UTC
From: dfinn1@nc.rr.com
Message-ID: <98c0a819-a951-4ef1-ab4f-97be3c233ca8@i20g2000prf.googlegroups.com>
Source record: 22898

On Sep 3, 11:30 pm, Owen Duffy <n...@no.where> wrote:
> "Jerry" <jerrymar...@verizon.net> wrote innews:s5Ivk.448$sq3.441@trnddc07:
> ...
>
> > I realize that you have asked this question to Richard, who is far
> > better
> > prepared to answer than I am. But, it seems that you are confused
> > about how two sine waves add. Maybe I am wrong, and you do know how
> > two sine wave voltages generated at different times and are connected
> > in series combine to being other than 180 degrees from terminal to
> > terminal.
> > All the 208 power lines I am familiar with *are* 208 from terminal
> > to
> > terminal when each leg is 120 "terminal to center". Where did you
> > get the "240"?
>
> > Jerry KD6JDJ
>
> Jerry, in the three wire system with 180° phase difference between Line1
> and Line2 wrt Neutral (the centre wire) the voltage Line1 wrt Line2 is
> exactly twice the Line1 to Neutral voltage.
>
> You probably don't use the word Neutral over there, it is the word used
> for four wire three phase systems and it is equally applicable for a
> three wire two phase system where the Neutral wire carries the
> "imbalance" current.
>
> None of this is a good analogy to a two wire open transmission line at
> radio frequencies, principally because the length of conductors at power
> frequencies is usually a very small part of a wavelength and can be
> approximated well using a simpler analytical model than the traditional
> 'Telegrapher's' equations applied to transmission lines.
>
> Those who resort to explaining radio frequency transmission lines and
> transformers using 60Hz models need to justify the accuracy / limits of
> the approximation. The low frequency model does not explain high
> frequency roll-off in RF transformers and inductors, so it is clearly
> incomplete.
>
> Almost all of this discussion is using lumped circuit analysis (a low
> frequency model) to explain not just transmission lines, but conductors
> with significant mutual coupling (the nominal radiator and its feedline).
>
> Owen

>
>
>
> - Hide quoted text -
>
> - Show quoted text -

I found it difficult to go beyond the simplistic 60 Hz analogy in this discussion to best decribe my concept (when writing on usenet). All one can hope for is that the general idea comes out and hope people realize that the variables you mention do exist as well and do not detract from the very fundamental concepts.

1725. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 03:59:46 UTC
From: dfinn1@nc.rr.com
Message-ID: <f962834c-c983-43f4-961e-76c8d9860b68@t1g2000pra.googlegroups.com>
Source record: 22899

On Sep 3, 7:12 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > Nope. The CM choke works precisely because the common mode currents
> > are mirror images, 180 degrees out of phase.
>
> You are 100% wrong. From "The IEEE Dictionary":
> "common-mode (1)(general) The instantaneous algebraic
> average of two signals applied to a balanced circuit,
> both signals referred to a common reference."
>
> The "instantaneous algebraic average of two signals"
> 180 degrees out of phase is ZERO.
> --
> 73, Cecil http://www.w5dxp.com

You reference line 1 to line 2. You put your RF voltmeter acroos the two conductors. When doing so you measure two times the voltage that line 1 or line 2 reads with respect to an imaginary isolated grounbd at the centertap the line 1 or 2 measures separately with respect to centertap. OF COURSE the summation of all points on the common reference is zero at all locations at all times, that is why it is called an isolated "ground"! That is why I said earlier you could connect the centertap of the isolated CM side to real ground with no effect on the circuit in an earlier post.

1726. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:03:12 UTC
From: dfinn1@nc.rr.com
Message-ID: <76b60152-33e1-4599-b2fb-72c27380b7fa@t1g2000pra.googlegroups.com>
Source record: 22900

On Sep 3, 7:18 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > I agree that a balun operating at 14 MHz would be a choke when
> > operating at 70MHz.
>
> You would do well to agree that a well-designed W2DU balun
> operating at 14 MHz is choking the heck out of the 14 MHz
> common-mode current in order to achieve the balun function.
>
> You seem to have the IEEE definitions of differential
> signals and common-mode signals exactly reversed. Because
> of that misconception, might you be the one who doesn't
> understand how baluns work?
> --
> 73, Cecil http://www.w5dxp.com

Cecil, if a transmission line operated in the way you think, it would be radiating fields all along its length transmitting RF all along the length of the line. Nothing would get the antenna. The conductors in the lines MUST carry mirror image currents and voltages to indeed cause the cancellation of fileds you speak about. THAT is how energy gets to the antenna. Ever hear of a ground loop?

1727. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:08:18 UTC
From: dfinn1@nc.rr.com
Message-ID: <1f543c64-bc6b-4c1e-8620-a70e16ca334f@s9g2000prg.googlegroups.com>
Source record: 22801

On Sep 3, 10:43 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > I agree that a balun operating at 14 MHz would be a choke when
> > operating at 70MHz.
>
> Oh, gee, then you would also agree that a ferrite core around a power
> supply lead would begin to act as a reactance when the DC line had an AC
> component travel its' conductive route--you will be happy to realize
> most would concur! ROFLOL
>
> Lame ... need I really add more?
>
> Regards,
> JS
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

I am not sure where you are coming from. Are you trying to say that differential mode interference often exists alongside CM interference and diff mode can be filtered by coiling phase wires over a ferrite core? Works for me. I agree. Now, what has that got to do with the discussion?

1728. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:10:11 UTC
From: dfinn1@nc.rr.com
Message-ID: <b3dcd5e1-a0d7-41e2-9de5-7650475c3772@i20g2000prf.googlegroups.com>
Source record: 22802

On Sep 3, 10:45 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
>
> > ...
>
>
>
>
>
> > I wouldn't say it was choking the common mode.mode current, I would
> > say it is isolating it from diff mode current by simply creating an
> > isolated ground reference point (you could define it at centertap if
> > you were so inclined). Of course I would agree that the impedance
> > between diff mode current at the input and CM current in the output
> > had better be very high, infinity would be best, but the finite
> > impedances to load and source respectively should match the balun. If
> > you want to call the ground isolation function "choking", that use of
> > this colloquialism is fine with me but FYI that is not the traditional
> > vernacular for that that application. Also, if the W2DU balun is
> > referred to as the "ugly balun", I do believe the use of a bifilar
> > winding around an air core to create an RF transformer has been around
> > for more than 100 years so I do not understand why it is so-named
> > after a contemporary ham. It is rather simple to go from bifilar
> > enameled copper to using the shield and inner conductor of a coax as
> > "bifilar" conductors. All of this stuff is pretty basic EE (Associate
> > level, not even Bachelors) and I hesitate to spend much more time on
> > it.
>
> One thing I can say for sure, you are an idiot ... good luck.
>
> What an utter waste of time ...
>
> Regards,
> JS

Coming from you that is a compliment. I recommend you stop wasting
your time on things you know nothing about. If you agreed with me,
then I would have to take another look at what I was saying.

1729. Re: Unwinantennas.com Web Page

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:10:52 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <2846ddb6-cf7b-4a4d-90ee-8143ec1f9604@s20g2000prd.googlegroups.com>
Source record: 22803

On Aug 30, 11:22 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Aug 30, 4:45 am, Highland Ham <abcgm0csz.kn6wh...@dsl.pipex.com>
> wrote:
>
>
>
>
>
> > > I have been advised not to publish until I get permission from the
> > > patent examiner.
> > > As a private entity the examiner can advise on write up and claims so
> > > until that is finalized
> > > my hands are tied. Sorry about that but moneystakes are involved .
> > > Regards
> > > Art
>
> > ==
> > As a (presumably) radio 'amateur' you could have made your 'invention'
> > available under a General Public Licence , like the GPL applicable to
> > open source software (ref Linux)
>
> > The number of people now making a good living by developing open source
> > software under the GPL show that personal benefit and sharing can go
> > hand in hand.
>
> > Frank   GM0CSZ / KN6WH
>
> I have not heard of that. I have always shared my work with amateurs
> even tho
> it makes you a target for naysayers and loudmouths. But to give out
> how one can make a
> an efficient small antenna before it is cleared by the patent office
> puts a lot of money at stake
> and with the sunspot activety at it's lowpoint it does not hurt to
> wait a couple of months which extends time for loud mouths to spew.
> Cheers
> Art- Hide quoted text -
>
> - Show quoted text -

I in all honesty think I remember seeing a circuit years ago for an
emergency dummy load that was identical to Arts design for an antenna.
I am fairly sure it was one of my uncles books from the Navy as he was
a radio operator during WWII. If anyone else remembers something like

this I woul like to know of it.

Jimmie

1730. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:12:16 UTC
From: dfinn1@nc.rr.com
Message-ID: <77ac8f57-03a9-4d2a-a8a9-ef44a7d45d63@r15g2000prh.googlegroups.com>
Source record: 22804

On Sep 3, 10:47 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > Because the input and the out windings of the balun must be isolated
> > at least at RF of interest, OF COURSE there should be a high impedance
> > between the ballanced current flow and the unbalanced current flow.
> > However, the impedance of the source looking into the impedance from
> > the souurce should match source impedance and the impedance of the
> > load looking in the output winding of the balun should match the load
> > impedance (say 70 ohms, or 600 ohms or whatever your antenna or
> > trnasmission line impedance is. The impedence at frequency of interest
> > between input winding and output winding should be infinity for
> > isolation purposes (obviously you do not want to mix the unbalanced
> > input and balanced output currents.
>
> Hey, are you just a plain idot, or someone who lacks any ability at all
> to apply logic? ROFLOL
>
> In all my time here, years!, I have never seen as large an idiot as you!
>   My Gawd, you make the dummies here begin to seem logical!

Please plonk me. I don't know how to plonk you using this google web
interface...unless you have instructions. I note you do a lot of
plonking. And its not due to the heat, it's the senility.

1731. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:12:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nn7rihg1@news.albasani.net>
Source record: 22805

Jerry wrote:

> ...
> I realize that you have asked this question to Richard, who is far better
> prepared to answer than I am.
> ...
> Jerry KD6JDJ
>
>

Huh, didn't know you liked Shakespeare that much. Let me get to the
library and dust off the old tomes for you ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1732. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:15:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nndlihg2@news.albasani.net>
Source record: 22806

Jerry wrote:
>> ... was expecting some
> lanswer ...
>> ...
> Jerry

Good, you are expecting it then, an lanswer (lame answer.)

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1733. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:16:18 UTC
From: dfinn1@nc.rr.com
Message-ID: <23fb127a-ae0f-4aa4-b99d-d51b1bff1492@q5g2000prf.googlegroups.com>
Source record: 22807

On Sep 3, 10:54 pm, "Jerry" <jerrymar...@verizon.net> wrote:
> <dfi...@nc.rr.com> wrote in message
>
> news:3fd89637-bede-4d7c-a357-d110796591d8@b2g2000prf.googlegroups.com...
> On Sep 3, 3:59 pm, Richard Clark <kb7...@comcast.net> wrote:
>
>
>
>
>
> > On Mon, 1 Sep 2008 09:26:26 -0700 (PDT), dfi...@nc.rr.com wrote:
> > >In a perfect situation, with a balanced feedline, the only kind of
> > >current and voltage you have IS common mode!
>
> > This statement above contains a serious error of perception while
> > trying to inhabit the debate over BalUns - and it probably corrupts
> > that topic too.
>
> > First - a circuit has at a minimum two conductors extending from a
> > source. A circuit by its nature is circular: for every charge carrier
> > that enters it, one must exit it. Continuity is a necessary condition
> > for a circuit. No continuity, no conduction, hence an "Open Circuit."
>
> > Second - those two conductors, if viewed at a remote point where they
> > are joined, have equal and opposite paths of current conduction - to
> > and from that point. This is from Kirchoff's law of currents.
>
> > Third - this is called Differential Mode current in anticipation of a
> > common modality.
>
> > Fourth - if that remote point of connection is replaced with a load,
> > there is a voltage across that load characterized by both the
> > unaltered directions of current, and its now altered magnitude of
> > current.
>
> > Fifth - this is called Differential Mode voltage in anticipation of a
> > common modality.
>
> > This completes the discussion of the Differential Mode.
>
> > If we expand upon this simple model of a source, two wires, and a load
> > and put it into the context of life as we know it; then the circuit
> > operates in the proximity of ground. By convention, ground is called
> > Common.

>
> > Ground, by convention is an infinite sink of charge of infinite
> > extent. Hence as a conductor, it is available everywhere - Common.
> > This ground may have either deliberate or accidental conductive
> > relationships to the Differential Circuit.
>
> > First - the linkage of ground to the differential circuit can be
> > through an Ohmic path, or by an inductive path, or by a capacitive
> > path. To support conduction, the circuit must contain two conductive
> > paths to ground through any combination of these linkages, and that
> > path must be complete. The apparent source driving conduction through
> > that path will be a combination of the differential source and the
> > differential load as each will have some relationship to ground.
>
> > Second - those two conductive paths, if viewed at a remote point
> > where they are joined, have equal and opposite paths of current
> > conduction - to and from that point. This is from Kirchoff's law of
> > currents.
>
> > Third - this is called Common Mode current.
>
> > Fourth - as the differential circuit is original and establishes both
> > the source and the load; then through the introduction of ground, this
> > Common Mode current is mixed with the original Differential Current
> > and analysis must be performed by substitutions to separate them.
>
> > Fifth - the apparent source presents the Common Mode voltage.
>
> > This completes the discussion of Common Mode.
>
> > The applications of a choke to either circuit is commonplace to
> > control each mode's current. It would appear through the context of
> > discussion in other threads that there is some confusion in what is
> > being choked, and how a choke is properly applied is confounded by
> > that confusion.
>
> > It follows that if the transmission line from the source to load
> > suffers from Common Mode currents, that this must be due to a Common
> > Mode voltage gradient extending from the source to the load. If
> > either lead of that transmission line pair were choked, this would
> > disrupt the Differential Mode. If both leads of the transmission line
> > pair were independently choked, this would only double the disruption.
> > However, if both leads were choked in parallel (both lines either
> > coiled as a pair rather than individually, or both lines penetrate a
> > lossy core) then their fields would be contained between them in the
> > Differential Mode, but their Common Mode path (they both share equal
> > conduction in the same direction due to the Common Mode voltage
> > gradient) will be snubbed.
>
> > Some BalUns employ these techniques - some don't. BalUns fail by the

> > degree that they don't when Common Mode, as a problem, is injected
> > into the circuit through imbalances. As balance in the proximity of
> > earth and many confounding nearby structures is a forgone failure,
> > choking is a practical necessity for correct BalUn performance. Any
> > issues of BalUn heatings are proof of this choking necessity, and
> > further proof of the demand for additional choking at that point (and
> > frequently elsewhere at wavelength relationships along the affected
> > line).
>
> > 73's
> > Richard Clark, KB7QHC
>
> Let me put it this way (again very simplifed): How do you explain a
> residential 208V power source where you have 120 V from line 1 and
> line 2 to ground but 240V with respect to each other. You 240V
> household appliances operate this way. Ecept for the fact that the
> lines are 120 degrees out of phase phase (insread of 180 because we
> use a delta system instead of Y, but this is not that important for
> this discussion) this is nearly a BALANCED feed, where lines 1 and 2
> degrees out of phase at 60 Hz and the voltage of interest is the
> summation of the two lines. Nearly every home in the USA operates this
> way. In Europe, 240 V is usually obtained by the voltage difference
> between line 1 (240V) and earth (0V). That is an unbalanced feed. You
> can insert a 1:1 isolation transformer using the European system at
> the input and create the balanced USA system at the output by drawing
> +120 and -120 at from the output windings assigning imaginary isolated
> earth at centertap. The isolated ground CANNOT conduct tio real ground
> if the winding to winding impedance is infinity. Basically, hams' 1:1
> baluns do much the same thing: They isolate the real ground as such
> and prevent currents from flowing down the input ground shield. On
> this ng in a short space I cannot think of a simpler way to express
> this although I expect to see many statements (you can't equate 60Hz
> to RF!). Yes you can; a transformer operates as a transformer in the
> same wayat any frequency providing you design it properly for the
> frequency of interest. This subject is not nearly so complicated as
> some in this group makes it out to be and the topic certainly does not
> rate articles in amateur publications any more than basic application
> of ohm's law does.
>
> Hi Dfinn
>
> I realize that you have asked this question to Richard, who is far better
> prepared to answer than I am. But, it seems that you are confused about
> how two sine waves add. Maybe I am wrong, and you do know how two sine wave
> voltages generated at different times and are connected in series combine to
> being other than 180 degrees from terminal to terminal.
> All the 208 power lines I am familiar with *are* 208 from terminal to
> terminal when each leg is 120 "terminal to center". Where did you get the
> "240"?
>

> Jerry KD6JDJ- Hide quoted text -
>
> - Show quoted text -

I tried to explain this one failure in my model; it is truely of phase difference of 120 degree, thus you get only 240/SQRT(3) = 208 RMC when measuring from phase 1 relative to phase 2. The cure is to imagine a Y network instead of a delta network; it is much easier to conceptualize but they are not used so much in the US anymore

1734. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:17:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nngeihg3@news.albasani.net>
Source record: 22808

dfinn1@nc.rr.com wrote:

> ...
> I found it difficult to go beyond the simplistic 60 Hz analogy in this
> discussion to best decribe my concept (when writing on usenet). All
> one can hope for is that the general idea comes out and hope people
> realize that the variables you mention do exist as well and do not
> detract from the very fundamental concepts.

Hmmm, and no wonder ... ever attempt to modulate a 60 hz signal?

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1735. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:17:18 UTC
From: dfinn1@nc.rr.com
Message-ID: <40624608-46e0-4892-98e3-3f9294b8159b@a2g2000prm.googlegroups.com>
Source record: 22809

On Sep 3, 10:54 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
>
> > A 1:1 balun IS an RF transformer. Lengths of transmission line wound
> > an air core can function as a 1:1 RF transformer. Does this in any way
> > show you the error you are making? Transformers operate in the same
> > way whether at 60Hz or RF. So much for your "No" statement which seems
> > to demonstrate a certain confidence masked in senility.
>
> Actually, NO!
>
> A 1:1 balun is a TLT, as stated, properly, by Ownen ...
>
> But, what you speak of is frequently an RF Transformer ... how you keep
> repeating that mistake speaks to your in ability to do research and
> educate yourself ...

it's not the heat it's the senility

1736. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:18:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5jkub4lh110m6srtde9hnagbsakcvvkoih@4ax.com>
Source record: 22810

On Wed, 3 Sep 2008 16:14:23 -0700 (PDT), dfinn1@nc.rr.com wrote:

>Let me put it this way (again very simplifed): How do you explain a
>residential 208V power source where you have 120 V from line 1 and
>line 2 to ground but 240V with respect to each other.

I have explained it and I see nothing in your query that changes any particular. Multiple phases compounds the complexity, it doesn't change first principles. The terminology and usage have been long established and I have described everything by those conventions.

>I cannot think of a simpler way to express
>this although I expect to see many statements (you can't equate 60Hz
>to RF!). Yes you can; a transformer operates as a transformer in the
>same wayat any frequency providing you design it properly for the
>frequency of interest.

RF transmission line transformers DO NOT HAVE TO employ squared turns ratios linked through magnetic flux. The purpose of successful BalUn core designs is to isolate input from output, not to perform magnetic coupling. Hence the topic of choking being so tightly conjoined with RF Z transformation.

Modern BalUns, by this design, exhibit far wider bandwidths of operation than would be exhibited by traditional flux linked transformers. More so, the cores used for modern BalUns would roast in a millisecond under those traditional flux linked conditions where they can easily pass huge amounts of power differentially, and suppress Common Mode currents.

The two design principles are vastly different, but serve the same goal and employ the same terminology: both being called "transformers." One very obvious confounding example to flux linkage is the halfwave coaxial BalUn that is fed in parallel and loaded in series to transform the unbalanced line input from 50 Ohms to the balanced load output of 200 Ohms. No cores or turns ratios were employed to accomplish what the isolation of the line provided naturally. It is confined to a narrow range of frequency, but conceptually replacing the isolation of line length with the application of choking extends its coverage by orders of magnitude.

>This subject is not nearly so complicated as
>some in this group makes it out to be and the topic certainly does not
>rate articles in amateur publications any more than basic application
>of ohm's law does.

Choking, shielding, and isolation - all of a piece - is a very complicated topic and generally dismissed inappropriately. The complexity lies in the breadth of application demands. Analysis proceeds by simple concepts, certainly, but this does not abstract to simple solutions.

I will again repeat the admonition that choking a transmission line does NOT choke each lead individually (which appears to be your sole experience dominated by RFI suppression in 60Hz applications). If this singular statement is cryptic, then you should invest your energy in the study of how the core isolates the input from the output of any "Guanella BalUn." A perfectly good tutorial has already been recommended to you by Roy.

73's
Richard Clark, KB7QHC

1737. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:20:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nnm1ihg4@news.albasani.net>
Source record: 22811

dfinn1@nc.rr.com wrote:

> ...
> Yes, ZERO with respect to the isolated reference point. They are
> measured with respect to each other, not ground. No current should
> flow through the ground line if the feed is perfectly balanced.

Yes, ZERO. The progress you have made since you have began wasting you
time here ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1738. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:21:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nnp1ihg5@news.albasani.net>
Source record: 22812

dfinn1@nc.rr.com wrote:

> ...
> You reference line 1 to line 2. You put your RF voltmeter acroos the
> two conductors. When doing so you measure two times the voltage that
> line 1 or line 2 reads with respect to an imaginary isolated grounbd
> at the centertap the line 1 or 2 measures separately with respect to
> centertap. OF COURSE the summation of all points on the common
> reference is zero at all locations at all times, that is why it is
> called an isolated "ground"! That is why I said earlier you could
> connect the centertap of the isolated CM side to real ground with no
> effect on the circuit in an earlier post.

Yanno, I think you have Legos confused with antennas. What does it say
on that box that your mom bought you?

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1739. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:23:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nns3ihg6@news.albasani.net>
Source record: 22813

dfinn1@nc.rr.com wrote:

> ...
> Coming from you that is a compliment. I recommend you stop wasting
> your time on things you know nothing about. If you agreed with me,
> then I would have to take another look at what I was saying.
>

Yes, well, I am quite happy you are pleased ... hey, are you related to
richard?

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1740. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:26:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9no1fihg7@news.albasani.net>
Source record: 22814

dfinn1@nc.rr.com wrote:

> ...
> I am not sure where you are coming from. Are you trying to say that
> differential mode interference often exists alongside CM interference
> and diff mode can be filtered by coiling phase wires over a ferrite
> core? Works for me. I agree. Now, what has that got to do with the
> discussion?

Fool, I think "differential mode" is the "mode of the day!" (gawd I hate that word ... :-( )

However, common mode, as many have tried to explain to you, is a bad trip ... but then, you should know that.

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1741. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:28:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9no55ihg8@news.albasani.net>
Source record: 22815

dfinn1@nc.rr.com wrote:

> ...
> Please plonk me. I don't know how to plonk you using this google web
> interface...unless you have instructions. I note you do a lot of
> plonking. And its not due to the heat, it's the senility.

Naw, I take a particular bizarre interest in serial murders, rapists,
etc. The wife and I just can't get enough of those weird crime shows
... you are even better than that/those!

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1742. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:31:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nobmihg9@news.albasani.net>
Source record: 22816

Richard Clark wrote:

>> ...
> 73's
> Richard Clark, KB7QHC

By all means, proceed. However, fair warning, I stopped reading any posts, by you, long ago ... I find that all I can muster is caustic comments from here on out ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1743. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:33:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9nofoihg10@news.albasani.net>
Source record: 22817

dfinn1@nc.rr.com wrote:

> ...
> it's not the heat it's the senility

Be careful, a heat rash like that in the pubic area might be the sign of
a larger problem ... perhaps the whores on 65th street are better left
to themselves ... something to consider anyway.

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1744. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:48:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rnpub4tgtlpnsr7qh7aon4t55sra8qsn09@4ax.com>
Source record: 22818

On Wed, 03 Sep 2008 19:49:55 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>My gawd,
inappropriately addressed - but accepted nonetheless.
>an idiot which
who
>takes a hundrend
hundred
>sentences to say
write
>a simple point
>is little better than an idiot which
who
>cannot even generate
write
>one sentence!

Only a little better? Do you have a sentence, or is this another
obscure sentiment?

73's
Richard Clark, KB7QHC

1745. Re: Fiberglass Statues.....John Smith uses for butt plugs!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 04:55:54 UTC
From: Snarky <popesnarky@caballista.organ>
Message-ID: <pan.2008.09.04.04.55.52.267759@jm.ck.poee.kothask.dsocpl.eothidiautp.hcnb.ggghd.bcb.cem.fi>
Source record: 22819
Cross-posted to: rec.radio.amateur.antenna,alt.callahans,alt.usenet.kooks,rec.ponds,alt.sex

On Wed, 03 Sep 2008 06:22:40 -0700, John "anonymous coward" Smith wrote
these lies, denials, arrogant assertions, erroneous presuppositions,
and/or obfuscations:
> On Sep 3, 6:52 am, AndyTao wrote:
>> Statues lifesize & small, animals cows, lions, tigers, custom
>> workhttp://www.ogogo123sina.cn
>
> No but odds are John Smith can use them as a fancey butt plug. HOw much
> does your momma charge for blow jobs John Smith? Last I heard she had to
> pay folks to take em. Staya the fuck out of thre fish groups with your
> bullshit and posts will stay out of these groups . You can thank John
> Smith for the crap posts he drug here......He is quite the pervert when
> it comes to little boys and tiny dicks

How does it feel to be completely owned by your namesake?

--
_____
Hail Eris! mhm 29x21; TM#5; Anonymous Psycho Criminal #18
TEH USENETS BULLIE
http://www.runescape.com/
Join my RuneScape clan!
http://z11.invisionfree.com/Holy_Pretzel_Cabal/index.php
Full name of clan: Cabal of the Holy International Discordian Internet
And Usenet Terrorist Pretzel

Barbara Woodhouse Memorial Dog Whistle
Trainer of PorchMonkey4Life
http://www.screedbomb.info/porchie/

Pierre Salinger Memorial Hook, Line & Sinker, June 2008
Hammer of Thor, July 2008

"Not supporting me is equivalent to forfeiting your own rights." --
John D. Wentzky: Warrior For Your Freedumb! Message-ID:
<33km2419sg6fnq3shtbatqa602eagfbskl@4ax.com>

"You cognatatively challenged fool!" -- According to Agamemnon, Stephen
Wilson is, apparently, highly ignorant about cognates, and so is anyone
who dares to disagree with him, in Message-ID:
<Jvidnfyewe883sjVnZ2dnUVZ8rOdnZ2d@eclipse.net.uk>

"Is it still necrophilia if I'm conscious?" -- Owen Harper, "Dead Man
Walking", Torchwood (20/207)

1746. Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 05:04:40 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <K%Jvk.16801$3A4.11364@newsfe04.iad>
Source record: 22820

I recently handled an estate sale. Among the SK's posessions was a one-foot piece of RG-8 or RG-213 which he had carefully modified by cutting away about 3/16 inch of the jacket and braid all around the circumference of the cable, near its middle.

I am not sure what use this would be to a ham. Some audio cables are made up with discontinuous shields for elimination of ground loops but I've not seen it done for RF.

Ideas?

1747. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 05:15:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <8374p5-lu5.ln1@mail.specsol.com>
Source record: 22821

Sal M. Onella <salmonella@food.poisoning.org> wrote:
> I recently handled an estate sale. Among the SK's posessions was a one-foot
> piece of RG-8 or RG-213 which he had carefully modified by cutting away
> about 3/16 inch of the jacket and braid all around the circumference of the
> cable, near its middle.
>
> I am not sure what use this would be to a ham. Some audio cables are made
> up with discontinuous shields for elimination of ground loops but I've not
> seen it done for RF.
>
> Ideas?

A shielded loop.

--
Jim Pennino

Remove .spam.sux to reply.

1748. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 05:25:41 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <rjKvk.27967$Fr1.21257@newsfe03.iad>
Source record: 22822

"Mike Coslo" <mcoslo@youknow.comcast.net> wrote in message
news:Xns9B0ECD1C33BD9mcoslocomcastnet@216.196.97.136...
>
> Do your prayers make any difference, they really don't, because God knew
> you were going to pray, and he knew his response. You had no choice. You
> did what you did because God made you do it that way.
>
> This of course means that God knows the predestination of every person he
> created, which means that he knew that he was knowingly condemming a whole
> lot of people to an eternity of torture.

I picked up on these and other inconsistencies in the early 1970s. I've
been an atheist ever since.

I wish some few atheists weren't such activists about it, though. It gives
us bad PR and turns atheism into a religion.

1749. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 06:11:58 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <R_Kvk.24693$_s1.6160@newsfe07.iad>
Source record: 22823

<jimp@specsol.spam.sux.com> wrote in message
news:8374p5-lu5.ln1@mail.specsol.com...
> Sal M. Onella <salmonella@food.poisoning.org> wrote:
> > I recently handled an estate sale. Among the SK's posessions was a
one-foot
> > piece of RG-8 or RG-213 which he had carefully modified by cutting away
> > about 3/16 inch of the jacket and braid all around the circumference of
the
> > cable, near its middle.

> A shielded loop.

Thanks. Good chance that was it.

1750. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 06:13:40 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <g9nuar$m32$1@news.netins.net>
Source record: 22824

Take all of the sheath and the shield off and a piece like that could be used in the making of a gamma match. Partially stripped it could have been for a piece of test equipment or ???

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message news:K%Jvk.16801$3A4.11364@newsfe04.iad...
>I recently handled an estate sale. Among the SK's posessions was a >one-foot
> piece of RG-8 or RG-213 which he had carefully modified by cutting away
> about 3/16 inch of the jacket and braid all around the circumference of
> the
> cable, near its middle.
>
> I am not sure what use this would be to a ham. Some audio cables are made
> up with discontinuous shields for elimination of ground loops but I've not
> seen it done for RF.
>
> Ideas?
>
>

1751. Re: Common and Differential Modalities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 07:11:39 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <LSLvk.465$sq3.343@trnddc07>
Source record: 22825

<dfinn1@nc.rr.com> wrote in message
news:23fb127a-ae0f-4aa4-b99d-d51b1bff1492@q5g2000prf.googlegroups.com...
On Sep 3, 10:54 pm, "Jerry" <jerrymar...@verizon.net> wrote:
> <dfi...@nc.rr.com> wrote in message
>
> news:3fd89637-bede-4d7c-a357-d110796591d8@b2g2000prf.googlegroups.com...
> On Sep 3, 3:59 pm, Richard Clark <kb7...@comcast.net> wrote:
>
>
>
>
>
> > On Mon, 1 Sep 2008 09:26:26 -0700 (PDT), dfi...@nc.rr.com wrote:
> > >In a perfect situation, with a balanced feedline, the only kind of
> > >current and voltage you have IS common mode!
>
> > This statement above contains a serious error of perception while
> > trying to inhabit the debate over BalUns - and it probably corrupts
> > that topic too.
>
> > First - a circuit has at a minimum two conductors extending from a
> > source. A circuit by its nature is circular: for every charge carrier
> > that enters it, one must exit it. Continuity is a necessary condition
> > for a circuit. No continuity, no conduction, hence an "Open Circuit."
>
> > Second - those two conductors, if viewed at a remote point where they
> > are joined, have equal and opposite paths of current conduction - to
> > and from that point. This is from Kirchoff's law of currents.
>
> > Third - this is called Differential Mode current in anticipation of a
> > common modality.
>
> > Fourth - if that remote point of connection is replaced with a load,
> > there is a voltage across that load characterized by both the
> > unaltered directions of current, and its now altered magnitude of
> > current.
>
> > Fifth - this is called Differential Mode voltage in anticipation of a
> > common modality.
>
> > This completes the discussion of the Differential Mode.
>
> > If we expand upon this simple model of a source, two wires, and a load
> > and put it into the context of life as we know it; then the circuit

> > operates in the proximity of ground. By convention, ground is called
> > Common.
>
> > Ground, by convention is an infinite sink of charge of infinite
> > extent. Hence as a conductor, it is available everywhere - Common.
> > This ground may have either deliberate or accidental conductive
> > relationships to the Differential Circuit.
>
> > First - the linkage of ground to the differential circuit can be
> > through an Ohmic path, or by an inductive path, or by a capacitive
> > path. To support conduction, the circuit must contain two conductive
> > paths to ground through any combination of these linkages, and that
> > path must be complete. The apparent source driving conduction through
> > that path will be a combination of the differential source and the
> > differential load as each will have some relationship to ground.
>
> > Second - those two conductive paths, if viewed at a remote point
> > where they are joined, have equal and opposite paths of current
> > conduction - to and from that point. This is from Kirchoff's law of
> > currents.
>
> > Third - this is called Common Mode current.
>
> > Fourth - as the differential circuit is original and establishes both
> > the source and the load; then through the introduction of ground, this
> > Common Mode current is mixed with the original Differential Current
> > and analysis must be performed by substitutions to separate them.
>
> > Fifth - the apparent source presents the Common Mode voltage.
>
> > This completes the discussion of Common Mode.
>
> > The applications of a choke to either circuit is commonplace to
> > control each mode's current. It would appear through the context of
> > discussion in other threads that there is some confusion in what is
> > being choked, and how a choke is properly applied is confounded by
> > that confusion.
>
> > It follows that if the transmission line from the source to load
> > suffers from Common Mode currents, that this must be due to a Common
> > Mode voltage gradient extending from the source to the load. If
> > either lead of that transmission line pair were choked, this would
> > disrupt the Differential Mode. If both leads of the transmission line
> > pair were independently choked, this would only double the disruption.
> > However, if both leads were choked in parallel (both lines either
> > coiled as a pair rather than individually, or both lines penetrate a
> > lossy core) then their fields would be contained between them in the
> > Differential Mode, but their Common Mode path (they both share equal
> > conduction in the same direction due to the Common Mode voltage
> > gradient) will be snubbed.

>
> > Some BalUns employ these techniques - some don't. BalUns fail by the
> > degree that they don't when Common Mode, as a problem, is injected
> > into the circuit through imbalances. As balance in the proximity of
> > earth and many confounding nearby structures is a forgone failure,
> > choking is a practical necessity for correct BalUn performance. Any
> > issues of BalUn heatings are proof of this choking necessity, and
> > further proof of the demand for additional choking at that point (and
> > frequently elsewhere at wavelength relationships along the affected
> > line).
>
> > 73's
> > Richard Clark, KB7QHC
>
> Let me put it this way (again very simplifed): How do you explain a
> residential 208V power source where you have 120 V from line 1 and
> line 2 to ground but 240V with respect to each other. You 240V
> household appliances operate this way. Ecept for the fact that the
> lines are 120 degrees out of phase phase (insread of 180 because we
> use a delta system instead of Y, but this is not that important for
> this discussion) this is nearly a BALANCED feed, where lines 1 and 2
> degrees out of phase at 60 Hz and the voltage of interest is the
> summation of the two lines. Nearly every home in the USA operates this
> way. In Europe, 240 V is usually obtained by the voltage difference
> between line 1 (240V) and earth (0V). That is an unbalanced feed. You
> can insert a 1:1 isolation transformer using the European system at
> the input and create the balanced USA system at the output by drawing
> +120 and -120 at from the output windings assigning imaginary isolated
> earth at centertap. The isolated ground CANNOT conduct tio real ground
> if the winding to winding impedance is infinity. Basically, hams' 1:1
> baluns do much the same thing: They isolate the real ground as such
> and prevent currents from flowing down the input ground shield. On
> this ng in a short space I cannot think of a simpler way to express
> this although I expect to see many statements (you can't equate 60Hz
> to RF!). Yes you can; a transformer operates as a transformer in the
> same wayat any frequency providing you design it properly for the
> frequency of interest. This subject is not nearly so complicated as
> some in this group makes it out to be and the topic certainly does not
> rate articles in amateur publications any more than basic application
> of ohm's law does.
>
> Hi Dfinn
>
> I realize that you have asked this question to Richard, who is far better
> prepared to answer than I am. But, it seems that you are confused about
> how two sine waves add. Maybe I am wrong, and you do know how two sine
> wave
> voltages generated at different times and are connected in series combine
> to
> being other than 180 degrees from terminal to terminal.

> All the 208 power lines I am familiar with *are* 208 from terminal to
> terminal when each leg is 120 "terminal to center". Where did you get the
> "240"?
>
> Jerry KD6JDJ- Hide quoted text -
>
> - Show quoted text -

I tried to explain this one failure in my model; it is truely of phase
difference of 120 degree, thus you get only 240/SQRT(3) = 208 RMC when
measuring from phase 1 relative to phase 2. The cure is to imagine a Y
network instead of a delta network; it is much easier to conceptualize
but they are not used so much in the US anymore

Hi Dfinn

Where do you measure voltages on any two terminals to get a 120 degree
phase reading in
a three phase system? How do you divide 240 by the square root of 3 and
get 208?

Jerry KD6JDJ

1752. Re: Fiberglass Statues

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 08:04:58 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <TvZ2gkAqa5vIFwy8@g3ohx.demon.co.uk>
Source record: 22826

In message
<a48ef198-e73c-4823-8e39-084f0096f1e8@a2g2000prm.googlegroups.com>,
AndyTao <22265737@qq.com> writes
>Statues lifesize & small, animals cows, lions, tigers, custom work
>http://www.ogogo123sina.cn

Unfortunately, "The page cannot be found".
I was hoping to find out if they did a giraffe. It's probably the only
statue which would make a reasonable antenna.
--
Ian

1753. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 10:56:38 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <F9Pvk.24737$N87.23946@nlpi068.nbdc.sbc.com>
Source record: 22827

dfinn1@nc.rr.com wrote:
> If
> you want to call the ground isolation function "choking", that use of
> this colloquialism is fine with me but FYI that is not the traditional
> vernacular for that that application.

In 1953, my first ham transmitter had an RF choke to allow
DC to reach the 6146 plate while choking the RF thus forcing
it to follow a different path through the pi-net. RF "chokes"
have been around since before I was born.

From "The IEEE Dictionary": "choke - a device for preventing
energy ... in a given frequency range from taking an undesired
path."

That's exactly what the RF choke in my Globe Scout did in
1953 and that's exactly how a W2DU balun works today.
--
73, Cecil http://www.w5dxp.com

1754. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 11:51:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <fZPvk.20544$mh5.17425@nlpi067.nbdc.sbc.com>
Source record: 22828

dfinn1@nc.rr.com wrote:
>> Again, you seem to have the IEEE definitions of "differential"
>> and "common-mode" exactly reversed in your head.
>
> Really? Do you believe the currents in a resonant 1/2 wave dipole are
> common mode or differential mode?

Assume it is a 1/2WL wire in free space. Where
is the common reference?

I've heard antenna currents called "common-mode"
currents but neither Kraus nor Balanis call those
currents "common-mode". They are usually called
"antenna currents" (in phase, radiating) vs
"transmission line currents" (out of phase, non-
radiating).

In any case, differential currents on a transmission
line are 180 degrees out of phase and ideally, non-
radiating. Common-mode currents on a transmission
line are in phase and radiate. The currents in a
folded dipole are in phase and radiate.

Within a ferrite toroid wired in a 1:1 current-choke-
balun configuration, common-mode current induces flux
in the toroid with virtually none from differential mode.
If the device is made out of turns of coax, the differential
currents never see the choking impedance.
--
73, Cecil http://www.w5dxp.com

1755. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 12:34:28 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <NDQvk.8505$np7.221@flpi149.ffdc.sbc.com>
Source record: 22829

dfinn1@nc.rr.com wrote:
> Cecil, if a transmission line operated in the way you think, it would
> be radiating fields all along its length transmitting RF all along the
> length of the line.

False! This is easy to visualize and prove. Given a 1/2WL
folded dipole fed with 300 ohm balanced line:

1. Do the out-of-phase differential transmission line
currents radiate? Ideally - NO!, because the fields
from the two wires engage in destructive interference
and cancel.

2. Do the in-phase antenna currents radiate? YES!, just
as they are supposed to do because the fields from the
two wires engage in constructive interference and re-
enforce each other.

Let's look at the balanced output terminals of the current
balun at the source. Instantaneous current is flowing out
of one terminal while instantaneous current is flowing into
the other terminal. I'm sorry, but that is differential,
transmission line current.
--
73, Cecil http://www.w5dxp.com

1756. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 12:43:41 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <pMQvk.8506$np7.2005@flpi149.ffdc.sbc.com>
Source record: 22830

Sal M. Onella wrote:
> Among the SK's posessions was a one-foot
> piece of RG-8 or RG-213 which he had carefully modified by cutting away
> about 3/16 inch of the jacket and braid all around the circumference of the
> cable, near its middle. I am not sure what use this would be to a ham. Ideas?

It's probably a poor-man's slotted line. A needle is
inserted through the center insulation to access the
voltage on the center conductor.
--
73, Cecil http://www.w5dxp.com

1757. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 13:12:04 UTC
From: ltdoc@yahoo.com
Message-ID: <6cc17eac-7b31-4ebc-940d-9eb76787f7f3@s20g2000prd.googlegroups.com>
Source record: 22831

Then again, depending on how 'devious' he was, it could have been that
he wanted to leave something that would make people wonder. ;)
- 'Doc

1758. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 13:52:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <xKRvk.21388$89.8596@nlpi069.nbdc.sbc.com>
Source record: 22832

Cecil Moore wrote:
> Sal M. Onella wrote:
>> Among the SK's posessions was a one-foot
>> piece of RG-8 or RG-213 which he had carefully modified by cutting away
>> about 3/16 inch of the jacket and braid all around the circumference
>> of the
>> cable, near its middle. I am not sure what use this would be to a ham.
>> Ideas?
>
> It's probably a poor-man's slotted line. A needle is
> inserted through the center insulation to access the
> voltage on the center conductor.

Sorry, I misunderstood the description. It is probably
part of a loop antenna.
--
73, Cecil http://www.w5dxp.com

1759. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 14:21:18 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <g9oqt4$4d1$1@news.netins.net>
Source record: 22833

Maybe he was starting to strip the outter sheath and shield to make a gamma match. Or it could be a test gadget he was going to make.....Rollie

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message news:K%Jvk.16801$3A4.11364@newsfe04.iad...
>I recently handled an estate sale. Among the SK's posessions was a
>one-foot
> piece of RG-8 or RG-213 which he had carefully modified by cutting away
> about 3/16 inch of the jacket and braid all around the circumference of
> the
> cable, near its middle.
>
> I am not sure what use this would be to a ham. Some audio cables are made
> up with discontinuous shields for elimination of ground loops but I've not
> seen it done for RF.
>
> Ideas?
>
>

1760. Re: How do you get a ground rod to 6 feet ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 16:15:43 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <fNTvk.20026$bx1.9067@bignews1.bellsouth.net>
Source record: 22834

<Dave WB3DWE> wrote in message
news:k4f0b4hcg9c5rvrcvsnn7ek2l43jrer5ed@4ax.com...
> On Sat, 23 Aug 2008 16:29:03 GMT, "Wayne" <mygarbagecan@verizon.net>
> wrote:
>
>>-
>>I lived for many years in the Dallas area. The caliche was down about 2
>>feet and was about a foot thick. I had to dig a hole with a shovel down
>>to
>>the caliche, then use a heavy hammer and long chisel to get through the
>>caliche. Then, backfill and proceed as normal. Don't know what your
>>configuration would be. Good luck.
>>
>
> Thanks Wayne.
> As a last resort I will hack a trench with a pick and lay in the rod
> at a shallow angle to the surface. Would this give an adequate
> ground ? I could also bond it to an outdoor brass spigot
> 10 yards away or even to an anchor fence in the other direction.
> Dave WB3DWE

Not familiar with that soil, but what would happen if you soaked the ground
with water? Would it soften it and/or make a mud that you could sink the
rod into? I do that around nere in the NC clay and it works pretty
well---unless you hit ROCKS. And that is pretty likely, too.

73

J

1761. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 18:25:48 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <5LVvk.20203$cW3.4432@nlpi064.nbdc.sbc.com>
Source record: 22835

Cecil Moore wrote:
> Cecil Moore wrote:
>> Sal M. Onella wrote:
>>> Among the SK's posessions was a one-foot
>>> piece of RG-8 or RG-213 which he had carefully modified by cutting away
>>> about 3/16 inch of the jacket and braid all around the circumference
>>> of the
>>> cable, near its middle. I am not sure what use this would be to a
>>> ham. Ideas?
>>
>> It's probably a poor-man's slotted line. A needle is
>> inserted through the center insulation to access the
>> voltage on the center conductor.
>
> Sorry, I misunderstood the description. It is probably
> part of a loop antenna.

What is needed, here, is a Ouija board.
73,
Tom Donaly, KA6RUH

1762. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-04 22:24:10 UTC
From: Jim-NN7K
Message-ID: <YeZvk.20051$jI5.448@flpi148.ffdc.sbc.com>
Source record: 22836

Sal M. Onella wrote:
> I recently handled an estate sale. Among the SK's posessions was a one-foot
> piece of RG-8 or RG-213 which he had carefully modified by cutting away
> about 3/16 inch of the jacket and braid all around the circumference of the
> cable, near its middle.
>
> I am not sure what use this would be to a ham. Some audio cables are made
> up with discontinuous shields for elimination of ground loops but I've not
> seen it done for RF.
>
> Ideas?
>
>
All the above have merit-- One other use- in SOME installations, there
is a requirement to do D.C. isolation - Removal ot part of the sheath,
jumpered by a Capacitor (but if that is what this for, the cap would
be in place). And, as to the first comment, such a loop would have been
used as a direction Finder (the space between the broken shields was
the "sense area of the loop, and, if remember right, you "Null" in the
direction that the "loop" is perpendicular to. - Jim NN7K

1763. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 00:04:39 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <sl_vk.27628$_s1.22659@newsfe07.iad>
Source record: 22837

"Jim-NN7K" <nn7kexk7zfg@noway.net.> wrote in message
news:YeZvk.20051$jI5.448@flpi148.ffdc.sbc.com...
> Sal M. Onella wrote:
> > I recently handled an estate sale. Among the SK's posessions was a
one-foot
> > piece of RG-8 or RG-213 which he had carefully modified by cutting away
> > about 3/16 inch of the jacket and braid all around the circumference of
the
> > cable, near its middle.
> >
> > I am not sure what use this would be to a ham. Some audio cables are
made
> > up with discontinuous shields for elimination of ground loops but I've
not
> > seen it done for RF.
> >
> > Ideas?
> >
> >
> All the above have merit-- One other use- in SOME installations, there
> is a requirement to do D.C. isolation - Removal ot part of the sheath,
> jumpered by a Capacitor (but if that is what this for, the cap would
> be in place). And, as to the first comment, such a loop would have been
> used as a direction Finder (the space between the broken shields was
> the "sense area of the loop, and, if remember right, you "Null" in the
> direction that the "loop" is perpendicular to. - Jim NN7K

Thanks to all. I really think we have it nailed down.

After the first response mentioned a small loop, I did some searching and found diagrams of loops, complete with some recommended tuning capacitors, etc. Today, I dimly recall a metal project box with three coax connectors on it. (Might still have it if it didn't sell.) My first thought was "balun" but a homemade balun doesn't have three coax connectors -- it has just one plus two non-coax connectors. THAT may have been the feed part of the loop. I don't recall if anything else was in that box.

With the gap section and the feed section, then various pairs of coax jumpers would have comprised the remainder of the loop for different experimental sizes. I s'pose I should follow in the SK's footsteps and build myself a loop or two.

Ain't hammin' grand?!?

1764. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 01:05:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <2oadnehBMNRPGF3VnZ2dnUVZ_jWdnZ2d@posted.easystreetonline>
Source record: 22838

Jim-NN7K wrote:
>>
> All the above have merit-- One other use- in SOME installations, there
> is a requirement to do D.C. isolation - Removal ot part of the sheath,
> jumpered by a Capacitor (but if that is what this for, the cap would be
> in place). And, as to the first comment, such a loop would have been
> used as a direction Finder (the space between the broken shields was
> the "sense area of the loop, and, if remember right, you "Null" in the
> direction that the "loop" is perpendicular to. - Jim NN7K

Actually, the active loop is the outside of the shield, and the gap is the feedpoint. Shielded loops have been discussed at great length on this newsgroup (not because they're complicated, but because they're impossible to understand until a person is willing to let go of some common misconceptions). Anyone interested in these can find the previous postings via a search at groups.google.com.

Roy Lewallen, W7EL

1765. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 01:23:16 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B1073CF3BCBFnonenowhere@61.9.191.5>
Source record: 22839

Roy Lewallen <w7el@eznec.com> wrote in
news:2oadnehBMNRPGF3VnZ2dnUVZ_jWdnZ2d@posted.easystreetonline:
...
> the feedpoint. Shielded loops have been discussed at great length on
> this newsgroup (not because they're complicated, but because they're
> impossible to understand until a person is willing to let go of some
> common misconceptions). Anyone interested in these can find the
...

Sadly, some of the misconceptions are propagated in ARRL publications. It is understandable that people have the wrong idea!

Owen

1766. THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 02:25:02 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6d8c48a7-e1c4-4180-869b-82a3fcc41482@e39g2000hsf.googlegroups.com>
Source record: 22840

In Switzerland on the 10th of this month they are going to project a particle thru the Earths crust at the speed of light. The particle that they are projecting comes from outer space. So what does this have to do with antennas?
Low energy particles are in abundance on Earth as they are in space but they obtain their own magnetic field as they enter the earths arbitrary field and settle on such things as antennas made from a diamagnetic material!
When a time varing field is applied to a diamagnetic material two magnetic fields are generated, primary and secondary both of which together project the particles off of the radiator with a spinnning action that provides a straight line projection away from gravitational effects. The anti gravity force or the electroweak force is the secondary magnetic field alluded to earlier. This electroweak force is used regularly in scrap metal yards to sort materials by ejection from magnetized conveyor line which produces a magnetic field which ejects metals of a like field into a particular container by the inter action of two magnetic fields as per antenna/radiator. It is the secondary force that is known as the weak force which is a closed field on the material surface called the Foucault current or eddy current which is also used for non destructive metal examination.So soon the CERN project will try to mimic the antenna operation by projecting a particle originaly from outer space thru the crust of the Earth at near the speed of light where they will be captured by a large area of water, which is a diamagnetic material just like our receiving antennas !.
Regards
Art KB9MZ.....xg

1767. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 02:34:06 UTC
From: dfinn1@nc.rr.com
Message-ID: <f615c5a0-e716-4753-9de1-5594edb39523@59g2000hsb.googlegroups.com>
Source record: 22841

On Sep 4, 7:51 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> >> Again, you seem to have the IEEE definitions of "differential"
> >> and "common-mode" exactly reversed in your head.
>
> > Really? Do you believe the currents in a resonant 1/2 wave dipole are
> > common mode or differential mode?
>
> Assume it is a 1/2WL wire in free space. Where
> is the common reference?

There is none unless you choose to define one. You could go halfway
down the output choke and call it "common refreference" or "isolated
ground" or whatever you want to call it. Since there usually no need
to reference it axcept perhaps for tutorial purposes, I wouldn't call
it anything. You could also reference it to earth ground but only if
you physically connected it to the aforementioned centertap.
>
> I've heard antenna currents called "common-mode"
> currents but neither Kraus nor Balanis call those
> currents "common-mode". They are usually called
> "antenna currents" (in phase, radiating) vs
> "transmission line currents" (out of phase, non-
> radiating).
>
> In any case, differential currents on a transmission
> line are 180 degrees out of phase and ideally, non-
> radiating. Common-mode currents on a transmission
> line are in phase and radiate. The currents in a
> folded dipole are in phase and radiate.

The ideal transmission line is common mode and does not radiate
because the fields cancel as you said earlier. The dipole antenna is
ALSO common mode but the fileds do NOT cancel because the conductors
are physically 180 degrees apart from each other so they cannot
interfere with each other; instead the fields radiate into free space
rather than cancel each other out. It is rather simple really. It is
correct to call antenna currents "common mode currents". If the
currents on a transmission line are differential, how would (COULD)
they be converted to common mode currents on the antenna? We would
need a 180 degree phase shift somewhere. Answer: the currents on both
the transmission line and the antenna are common mode.
>
> Within a ferrite toroid wired in a 1:1 current-choke-
> balun configuration, common-mode current induces flux

> in the toroid with virtually none from differential mode.
> If the device is made out of turns of coax, the differential
> currents never see the choking impedance.

Which explains why you should call it a balun and not a choke. If the balun and source impedances match there should be no choking impedance; maximum power trnasfer should occur.

> --
> 73, Cecil http://www.w5dxp.com

1768. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 02:45:05 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <n0j6p5-b3s.ln1@mail.specsol.com>
Source record: 22842

Art Unwin <ArthurUnwin@gmail.com> wrote:
> In Switzerland on the 10th of this month they are going to project a
> particle thru the Earths crust at the speed of light. The particle
> that they are projecting comes from outer space.

Well actually they are going project 2 locally generated proton beams
around a giant circle at 99.99% the speed of light so that they
collide.

But don't let easily verifiable facts get in your way.

> So what does this
> have to do with antennas?

Nothing.

> Low energy particles are in abundance on Earth as they are in space

Actually, high energy particles are in abundance on Earth as they
are in space, they are called cosmic rays, but again don't let easily
verifiable facts get in your way.

> but they obtain their own magnetic field as they enter the earths
> arbitrary field and settle on such things as antennas made from a
> diamagnetic material!

And thus we have completed our journey to la-la land.

Hope you enjoyed the trip.

<snip remaining babble>

--
Jim Pennino

Remove .spam.sux to reply.

1769. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 03:30:10 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d1e98a9c-bd3f-4191-b3db-a52ded1876b1@y21g2000hsf.googlegroups.com>
Source record: 22843

On Sep 4, 9:45 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > In Switzerland on the 10th of this month they are going to project a
> > particle thru the Earths crust at the speed of light. The particle
> > that they are projecting comes from outer space.
>
> Well actually they are going project 2 locally generated proton beams
> around a giant circle at 99.99% the speed of light so that they
> collide.
>
> But don't let easily verifiable facts get in your way.
>
> > So what does this
> > have to do with antennas?
>
> Nothing.
>
> > Low energy particles are in abundance on Earth as they are in space
>
> Actually, high energy particles are in abundance on Earth as they
> are in space, they are called cosmic rays, but again don't let easily
> verifiable facts get in your way.
>
> > but they obtain their own magnetic field as they enter the earths
> > arbitrary field and settle on such things as antennas made from a
> > diamagnetic material!
>
> And thus we have completed our journey to la-la land.
>
> Hope you enjoyed the trip.
>
> <snip remaining babble>
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

My understanding was that the experiment that I described was the
initiating test where the collider experiment
was going to start around November. So If I am behind in the facts,
and I may be, you are surely aware that one of the tests is as I
described !
Either way the search is for info on the leptons and their bye

products such as Neutrinos which I have stated before can well be the same particle involved with radiatiation. Since you declare your self so up to date I would like to hear your opinion as to why my explanation of radiation is incorrect
instead of immittating a reckless smart arse plus your interpretation of the electro-weak force which overides my explanation?
Arrt

1770. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 04:05:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <ugn6p5-if6.ln1@mail.specsol.com>
Source record: 22844

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Sep 4, 9:45?pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > In Switzerland on the 10th of this month they are going to project a
>> > particle thru the Earths crust at the speed of light. The particle
>> > that they are projecting comes from outer space.
>>
>> Well actually they are going project 2 locally generated proton beams
>> around a giant circle at 99.99% the speed of light so that they
>> collide.
>>
>> But don't let easily verifiable facts get in your way.
>>
>> > So what does this
>> > have to do with antennas?
>>
>> Nothing.
>>
>> > Low energy particles are in abundance on Earth as they are in space
>>
>> Actually, high energy particles are in abundance on Earth as they
>> are in space, they are called cosmic rays, but again don't let easily
>> verifiable facts get in your way.
>>
>> > but they obtain their own magnetic field as they enter the earths
>> > arbitrary field and settle on such things as antennas made from a
>> > diamagnetic material!
>>
>> And thus we have completed our journey to la-la land.
>>
>> Hope you enjoyed the trip.
>>
>> <snip remaining babble>
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> My understanding was that the experiment that I described was the
> initiating test where the collider experiment
> was going to start around November. So If I am behind in the facts,
> and I may be, you are surely aware that one of the tests is as I
> described !

Wrong, everything goes around in a circle in a vacuum.

There never was a plan to do anything else.

Nothing is going into the Earth's crust.

> Either way the search is for info on the leptons and their bye
> products such as Neutrinos which I have stated before can well be the
> same particle involved with radiatiation.

Wrong, the search is for information on the collision of large hadrons
which are composed of quarks, not leptons, and specifically to see if
the Higgs boson is produced in the collision.

This would be a step in the search for a so called Grand Unified
Theory which would unify electromagnetism, the strong nuclear force,
and the weak nuclear force, leaving out only gravity.

Neutrinos are leptons, not a by product of leptons.

> Since you declare your self
> so up to date I would like to hear your opinion as to why my
> explanation of radiation is incorrect
> instead of immittating a reckless smart arse plus your interpretation
> of the electro-weak force which overides my explanation?

I declare myself able to read and as having stayed awake during physics
classes enough to know there is no such thing as an "electro-weak force".

www.cern.ch

--
Jim Pennino

Remove .spam.sux to reply.

1771. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 04:11:27 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ec81800e-eb6c-40c3-b409-ac81fca56f24@s50g2000hsb.googlegroups.com>
Source record: 22845

On Sep 4, 9:45 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > In Switzerland on the 10th of this month they are going to project a
> > particle thru the Earths crust at the speed of light. The particle
> > that they are projecting comes from outer space.
>
> Well actually they are going project 2 locally generated proton beams
> around a giant circle at 99.99% the speed of light so that they
> collide.
>
> But don't let easily verifiable facts get in your way.
>
> > So what does this
> > have to do with antennas?
>
> Nothing.
>
> > Low energy particles are in abundance on Earth as they are in space
>
> Actually, high energy particles are in abundance on Earth as they
> are in space, they are called cosmic rays, but again don't let easily
> verifiable facts get in your way.
>
> > but they obtain their own magnetic field as they enter the earths
> > arbitrary field and settle on such things as antennas made from a
> > diamagnetic material!
>
> And thus we have completed our journey to la-la land.
>
> Hope you enjoyed the trip.
>
> <snip remaining babble>
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

When one referes to Cosmic rays it really shows that he is uninformed.
Informed people would call it an accumullation of particles that
continually bombard
our earth some of which release their energy when collisions occur
with the earths magnetic field.
Such particles are usually clumps bounded together by the force of

colour that is released in the form of an Aurora
where some speculate it is that that feeds energy to the weather
clouds of Earth that provides time varying magnetic fields
which can create tornadoes as a form of eddy current. Those that
bombard or float thru the earth's boundary are in single particle form
and rest on surfaces that will not absorb them into their overall
atomic pattern. Since the earth is more than 95% diagmatic they can
really settle anywhere.
It is these particles that I am refering to and that is not babble
unless you can prove otherwise. These same particles cannot radiate in
space under their own means but only when under the earth's
gravitational influence and where the anti gravity forces become a
reality.(Newton's law in action)
If you are not aware of the particular experiment that I was referring
to then your posting was intended to cause anger because of the
absence
of anything that could be seen as adding to a conversation in a polite
manner.
Art Unwin

1772. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 04:45:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <8kp6p5-0nj.ln1@mail.specsol.com>
Source record: 22846

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Sep 4, 9:45?pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > In Switzerland on the 10th of this month they are going to project a
>> > particle thru the Earths crust at the speed of light. The particle
>> > that they are projecting comes from outer space.
>>
>> Well actually they are going project 2 locally generated proton beams
>> around a giant circle at 99.99% the speed of light so that they
>> collide.
>>
>> But don't let easily verifiable facts get in your way.
>>
>> > So what does this
>> > have to do with antennas?
>>
>> Nothing.
>>
>> > Low energy particles are in abundance on Earth as they are in space
>>
>> Actually, high energy particles are in abundance on Earth as they
>> are in space, they are called cosmic rays, but again don't let easily
>> verifiable facts get in your way.
>>
>> > but they obtain their own magnetic field as they enter the earths
>> > arbitrary field and settle on such things as antennas made from a
>> > diamagnetic material!
>>
>> And thus we have completed our journey to la-la land.
>>
>> Hope you enjoyed the trip.
>>
>> <snip remaining babble>
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> When one referes to Cosmic rays it really shows that he is uninformed.
> Informed people would call it an accumullation of particles that
> continually bombard
> our earth some of which release their energy when collisions occur
> with the earths magnetic field.

Wrong, the term "cosmic rays" is a misnomer as they are actually
individually arriving partcles, about 90% of which are protons,
9% are helium nuclei or alpha particles and about 1% are electrons.

They collide with the molecules of the atmosphere and produce a
cascade of lighter particles.

> Such particles are usually clumps bounded together by the force of
> colour that is released in the form of an Aurora
> where some speculate it is that that feeds energy to the weather
> clouds of Earth that provides time varying magnetic fields
> which can create tornadoes as a form of eddy current. Those that
> bombard or float thru the earth's boundary are in single particle form
> and rest on surfaces that will not absorb them into their overall
> atomic pattern. Since the earth is more than 95% diagmatic they can
> really settle anywhere.

Utter, babbling nonsense.

Cosmic rays arrive individually and are not clumped.

> It is these particles that I am refering to and that is not babble
> unless you can prove otherwise.

http://en.wikipedia.org/wiki/Cosmic_ray
http://helios.gsfc.nasa.gov/cosmic.html
http://www.srl.caltech.edu/personnel/dick/cos_encyc.html
http://www.ngdc.noaa.gov/stp/SOLAR/COSMIC_RAYS/cosmic.html
http://imagine.gsfc.nasa.gov/docs/science/know_l1/cosmic_rays.html
http://hyperphysics.phy-astr.gsu.edu/Hbase/astro/cosmic.html
http://www2.slac.stanford.edu/vvc/cosmic_rays.html
http://www.ast.leeds.ac.uk/haverah/aims.shtml
http://www.sciencedaily.com/releases/2007/10/071009160230.htm
http://www.auger.org/

Want more proof you are babbling nonsense?

> These same particles cannot radiate in
> space under their own means but only when under the earth's
> gravitational influence and where the anti gravity forces become a
> reality.(Newton's law in action)

More babbling nonsense.

The particles come from space.

Gravity has little influence on them.

There is no such thing as "the anti gravity forces".

The velocities and energies are such that Newtonian physics doesn't
apply and you are forced to use relativistic physics.

> If you are not aware of the particular experiment that I was referring
> to then your posting was intended to cause anger because of the
> absence

> of anything that could be seen as adding to a conversation in a polite
> manner.

There is no such experiment.

www.cern.ch

--
Jim Pennino

Remove .spam.sux to reply.

1773. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 05:11:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2ba59242-4f1b-4ec4-9acc-b1b612c8473e@t54g2000hsg.googlegroups.com>
Source record: 22847

On Sep 4, 11:05 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Sep 4, 9:45?pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > In Switzerland on the 10th of this month they are going to project a
> >> > particle thru the Earths crust at the speed of light. The particle
> >> > that they are projecting comes from outer space.
>
> >> Well actually they are going project 2 locally generated proton beams
> >> around a giant circle at 99.99% the speed of light so that they
> >> collide.
>
> >> But don't let easily verifiable facts get in your way.
>
> >> > So what does this
> >> > have to do with antennas?
>
> >> Nothing.
>
> >> > Low energy particles are in abundance on Earth as they are in space
>
> >> Actually, high energy particles are in abundance on Earth as they
> >> are in space, they are called cosmic rays, but again don't let easily
> >> verifiable facts get in your way.
>
> >> > but they obtain their own magnetic field as they enter the earths
> >> > arbitrary field and settle on such things as antennas made from a
> >> > diamagnetic material!
>
> >> And thus we have completed our journey to la-la land.
>
> >> Hope you enjoyed the trip.
>
> >> <snip remaining babble>
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > My understanding was that the experiment that I described was the
> > initiating test where the collider experiment
> > was going to start around November. So If I am behind in the facts,
> > and I may be, you are surely aware that one of the tests is as I

> > described !
>
> Wrong, everything goes around in a circle in a vacuum.
>
> There never was a plan to do anything else.
>
> Nothing is going into the Earth's crust.
>
> > Either way the search is for info on the leptons and their bye
> > products such as Neutrinos which I have stated before can well be the
> > same particle involved with radiatiation.
>
> Wrong, the search is for information on the collision of large hadrons
> which are composed of quarks, not leptons, and specifically to see if
> the Higgs boson is produced in the collision.
>
> This would be a step in the search for a so called Grand Unified
> Theory which would unify electromagnetism, the strong nuclear force,
> and the weak nuclear force, leaving out only gravity.
>
> Neutrinos are leptons, not a by product of leptons.
>
> > Since you declare your self
> > so up to date I would like to hear your opinion as to why my
> > explanation of radiation is incorrect
> > instead of immittating a reckless smart arse plus your interpretation
> > of the electro-weak force which overides my explanation?
>
> I declare myself able to read and as having stayed awake during physics
> classes enough to know there is no such thing as an "electro-weak force".
>
> www.cern.ch
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Oh my!
Leptons are objects of different flavours one of which the neutrino
evolves from.
If I remember correctly there are 4 types of leptons one of which is a
clump of five or more
electrons of which three are of colour form i.e. heavy binding forces
As far as there is no such thing as a electroweak force. The standard
model of physics has four forces of which electro weak
or anti gravity force is one, Einstein spent his whole life looking
for it and it is expected that Higgs field will provide
details. If you want to disagree about the four forces and reduce them
to three then be my guest but it is the weak force

that provides the tilting force on a antenna in equilibrium. I understand that one sea port have tilted all their antennas to get improved performance
which is provided by the "weak" force and its presence is verified by the laws of Maxwell and Newton The experiment I am refering to is the projection of particles from a near earth surface and where the particles travel in a straight line at right angles to the center of the earth where they penetrate the earths surface and emerge some hundred miles away, the particles being called neutrinos which are low life radiation particles that escape from the Sun's
arbitrary boundary. They are one of many types of particles that exist in the Universe some of which are distributed by solar winds.
I would be very interested on what grounds you dismiss the existance of the "weak" force since all the masters of science include that force for the attainment of equilibriumaround which all Universal laws are based around..The weak force does not exist in outer space but when gravity enters the situation Newtons law states for every action there is a reactionI Was Faraday,Newton Coloumn,Gauss, Einstein, Feyman and others all totally in error because of something that YOU have found?
Why not print your physics fact sheet so that CERN can redirect their efforts?
Art Unwin......KB9MZ

1774. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 05:15:47 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <8g3wk.36935$4s1.30121@newsfe06.iad>
Source record: 22848

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:2oadnehBMNRPGF3VnZ2dnUVZ_jWdnZ2d@posted.easystreetonline...

>
> Actually, the active loop is the outside of the shield, and the gap is
> the feedpoint. Shielded loops have been discussed at great length on
> this newsgroup (not because they're complicated, but because they're
> impossible to understand until a person is willing to let go of some
> common misconceptions). Anyone interested in these can find the previous
> postings via a search at groups.google.com.

Well, that blows my thinking to pieces. Back to the drawing board.

1775. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 05:31:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <5de9f5a3-ca04-4c39-beec-8bf09eb97c35@z72g2000hsb.googlegroups.com>
Source record: 22849

On Sep 4, 11:45 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Sep 4, 9:45?pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > In Switzerland on the 10th of this month they are going to project a
> >> > particle thru the Earths crust at the speed of light. The particle
> >> > that they are projecting comes from outer space.
>
> >> Well actually they are going project 2 locally generated proton beams
> >> around a giant circle at 99.99% the speed of light so that they
> >> collide.
>
> >> But don't let easily verifiable facts get in your way.
>
> >> > So what does this
> >> > have to do with antennas?
>
> >> Nothing.
>
> >> > Low energy particles are in abundance on Earth as they are in space
>
> >> Actually, high energy particles are in abundance on Earth as they
> >> are in space, they are called cosmic rays, but again don't let easily
> >> verifiable facts get in your way.
>
> >> > but they obtain their own magnetic field as they enter the earths
> >> > arbitrary field and settle on such things as antennas made from a
> >> > diamagnetic material!
>
> >> And thus we have completed our journey to la-la land.
>
> >> Hope you enjoyed the trip.
>
> >> <snip remaining babble>
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > When one referes to Cosmic rays it really shows that he is uninformed.
> > Informed people would call it an accumullation of particles that
> > continually bombard
> > our earth some of which release their energy when collisions occur

> > with the earths magnetic field.
>
> Wrong, the term "cosmic rays" is a misnomer as they are actually
> individually arriving partcles, about 90% of which are protons,
> 9% are helium nuclei or alpha particles and about 1% are electrons.
>
> They collide with the molecules of the atmosphere and produce a
> cascade of lighter particles.
>
> > Such particles are usually clumps bounded together by the force of
> > colour that is released in the form of an Aurora
> > where some speculate it is that that feeds energy to the weather
> > clouds of Earth that provides time varying magnetic fields
> > which can create tornadoes as a form of eddy current. Those that
> > bombard or float thru the earth's boundary are in single particle form
> > and rest on surfaces that will not absorb them into their overall
> > atomic pattern. Since the earth is more than 95% diagmatic they can
> > really settle anywhere.
>
> Utter, babbling nonsense.
>
> Cosmic rays arrive individually and are not clumped.
>
> > It is these particles that I am refering to and that is not babble
> > unless you can prove otherwise.
>
> http://en.wikipedia.org/wiki/Cosmic_rayhttp://helios.gsfc.nasa.gov/cosmic.htmlhttp://www
.srl.caltech.edu/personnel/dick/cos_encyc.htmlhttp://www.ngdc.noaa.gov/stp/SOLAR/COSMIC_RA
YS/cosmic.htmlhttp://imagine.gsfc.nasa.gov/docs/science/know_l1/cosmic_rays.htmlhttp://hyp
erphysics.phy-astr.gsu.edu/Hbase/astro/cosmic.htmlhttp://www2.slac.stanford.edu/vvc/cosmic
_rays.htmlhttp://www.ast.leeds.ac.uk/haverah/aims.shtmlhttp://www.sciencedaily.com/release
s/2007/10/071009160230.htmhttp://www.auger.org/
>
> Want more proof you are babbling nonsense?
>
> > These same particles cannot radiate in
> > space under their own means but only when under the earth's
> > gravitational influence and where the anti gravity forces become a
> > reality.(Newton's law in action)
>
> More babbling nonsense.
>
> The particles come from space.
>
> Gravity has little influence on them.
>
> There is no such thing as "the anti gravity forces".
>
> The velocities and energies are such that Newtonian physics doesn't
> apply and you are forced to use relativistic physics.

>
> > If you are not aware of the particular experiment that I was referring
> > to then your posting was intended to cause anger because of the
> > absence
> > of anything that could be seen as adding to a conversation in a polite
> > manner.
>
> There is no such experiment.
>
> www.cern.ch
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Cosmic rays are particles as you stated Wilkpedia said as much by
saying it is a misnomer,
I also called them particles which is what you contradicted !
Personaly I do not know what the word "ray" defines with respect to
physics since physics
is built around particles that can oscillate. I believe most if not
all of your statements are false
and thus raise the question of validity when you espouse about
antennas of which the "weak" force
is a vital component of radiation directivity and density.
As far as the experiment that I refered to as being non existent the
same as the presence of four forces
with respect to the standard model I would remind you that similar
tests were done in I believe Japan,
where they had difficulty in harvesting the amount of neutrinos that
they had calculated upon but later
proved their calculations were correct. Neutrinos seemes to be the
center of Physics these days with
the may publications yet you seem to know so little about the subject.
I think you have said enough
on this thread to expose yourself
Art

1776. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 05:45:05 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <cgt6p5-o5.ln1@mail.specsol.com>
Source record: 22751

Roy Lewallen <w7el@eznec.com> wrote:
> Jim-NN7K wrote:
>>>
>> All the above have merit-- One other use- in SOME installations, there
>> is a requirement to do D.C. isolation - Removal ot part of the sheath,
>> jumpered by a Capacitor (but if that is what this for, the cap would be
>> in place). And, as to the first comment, such a loop would have been
>> used as a direction Finder (the space between the broken shields was
>> the "sense area of the loop, and, if remember right, you "Null" in the
>> direction that the "loop" is perpendicular to. - Jim NN7K
>
> Actually, the active loop is the outside of the shield, and the gap is
> the feedpoint. Shielded loops have been discussed at great length on
> this newsgroup (not because they're complicated, but because they're
> impossible to understand until a person is willing to let go of some
> common misconceptions). Anyone interested in these can find the previous
> postings via a search at groups.google.com.
>
> Roy Lewallen, W7EL

FWIW, there are several projects in the ARRL pubs, mostly for RDF, that
use a short piece of coax exactly as described as a loop.

--
Jim Pennino

Remove .spam.sux to reply.

1777. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 05:45:05 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <s4t6p5-o5.ln1@mail.specsol.com>
Source record: 22850

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Sep 4, 11:05?pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > On Sep 4, 9:45?pm, j...@specsol.spam.sux.com wrote:
>> >> Art Unwin <ArthurUn...@gmail.com> wrote:
>> >> > In Switzerland on the 10th of this month they are going to project a
>> >> > particle thru the Earths crust at the speed of light. The particle
>> >> > that they are projecting comes from outer space.
>>
>> >> Well actually they are going project 2 locally generated proton beams
>> >> around a giant circle at 99.99% the speed of light so that they
>> >> collide.
>>
>> >> But don't let easily verifiable facts get in your way.
>>
>> >> > So what does this
>> >> > have to do with antennas?
>>
>> >> Nothing.
>>
>> >> > Low energy particles are in abundance on Earth as they are in space
>>
>> >> Actually, high energy particles are in abundance on Earth as they
>> >> are in space, they are called cosmic rays, but again don't let easily
>> >> verifiable facts get in your way.
>>
>> >> > but they obtain their own magnetic field as they enter the earths
>> >> > arbitrary field and settle on such things as antennas made from a
>> >> > diamagnetic material!
>>
>> >> And thus we have completed our journey to la-la land.
>>
>> >> Hope you enjoyed the trip.
>>
>> >> <snip remaining babble>
>>
>> >> --
>> >> Jim Pennino
>>
>> >> Remove .spam.sux to reply.
>>
>> > My understanding was that the experiment that I described was the
>> > initiating test where the collider experiment
>> > was going to start around November. So If I am behind in the facts,

>> > and I may be, you are surely aware that one of the tests is as I
>> > described !
>>
>> Wrong, everything goes around in a circle in a vacuum.
>>
>> There never was a plan to do anything else.
>>
>> Nothing is going into the Earth's crust.
>>
>> > Either way the search is for info on the ?leptons and their bye
>> > products such as Neutrinos which I have stated before can well be the
>> > same particle involved with radiatiation.
>>
>> Wrong, the search is for information on the collision of large hadrons
>> which are composed of quarks, not leptons, and specifically to see if
>> the Higgs boson is produced in the collision.
>>
>> This would be a step in the search for a so called Grand Unified
>> Theory which would unify electromagnetism, the strong nuclear force,
>> and the weak nuclear force, leaving out only gravity.
>>
>> Neutrinos are leptons, not a by product of leptons.
>>
>> > Since you declare your self
>> > so up to date I would like to hear your opinion as to why my
>> > explanation of radiation is incorrect
>> > instead of immittating a reckless smart arse plus ?your interpretation
>> > of the electro-weak force which overides my explanation?
>>
>> I declare myself able to read and as having stayed awake during physics
>> classes enough to know there is no such thing as an "electro-weak force".
>>
>> www.cern.ch
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> Oh my!
> Leptons are objects of different flavours one of which the neutrino
> evolves from.
> If I remember correctly there are 4 types of leptons one of which is a
> clump of five or more
> electrons of which three are of colour form i.e. heavy binding forces
> As far as there is no such thing as a electroweak force. The standard
> model of physics has four forces of which electro weak
> or anti gravity force is one, Einstein spent his whole life looking
> for it and it is expected that Higgs field will provide
> details. If you want to disagree about the four forces and reduce them

> to three then be my guest but it is the weak force
> that provides the tilting force on a antenna in equilibrium. I
> understand that one sea port have tilted all their antennas to get
> improved performance
> which is provided by the "weak" force and its presence is verified by
> the laws of Maxwell and Newton The experiment I am refering to is the
> projection of particles from a near earth surface and where the
> particles travel in a straight line at right angles to the center of
> the earth where they penetrate the earths surface and emerge some
> hundred miles away, the particles being called neutrinos which are low
> life radiation particles that escape from the Sun's
> arbitrary boundary. They are one of many types of particles that exist
> in the Universe some of which are distributed by solar winds.
> I would be very interested on what grounds you dismiss the existance
> of the "weak" force since all the masters of science include that
> force for the attainment of equilibriumaround which all Universal laws
> are based around..The weak force does not exist in outer space but
> when gravity enters the situation Newtons law states for every action
> there is a reactionI Was Faraday,Newton Coloumn,Gauss, Einstein,
> Feyman and others all totally in error because of something that YOU
> have found?
> Why not print your physics fact sheet so that CERN can redirect their
> efforts?
> Art Unwin......KB9MZ

The people at CERN already know what they are doing and none of it
even comes close to matching all your babbling nonsense.

www.cern.ch

It would take more hours than I care to invest to correct all this
babble.

Try these:

http://en.wikipedia.org/wiki/Lepton
http://en.wikipedia.org/wiki/Force
http://en.wikipedia.org/wiki/Neutrino
http://en.wikipedia.org/wiki/Higgs_boson

--
Jim Pennino

Remove .spam.sux to reply.

1778. ieee.org hosts presentation on new technology.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 06:09:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9qielttb1@news.albasani.net>
Source record: 22752

http://ewh.ieee.org/r1/providence/dlm.htm

Regards,
JS
--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1779. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 11:23:07 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <uE8wk.20096$jI5.14339@flpi148.ffdc.sbc.com>
Source record: 22753

dfinn1@nc.rr.com wrote:
> The ideal transmission line is common mode and does not radiate
> because the fields cancel as you said earlier. The dipole antenna is
> ALSO common mode but the fileds do NOT cancel because the conductors
> are physically 180 degrees apart from each other so they cannot
> interfere with each other; instead the fields radiate into free space
> rather than cancel each other out.

If transmission line currents were common-mode, they would radiate
like crazy and would be an antenna instead of a transmission line.
When one shorts the two wires together and feeds the system Marconi
style against ground, then the currents are common-mode. (Please
switch your news-reader to fixed font). A '+' indicates a connection,
not polarity.

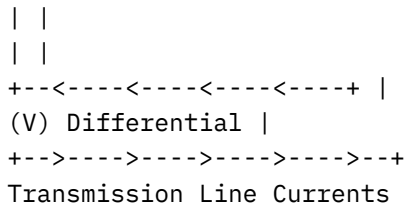
```
+----->------>------>---
| current reference
(V)
| Differential currents to antenna
+-----<------<------<---
Normal Transmission Line mode designed not to radiate
```

```
+-->--+----->----->----->---
| | current reference
(V) |
| | Common-mode currents (becomes antenna)
| +----->----->----->---
GND Marconi Style feed designed to radiate
```

> If the
> currents on a transmission line are differential, how would (COULD)
> they be converted to common mode currents on the antenna? We would
> need a 180 degree phase shift somewhere.

I'm glad you asked. When we take the last 1/4WL of transmission
line and open it up into a dipole, we have rotated one wire by
-90 degrees and the other wire by +90 degrees. That's a 180 degree
difference. The transmission line currents are 180 degrees out of
phase. The extra 180 degrees of physical rotation subtracts from
the 180 degrees in the transmission line for a total of zero
degrees (in phase) at the antenna feedpoint. This is explained
in detail in "Antenna Theory", by Balanis, 2nd edition, page 18.
I will try to duplicate it here using fixed font ASCII graphics.

```
In Phase Antenna Currents
---->---->---->---->----+ +---->---->---->---->----
```



Transmission Line Currents

Note the out of phase currents in the transmission line results
in in-phase currents in the dipole antenna.
--
73, Cecil http://www.w5dxp.com

1780. Re: ieee.org hosts presentation on new technology.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 11:32:09 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <YM8wk.20097$jI5.14522@flpi148.ffdc.sbc.com>
Source record: 22754

John Smith wrote:
> http://ewh.ieee.org/r1/providence/dlm.htm

Here's another one:

http://www.spectrum.ieee.org/aug08/6609

Two times zero doesn't always equal zero.
--
73, Cecil http://www.w5dxp.com

1781. Re: r7 vertical resonates too high

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 11:52:22 UTC
From: Hello.com
Message-ID: <KfmdnRHTX6rlgFzVnZ2dnUVZ_qjinZ2d@giganews.com>
Source record: 22755

Those 5 spokes are a 'capacity hat' loading the bottom half of the 'dipole'.

If the problem is on ONE BAND, I would look at the capacitor assy for that
particular band. They are usually the first item to fail. Your R7 has been
on borrowed time for a few years.

Emil
W9NM

"Edmund H. Ramm" <ehramm@dk3uz.ampr.org> wrote in message
news:K6Mq82.6Dy@dk3uz.ampr.org...
> In <g9lfeo$5k5$1@registered.motzarella.org> "Ed Cregger"
> <ecregger@bellsouff.net> writes:
>
>
>> [...]
>> The R7 doesn't use radials or a counterpoise.
>
> Yes it does, those 5 spokes are the counterpoise.
>
>> It is the electrical equivalent of a 1/2 wave antenna on all bands.
>
> Lambda 3/8.
>
>> [...]
>
>> Like the OP, I tend to agree that the problem is in the black box.
>> There were several articles published on how to restore the black box to
>> original specs. Anyone know of their location?
>
> http://www.iol.ie/~bravo/r7_vertical.htm
>
> 73, Eddi ._._.
> --
> e-mail: dk3uz AT darc DOT de | AMPRNET: dk3uz@db0hht.ampr.org
> If replying to a Usenet article, please use above e-mail address.
> Linux/m68k, the best U**x ever to hit an Atari!

1782. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 12:53:26 UTC
From: Dave <noone@nowhere.com>
Message-ID: <aZ9wk.598$jE1.565@trnddc03>
Source record: 22756

<jimp@specsol.spam.sux.com> wrote in message
news:8kp6p5-0nj.ln1@mail.specsol.com...
> Art Unwin <ArthurUnwin@gmail.com> wrote:
>> On Sep 4, 9:45?pm, j...@specsol.spam.sux.com wrote:
>>> Art Unwin <ArthurUn...@gmail.com> wrote:
>>> > In Switzerland on the 10th of this month they are going to project a
>>> > particle thru the Earths crust at the speed of light. The particle
>>> > that they are projecting comes from outer space.
>>>
>>> Well actually they are going project 2 locally generated proton beams
>>> around a giant circle at 99.99% the speed of light so that they
>>> collide.
>>>
>>> But don't let easily verifiable facts get in your way.
>>>
>>> > So what does this
>>> > have to do with antennas?
>>>
>>> Nothing.
>>>
>>> > Low energy particles are in abundance on Earth as they are in space
>>>
>>> Actually, high energy particles are in abundance on Earth as they
>>> are in space, they are called cosmic rays, but again don't let easily
>>> verifiable facts get in your way.
>>>
>>> > but they obtain their own magnetic field as they enter the earths
>>> > arbitrary field and settle on such things as antennas made from a
>>> > diamagnetic material!
>>>
>>> And thus we have completed our journey to la-la land.
>>>
>>> Hope you enjoyed the trip.
>>>
>>> <snip remaining babble>
>>>
>>> --
>>> Jim Pennino
>>>
>>> Remove .spam.sux to reply.
>>
>> When one referes to Cosmic rays it really shows that he is uninformed.
>> Informed people would call it an accumullation of particles that
>> continually bombard

>> our earth some of which release their energy when collisions occur
>> with the earths magnetic field.
>
> Wrong, the term "cosmic rays" is a misnomer as they are actually
> individually arriving partcles, about 90% of which are protons,
> 9% are helium nuclei or alpha particles and about 1% are electrons.
>
> They collide with the molecules of the atmosphere and produce a
> cascade of lighter particles.
>
>
>> Such particles are usually clumps bounded together by the force of
>> colour that is released in the form of an Aurora
>> where some speculate it is that that feeds energy to the weather
>> clouds of Earth that provides time varying magnetic fields
>> which can create tornadoes as a form of eddy current. Those that
>> bombard or float thru the earth's boundary are in single particle form
>> and rest on surfaces that will not absorb them into their overall
>> atomic pattern. Since the earth is more than 95% diagmatic they can
>> really settle anywhere.
>
> Utter, babbling nonsense.
>
> Cosmic rays arrive individually and are not clumped.
>
>> It is these particles that I am refering to and that is not babble
>> unless you can prove otherwise.
>
> http://en.wikipedia.org/wiki/Cosmic_ray
> http://helios.gsfc.nasa.gov/cosmic.html
> http://www.srl.caltech.edu/personnel/dick/cos_encyc.html
> http://www.ngdc.noaa.gov/stp/SOLAR/COSMIC_RAYS/cosmic.html
> http://imagine.gsfc.nasa.gov/docs/science/know_l1/cosmic_rays.html
> http://hyperphysics.phy-astr.gsu.edu/Hbase/astro/cosmic.html
> http://www2.slac.stanford.edu/vvc/cosmic_rays.html
> http://www.ast.leeds.ac.uk/haverah/aims.shtml
> http://www.sciencedaily.com/releases/2007/10/071009160230.htm
> http://www.auger.org/
>
> Want more proof you are babbling nonsense?
>
>> These same particles cannot radiate in
>> space under their own means but only when under the earth's
>> gravitational influence and where the anti gravity forces become a
>> reality.(Newton's law in action)
>
> More babbling nonsense.
>
> The particles come from space.
>

> Gravity has little influence on them.
>
> There is no such thing as "the anti gravity forces".
>
> The velocities and energies are such that Newtonian physics doesn't
> apply and you are forced to use relativistic physics.
>
>> If you are not aware of the particular experiment that I was referring
>> to then your posting was intended to cause anger because of the
>> absence
>> of anything that could be seen as adding to a conversation in a polite
>> manner.
>
> There is no such experiment.
>
> www.cern.ch
>
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

welcome back art, i needed a good laugh today! your statement about tornados being caused by eddy currents is a real knee slapper! keep up the good work, some day with all your material you could be a stand up act at a physics convention. guaranteed to bring the house down!

1783. baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 12:56:34 UTC
From: ml <m@di.net>
Message-ID: <m-0830F3.08563405092008@news.optonline.net>
Source record: 22757

hi

Over the years, I've found it interesting and disturbing even
confusing, that there seems to be so much confusion regarding the
above.

Nothing gets a post responce, like the above topic and boy those
threads quickly grow to large numbers

I always read them trying to learn as well as books on the topics,
i don't pretend to have any formal engineering /scientific
knowledge just enjoy reading what i can

but i ponder why there seems to be so many opposing /contradicting
views on same subjects and topics and i am not referring to just
those here on the news groups

if i get x people in a room ask about baluns or chokes 1/2 say one
thing the other 1/2 say something else

dunno it's strange in all that confusion obviously we all pick
what we interpert and believe to be best but i hate when that happens

1784. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 13:03:11 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <g6awk.24827$N87.20307@nlpi068.nbdc.sbc.com>
Source record: 22758

Dave wrote:
> welcome back art, i needed a good laugh today! your statement about
> tornados being caused by eddy currents is a real knee slapper!

From Webster's: "eddy - a current at variance with the
main current in a stream of liquid or gas, esp. one
having a rotary or whirling motion."

Wouldn't tornadoes, spawned around the edge of a
hurricane, meet that definition of "eddy current"?
--
73, Cecil http://www.w5dxp.com

1785. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 13:13:10 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <tdawk.12279$vn7.8794@flpi147.ffdc.sbc.com>
Source record: 22759

ml wrote:
> dunno it's strange in all that confusion obviously we all pick
> what we interpert and believe to be best but i hate when that happens

Baluns are not unique. Religions, politics, investment advice,
brands of vehicles, flavors of ice cream, sexual attraction,
life styles, ... - "We all pick what we interpret and believe
to be the best" in virtually every aspect of our lives.

My personal preference is a 1:1 current-choke-balun with
thousands of ohms of choking impedance, either resistive
and/or reactive.
--
73, Cecil http://www.w5dxp.com

1786. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 13:51:52 UTC
From: Dave <noone@nowhere.com>
Message-ID: <YPawk.467$Dj1.215@trnddc02>
Source record: 22760

"ml" <m@di.net> wrote in message
news:m-0830F3.08563405092008@news.optonline.net...
> hi
>
> Over the years, I've found it interesting and disturbing even
> confusing, that there seems to be so much confusion regarding the
> above.
>
> Nothing gets a post responce, like the above topic and boy those
> threads quickly grow to large numbers
>
> I always read them trying to learn as well as books on the topics,
> i don't pretend to have any formal engineering /scientific
> knowledge just enjoy reading what i can
>
> but i ponder why there seems to be so many opposing /contradicting
> views on same subjects and topics and i am not referring to just
> those here on the news groups
>
> if i get x people in a room ask about baluns or chokes 1/2 say one
> thing the other 1/2 say something else
>
> dunno it's strange in all that confusion obviously we all pick
> what we interpert and believe to be best but i hate when that happens

yeah, i just hate it when that happens... it all stems from many old myths and misconceptions about what baluns do, or don't do... and confusing them with coax cable chokes.

One important note... coax IS a balanced transmission line, its just that the current that balances the one on the center conductor is confined (normally) to the inside of the shield.

i look at it this way:

a 'true' balun is a transformer that converts from balanced to unbalanced lines, it may or may not also transform impedances. this is the type of thing you would put in between a coax and an open wire feeder, or what is included in many tuners that are fed with coax and have balanced outputs. in the degenerate case, which is actually now the most common use, the balanced line is shortened to nothing and the balun is at the feedpoint of the dipole or yagi driven element.

the coax choke is often confused with a balun because it is also used at a balanced antenna feedpoint, but the actual physics of it is much different. if you just connect a dipole to a piece of coax with no choke you really

have a 3 legged 'dipole'. current going out the center conductor wants to return on the INSIDE of the coax shield... however there are 2 paths for this current to take. it can come from the other side of the dipole, the intended path, or it can come from the OUTSIDE of the shield up to the feedpoint then back to the INSIDE of the shield... this is the one that causes trouble. Not only is it usually vertically polarized instead of horizontal like the intended current which distorts the pattern. But it is also not just confined to the coax near the antenna, it can also exist on the outside of the shield all the way back to the shack. Now, a choke on the outside of the shield, either by winding coils of coax or adding ferrite beads creates a high impedance bump between the shield below the choke and the inside of the shield at the feed point. This high impedance reflects any current on the outside of the shield back down, out of phase, thus effectively canceling it out. This means the only route back for the current to the inside of the coax shield is from the intended side of the radiator... thus it forces a balance in the currents, but through a slightly different mechanism than a 'true' balun transformer. Personally i prefer the coil method because all it costs is a bit of coax. The ferrites that are often used can have some unintended effects. first, they are lossy, and some people assume this is their intended mode of operation and use even lossier ones than they should. this results in heating at high power and loss of transmitted power in the choke. also at high power if the cores are not big enough they can saturate which causes harmonics and even more heat plus a loss of effectiveness. The more correct way to look at it is as a single turn choke, the ferrite core should present as high an impedance as possible with as little loss as possible at the frequency its being used at. This reduces losses and the associated bad effects. also note that the coax choke can not transform impedances, the feedpoint must be matched to the coax.

1787. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 14:26:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <82e9dfc6-413b-4a46-8bbe-8f8cc5351fd1@i76g2000hsf.googlegroups.com>
Source record: 22761

On Sep 5, 8:03 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Dave wrote:
> > welcome back art, i needed a good laugh today! your statement about
> > tornados being caused by eddy currents is a real knee slapper!
>
> From Webster's: "eddy - a current at variance with the
> main current in a stream of liquid or gas, esp. one
> having a rotary or whirling motion."
>
> Wouldn't tornadoes, spawned around the edge of a
> hurricane, meet that definition of "eddy current"?
> --
> 73, Cecil http://www.w5dxp.com

It is similar to a helicopter or a Sedgeway where one must have
stability.
That is why the rotator at the rear of a helicopter follows the
Universal law
of action and reaction mimicing the eddy force.
Same goes for the weather. Lightning is a electrical occillation of
many frequencies
thus follows the same Universal law. When there is a heavy storm that
picks up energy
from the ground and lightning occurrs ir must produce a circulating
force in equal and opposite fashion.
When I spoke of the weather I used it as an example of the swirling
eddy current
where the rest was speculation based on same. Exactly the same
motions occur during
radiation in the manner I spoke of in the beginning of this thread.
Simple physics
Art Unwin KB9MZ

1788. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 14:55:08 UTC
From: JB <nospam@goofball.net>
Message-ID: <gLbwk.562$1a2.65@trnddc04>
Source record: 22762

> but i ponder why there seems to be so many opposing /contradicting
> views on same subjects and topics and i am not referring to just
> those here on the news groups
>
> if i get x people in a room ask about baluns or chokes 1/2 say one
> thing the other 1/2 say something else
>
> dunno it's strange in all that confusion obviously we all pick
> what we interpert and believe to be best but i hate when that happens

It's real easy to get caught up the definitions. A transformer transforms impedance, voltage or current and often isolates but not necessarily. A choke uses the magnetic field created by the AC current through it to oppose that current. The wiki points out there are balanced and unbalanced signals. Webster says balanced and unbalanced lines. Someone posted that coax is in fact a balanced line. OK that can be oddly true, but it can be unbalanced by how you connect it. So it can be part application, part configuration, part common word usage that might not be purely accurate, and where you are focusing your attention.

Still, it can be many prefer to be an expert and argue and make statements rather than ask the questions. I must confess after a project, I often let details slip by me unlike day to day operations that I can't get out of my head 30 years later. I can still align Micor and Motrac radios in my sleep step by step.

The whole discussion could have all been on a roundtable net but then we wouldn't have the luxury of nit-picking and cussing each other out.

1789. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 14:57:40 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g9rhd4$16ac$1@f04n12.cac.psu.edu>
Source record: 22763

Sal M. Onella wrote:
> "Mike Coslo" <mcoslo@youknow.comcast.net> wrote in message
> news:Xns9B0ECD1C33BD9mcoslocomcastnet@216.196.97.136...
>> Do your prayers make any difference, they really don't, because God knew
>> you were going to pray, and he knew his response. You had no choice. You
>> did what you did because God made you do it that way.
>>
>> This of course means that God knows the predestination of every person he
>> created, which means that he knew that he was knowingly condemming a whole
>> lot of people to an eternity of torture.
>
> I picked up on these and other inconsistencies in the early 1970s. I've
> been an atheist ever since.
>
> I wish some few atheists weren't such activists about it, though. It gives
> us bad PR and turns atheism into a religion.

For me, a person is allowed to believe whatever they want, as long as it doesn't affect me. Unfortunately, too many of them don't get that part and want to force themselves on everyone.

Oddly enough, the greatest sermon, direct orders from the man himself is ignored by these folk.

- 73 de Mike N3LI -

1790. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 15:45:42 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a31a9fca-23e9-463e-97d5-5c2674baeed6@d77g2000hsb.googlegroups.com>
Source record: 22764

On Sep 5, 9:26 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 5, 8:03 am, Cecil Moore <nos...@w5dxp.com> wrote:
>
> > Dave wrote:
> > > welcome back art, i needed a good laugh today! your statement about
> > > tornados being caused by eddy currents is a real knee slapper!
>
> > From Webster's: "eddy - a current at variance with the
> > main current in a stream of liquid or gas, esp. one
> > having a rotary or whirling motion."
>
> > Wouldn't tornadoes, spawned around the edge of a
> > hurricane, meet that definition of "eddy current"?
> > --
> > 73, Cecil http://www.w5dxp.com
>
> It is similar to a helicopter or a Sedgeway where one must have
> stability.
> That is why the rotator at the rear of a helicopter follows the
> Universal law
> of action and reaction mimicing the eddy force.
> Same goes for the weather. Lightning is a electrical occillation of
> many frequencies
> thus follows the same Universal law. When there is a heavy storm that
> picks up energy
> from the ground and lightning occurrs ir must produce a circulating
> force in equal and opposite fashion.
> When I spoke of the weather I used it as an example of the swirling
> eddy current
> where the rest was speculation based on same. Exactly the same
> motions occur during
> radiation in the manner I spoke of in the beginning of this thread.
> Simple physics
> Art Unwin KB9MZ

Yunno This thread high lights why electrical engineers fail to fully
understand radiation
by viewing it as a electrical phenomina instead of the adherence to
the Universal laws.
True parallel radiators produce radiation when applying just a portion
of the forces in the standard
model such that antennas are formed horizontally to include the
gravitational forces and ignoring the electro weak force
which for equilibrium means the radiator must be tilted. If one

follows the laws of equilibrium which Maxwell's laws do
all forces must be taken into account for three dimensional
resolvement where the yagi involves just a two dimensional
structure, which in itself does not represent ALL the vectors involved
produced by all four forces. The four forces are there ofcourse
because without the "weak force" radiation cannot occur, It is this
force that pushes charges to the outside of a conducter
by the swirling action of the eddy current, which is commonly
reffered to by electrical engineers a "skin depth",.which is also made
use of
in non destructive metal measurements where a fissure breaks the
rotational closed current circuit.
Until scientists stop using computers in the hope that something will
emerge to advance science there will be no progress especially when
they are wedded to that printed in books which is representitive of
present day theory only which times past has shown to be oft times
incorrect.
Correct use of Universal laws such as those of Maxwell are based on
equilibrium where all forces are accounted for and without which
radiation cannot occur. Without acceptance of such we only have self
perceived experts in the hobby of ham radio.

Happy days
Art Unwin KB9MZ.....xg

1791. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 15:46:11 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Mscwk.26281$Ri.17936@flpi146.ffdc.sbc.com>
Source record: 22765

Dave wrote:
> This means the only route back for the
> current to the inside of the coax shield is from the intended side of the
> radiator... thus it forces a balance in the currents, but through a slightly
> different mechanism than a 'true' balun transformer.

Sevick suggested that the word transformer *NOT* be used
with baluns. He said, in "Building and Using Baluns and
Ununs":

"By far, most misconceptions regarding baluns are due
to the many radio amateurs who perceive these devices
as conventional transformers that transmit the energy
from input to output by flux linkages and not as
transmission line transformers, which transmit energy
by an efficient transmission line mode."

"If the writers had accepted the correct model for
these devices (given to us by Guanella and Ruthroff),
which shows that *THEY ARE REALLY CHOKES* (lumped
elements) and configurations of transmission lines
(distributed elements), ..." emphasis mine.

"In fact, the perception that the transmission line
transformer is actually a conventional transformer
is so prevalent, that a new name for this class of
devices should be considered -
broad band transmission line matching networks.
This name (without the word transformer) would help
in dispelling inaccurate perceptions and in
standardizing the schematic diagrams."
--
73, Cecil http://www.w5dxp.com

1792. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 15:49:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Lvcwk.26282$Ri.25085@flpi146.ffdc.sbc.com>
Source record: 22766

JB wrote:
> I can still align Micor and Motrac radios in my sleep
> step by step.

Using megacycles and condensers, no doubt. :-)
--
73, Cecil http://www.w5dxp.com

1793. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 16:18:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6ag2c4ptcu2805ed3ugktv9gq8n2bu7i0a@4ax.com>
Source record: 22767

On Fri, 05 Sep 2008 08:56:34 -0400, ml <m@di.net> wrote:

>but i ponder why there seems to be so many opposing /contradicting
>views on same subjects and topics and i am not referring to just
>those here on the news groups

Hi Myles,

Most of this "controversy" extends from the lack of experience. Quite
a natural condition for some amateurs. This will change if they are
interested - interest also being a common condition for amateurs.

Those with a technical bent (rather than simply being interested in
operating) will sit at the bench and figure out this topic of baluns n
chokes n stuff. Then it won't be the controversial mystery it seems
to be for those who don't.

73's
Richard Clark, KB7QHC

1794. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 16:50:24 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g9ro0f$b4k$2@news.jpl.nasa.gov>
Source record: 22768

ml wrote:
> hi
>
> Over the years, I've found it interesting and disturbing even
> confusing, that there seems to be so much confusion regarding the
> above.
>
> Nothing gets a post responce, like the above topic and boy those
> threads quickly grow to large numbers
>
> I always read them trying to learn as well as books on the topics,
> i don't pretend to have any formal engineering /scientific
> knowledge just enjoy reading what i can
>
> but i ponder why there seems to be so many opposing /contradicting
> views on same subjects and topics and i am not referring to just
> those here on the news groups

Several reasons..
1) the terminology isn't necessarily consistent in its definition

2) the things get used in a complex system with lots of interactions, so it's hard to separate out the effects of the function of component A from those of components B,C,D, and E.

3) there's a host of empirical evidence out there that seems to contradict the theoretical behavior of A (mostly because the empirical evidence also includes the behaviors of B, C, D, and E, which aren't always controlled for or understood). So you wind up with "A does X" in system 1, and "A does Y" in system 2.

1795. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 17:05:22 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <ABdwk.20753$bx1.19558@bignews1.bellsouth.net>
Source record: 22769

"Art Unwin" wrote

-massive drivel snip-

Without acceptance of such we only have self
perceived experts in the hobby of ham radio.

Happy days
Art Unwin KB9MZ...........xg

Art: I checked your web page... soooo glad to see
that you've corrected the errors, and have posted only
what you KNOW about antennas!

Mike W5CHR
Memphis

1796. Re: ieee.org hosts presentation on new technology.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 17:14:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9rpdi$8a5$1@news.albasani.net>
Source record: 22770

Cecil Moore wrote:
> John Smith wrote:
>> http://ewh.ieee.org/r1/providence/dlm.htm
>
> Here's another one:
>
> http://www.spectrum.ieee.org/aug08/6609
>
> Two times zero doesn't always equal zero.

;-)

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1797. Re: ieee.org hosts presentation on new technology.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 17:18:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9rpm8$8i7$1@news.albasani.net>
Source record: 22771

Cecil Moore wrote:

>> ...
> Here's another one:
>
> http://www.spectrum.ieee.org/aug08/6609
>
> Two times zero doesn't always equal zero.

Let me consider your point in more detail:

2 guys with zero dollars in their wallets (2 X 0)

and the answer is:

2 guys X 0 dollars = 2 guys

Clearly!, proof that the law/rule of multiplication my zero is in error!

:-P

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1798. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 17:28:24 UTC
From: "Jim, K7JEB" <k7jeb_2@yahoo.com>
Message-ID: <4%dwk.37850$Rs1.28811@newsfe08.iad>
Source record: 22772

Mike Coslo wrote:

> I was listening to a preacher just last night.
>
> According to him, All is preordinated. God knows the outcome of everything
> and every single thing that has and will ever happen. All is predestinated.
> This has been known from before he created the unuverse

Predestinated?? Does that mean that God knows exactly when
you will end your 2-meter mobile QSO, lock up the car and
go inside the supermarket for the milk jug the XYL just told
you to pick up on the way home?

Jim, K7JEB

1799. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 17:39:00 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3599e122-906d-4099-a7bf-315d7f883189@l42g2000hsc.googlegroups.com>
Source record: 22773

On Sep 5, 12:05 pm, "Mike Lucas" <w5...@bellsouth.net> wrote:
> "Art Unwin" wrote
>
> -massive drivel snip-
>
> Without acceptance of such we only have self
> perceived experts in the hobby of ham radio.
>
> Happy days
> Art Unwin KB9MZ.....xg
>
> Art: I checked your web page... soooo glad to see
> that you've corrected the errors, and have posted only
> what you KNOW about antennas!
>
> Mike W5CHR
> Memphis

What I "know": is what I can prove that is correct using accepted
known Universal laws such as the laws of Newton and Maxwell as taught
universally.
I will provide all of this when I get the go ahead for my page.
If you can disprove without doubt what I state as a viable theory you
can shatter by providing
evidence where the theory does not hold. This is the way science
progreses and not by stoking the fire
and exercising a loose mouth Maybe it is a mistake coming back and
sharing information on antennas
when all that is required is a target for the uninformed
Regards
Art Unwin KB9MZ.....xg
Art.

1800. Re: ieee.org hosts presentation on new technology.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 17:47:19 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a4639e69-fdbc-4f77-9357-97a56d77b2e1@l64g2000hse.googlegroups.com>
Source record: 22774

On Sep 5, 12:14 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Cecil Moore wrote:
> > John Smith wrote:
> >>http://ewh.ieee.org/r1/providence/dlm.htm
>
> > Here's another one:
>
> >http://www.spectrum.ieee.org/aug08/6609
>
> > Two times zero doesn't always equal zero.
>
> ;-)
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

John, may I suggest that the term :"zero" represents the extreme of
what can be perceived and not a total
nothingness which cannot exist in science. Thus we can have two
phenomina that cannot be identified
in singular form but becomes identifiable when they act in concert.
Best Regards
Art

1801. E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:00:52 UTC
From: Jon Mcleod <jonmcleod2003@yahoo.com>
Message-ID: <t92dnXpY9Jh071zVnZ2dnUVZ_sjinZ2d@earthlink.com>
Source record: 22775

A few weeks ago, I asked about generating an 140kHz electric field across a leaf, part of a bio-med lab. Thanks for the answers. But it turns out I misread the roster and was in the wrong group.

What I ACTUALLY NEED to do is generate a 100kHz electric field, at 1v/cm, across a T-Bone steak, to measure whether it retards or accelerates decomposition over time. The hypothesis is that the e-field retards growth of certain bacteria inside the meat.

By design, we have not been instructed exactly how to construct the methods and apparatus. I have at my disposal a function generator and various amplifiers.

It is a gross oversimplification to just connect one wire to one end of the steak, and another wire at the other end, and apply 20V RMS across a 20cm steak to generate 1V/cm?

Thanks. Sorry about the idiot questions.

1802. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:11:35 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3ba74ff4-6fa3-407a-ae89-d1858573b1f9@y38g2000hsy.googlegroups.com>
Source record: 22776

On Sep 4, 11:45 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Sep 4, 9:45?pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > In Switzerland on the 10th of this month they are going to project a
> >> > particle thru the Earths crust at the speed of light. The particle
> >> > that they are projecting comes from outer space.
>
> >> Well actually they are going project 2 locally generated proton beams
> >> around a giant circle at 99.99% the speed of light so that they
> >> collide.
>
> >> But don't let easily verifiable facts get in your way.
>
> >> > So what does this
> >> > have to do with antennas?
>
> >> Nothing.
>
> >> > Low energy particles are in abundance on Earth as they are in space
>
> >> Actually, high energy particles are in abundance on Earth as they
> >> are in space, they are called cosmic rays, but again don't let easily
> >> verifiable facts get in your way.
>
> >> > but they obtain their own magnetic field as they enter the earths
> >> > arbitrary field and settle on such things as antennas made from a
> >> > diamagnetic material!
>
> >> And thus we have completed our journey to la-la land.
>
> >> Hope you enjoyed the trip.
>
> >> <snip remaining babble>
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > When one referes to Cosmic rays it really shows that he is uninformed.
> > Informed people would call it an accumullation of particles that
> > continually bombard
> > our earth some of which release their energy when collisions occur

> > with the earths magnetic field.
>
> Wrong, the term "cosmic rays" is a misnomer as they are actually
> individually arriving partcles, about 90% of which are protons,
> 9% are helium nuclei or alpha particles and about 1% are electrons.
>
> They collide with the molecules of the atmosphere and produce a
> cascade of lighter particles.
>
> > Such particles are usually clumps bounded together by the force of
> > colour that is released in the form of an Aurora
> > where some speculate it is that that feeds energy to the weather
> > clouds of Earth that provides time varying magnetic fields
> > which can create tornadoes as a form of eddy current. Those that
> > bombard or float thru the earth's boundary are in single particle form
> > and rest on surfaces that will not absorb them into their overall
> > atomic pattern. Since the earth is more than 95% diagmatic they can
> > really settle anywhere.
>
> Utter, babbling nonsense.
>
> Cosmic rays arrive individually and are not clumped.
>
> > It is these particles that I am refering to and that is not babble
> > unless you can prove otherwise.
>
> http://en.wikipedia.org/wiki/Cosmic_rayhttp://helios.gsfc.nasa.gov/cosmic.htmlhttp://www
.srl.caltech.edu/personnel/dick/cos_encyc.htmlhttp://www.ngdc.noaa.gov/stp/SOLAR/COSMIC_RA
YS/cosmic.htmlhttp://imagine.gsfc.nasa.gov/docs/science/know_l1/cosmic_rays.htmlhttp://hyp
erphysics.phy-astr.gsu.edu/Hbase/astro/cosmic.htmlhttp://www2.slac.stanford.edu/vvc/cosmic
_rays.htmlhttp://www.ast.leeds.ac.uk/haverah/aims.shtmlhttp://www.sciencedaily.com/release
s/2007/10/071009160230.htmhttp://www.auger.org/
>
> Want more proof you are babbling nonsense?
>
> > These same particles cannot radiate in
> > space under their own means but only when under the earth's
> > gravitational influence and where the anti gravity forces become a
> > reality.(Newton's law in action)
>
> More babbling nonsense.
>
> The particles come from space.
>
> Gravity has little influence on them.
>
> There is no such thing as "the anti gravity forces".
>
> The velocities and energies are such that Newtonian physics doesn't
> apply and you are forced to use relativistic physics.

>
> > If you are not aware of the particular experiment that I was referring
> > to then your posting was intended to cause anger because of the
> > absence
> > of anything that could be seen as adding to a conversation in a polite
> > manner.
>
> There is no such experiment.
>
> www.cern.ch
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Jim, following your advice I just entered "cern" in Google.
It immediately states as correct everything I have stated in detail
except for the identity
of the "weak" force which I have subsequently discovered.
If CERN provides such an outline of the progress on present day
science and the
path that they are proceding upon then on what premise do you have to
advise
others that all that it states is false?
I recommend that all viewers do the same as I just did and decide
whether
you are correct in the face of what "cern" states !
I see no point in continueing this thread for the benefit of loose
mouths
Art

1803. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:16:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <12c3d0eb-5fa6-4de8-9993-509c30fcaaec@j22g2000hsf.googlegroups.com>
Source record: 22777

On Sep 5, 1:00 pm, Jon Mcleod <jonmcleod2...@yahoo.com> wrote:
> A few weeks ago, I asked about generating an 140kHz electric field
> across a leaf, part of a bio-med lab. Thanks for the answers. But it
> turns out I misread the roster and was in the wrong group.
>
> What I ACTUALLY NEED to do is generate a 100kHz electric field, at
> 1v/cm, across a T-Bone steak, to measure whether it retards or
> accelerates decomposition over time. The hypothesis is that the e-field
> retards growth of certain bacteria inside the meat.
>
> By design, we have not been instructed exactly how to construct the
> methods and apparatus. I have at my disposal a function generator and
> various amplifiers.
>
> It is a gross oversimplification to just connect one wire to one end of
> the steak, and another wire at the other end, and apply 20V RMS across a
> 20cm steak to generate 1V/cm?
>
> Thanks. Sorry about the idiot questions.

What you are refering to is the induction process as applied to
present day induction cookers
available in stors for the general consumer
Best regards
Art

1804. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:19:28 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g9rt7f$14nq$1@f04n12.cac.psu.edu>
Source record: 22778

Jim, K7JEB wrote:
> Mike Coslo wrote:
>
>> I was listening to a preacher just last night.
>>
>> According to him, All is preordinated. God knows the outcome of everything
>> and every single thing that has and will ever happen. All is predestinated.
>> This has been known from before he created the unuverse
>
> Predestinated?? Does that mean that God knows exactly when
> you will end your 2-meter mobile QSO, lock up the car and
> go inside the supermarket for the milk jug the XYL just told
> you to pick up on the way home?

You got it. He won't tell you when you lock your keys in the car - even
when he already knows you're going to do it!

- 73 de Mike N3LI -

1805. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:19:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b0t2c41cif083b5g7m8dfdnog2sof7tpng@4ax.com>
Source record: 22779

On Fri, 05 Sep 2008 14:00:52 -0400, Jon Mcleod
<jonmcleod2003@yahoo.com> wrote:

>A few weeks ago, I asked about generating an 140kHz electric field
>across a leaf, part of a bio-med lab. Thanks for the answers. But it
>turns out I misread the roster and was in the wrong group.
>
>What I ACTUALLY NEED to do is generate a 100kHz electric field, at
>1v/cm, across a T-Bone steak, to measure whether it retards or
>accelerates decomposition over time. The hypothesis is that the e-field
>retards growth of certain bacteria inside the meat.

A pretty shabby hypothesis.

>By design, we have not been instructed exactly how to construct the
>methods and apparatus. I have at my disposal a function generator and
>various amplifiers.
>
>It is a gross oversimplification to just connect one wire to one end of
>the steak, and another wire at the other end, and apply 20V RMS across a
>20cm steak to generate 1V/cm?

Yes it is a gross oversimplification. What are your controls?

>Thanks. Sorry about the idiot questions.

Hi Jon,

It has been historically proven that the e-fields of 60 Hz current
across the ribs of convicts, over time (about several minutes)
seriously accelerates decomposition. Sterilization would naturally
follow too answering the point about bacteria growth. Between those
two obvious observations, it would seem you have a conflicting agenda.
The hypothesis you are testing seems to want to simultaneously
challenge and support longstanding evidence through shifting frequency
without actually specifying how MUCH current should be applied. Thus
the hypothesis devolves to: "How does frequency enter into what has
already been observed?"

Let me point out that this, too, already has longstanding evidence of
doing pretty much offering the same outcome; and the state, for the
sake of economy, has long since abandoned the hypothesis of performing
executions with 100KHz electric chairs.

To put it simply, you have to many unstated and unfulfilled variables
to call your proposal a hypothesis.

73's
Richard Clark, KB7QHC

1806. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:27:44 UTC
From: Jon Mcleod <jonmcleod2003@yahoo.com>
Message-ID: <mLWdnWQQdqGq5FzVnZ2dnUVZ_ozinZ2d@earthlink.com>
Source record: 22780

Art Unwin wrote:

> What you are refering to is the induction process as applied to
> present day induction cookers
> available in stors for the general consumer
> Best regards

Actually, no, the induction cooker uses a much stronger field. This is a low voltage field (1v/cm) that doesn't cook (or heat) the steak. Supposedly it disrupts internal structures inside bacteria when they try to divide, at least so goes the hypothesis.

1807. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:31:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nju2c4tmsfjofsi1bkrfprk0c2433rmr6o@4ax.com>
Source record: 22781

On Fri, 5 Sep 2008 11:11:35 -0700 (PDT), Art Unwin wrote:
On Sep 4, 11:45 Jim Pennino wrote:
>> www.cern.ch
>Jim, following your advice I just entered "cern" in Google.

1808. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:37:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ppu2c45ik2qias6q6bjpe5eh1aju9516v2@4ax.com>
Source record: 22783

On Fri, 05 Sep 2008 14:19:28 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>Jim, K7JEB wrote:
>> Mike Coslo wrote:
>>
>>> I was listening to a preacher just last night.
>>>
>>> According to him, All is preordinated. God knows the outcome of everything
>>> and every single thing that has and will ever happen. All is predestinated.
>>> This has been known from before he created the unuverse
>>
>> Predestinated?? Does that mean that God knows exactly when
>> you will end your 2-meter mobile QSO, lock up the car and
>> go inside the supermarket for the milk jug the XYL just told
>> you to pick up on the way home?
>
>
>You got it. He won't tell you when you lock your keys in the car - even
>when he already knows you're going to do it!

He won't answer your prayers for the phone number for AAA because he
already wrote it on your membership card he knew you left on the
dresser.

73's
Richard Clark, KB7QHC

1809. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:42:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c43c322c-3054-49b4-8b91-eb10fb0a2941@c58g2000hsc.googlegroups.com>
Source record: 22784

On Sep 5, 1:27 pm, Jon Mcleod <jonmcleod2...@yahoo.com> wrote:
> Art Unwin wrote:
> > What you are refering to is the induction process as applied to
> > present day induction cookers
> > available in stors for the general consumer
> > Best regards
>
> Actually, no, the induction cooker uses a much stronger field. This is
> a low voltage field (1v/cm) that doesn't cook (or heat) the steak.
> Supposedly it disrupts internal structures inside bacteria when they try
> to divide, at least so goes the hypothesis.

Well you are partly correct.If the heating section is not fully
resonant and a time varying current is applied
Then you attain a position where radiation is retarded and replaced by
heat. If the heating section
is resonant then the applied time varying current will only supply the
energy to overcome friction and where all the rest
is radiation. The equivalent electrical circuit is known as a Tank
circuit where applied energy
only replaces the friction involved in the continuos movement of
charges backwards and
forwards between the inductor and the capacitor in a near perpetual
motion..
So in the correct circumstances only a bare minimum of heat is
generated and where
the rest of the energy goes to provide radiation a well known
attribute created for sterelization found by Madame Curie
of France
Cheers
Art

1810. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:42:31 UTC
From: Jon Mcleod <jonmcleod2003@yahoo.com>
Message-ID: <yl2dnS1kwOMw4VzVnZ2dnUVZ_gudnZ2d@earthlink.com>
Source record: 22782

Richard Clark wrote:
> On Fri, 05 Sep 2008 14:00:52 -0400, Jon Mcleod
> <jonmcleod2003@yahoo.com> wrote:
>
>> A few weeks ago, I asked about generating an 140kHz electric field
>> across a leaf, part of a bio-med lab. Thanks for the answers. But it
>> turns out I misread the roster and was in the wrong group.
>>
>> What I ACTUALLY NEED to do is generate a 100kHz electric field, at
>> 1v/cm, across a T-Bone steak, to measure whether it retards or
>> accelerates decomposition over time. The hypothesis is that the e-field
>> retards growth of certain bacteria inside the meat.
>
> A pretty shabby hypothesis.
>
>> By design, we have not been instructed exactly how to construct the
>> methods and apparatus. I have at my disposal a function generator and
>> various amplifiers.
>>
>> It is a gross oversimplification to just connect one wire to one end of
>> the steak, and another wire at the other end, and apply 20V RMS across a
>> 20cm steak to generate 1V/cm?
>
> Yes it is a gross oversimplification. What are your controls?
>
>> Thanks. Sorry about the idiot questions.
>
> Hi Jon,
>
> It has been historically proven that the e-fields of 60 Hz current
> across the ribs of convicts, over time (about several minutes)
> seriously accelerates decomposition. Sterilization would naturally
> follow too answering the point about bacteria growth. Between those
> two obvious observations, it would seem you have a conflicting agenda.
> The hypothesis you are testing seems to want to simultaneously
> challenge and support longstanding evidence through shifting frequency
> without actually specifying how MUCH current should be applied. Thus
> the hypothesis devolves to: "How does frequency enter into what has
> already been observed?"
>
> Let me point out that this, too, already has longstanding evidence of
> doing pretty much offering the same outcome; and the state, for the
> sake of economy, has long since abandoned the hypothesis of performing
> executions with 100KHz electric chairs.

>
> To put it simply, you have to many unstated and unfulfilled variables
> to call your proposal a hypothesis.
>
> 73's
> Richard Clark, KB7QHC

Mr. Clark,

The control is another steak is similar size from the same grocery packaging, placed in a second apparatus that is not powered.

The idea is that a certain frequencies of low-voltage e-fields inhibit cellular mitosis.

The professor saw an article in Science magazine about treating cancer with these fields, and decided it would be a nice lab activity for his students to observe other effects with this type of field.

www.rife.de/files/disruption_of_cancer_cell_replication.pdf

Since generating an e-field in "meat" or "plant material" is not so easy, this is part of the assignment. We need to figure it out and then fully describe it in our methods section. The leaf people are using high-voltage insulated wires. With "meat", which is larger, I don't think this will work. I am wondering if I can use a low-voltage direct connection.

My problem is that our group is weak on electromagnetism. They have been floundering, and now I am floundering with them. I have some ideas, but ideas are best vetted through those with PRACTICAL experience, which you guys seem to have. I have also wasted almost 2 weeks by sitting in the wrong group. OK I am an idiot in terms of BOTH electromagnetism and reading directions.

Bottom line: I need to generate a 1V/cm field across a t-bone steak. Merit or no merit (this is college). Does anyone have any place I might look on line, or any book I might buy, or any advice on how I might accomplish this?

Thank you.

1811. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 18:53:53 UTC
From: Dave <noone@nowhere.com>
Message-ID: <5ffwk.487$Dj1.218@trnddc02>
Source record: 22785

"Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
news:yI2dnS1kwOMw4VzVnZ2dnUVZ_gudnZ2d@earthlink.com...
> Richard Clark wrote:
>> On Fri, 05 Sep 2008 14:00:52 -0400, Jon Mcleod
>> <jonmcleod2003@yahoo.com> wrote:
>>
>>> A few weeks ago, I asked about generating an 140kHz electric field
>>> across a leaf, part of a bio-med lab. Thanks for the answers. But it
>>> turns out I misread the roster and was in the wrong group.
>>>
>>> What I ACTUALLY NEED to do is generate a 100kHz electric field, at
>>> 1v/cm, across a T-Bone steak, to measure whether it retards or
>>> accelerates decomposition over time. The hypothesis is that the e-field
>>> retards growth of certain bacteria inside the meat.
>>
>> A pretty shabby hypothesis.
>>
>>> By design, we have not been instructed exactly how to construct the
>>> methods and apparatus. I have at my disposal a function generator and
>>> various amplifiers.
>>>
>>> It is a gross oversimplification to just connect one wire to one end of
>>> the steak, and another wire at the other end, and apply 20V RMS across a
>>> 20cm steak to generate 1V/cm?
>>
>> Yes it is a gross oversimplification. What are your controls?
>>
>>> Thanks. Sorry about the idiot questions.
>>
>> Hi Jon,
>>
>> It has been historically proven that the e-fields of 60 Hz current
>> across the ribs of convicts, over time (about several minutes)
>> seriously accelerates decomposition. Sterilization would naturally
>> follow too answering the point about bacteria growth. Between those
>> two obvious observations, it would seem you have a conflicting agenda.
>> The hypothesis you are testing seems to want to simultaneously
>> challenge and support longstanding evidence through shifting frequency
>> without actually specifying how MUCH current should be applied. Thus
>> the hypothesis devolves to: "How does frequency enter into what has
>> already been observed?" Let me point out that this, too, already has
>> longstanding evidence of
>> doing pretty much offering the same outcome; and the state, for the
>> sake of economy, has long since abandoned the hypothesis of performing

>> executions with 100KHz electric chairs.
>>
>> To put it simply, you have to many unstated and unfulfilled variables
>> to call your proposal a hypothesis.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> Mr. Clark,
>
> The control is another steak is similar size from the same grocery
> packaging, placed in a second apparatus that is not powered.
>
> The idea is that a certain frequencies of low-voltage e-fields inhibit
> cellular mitosis.
>
> The professor saw an article in Science magazine about treating cancer
> with these fields, and decided it would be a nice lab activity for his
> students to observe other effects with this type of field.
>
> www.rife.de/files/disruption_of_cancer_cell_replication.pdf
>
> Since generating an e-field in "meat" or "plant material" is not so easy,
> this is part of the assignment. We need to figure it out and then fully
> describe it in our methods section. The leaf people are using
> high-voltage insulated wires. With "meat", which is larger, I don't think
> this will work. I am wondering if I can use a low-voltage direct
> connection.
>
> My problem is that our group is weak on electromagnetism. They have been
> floundering, and now I am floundering with them. I have some ideas, but
> ideas are best vetted through those with PRACTICAL experience, which you
> guys seem to have. I have also wasted almost 2 weeks by sitting in the
> wrong group. OK I am an idiot in terms of BOTH electromagnetism and
> reading directions.
>
> Bottom line: I need to generate a 1V/cm field across a t-bone steak. Merit
> or no merit (this is college). Does anyone have any place I might look on
> line, or any book I might buy, or any advice on how I might accomplish
> this?
>
> Thank you.

the problem is, do you want the field 'inside' the meat, or in the air around the meat? The problem is made harder because the steak is not only a dielectric material, which changes the magnitude of the field, but is also moderately conductive, which essentially shorts out the field. also, the properties depend on the direction of the field... you might want to see if your library has this article: http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=300250 . personally

i would probably go the other way and suspend the meat on an insulating net horizontally and put a plate above and below it that are bigger than the steak. it is much easier to generate a uniform field between large parallel conductive plates than with wires... as a first approximation make the plates about double the largest dimension of the steak. it may be acceptible to set the steak on one of the plates (sterilize it first) and just suspend the other one above it.

1812. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 19:04:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <39v2c4h017d8js7orjgjgf0qg2ap7r58bs@4ax.com>
Source record: 22786

On Fri, 05 Sep 2008 14:42:31 -0400, Jon Mcleod
<jonmcleod2003@yahoo.com> wrote:

>Mr. Clark,
>
>The control is another steak is similar size from the same grocery
>packaging, placed in a second apparatus that is not powered.
>
>The idea is that a certain frequencies of low-voltage e-fields inhibit
>cellular mitosis.
>
>The professor saw an article in Science magazine about treating cancer
>with these fields, and decided it would be a nice lab activity for his
>students to observe other effects with this type of field.
>
>www.rife.de/files/disruption_of_cancer_cell_replication.pdf

Hi Jon,

Let's examine the hypothesis of "low-voltage e-fields" in light of the
source:
In Vitro Experimental Set Up. Cultures were grown in standard
culture dishes (4-well cell culture chambers; SN 138121; Nalge
Nunc International). The TTFields were generated by pairs of
15-mm-long, completely insulated wires (P/N K-30ï¿½1000; VT
Corporation; outer diameter, 0.5 mm; ethylene tetrafluoroethylene
insulation thickness, 0.125 mm; dielectric breakdown,
1800 V/mil) fixed to the bottom of each dish at a distance of 1 mm
from each other. The wires were connected to an oscillator
(GFG8219A; Instek) and a high-voltage amplifier (A303; A. A. Lab
Systems Ltd.) that generated the required sine-wave signals
(range, 300-800 V).

This would equate to an average of 5,500V/cM or roughly 275kV across
the chest of a convict. History reveals that this prisoner would be
specially prepared with conductive paste and electrodes that were NOT
insulated (such as specified in your source). Thus we have two
differences:
1. Frequency (100KHz vs. 60 Hz);
2. Insulation;
3. Application (in situ vs. in vitro).

>Since generating an e-field in "meat" or "plant material" is not so
>easy, this is part of the assignment. We need to figure it out and then
>fully describe it in our methods section. The leaf people are using
>high-voltage insulated wires. With "meat", which is larger, I don't

>think this will work. I am wondering if I can use a low-voltage direct
>connection.

You would then be changing the conditions from testing fields to
testing conduction. Ask yourself, if faced with the prospects of
sitting in the electric chair, would you care to amend the conditions
to include insulative pads at all points that formerly contacted the
seat? Your rational answer would suggest you already know you are
redefining expectations.
>
>My problem is that our group is weak on electromagnetism. They have
>been floundering, and now I am floundering with them. I have some
>ideas, but ideas are best vetted through those with PRACTICAL
>experience, which you guys seem to have. I have also wasted almost 2
>weeks by sitting in the wrong group. OK I am an idiot in terms of BOTH
>electromagnetism and reading directions.
>
>Bottom line: I need to generate a 1V/cm field across a t-bone steak.
>Merit or no merit (this is college). Does anyone have any place I might
>look on line, or any book I might buy, or any advice on how I might
>accomplish this?

You stick to the source if you want a good grade. To replicate the
experiment, you have to conform exactly to the conditions, but not
necessarily the means.

It follows from shallow reading (speaking of my own efforts, not
yours) that there is not much current flowing (otherwise this would
immediately place us in the chair with the convict). This is to your
advantage. You use the function generator you have, apply it to what
is called a step-up transformer to obtain the voltage specified; and
you come very close to the original conditions. Your function
generator should have enough power to both step-up and supply the low
current (you will have to confirm this through other means). You will
have to use a small portion of meat because this is an e-field
experiment that is measured in volt/meter. Choosing a T-Bone
exacerbates your voltage problem, and making a direct connection
invalidates it.

Almost any insulated wire will perform adequately, the source is
simply providing information for you to choose a suitable alternative,
it is not necessary to find the exact reel of wire from a specific
manufacturer. Google for the topic "100 KHz voltage transformer" and
you will find a design that shows you how to construct one within an
hour of obtaining the cheap components. It is merely a matter of
ratios (how much voltage out of your function generator, and how much
do you need?). This, of course, requires you to have a voltmeter that
measures voltage at that frequency.

Go to the EE department and visit their second year circuits lab.

73's
Richard Clark, KB7QHC

1813. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 19:11:20 UTC
From: Jon Mcleod <jonmcleod2003@yahoo.com>
Message-ID: <C-ednfhtdYXzHlzVnZ2dnUVZ_hGdnZ2d@earthlink.com>
Source record: 22787

Dave wrote:

> the problem is, do you want the field 'inside' the meat, or in the air
> around the meat? The problem is made harder because the steak is not only a
> dielectric material, which changes the magnitude of the field, but is also
> moderately conductive, which essentially shorts out the field. also, the
> properties depend on the direction of the field... you might want to see if
> your library has this article:
> http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=300250 . personally
> i would probably go the other way and suspend the meat on an insulating net
> horizontally and put a plate above and below it that are bigger than the
> steak. it is much easier to generate a uniform field between large parallel
> conductive plates than with wires... as a first approximation make the
> plates about double the largest dimension of the steak. it may be
> acceptible to set the steak on one of the plates (sterilize it first) and
> just suspend the other one above it.

Thank you! In hindsight, obviously applying a field top to bottom will
be easier than side-to-side!

I need to research it, but I should be able to calculate the voltage
required to generate the 1v/cm field in the steak if I know the
dielectric constant of the "meat"...

One question, what if the plates both touch the steak and I use a
smaller voltage? I guess since steak is conductive, keeping the plates
at a 1V/cm potential may actually sink a lot of current through the
steak and cook it after all.

1814. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 19:20:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q113c4lg8suqksoqgasud6683m76dpalvs@4ax.com>
Source record: 22788

On Fri, 05 Sep 2008 18:53:53 GMT, "Dave" <noone@nowhere.com> wrote:

>The problem is made harder because the steak is not only a
>dielectric material, which changes the magnitude of the field, but is also
>moderately conductive, which essentially shorts out the field.

Hi Jon, through Dave,

Let's examine what is offered above, and the fault in a large T-Bone.

The original work was performed with an average of 550V across a gap of 1mm which contained a sample of cells. Those cells, too, shorted out the voltage, but across a shorter distance.

Most function generators will only source several volts at best, let's call it 5.5V to simplify comparisons. We replicate the field arrangement with a 10cM portion of steak. When we revisit the field strength, we will find it has plunged from the normalized 550,000V/m of the original work to the now feeble 55V/m or 4 orders of magnitude lower field of your suggested work.

It would follow from the original author's thesis that your efforts will show 4 orders of magnitude less results. Call it zero. There's no point in doing it without replicating the fields as specified in the original.

73's
Richard Clark, KB7QHC

1815. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 19:23:11 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <43514320-df9f-4834-b545-64f965c314db@m45g2000hsb.googlegroups.com>
Source record: 22789

On Sep 5, 1:27 pm, Jon Mcleod <jonmcleod2...@yahoo.com> wrote:
> Art Unwin wrote:
> > What you are refering to is the induction process as applied to
> > present day induction cookers
> > available in stors for the general consumer
> > Best regards
>
> Actually, no, the induction cooker uses a much stronger field. This is
> a low voltage field (1v/cm) that doesn't cook (or heat) the steak.
> Supposedly it disrupts internal structures inside bacteria when they try
> to divide, at least so goes the hypothesis.

Jon, the idea of heat is confusing you!. The BBC aired a segment from
Germany
where they placed a slab of ice on top of a induction oven and then
placed a cooking utensel
on top of the ice so they could cook its contents. If the induction
oven was creating heat instead of a radiation field
one could surmise that the ice would melt . This was not the case as
radiation bypassed the ice and gyrated towards
the diagmagnetic cooking utensil. The experiment may well still be
shown on U tube!
I have just to get away and do some honey dooos !
Regards
Art KB9MZ

1816. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 19:25:06 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <q5d8p5-11i.ln1@mail.specsol.com>
Source record: 22790

Art Unwin <ArthurUnwin@gmail.com> wrote:

> Jim, following your advice I just entered "cern" in Google.

Yeah, sure, that's what I said.

> It immediately states as correct everything I have stated in detail

Yeah, sure, of course it does.

Yeah, you're genius all right; sane too.

--
Jim Pennino

Remove .spam.sux to reply.

1817. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 19:27:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nn13c41lv421vniv6uaob6kir0ovtktp7v@4ax.com>
Source record: 22791

On Fri, 05 Sep 2008 15:11:20 -0400, Jon Mcleod
<jonmcleod2003@yahoo.com> wrote:

>I need to research it, but I should be able to calculate the voltage
>required to generate the 1v/cm field in the steak if I know the
>dielectric constant of the "meat"...

Hi Jon,

The dielectric constant of anything is a sidebar, or distraction,
simply because you don't know the dc of the original work's cells
either. In all probability they are the same, but this is unnecessary
information.

More to the matter is where you derive 1V/cm from the original work's
application of an average of 550V (nearly 3 orders greater) to 1mm gap
(exactly 1 order smaller). Your 1V is off by nearly 4 orders of
magnitude.

Again, if you were a convict and they let you set the voltage DOWN by
4 orders of magnitude, you might ask for a cool drink while the threw
the switch and waited several hours for your execution. They may have
to suspend it on account of darkness until the next dawn.

73's
Richard Clark, KB7QHC

1818. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 19:41:15 UTC
From: Jon Mcleod <jonmcleod2003@yahoo.com>
Message-ID: <k_6dnYhEwK7vF1zVnZ2dnUVZ_r7inZ2d@earthlink.com>
Source record: 22792

Richard Clark wrote:
> On Fri, 05 Sep 2008 18:53:53 GMT, "Dave" <noone@nowhere.com> wrote:
>
>> The problem is made harder because the steak is not only a
>> dielectric material, which changes the magnitude of the field, but is also
>> moderately conductive, which essentially shorts out the field.
>
> Hi Jon, through Dave,
>
> Let's examine what is offered above, and the fault in a large T-Bone.
>
> The original work was performed with an average of 550V across a gap
> of 1mm which contained a sample of cells. Those cells, too, shorted
> out the voltage, but across a shorter distance.
>
> Most function generators will only source several volts at best, let's
> call it 5.5V to simplify comparisons. We replicate the field
> arrangement with a 10cM portion of steak. When we revisit the field
> strength, we will find it has plunged from the normalized 550,000V/m
> of the original work to the now feeble 55V/m or 4 orders of magnitude
> lower field of your suggested work.
>
> It would follow from the original author's thesis that your efforts
> will show 4 orders of magnitude less results. Call it zero. There's
> no point in doing it without replicating the fields as specified in
> the original.

Mr. Clark,

In the introduction, they describe, "In the present study we show for
the first time, to our knowledge, that very low-intensity (2 V/cm),
intermediate-frequency (100ï¿½300kHz), alternating electric fields induced
by insulated electrodes have specific inhibitory effects on dividing
cells in culture."

The novocure dude is talking about 2 V/cm, and the prof here is talking
about 1V/cm. I don't need to duplicate this experiment, I need to
immerse a T-Bone into a 1V/cm, 100kHz e-field. I appreciate your help
so much, but I don't understand where 550,000V/m is coming from???

1819. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 20:07:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nf23c495i8rvdh1m9ppe9i7hvtrq6h5v7f@4ax.com>
Source record: 22793

Following my post, I read your source material closer to then ammend
my statements, interleaved below:

On Fri, 05 Sep 2008 12:27:57 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Fri, 05 Sep 2008 15:11:20 -0400, Jon Mcleod
><jonmcleod2003@yahoo.com> wrote:
>
>>I need to research it, but I should be able to calculate the voltage
>>required to generate the 1v/cm field in the steak if I know the
>>dielectric constant of the "meat"...
>
>Hi Jon,
>
>The dielectric constant of anything is a sidebar, or distraction,
>simply because you don't know the dc of the original work's cells
>either. In all probability they are the same, but this is unnecessary
>information.

In fact, they do report the dielectric constant, and as I speculated,
nearly identical to that of steak (or seawater for that matter).

>More to the matter is where you derive 1V/cm from the original work's
>application of an average of 550V (nearly 3 orders greater) to 1mm gap
>(exactly 1 order smaller). Your 1V is off by nearly 4 orders of
>magnitude.

In fact, they do report 1V/cm.
The electric field intensity was mapped within the cell, based on
the amplitude (1 V/cm), frequency (100 kHz) and waveform (sine) of
the electric field applied to the cell culture.

Unfortunately their reference for this was
11. Volakis JL, Chatterjee A, Kempel LC. Finite element method
electromagnetics: antennas, microwave circuits, and scattering
applications.
which cannot be applied to a situation where the wavelength of
excitation is 3000 meters and the gap is one thousandth meter. The
calculation of 1V/cm based upon the application of an average of 550V
across a 1mm gap flies in the face of credulity.

However, and again confounding their use of power amplifier to deliver
1 V/cm in the near field, there is the report:
The electric field intensity in the culture medium was measured by
means of a probe, consisting of two (0.25 mm in diameter)

insulated wires with exposed tips 0.5 mm apart, that was dipped in the culture medium. The wires were connected to a high-input impedance differential amplifier that translated the waveform amplitude into a calibrated steady voltage that was digitally recorded. Field intensities throughout the manuscript are expressed in peak voltage amplitude per centimeter (V/cm).

Care was taken to eliminate any pickup from the field outside the culture medium. Continuous field monitoring could also be made by measuring the potential drop across a 100 Ohm resistor placed in series with one of the field generating wires.

This last statement lacks data about what voltage was observed and says nothing of the contribution of field's interaction with the leads going to it to measure the voltage across them.

I can understand your desire to simply shove your function generator's output directly into a steak. It is a choice that is tantilizingly teased as an option given this report of 1 V/cm. It also raises the curious aversion of the authors from performing the same test and removing the absurd complexity of amplifiers and remote senors. Afterall, 1 V/cm is trivial to obtain, demands no external amplification, and whose level can be monitored from the function generator itself.

All of this (in concert with missing data and no computation shown) suggests a problematic correlation of results (which are inarguable) to field strength.

Again, science would say replicate the conditions and observe if the results follow. You can make your own correlations. All things being practical, the application of an average of 550V across a 1mm gap demands a better reporting of a finding of 1 V/cm in the sample.

73's
Richard Clark, KB7QHC

1820. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 20:09:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <9mgwk.21523$89.9096@nlpi069.nbdc.sbc.com>
Source record: 22794

Michael Coslo wrote:
> You got it. He won't tell you when you lock your keys in the car - even
> when he already knows you're going to do it!

Even before He told Pharaoh to let His people go,
He already knew Pharaoh was predestined to say no.
--
73, Cecil http://www.w5dxp.com

1821. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 20:25:27 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <g9s4jn$1j70$1@f04n12.cac.psu.edu>
Source record: 22795

Richard Clark wrote:
> On Fri, 05 Sep 2008 14:19:28 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> Jim, K7JEB wrote:
>>> Mike Coslo wrote:
>>>
>>>> I was listening to a preacher just last night.
>>>>
>>>> According to him, All is preordinated. God knows the outcome of everything
>>>> and every single thing that has and will ever happen. All is predestinated.
>>>> This has been known from before he created the unuverse
>>> Predestinated?? Does that mean that God knows exactly when
>>> you will end your 2-meter mobile QSO, lock up the car and
>>> go inside the supermarket for the milk jug the XYL just told
>>> you to pick up on the way home?
>>
>> You got it. He won't tell you when you lock your keys in the car - even
>> when he already knows you're going to do it!
>
> He won't answer your prayers for the phone number for AAA because he
> already wrote it on your membership card he knew you left on the
> dresser.

If he was a person, he wouldn't be on my Christmas card list.

After I wrote that, I realized just how weird the statement was. Oh
well, I'll leave it for people's amusement or irritation.

Suffice it to say, the XYL wouldn't put up with that sort of behavior....

- 73 de Mike N3LI -

1822. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 20:38:56 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ANgwk.665$Wd.550@trnddc01>
Source record: 22796

"Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
news:C-ednfhtdYXzHlzVnZ2dnUVZ_hGdnZ2d@earthlink.com...
> Dave wrote:
>
>> the problem is, do you want the field 'inside' the meat, or in the air
>> around the meat? The problem is made harder because the steak is not
>> only a dielectric material, which changes the magnitude of the field, but
>> is also moderately conductive, which essentially shorts out the field.
>> also, the properties depend on the direction of the field... you might
>> want to see if your library has this article:
>> http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=300250 .
>> personally i would probably go the other way and suspend the meat on an
>> insulating net horizontally and put a plate above and below it that are
>> bigger than the steak. it is much easier to generate a uniform field
>> between large parallel conductive plates than with wires... as a first
>> approximation make the plates about double the largest dimension of the
>> steak. it may be acceptible to set the steak on one of the plates
>> (sterilize it first) and just suspend the other one above it.
>
> Thank you! In hindsight, obviously applying a field top to bottom will be
> easier than side-to-side!
>
> I need to research it, but I should be able to calculate the voltage
> required to generate the 1v/cm field in the steak if I know the dielectric
> constant of the "meat"...
>
> One question, what if the plates both touch the steak and I use a smaller
> voltage? I guess since steak is conductive, keeping the plates at a 1V/cm
> potential may actually sink a lot of current through the steak and cook it
> after all.

yes, that would be much harder and may result in cooking.. better to keep an
air gap.

1823. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 20:41:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sc43c49k5pf5uh66tpgbu90h3tnao78b4a@4ax.com>
Source record: 22797

On Fri, 05 Sep 2008 15:41:15 -0400, Jon Mcleod
<jonmcleod2003@yahoo.com> wrote:
>The novocure dude is talking about 2 V/cm, and the prof here is talking
>about 1V/cm. I don't need to duplicate this experiment, I need to
>immerse a T-Bone into a 1V/cm, 100kHz e-field. I appreciate your help
>so much, but I don't understand where 550,000V/m is coming from???

Hi Jon,

Take 550V (the average of their amplifier's 300-800V capacity) and
place it across 1mm. How many volts per meter?

Consider the claim and specification of 1V/cm. How many volts per
meter?

How many volts will you need to obtain 1V/cm across a T-Bone steak
measuring 20 centimeters?

If you can solve one, you can solve them all.

Where did the missing voltage go? This is a simple series impedance
relationship that is linear with distance. To obtain 1V/cm from the
author's source demands that there is considerable impedance isolating
the sample from the excitation probes. This could be accomplished if
there were a huge air gap between the first excitation probe and the
cells' culture, and perhaps a corresponding huge air gap on the other
side of the cell culture towards the second excitation probe. The
ratio of impedances would be 550,000/10. The sum of both air gaps'
impedance would have to exceed the cell culture's impedance by this
ratio.

This is possible, but the report is obscure to that possibility. The
introduction of field measurement probes would be exceedingly
disturbing to the balance of impedances too. The diameters of those
probes consume half the gap within which the cell culture resides, and
lay in exceedingly close proximity to the excitation probes! The
probes themselves present more mass and area than the cell culture.

The claims are specific, but all the evidence points to the authors
having convinced themselves of a very problematic measurement. They
are, afterall, no more versed in the art of antenna math and finite
element modeling than you are. They got numbers to be sure, and
performed what every student would recognize as "plug-n-chug."

However, you are more interested in the results than the claims. Your
assignment, as I understand it, is to investigate what results follow
from your own variation of their work. Unless you are trying to also

validate the correlations to fields, which I seriously doubt you could do, and would be suspect through direct attachment (as it does not conform to the original); then I would suggest you think smaller gap (not a T-Bone), up the voltage (as offered), and measure bacterial activity.

Or, in your own terms:
>What I ACTUALLY NEED to do is generate a 100kHz electric field, at
>1v/cm, across a T-Bone steak, to measure whether it retards or
>accelerates decomposition over time. The hypothesis is that the e-field
>retards growth of certain bacteria inside the meat.
Set your function generator for a 1 volt output, separate two probes by 1 centimeter, place 0.99 centimeters of steak between. I will hope your grade isn't scored in competition to others puting their effort into more voltage across smaller gaps.

73's
Richard Clark, KB7QHC

1824. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 20:53:28 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c9d711f2-9edd-4670-a4f7-483ab2654e94@y21g2000hsf.googlegroups.com>
Source record: 22798

On Sep 5, 2:25 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > Jim, following your advice I just entered "cern" in Google.
>
> Yeah, sure, that's what I said.
>
> > It immediately states as correct everything I have stated in detail
>
> Yeah, sure, of course it does.
>
> Yeah, you're genius all right; sane too.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

If I am a genius it is only by comparison to the likes of you.
Put in "cern"in google where the first item that comes up is Cern's
stated purposes where they specifically state there are four forces in
the standard model
So your idea that the "weak" force is fictitious as well as a swarm of
particles should be referred to as cosmic "rays" whatever "rays" are
totally incorrect as well as your other statements. Other readers can
review the article
and judge for themselves your level of knoweledge in physics and
radiation.
Remember, when you exercise your freedom of free speech you supply the
means
for others to judge exactly what and who you really are. You would
have been better off
giving the reasons why the weak force is fictitious thus showing a
measure of your logic abilities
rather than allowing your lack of knoweledge forcing you to rely
emotionaly on the impact of insults!
Art......nuf aid

1825. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 21:44:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3693c4hi2qiifv8466mod6kfv71ucgtfrd@4ax.com>
Source record: 22799

On Fri, 5 Sep 2008 13:53:28 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Put in "cern"in google

How silly when Jim already supplied the direct link:
www.cern.ch

>Cern's
>stated purposes where they specifically state there are four forces in
>the standard model

From CERN itself:
CERNï¿½s mission
Research, technology, collaboration, education
found on CERN's own web page "About us" where nowhere appears any
references to any number of forces, nor any discussion of standard
models.

>a swarm of particles should be referred to as cosmic "rays" whatever "rays" are
>totally incorrect

Searching CERN's own website for Cosmic Rays reveals 12 documents
within the first one of which clearly states:
Cosmic rays are charged particles that bombard the Earth's
atmosphere from outer space.

The second of those 12 articles, in the FIRST SENTENCE states:
The giant CMS particle detector at CERN has been sealed and
switched on to collect data for an important series of tests using
cosmic ray particles.

The third of those 12 articles, in the FIRST SENTENCE states:
Cosmic particles are raining down on CERN.

The fourth of those 12 articles, in the FIRST SENTENCE 2nd paragraph
states:
Cosmic rays are charged particles that bombard the Earth's
atmosphere from outer space.

and on and on.

>Other readers can
>review the article
>and judge for themselves your level of knoweledge in physics and
>radiation.

how true.

73's
Richard Clark, KB7QHC

1826. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 21:54:32 UTC
From: JB <nospam@goofball.net>
Message-ID: <sUhwk.512$Af3.423@trnddc06>
Source record: 22800

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:Lvcwk.26282$Ri.25085@flpi146.ffdc.sbc.com...
> JB wrote:
> > I can still align Micor and Motrac radios in my sleep
> > step by step.
>
> Using megacycles and condensers, no doubt. :-)
> --
> 73, Cecil http://www.w5dxp.com

Those were in the Pre-Progs.

1827. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 21:56:33 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <g9s9uh$19v$1@news.jpl.nasa.gov>
Source record: 22701

>
> One question, what if the plates both touch the steak and I use a
> smaller voltage? I guess since steak is conductive, keeping the plates
> at a 1V/cm potential may actually sink a lot of current through the
> steak and cook it after all.

Sure, you can have the plates touch the meat. If it's 1cm thick, put a volt across it, and you're done.

As you point out, though, if you put that field on the meat itself (whether by direct contact, or because it's suspended between two plates with air in the middle), current will flow, and heat will be dissipated. Your exercise is to figure out how much, and how hot it gets.

Assume the thermal capacity is the same as water.
I'd assume the conductivity is about the same as sea water (60 mS/cm) as a start.

1828. Re: ieee.org hosts presentation on new technology.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 22:01:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9sa7t$su5$2@news.albasani.net>
Source record: 22702

Art Unwin wrote:

> ...
> John, may I suggest that the term :"zero" represents the extreme of
> what can be perceived and not a total
> nothingness which cannot exist in science. Thus we can have two
> phenomina that cannot be identified
> in singular form but becomes identifiable when they act in concert.
> Best Regards
> Art

Aye captain.

Upon close examination, "absolute zero" is a rather "imaginary
concept/condition."

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1829. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 22:21:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <7OCdnYJPXa1pLVzVnZ2dnUVZ_sudnZ2d@posted.easystreetonline>
Source record: 22703

Do a google search on "TEM cell". That should get you pointed in the
right direction.

Roy Lewallen, W7EL

Jon Mcleod wrote:
> A few weeks ago, I asked about generating an 140kHz electric field
> across a leaf, part of a bio-med lab. Thanks for the answers. But it
> turns out I misread the roster and was in the wrong group.
>
> What I ACTUALLY NEED to do is generate a 100kHz electric field, at
> 1v/cm, across a T-Bone steak, to measure whether it retards or
> accelerates decomposition over time. The hypothesis is that the e-field
> retards growth of certain bacteria inside the meat.
>
> By design, we have not been instructed exactly how to construct the
> methods and apparatus. I have at my disposal a function generator and
> various amplifiers.
>
> It is a gross oversimplification to just connect one wire to one end of
> the steak, and another wire at the other end, and apply 20V RMS across a
> 20cm steak to generate 1V/cm?
>
> Thanks. Sorry about the idiot questions.

1830. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 23:15:06 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <prq8p5-24q.ln1@mail.specsol.com>
Source record: 22704

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Sep 5, 2:25?pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > Jim, following your advice I just entered "cern" in Google.
>>
>> Yeah, sure, that's what I said.
>>
>> > It immediately states as correct everything I have stated in detail
>>
>> Yeah, sure, of course it does.
>>
>> Yeah, you're genius all right; sane too.
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> Put in "cern"in google where the first item that comes up is Cern's

Or you could have gone directly to www.cern.ch like I told you at
least 4 times.

--
Jim Pennino

Remove .spam.sux to reply.

1831. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 23:30:13 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <g9sfe5$2u9$1@news.albasani.net>
Source record: 22705

JB wrote:

> The Devil deceives many and jeers at the truth. But those who
> call on the Lord in prayer keep him at bay. The sun shines on
> the wicked and the righteous.
>
>

Your English is lacking. That second sentence is amusing to us
non-believers. Pray to your lord and you 'keep him at bay'.

These personal gods you just can't trust 'em!

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

1832. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 23:42:09 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <g9sg4h$362$1@news.albasani.net>
Source record: 22706

JB wrote:

>
> It's would be pretty arrogant to consider that you have the ability to screw
> up God's plan. We can't even be sure that Satan screwed up God's plan, but
> it appears that there is some contention that is/was/does exist in the
> heavenly realm.
>

Oh give us a break! It's pretty arrogant of you to assume that:

1) There is a god

2) That he has a plan

3) That there is such a beasty as satan

4) That there is a place called heaven

Still if it gets you through the night who I to deny you a walking
stick.

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

1833. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-05 23:45:57 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <g9sgbl$362$2@news.albasani.net>
Source record: 22707

JB wrote:
Salvation comes by invitation only.

There you go boys, just wait, lay back, smoke that joint, and wait
for the invite.

Goodbye self-determination - what a load of codswallop!

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

1834. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 00:11:52 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <17f7ef7a-82b8-448c-9dfa-0988612ef475@s50g2000hsb.googlegroups.com>
Source record: 22708

On Sep 5, 6:15 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Sep 5, 2:25?pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > Jim, following your advice I just entered "cern" in Google.
>
> >> Yeah, sure, that's what I said.
>
> >> > It immediately states as correct everything I have stated in detail
>
> >> Yeah, sure, of course it does.
>
> >> Yeah, you're genius all right; sane too.
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > Put in "cern"in google where the first item that comes up is Cern's
>
> Or you could have gone directly towww.cern.chlike I told you at
> least 4 times.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

READERS CLICK ON THIS FOR THE TRUTH

http//info.web.cern.ch/public/en/Science/StandardModel-
en.html

is what I got. I believe it represents the truth. Cosmic rays is
supplanted
by a swarm of active particles so no correction required. They show
disbelief
of the weak force being science fiction plus there are four forces in
the Standard model
In fact it exposes both of you as liers intent on deceiving the
readers Shame on both of you
Art

1835. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 00:29:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9siu9$634$1@news.albasani.net>
Source record: 22709

M0WYM wrote:

> ...
> Oh give us a break! It's pretty arrogant of you to assume that:
>
> 1) There is a god
>
> 2) That he has a plan
>
> 3) That there is such a beasty as satan
>
> 4) That there is a place called heaven
>
> Still if it gets you through the night who I to deny you a walking stick.
>

Really? Interesting concept ... hydrogen just is, has always been,
always will be ... such as a belief in God?

So, no one made any of these elements, they "just happened?" Where is
your proof, what law is behind your logic. Doesn't the scientific
method demand proof in repeatable experiments? The experiment you imply
in your reference, I am ignorant of that one. I know you must be busy
revolving in that logical world you seem to be engrossed in--but, just
for my sake, you could you provide a reference to it so I can examine it
for myself?

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1836. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 00:33:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9sj50$62s$1@news.albasani.net>
Source record: 22710

M0WYM wrote:
> JB wrote:
> Salvation comes by invitation only.
>
> There you go boys, just wait, lay back, smoke that joint, and wait
> for the invite.
>
> Goodbye self-determination - what a load of codswallop!
>
>

What wasted verbiage, in response to wasted verbiage! My gawd man,
let's just toss some words back and forth ... <yawn>

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1837. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 00:34:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ttj3c41moa13fqhmo601qvo42rc7k80j9d@4ax.com>
Source record: 22711

On Fri, 5 Sep 2008 17:11:52 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Sep 5, 6:15ï¿½pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > On Sep 5, 2:25?pm, j...@specsol.spam.sux.com wrote:
>> >> Art Unwin <ArthurUn...@gmail.com> wrote:

> In fact it exposes both of you as liers intent on deceiving the
>readers Shame on both of you

Both of you?

73's
Richard Clark, KB7QHC

1838. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 00:37:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9sjcl$6e7$1@news.albasani.net>
Source record: 22712

M0WYM wrote:

> ...
> Your English is lacking. That second sentence is amusing to us
> non-believers. Pray to your lord and you 'keep him at bay'.
>
> These personal gods you just can't trust 'em!
>

If a personal attack fails to bring the victim to his knees:

1) Attempt an attack in the mans use of grammer.

2) Attempt an attack in the form of his writings.

3) Attempt an attack on the choice of the words (hell, just like
scrabble, longer/complex words should count for more! <grin>)

4) Attempt an attack on sentence structure, abbreviation, "slang", etc.

5) etc., etc. ...

Something will finally gain some idiots attention ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1839. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 00:56:41 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <QvmdnR9N_dTVSFzVnZ2dnUVZ_qTinZ2d@bright.net>
Source record: 22713

Dear Student Mc Leod:

Roy Lewallen has a useful suggestion. I evaluate the performance of inanimate objects in a TEM cell, which may be thought of as an expanded transmission line. Zapping (an old EE term) an object with 100 v/m is not difficult, however that is not likely to be significant in your case.

Your DUT (device under test) is a piece of meat. Room temperature meat has a significant conductivity. Even at 100 kHz, the conductivity of the meat results in the field amplitude decreasing rapidly below the surface of a thick piece of meat. Thus, if you were to use a TEM cell to place the DUT into a 100 v/m field, the DUT needs to be thin or you can not say that the whole DUT was subjected to 100 v/m. While all of this is going on, the DUT is exposed to air-born contaminates that may well be different than those of the control.

If I had made this assignment, it would be because I expected the good student to perform an analysis of the experiment and prove that it was most unlikely to be a valid experiment. Alternatively, a student who I would recommend for graduate school would present me with a paper that shows what improbable measures would need to be taken (and why) to have a chance of having a valid experiment. The poor student is one who does what he or she is told to do without critical analysis.

I have lived long enough to have several of my past students as honored colleagues. They all are able to think.

Make friends with people in the EE department or some practical physicists.

Do report back on what you ended up doing.

Regards, Mac N8TT

--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:7OCdnYJPXa1pLVzVnZ2dnUVZ_sudnZ2d@posted.easystreetonline...
> Do a google search on "TEM cell". That should get you pointed in the right
> direction.
>
> Roy Lewallen, W7EL
>
> Jon Mcleod wrote:

1840. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 01:06:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9sl36$9h7$1@news.albasani.net>
Source record: 22714

M0WYM wrote:
> JB wrote:
>
>>
>> It's would be pretty arrogant to consider that you have the ability to
>> screw
>> up God's plan. We can't even be sure that Satan screwed up God's
>> plan, but
>> it appears that there is some contention that is/was/does exist in the
>> heavenly realm.
>>

OK. Since you seem to be "dirt stupid" and have been given some ignorant, preconceived notions which you DO NOT have a mind capable of lodging valid arguments to ... I will explain it to you, but just once:

You seem to think hydrogen is a "God"--is, always has been, always will be ...

However, while you would discredit a GOD, you would have us believe these elements which are, always have been and always will be, can, on their own, "evolve" into complex beings (biological machines) such as ourselves ...

However, in that same breath you will discredit that exactly such may have occurred so long ago, in such a distant past we cannot even fathom, and did result in a being so advanced, complex and so ahead of us that we have no choice other than consider him/her/it/the-alien a God ...

Gees, your mind would have interested me--when I had engaged kindergarten! <ROFLOL>

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1841. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 01:42:55 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <zelwk.689$Wd.412@trnddc01>
Source record: 22715

"Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
news:t92dnXpY9Jh071zVnZ2dnUVZ_sjinZ2d@earthlink.com...
>A few weeks ago, I asked about generating an 140kHz electric field across a
>leaf, part of a bio-med lab. Thanks for the answers. But it turns out I
>misread the roster and was in the wrong group.
>
> What I ACTUALLY NEED to do is generate a 100kHz electric field, at 1v/cm,
> across a T-Bone steak, to measure whether it retards or accelerates
> decomposition over time. The hypothesis is that the e-field retards
> growth of certain bacteria inside the meat.
>
> By design, we have not been instructed exactly how to construct the
> methods and apparatus. I have at my disposal a function generator and
> various amplifiers.
>
> It is a gross oversimplification to just connect one wire to one end of
> the steak, and another wire at the other end, and apply 20V RMS across a
> 20cm steak to generate 1V/cm?
>
> Thanks. Sorry about the idiot questions.

Hi Jon

Is it practical for you to place the T-Bone between two plates?
I would try a pair of parallel plates with the T-bone between them, fed
with a 100 KHz, generator and the voltage across the plates adjusted to
produce the field strength you want.

Jerry KD6JDJ

1842. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 02:05:05 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <io49p5-6bq.ln1@mail.specsol.com>
Source record: 22716

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Sep 5, 6:15?pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > On Sep 5, 2:25?pm, j...@specsol.spam.sux.com wrote:
>> >> Art Unwin <ArthurUn...@gmail.com> wrote:
>> >> > Jim, following your advice I just entered "cern" in Google.
>>
>> >> Yeah, sure, that's what I said.
>>
>> >> > It immediately states as correct everything I have stated in detail
>>
>> >> Yeah, sure, of course it does.
>>
>> >> Yeah, you're genius all right; sane too.
>>
>> >> --
>> >> Jim Pennino
>>
>> >> Remove .spam.sux to reply.
>>
>> > Put in "cern"in google where the first item that comes up is Cern's
>>
>> Or you could have gone directly towww.cern.chlike I told you at
>> least 4 times.
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
>
> READERS CLICK ON THIS FOR THE TRUTH

You wouldn't recognize truth if it smacked you in the forehead with a
two by four.

Why did you edit what I wrote, you babbling lunatic?

--
Jim Pennino

Remove .spam.sux to reply.

1843. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 02:23:28 UTC
From: nm5k@wt.net
Message-ID: <87a37149-282c-48fa-b1c0-ec0c781eadc3@k36g2000pri.googlegroups.com>
Source record: 22717

On Sep 4, 9:25 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> So what does this
> have to do with antennas?

> Regards
> Art KB9MZ.....xg

Midi-chlorians (also spelled "midi-clorians" or "midichlorians") are
a
microorganism in the fictional Star Wars galaxy, first mentioned in
Star Wars Episode I: The Phantom Menace. They are microscopic
life-forms that reside within the cells of all living things and
communicate with the Force. Midi-chlorians compose a collective
consciousness and intelligence, forming links between everything
living and the Force. They are symbionts with all other living
things;
that is, without them, life could not exist. The Jedi have learned
how to listen to and coordinate the midi-chlorians. In order to be a
Jedi or a Sith, one must have a high concentration of midi-chlorians
in one's cells.

The word "midi-chlorian" appears to be a portmanteau of
"mitochondrion" and "chloroplast", two organelles found in real cells
and thought to have evolved from bacteria as endosymbionts inside
other cells, as purported in the endosymbiotic theory. Creator George
Lucas has indeed stated that the midi-chlorians are based on the
endosymbiotic theory (Rolling Stone, June 2005), and it appears that
in the story of Anakin Skywalker, he wanted to create a more modern
"virgin birth" in the Star Wars saga that was as much based in
"science" (albeit fictional) as in philosophy and religion, with the
mythic
"givers of life" being microscopic life-forms, rather than gods.

An ancient prophecy foretold the appearance of a chosen one imbued
with a high concentration of midi-chlorians, strong with the Force,
and
destined to alter it forever. Anakin Skywalker was thought to be the
one.
He had the highest concentration of midi-chlorians the Jedi Council
had
ever seen. He was possibly conceived by the midi-chlorians; Anakin
was born without the assistance of a male. Lucas has said in
interviews
that Luke Skywalker had the same total midi-chlorian count that
Anakin

did at birth, though this does not necessarily make him the Chosen one
because Anakin did exactly what the prophecy foretold by coming back from the Dark Side and destroying Emperor Palpatine.

In Star Wars Episode III: Revenge of the Sith, Palpatine states that a
Sith Lord, Darth Plagueis, had the ability to use the Dark Side to influence midi-chlorians to create life and to prevent people from dying.

The Force can enhance natural physical and mental natural abilities, including enhancing strength (such as during a 'Force jump' or to slow a fall from an otherwise dangerous height) and accuracy as when Luke Skywalker was able to launch proton torpedoes into a small thermal exhaust port on the Death Star.
A number of other force powers are demonstrated, those include but are not limited to telekinesis, telepathy, enhanced empathy and precognition.
The Jedi were also able to influence and control the minds of others by making use of the Jedi mind trick. The Sith can sometimes use the Force to create harmful energy to attack others. Darth Sidious, 'the Emperor' is able to conjure a lightning-like attack using the force.

Within the Star Wars expanded universe, a number of other powers have been demonstrated, those include the ability to heal or drain the life-force of others, increase resistance to attack, dissipate energy attacks and warp space.

1844. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 02:52:46 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d01310be-88e7-4b85-b5ce-cc3080964374@f36g2000hsa.googlegroups.com>
Source record: 22718

```
On Sep 5, 9:05 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Sep 5, 6:15?pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > On Sep 5, 2:25?pm, j...@specsol.spam.sux.com wrote:
> >> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> >> > Jim, following your advice I just entered "cern" in Google.
>
> >> >> Yeah, sure, that's what I said.
>
> >> >> > It immediately states as correct everything I have stated in detail
>
> >> >> Yeah, sure, of course it does.
>
> >> >> Yeah, you're genius all right; sane too.
>
> >> >> --
> >> >> Jim Pennino
>
> >> >> Remove .spam.sux to reply.
>
> >> > Put in "cern"in google where the first item that comes up is Cern's
>
> >> Or you could have gone directly towww.cern.chlikeI told you at
> >> least 4 times.
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > READERS CLICK ON THIS FOR THE TRUTH
>
> You wouldn't recognize truth if it smacked you in the forehead with a
> two by four.
>
> Why did you edit what I wrote, you babbling lunatic?
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.
```

"edit" ? What on earth are you talking about?
I am still waiting for an answer why you believe the "weak" force is fictitious.
What proof do you have? I gave an explanation of it in a series of examples
that are in use today which explained radiation. It shows the procedure which
can also be accompanied by mathematical proof using the laws of the masters
and the antennas can be made quite easily if one wants to use a test range
which usually come under fire from naysayers. Is there only three forces
in a standard model or can you quote the presence of more?
Your postings supply zero content to support your beliefs. All we are getting from you
is expressions of emotion and anger that is shielding your brain from activity.
I think it is better that I leave again for a while so the newsgroup can sink back to inactivity
but I will come back.....I think!
Have a very happy day with the belief that you were correct in every way in this dual on physics
since nobody but I found fault with you. Ofcourse the "weak" force is fictitious the experts on the group
provided nothing to show you are in error so you are in the company of like thinkers.
Put your 2 by 4 away I am running away scared to death
Regards
Art

1845. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 02:54:26 UTC
From: dfinn1@nc.rr.com
Message-ID: <b9e427d7-cc32-4c16-b641-edbea14b8288@p25g2000hsf.googlegroups.com>
Source record: 22719

On Sep 5, 7:23 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > The ideal transmission line is common mode and does not radiate
> > because the fields cancel as you said earlier. The dipole antenna is
> > ALSO common mode but the fileds do NOT cancel because the conductors
> > are physically 180 degrees apart from each other so they cannot
> > interfere with each other; instead the fields radiate into free space
> > rather than cancel each other out.
>
> If transmission line currents were common-mode, they would radiate
> like crazy and would be an antenna instead of a transmission line.
> When one shorts the two wires together and feeds the system Marconi
> style against ground, then the currents are common-mode. (Please
> switch your news-reader to fixed font). A '+' indicates a connection,
> not polarity.
>
>   +----->------>------>---
> | current reference
> (V)
> | Differential currents to antenna
>   +-----<------<------<---
>   Normal Transmission Line mode designed not to radiate
>
>   +-->--+----->----->----->---
> | | current reference
> (V) |
> | | Common-mode currents (becomes antenna)
> | +----->----->----->---
> GND   Marconi Style feed designed to radiate
>
> > If the
> > currents on a transmission line are differential, how would (COULD)
> > they be converted to common mode currents on the antenna? We would
> > need a 180 degree phase shift somewhere.
>
> I'm glad you asked. When we take the last 1/4WL of transmission
> line and open it up into a dipole, we have rotated one wire by
> -90 degrees and the other wire by +90 degrees. That's a 180 degree
> difference. The transmission line currents are 180 degrees out of
> phase. The extra 180 degrees of physical rotation subtracts from
> the 180 degrees in the transmission line for a total of zero
> degrees (in phase) at the antenna feedpoint. This is explained
> in detail in "Antenna Theory", by Balanis, 2nd edition, page 18.
> I will try to duplicate it here using fixed font ASCII graphics.

>
>   In Phase Antenna Currents
> ---->---->---->---->----+ +---->---->---->---->----
> | |
> | |
>   +--<----<----<----<----+ |
> (V)   Differential |
>   +-->---->---->---->---->--+
>   Transmission Line Currents
>
> Note the out of phase currents in the transmission line results
> in in-phase currents in the dipole antenna.
> --
> 73, Cecil http://www.w5dxp.com

Upon doing independent research, it turns out my theory is exactly the same as your's but my terminology was reversed. The situation is summed up in an article by W8ji:

(quote)...the line will not radiate or contain substantial electric or magnetic fields external to the line area. The lack of external fields, even at a very small distances, is rooted in two conditions:

1.) All outgoing currents on one conductor are matched by equal level and exactly opposite phase currents on a return conductor at any given point along the line. (The reason I said the line will not radiate) This causes an exactly equal and opposite magnetic field along each conductor. The opposing magnetic fields caused by equal currents flowing opposite directions cancel magnetic fields outside the general area of the two conductors.

2.) All voltages from each conductor of the line to the outside environment surrounding the line are either contained within a closed shield, or are exactly equal and opposite an imaginary neutral reference point representing the environment around the line (balanced lines) (I discussed this imaginary reference point in some detail as well). We always have a constant ****differential*** voltage across the line (between the conductors) and that voltage changes only with standing wave ratio as we move along the line.

3.) The vector product of differential current flowing in conductors and voltage between line conductors at any point along the line always equals the power transmitted in transmission line mode. (unquote)

So I simply reversed the terminology and I agree that your use of the term "differential" was correct. I was calling the mirror image current pattern "common mode" when it should be differential.

But I still shy away from matching impedances with a "choke". I would match impedances with a balun or RF transformer. I agree that you must isolate, either mechancially or electrically, the input from

output on a balun. I made the simple mistake of confusing the terms differential and common mode. Thank you for the correction. And I have tried using the CM mode marconi style feed (shorting the antenna at the transceiver input terminals) to try to get my 80m G5RV to radiate at 2Mhz some years ago, as suggested by MFJ in their instruction manual, to no avail. I am sure it can radiate quite well at some frequency however!

1846. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 03:06:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9ss4adoa1@news.albasani.net>
Source record: 22720

Cecil Moore wrote:
> dfinn1@nc.rr.com wrote:
>> ...

As soon as he completes his "reversal", he will be back at the
beginning, where his error(s) in thinking first began ... let's take a
nap and let him accomplish his work ... <grin>

Regards,
JS

1847. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 03:07:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <tb6dnXCx18iVaVzVnZ2dnUVZ_jmdnZ2d@posted.easystreetonline>
Source record: 22721

When directly quoting something written by someone else, it's good form
as well as common courtesy to give credit to the source.

The first clue here was the use of "portmanteau", not a word I would
expect to be in an original posting in this newsgroup except perhaps
from Richard Clark.

Roy Lewallen, W7EL

nm5k@wt.net wrote:
>
> Midi-chlorians (also spelled "midi-clorians" or "midichlorians") are
> a
> microorganism in the fictional Star Wars galaxy, first mentioned in
> Star Wars Episode I: The Phantom Menace. They are microscopic
> life-forms that reside within the cells of all living things and
> communicate with the Force. Midi-chlorians compose a collective
> consciousness and intelligence, forming links between everything
> living and the Force. They are symbionts with all other living
> things;
> that is, without them, life could not exist. The Jedi have learned
> how to listen to and coordinate the midi-chlorians. In order to be a
> Jedi or a Sith, one must have a high concentration of midi-chlorians
> in one's cells.
>
> The word "midi-chlorian" appears to be a portmanteau of
> "mitochondrion" and "chloroplast", two organelles found in real cells
> and thought to have evolved from bacteria as endosymbionts inside
> other cells, as purported in the endosymbiotic theory. Creator George
> Lucas has indeed stated that the midi-chlorians are based on the
> endosymbiotic theory (Rolling Stone, June 2005), and it appears that
> in the story of Anakin Skywalker, he wanted to create a more modern
> "virgin birth" in the Star Wars saga that was as much based in
> "science" (albeit fictional) as in philosophy and religion, with the
> mythic
> "givers of life" being microscopic life-forms, rather than gods.
>
>
> An ancient prophecy foretold the appearance of a chosen one imbued
> with a high concentration of midi-chlorians, strong with the Force,
> and
> destined to alter it forever. Anakin Skywalker was thought to be the
> one.
> He had the highest concentration of midi-chlorians the Jedi Council
> had

> ever seen. He was possibly conceived by the midi-chlorians; Anakin
> was born without the assistance of a male. Lucas has said in
> interviews
> that Luke Skywalker had the same total midi-chlorian count that
> Anakin
> did at birth, though this does not necessarily make him the Chosen
> one
> because Anakin did exactly what the prophecy foretold by coming back
> from the Dark Side and destroying Emperor Palpatine.
>
> In Star Wars Episode III: Revenge of the Sith, Palpatine states that
> a
> Sith Lord, Darth Plagueis, had the ability to use the Dark Side to
> influence midi-chlorians to create life and to prevent people from
> dying.
>
> The Force can enhance natural physical and mental natural abilities,
> including enhancing strength (such as during a 'Force jump' or to
> slow a fall from an otherwise dangerous height) and accuracy
> as when Luke Skywalker was able to launch proton torpedoes into
> a small thermal exhaust port on the Death Star.
> A number of other force powers are demonstrated, those include
> but are not limited to telekinesis, telepathy, enhanced empathy and
> precognition.
> The Jedi were also able to influence and control the minds of others
> by making use of the Jedi mind trick. The Sith can sometimes use
> the Force to create harmful energy to attack others. Darth Sidious,
> 'the Emperor' is able to conjure a lightning-like attack using the
> force.
>
> Within the Star Wars expanded universe, a number of other powers
> have been demonstrated, those include the ability to heal or drain
> the life-force of others, increase resistance to attack, dissipate
> energy attacks and warp space.
>
>

1848. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 03:12:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9ssfmdoa2@news.albasani.net>
Source record: 22722

Roy Lewallen wrote:
> When directly quoting something written by someone else, it's good form
> as well as common courtesy to give credit to the source.
>
> The first clue here was the use of "portmanteau", not a word I would
> expect to be in an original posting in this newsgroup except perhaps
> from Richard Clark.
>
> Roy Lewallen, W7EL
> ...

ABSOLUTELY! I would also expect "everything but the kitchen sink" also
(well, if there was a kitchen sink in the mess, it would not be that
surprising), in a post by richard--along with a little Shakespeare for
good measure!

When you are right, you are RIGHT!

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1849. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 03:15:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <to89p5-0k8.ln1@mail.specsol.com>
Source record: 22723

```
Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Sep 5, 9:05?pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > On Sep 5, 6:15?pm, j...@specsol.spam.sux.com wrote:
>> >> Art Unwin <ArthurUn...@gmail.com> wrote:
>> >> > On Sep 5, 2:25?pm, j...@specsol.spam.sux.com wrote:
>> >> >> Art Unwin <ArthurUn...@gmail.com> wrote:
>> >> >> > Jim, following your advice I just entered "cern" in Google.
>>
>> >> >> Yeah, sure, that's what I said.
>>
>> >> >> > It immediately states as correct everything I have stated in detail
>>
>> >> >> Yeah, sure, of course it does.
>>
>> >> >> Yeah, you're genius all right; sane too.
>>
>> >> >> --
>> >> >> Jim Pennino
>>
>> >> >> Remove .spam.sux to reply.
>>
>> >> > Put in "cern"in google where the first item that comes up is Cern's
>>
>> >> Or you could have gone directly towww.cern.chlikeI told you at
>> >> least 4 times.
>>
>> >> --
>> >> Jim Pennino
>>
>> >> Remove .spam.sux to reply.
>>
>> > READERS CLICK ON THIS FOR THE TRUTH
>>
>> You wouldn't recognize truth if it smacked you in the forehead with a
>> two by four.
>>
>> Why did you edit what I wrote, you babbling lunatic?
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
```

> "edit" ? What on earth are you talking about?

You are so far gone you haven't a clue what you did.

<snip senile babble>

--
Jim Pennino

Remove .spam.sux to reply.

1850. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 04:09:45 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <eonwk.32788$Fr1.5299@newsfe03.iad>
Source record: 22724

<jimp@specsol.spam.sux.com> wrote in message
news:cgt6p5-o5.ln1@mail.specsol.com...
.
>
> FWIW, there are several projects in the ARRL pubs, mostly for RDF, that
> use a short piece of coax exactly as described as a loop.

I've seen some in books and on the 'net. Years ago, I did a one-week job on a Coast Guard cutter and I got to see some HF loop antennas that are standard issue for cutters. I do not recall with certainty whether they were transmit or receive or both, but I think they were both, but not at the same time, as certain USN fanwire antennas are.

HRO in San Diego usually has at least one HF loop on display.

"Sal"

1851. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 04:27:08 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <xEnwk.32939$Fr1.31195@newsfe03.iad>
Source record: 22725

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:g9rhd4$16ac$1@f04n12.cac.psu.edu...

< snip >

> For me, a person is allowed to believe whatever they want, as long as it
> doesn't affect me. Unfortunately, too many of them don't get that part
> and want to force themselves on everyone.
>
> Oddly enough, the greatest sermon, direct orders from the man himself is
> ignored by these folk.

That would be .... the "Do unto others ... " if I get your drift.

Proselytizing has its place I suppose, but I wish they'd figure out that I'm
not interested and quit ringing my doorbell ... them and AT&T.

1852. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 04:59:01 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-D6DA09.00590006092008@nntp.aioe.org>
Source record: 22726

In article <t92dnXpY9Jh071zVnZ2dnUVZ_sjinZ2d@earthlink.com>,
Jon Mcleod <jonmcleod2003@yahoo.com> wrote:

> What I ACTUALLY NEED to do is generate a 100kHz electric field, at
> 1v/cm, across a T-Bone steak, to measure whether it retards or
> accelerates decomposition over time. The hypothesis is that the e-field
> retards growth of certain bacteria inside the meat.

Jon-

Are the bacteria you want to retard inside the meat, or are they on the surface of the meat? You can't reach those inside due to the meat's conductivity, except by using enough energy to cook the meat.

If on the outside surface, then the problem is much simpler. Use parallel plates but insulate the meat. Since meat is conductive (compared to air), do not include its thickness in your calculation of volts per meter. In other words, subtract the meat thickness from the spacing of the plates.

Yes, the bacteria should be conductive. Their finite resistance will interact with the capacitive current that flows in the circuit, retarding their growth (or not!).

I suggest you try it with a third (or fourth) steak, at different field intensities. Perhaps 0.1 v/cm, 1 v/cm, 10 v/cm, 100 v/cm or whatever you can manage with the available equipment.

Fred

1853. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 09:09:32 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <g9thcc$47f$1@news.albasani.net>
Source record: 22727

John Smith wrote:

>
> What wasted verbiage, in response to wasted verbiage! My gawd man,
> let's just toss some words back and forth ... <yawn>
>
> Regards,
> JS
>

Codswallop :0)

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

1854. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 09:11:38 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <g9thga$47f$2@news.albasani.net>
Source record: 22728

John Smith wrote:

>
> Something will finally gain some idiots attention ...
>
> Regards,
> JS
>
Lighten up OM, it was a light-hearted response.
And I see someone did respond!

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

1855. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 09:18:16 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <g9thso$61f$1@news.albasani.net>
Source record: 22729

John Smith wrote:

> So, no one made any of these elements, they "just happened?"
> Where is your proof, what law is behind your logic. Doesn't the
> scientific method demand proof in repeatable experiments?

We can repeatedly and consistently experience the effects of
hydrogen - it does not take an act of faith or a delusion. We
cannot carry out the similar experiments with any of the so-called
deities - we can only believe.

But, like I said if it gets people through the night that's fine and
it may well be better than taking drugs.

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

1856. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 13:46:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <qQvwk.20763$mh5.9617@nlpi067.nbdc.sbc.com>
Source record: 22730

dfinn1@nc.rr.com wrote:
> Upon doing independent research, it turns out my theory is exactly the
> same as your's but my terminology was reversed.

As proven a week ago by my definition quotations from
"The IEEE Dictionary".

> But I still shy away from matching impedances with a "choke".
> I would match impedances with a balun or RF transformer.

Jerry Sevick, W2FMI, says a *balun IS a choke* plus
a transmission line. He wrote in "Building and Using
Baluns and Ununs":

"If the writers had accepted the correct model for
these devices (given to us by Guanella and Ruthroff),
which shows that *they are really chokes* (lumped
elements) and configurations of transmission lines
(distributed elements), ..." (emphasis mine)
--
73, Cecil http://www.w5dxp.com

1857. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 13:54:34 UTC
From: Dave <noone@nowhere.com>
Message-ID: <uYvwk.637$1a2.625@trnddc04>
Source record: 22731

<jimp@specsol.spam.sux.com> wrote in message
news:io49p5-6bq.ln1@mail.specsol.com...
> Art Unwin <ArthurUnwin@gmail.com> wrote:
>> On Sep 5, 6:15?pm, j...@specsol.spam.sux.com wrote:
>>> Art Unwin <ArthurUn...@gmail.com> wrote:
>>> > On Sep 5, 2:25?pm, j...@specsol.spam.sux.com wrote:
>>> >> Art Unwin <ArthurUn...@gmail.com> wrote:
>>> >> > Jim, following your advice I just entered "cern" in Google.
>>>
>>> >> Yeah, sure, that's what I said.
>>>
>>> >> > It immediately states as correct everything I have stated in detail
>>>
>>> >> Yeah, sure, of course it does.
>>>
>>> >> Yeah, you're genius all right; sane too.
>>>
>>> >> --
>>> >> Jim Pennino
>>>
>>> >> Remove .spam.sux to reply.
>>>
>>> > Put in "cern"in google where the first item that comes up is Cern's
>>>
>>> Or you could have gone directly towww.cern.chlike I told you at
>>> least 4 times.
>>>
>>> --
>>> Jim Pennino
>>>
>>> Remove .spam.sux to reply.
>>
>>
>> READERS CLICK ON THIS FOR THE TRUTH
>
> You wouldn't recognize truth if it smacked you in the forehead with a
> two by four.
>
> Why did you edit what I wrote, you babbling lunatic?
>
art is just pulling everyone's leg with techno babble. note how it changes
with new news and how he latches on to meaningless terms. of course the
weak force has nothing to do with electromagnetic waves and antennas, but
because it got mentioned in something and is sometimes termed the

electro-weak force he fits it into his fantasy world. may the farce be with you art... and keep writing, the wx is bad over here today and getting worse so we could use some entertainment... maybe try to link up the possible effects of beta decay caused by the weak force with your diamagnetic seeking anti gravity particles, that might be fun.

1858. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 14:00:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9u2eh$pq2$1@news.albasani.net>
Source record: 22732

M0WYM wrote:
> John Smith wrote:
>
>> So, no one made any of these elements, they "just happened?"
>> Where is your proof, what law is behind your logic. Doesn't the
>> scientific method demand proof in repeatable experiments?
>
> We can repeatedly and consistently experience the effects of
> hydrogen - it does not take an act of faith or a delusion. We
> cannot carry out the similar experiments with any of the so-called
> deities - we can only believe.
>
> But, like I said if it gets people through the night that's fine and
> it may well be better than taking drugs.

As I have pointed out ... a "leap of faith" is a leap of faith ... whether being made in an attempt to "look intellectual" (evolution) or being "intuited of spirit" (God) ... and, an argument for evolution is only a circular "back door" argument for the possible existence of God ... it is simple logic.

What is perplexing is how some can carry on these arguments without realization on what final point the argument(s) really argue! This is supposed to look "intellectual?"

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1859. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 14:13:07 UTC
From: JB <nospam@goofball.net>
Message-ID: <Tdwwk.730$393.162@trnddc05>
Source record: 22733

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:9mgwk.21523$89.9096@nlpi069.nbdc.sbc.com...
> Michael Coslo wrote:
> > You got it. He won't tell you when you lock your keys in the car - even
> > when he already knows you're going to do it!
>
> Even before He told Pharaoh to let His people go,
> He already knew Pharaoh was predestined to say no.
> --
> 73, Cecil http://www.w5dxp.com

But Moses was one of his people, and he negotiated with God over and over
again. Of course he pissed off God several times too.

1860. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 15:52:12 UTC
From: ml <m@di.net>
Message-ID: <m-761E5A.11521206092008@news.optonline.net>
Source record: 22734

In article <tdawk.12279$vn7.8794@flpi147.ffdc.sbc.com>,
Cecil Moore <nospam@w5dxp.com> wrote:

> ml wrote:
> > dunno it's strange in all that confusion obviously we all pick
> > what we interpert and believe to be best but i hate when that happens
>
> Baluns are not unique. Religions, politics, investment advice,
> brands of vehicles, flavors of ice cream, sexual attraction,
> life styles, ... - "We all pick what we interpret and believe
> to be the best" in virtually every aspect of our lives.
>
> My personal preference is a 1:1 current-choke-balun with
> thousands of ohms of choking impedance, either resistive
> and/or reactive.

wanted to say thanks much to all those that responded really
appreciate the thoughts

i guess for me, the 'easy ' way out (when in doubt) is after i do
something to take measurements, if i dont see what i should i
presume i did it wrong,

never hurts to double check with testing or to buy test gear and
tools

thanks again all

1861. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 16:12:37 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <UZxwk.12723$L_.5767@flpi150.ffdc.sbc.com>
Source record: 22735

JB wrote:
> But Moses was one of his people, and he negotiated with God over and over
> again. Of course he pissed off God several times too.

God just toyed with Moses, like a cat with a mouse, and that
"negotiation" wasn't for real. Moses didn't know it, but God
already knew the outcome so any other outcome was impossible.
--
73, Cecil http://www.w5dxp.com

1862. techical blog from teh kosher ham

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 16:24:57 UTC
From: an old friend <kb9rqz@yahoo.net>
Message-ID: <g9uasv$528$1@news.albasani.net>
Source record: 22736
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.swap,alt.ham-radio.vhf-uhf,alt.usenet.kooks

techical note from the kosher ham sorry folks
I owe you all an extra tip for Feb I promise

http://techkb9rqz.blogspot.com/

i indeed moronatate it so ASBOLUTELY noting OT will be alowed

1863. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 16:26:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9uavh$4uf$3@news.albasani.net>
Source record: 22737

Cecil Moore wrote:

> ...
> God just toyed with Moses, like a cat with a mouse, and that
> "negotiation" wasn't for real. Moses didn't know it, but God
> already knew the outcome so any other outcome was impossible.

To feed my sick sense of humor, and boredom. When in college brushing up, I would scan and print $20 bills, just one side, wrinkle them up a bit, and drop/plant then about. Observing from a distance, I kind of felt like God--I knew what the "outcome" would be every time some unsuspecting victim found one! <grin>

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1864. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 16:40:43 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <goywk.24971$N87.15215@nlpi068.nbdc.sbc.com>
Source record: 22738

Dave wrote:
> <jimp@specsol.spam.sux.com> wrote in message
> news:io49p5-6bq.ln1@mail.specsol.com...
>> Art Unwin <ArthurUnwin@gmail.com> wrote:
>>> On Sep 5, 6:15?pm, j...@specsol.spam.sux.com wrote:
>>>> Art Unwin <ArthurUn...@gmail.com> wrote:
>>>>> On Sep 5, 2:25?pm, j...@specsol.spam.sux.com wrote:
>>>>>> Art Unwin <ArthurUn...@gmail.com> wrote:
>>>>>>> Jim, following your advice I just entered "cern" in Google.
>>>>>> Yeah, sure, that's what I said.
>>>>>>> It immediately states as correct everything I have stated in detail
>>>>>> Yeah, sure, of course it does.
>>>>>> Yeah, you're genius all right; sane too.
>>>>>> --
>>>>>> Jim Pennino
>>>>>> Remove .spam.sux to reply.
>>>>> Put in "cern"in google where the first item that comes up is Cern's
>>>> Or you could have gone directly towww.cern.chlike I told you at
>>>> least 4 times.
>>>>
>>>> --
>>>> Jim Pennino
>>>>
>>>> Remove .spam.sux to reply.
>>>
>>> READERS CLICK ON THIS FOR THE TRUTH
>> You wouldn't recognize truth if it smacked you in the forehead with a
>> two by four.
>>
>> Why did you edit what I wrote, you babbling lunatic?
>>
> art is just pulling everyone's leg with techno babble. note how it changes
> with new news and how he latches on to meaningless terms. of course the
> weak force has nothing to do with electromagnetic waves and antennas, but
> because it got mentioned in something and is sometimes termed the
> electro-weak force he fits it into his fantasy world. may the farce be with
> you art... and keep writing, the wx is bad over here today and getting worse
> so we could use some entertainment... maybe try to link up the possible
> effects of beta decay caused by the weak force with your diamagnetic seeking
> anti gravity particles, that might be fun.
>
>

The diamagnetic reference proves he's in leg-pulling mode, and not just being psychotic. Nice try, Art.
73,
Tom Donaly, KA6RUH

1865. Re: MA5B background noise

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 16:47:28 UTC
From: Andy <dx90@blueyounder.co.uk>
Message-ID: <wuywk.755060$7f3.716464@newsfe23.ams2>
Source record: 22739

Hi John
I will see if the next-door neighbours will unplug there's and see if that's the problem.
I have had everything disconnected in here and the noise was still there.

73

Andy

<n2xwv@arrl.net> wrote in message news:3c5661b0-9e0a-40da-978e-08a48fbe1642@b2g2000prf.googlegroups.com...
> Hi andy, i have a MA5B with s-9 noise, after much sniffing it was a tv
> on the same ac line as some radio equipment, i switched the outlet and
> the noise 90% disapeared, hope this helps,73 john
> Andy wrote:
>> I have finally got my Cushcraft MA5B up in the air. But I am very
>> disappointed with it.
>>
>> Is it normal for this antenna to have a lot of background noise behind
>> strong signals 9+?
>>
>> The reason I ask is that I also own a cobwebb antenna and the side by
>> side
>> comparison between them, there is no background hiss on the same strong
>> signals on the cobwebb S4 - 9+ but there is on the same signal on the
>> MA5B
>> and it is enough to make listening on the MA5B very unpleasant even at
>> S9+.
>>
>> Is this normal?
>>
>> 73 Andy

1866. lightning bolt quad 4 el

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 17:02:43 UTC
From: Oro di Priscilla <orodipri@orodipriscilla.191.it>
Message-ID: <g9ud49$32j$1@aioe.org>
Source record: 22740

I'm looking for the instruction sheet of the lightning bolt quad 4 elements.
Found only 2 el. on google.
Can someone help me with a scan copy? If so please mail to i0uxy (at) email.
Thanks in advance.
Carlo i0uxy

1867. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 17:07:22 UTC
From: PN2222A <pn2222a@sbcglobal.net>
Message-ID: <INywk.40609$ZE5.33033@nlpi061.nbdc.sbc.com>
Source record: 22741

"Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
news:t92dnXpY9Jh071zVnZ2dnUVZ_sjinZ2d@earthlink.com...
>A few weeks ago, I asked about generating an 140kHz electric field
>across a leaf, part of a bio-med lab. Thanks for the answers. But it
>turns out I misread the roster and was in the wrong group.
>
> What I ACTUALLY NEED to do is generate a 100kHz electric field, at
> 1v/cm, across a T-Bone steak, to measure whether it retards or
> accelerates decomposition over time. The hypothesis is that the
> e-field retards growth of certain bacteria inside the meat.
>

Hi Jon

At your frequencies, a slab of meat will mostly resemble a resistor with some capacitive reactance. The resistance will vary with the thickness and area of the slab you're applying the signal to.

Memory fades, but I recall that you will be looking at resisitivities on the order of a few hundred ohm-cm. (R = rho * L / A).

At a field strength of 1 V/cm, the power levels will be pretty low -- the meat won't cook noticeably. The currents should be manageable, that is, I believe that your signal generator will be able to hold the 1V/cm without additional amplification.

This will be true as long as the load resistance is >> the 50ohm output impedance of the signal generator. There is a decent chance that your meat slab will be less than the desired impedance. In this case you will need to measure the voltage periodically and adjust the generator output: As the meat degrades, its conductivity should be increased by the spillage of conductive cell contents.

You will want to apply the field directly to conductive plates which are in contact with the meat -- if you have any air gap between a plate and the meat,
the voltage drop will essentially be all across the air gap, none across the test sample.

Best regards
PN2222A

NPN (Is = 14.34f Xti = 3 Eg = 1.11 Vaf = 74.03 Bf = 255.9 Ne = 1.307 Ise = 14.34 Ikf = .2847 Xtb = 1.5 Br = 6.092 Isc = 0

Ikr = 0 Rc = 1 Cjc = 7.306p Mjc = .3416 Vjc = .75 Fc = .5 Cje = 22.01p Mje = .377 Vje = .75 Tr = 46.91n Tf = 411.1p Itf = .6

```
Vtf = 1.7 Xtf = 3 Rb = 10)
```

1868. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 17:28:46 UTC
From: dfinn1@nc.rr.com
Message-ID: <659a47d8-ada3-4887-b674-cadc108c78a1@x41g2000hsb.googlegroups.com>
Source record: 22742

On Sep 5, 11:06 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Cecil Moore wrote:
> > dfi...@nc.rr.com wrote:
>
> >> ...
>
> As soon as he completes his "reversal", he will be back at the
> beginning, where his error(s) in thinking first began ... let's take a
> nap and let him accomplish his work ... <grin>
>
> Regards,
> JS

Yes John, go swallow an ambien and take your nap. Those Alzheimers-
raddled brain cells could use some rest so they will be stronger for
you to conduct future random senility eruptions.

1869. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 17:35:40 UTC
From: dfinn1@nc.rr.com
Message-ID: <a4e92fe4-1ac2-4a3e-a6bd-89d014cc2153@k37g2000hsf.googlegroups.com>
Source record: 22743

On Sep 6, 9:46 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > Upon doing independent research, it turns out my theory is exactly the
> > same as your's but my terminology was reversed.
>
> As proven a week ago by my definition quotations from
> "The IEEE Dictionary".

I shall not try to pop the bubble of your glory in the triumph of
knowing the correct terminology.

>
> > But I still shy away from matching impedances with a "choke".
> > I would match impedances with a balun or RF transformer.
>
> Jerry Sevick, W2FMI, says a *balun IS a choke* plus
> a transmission line. He wrote in "Building and Using
> Baluns and Ununs":
>
> "If the writers had accepted the correct model for
> these devices (given to us by Guanella and Ruthroff),
> which shows that *they are really chokes* (lumped
> elements) and configurations of transmission lines
> (distributed elements), ..." (emphasis mine)
> --
> 73, Cecil http://www.w5dxp.com

The lumped element equivalent of the transmission line itself is a
repetitive pattern of inductors and capacitors. If all inductors are
chokes, then the transmission line itself is composed of chokes.

1870. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 19:33:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9ulv1hkv1@news.albasani.net>
Source record: 22745

dfinn1@nc.rr.com wrote:

> ...
> I shall not try to pop the bubble of your glory in the triumph of
> knowing the correct terminology.
>

Yeah, glad you noticed, is good to use the right terminology ...

> ...
> The lumped element equivalent of the transmission line itself is a
> repetitive pattern of inductors and capacitors. If all inductors are
> chokes, then the transmission line itself is composed of chokes.
>

In a "linear-lumped-sum", such as a transmission line containing
capacitance AND inductance in a liner fashion (i.e., per in, per ft, etc.)

In a single lumped sums, it would be in as much error to display them as
such, as the error(s) in your terminology ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1871. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 19:34:31 UTC
From: Jon Mcleod <jonmcleod2003@yahoo.com>
Message-ID: <1ZidnTcVJ8bCR1_VnZ2dnUVZ_vadnZ2d@earthlink.com>
Source record: 22744

PN2222A wrote:

> You will want to apply the field directly to conductive plates which are
> in contact with the meat -- if you have any air gap between a plate and
> the meat,
> the voltage drop will essentially be all across the air gap, none across
> the test sample.

I've been thinking about this. There is a question on how to get an e-field into the meat, and there is a question about whether bacteria exist in the meat.

I am assuming there is bacteria in the meat, but I've searched all kind of FDA and safety sites, and I don't see anything discussed except ground meat, so I don't know. Maybe there is not, just bacteria on the surface.

As to whether you can get an efield into the meat, I found that the authors of the paper actually made a "helmet" to kill brain tumors in living patients:

http://tinyurl.com/5aatcs

They use insulated electrodes (dozens of them, apparently), but you do have to shave your head so they are close to the scalp. Are they really driving 1V/cm into someones brain without cooking it? Or is the actual field required to kill bacteria (and cancer) actually much smaller than 1V/cm? If the voltage is low, why don't they just put the electrodes in contact with the skalp?

I have not idea if the trial is working, but if the device is curing patients, then whatever this box does would kill the bacteria in the meat (whether its there or not) without cooking the meat. I'm assuming they have fancy DSP to control all of the electrodes, but they still have to obey the laws of physics.... I think the field intensity to do this job may be WAAAAAY less than 1V/cm.

1872. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 19:34:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9um0fhkv2@news.albasani.net>
Source record: 22746

dfinn1@nc.rr.com wrote:

> ...
> Yes John, go swallow an ambien and take your nap. Those Alzheimers-
> raddled brain cells could use some rest so they will be stronger for
> you to conduct future random senility eruptions.

Wake me at your next "revision point" ... <yawn>

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1873. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 19:48:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nrm5c4pfbvptb78c7vkk44csnf23kboho8@4ax.com>
Source record: 22747

On Sat, 06 Sep 2008 15:34:31 -0400, Jon Mcleod
<jonmcleod2003@yahoo.com> wrote:

>I've been thinking about this. There is a question on how to get an
>e-field into the meat,

Hi Jon,

I think that has been examined to death (no pun). The field does not
cease to exist, it simply has plunged from 550,000V/M to 10V/M (if the
suspect methods' data exhibit any correlation to reality).

>and there is a question about whether bacteria
>exist in the meat.

If it does (and there is no presumption that it "cannot"), then it
would be called an infection or necrosis.

>I am assuming there is bacteria in the meat, but I've searched all kind
>of FDA and safety sites, and I don't see anything discussed except
>ground meat, so I don't know. Maybe there is not, just bacteria on the
>surface.

Take a hint from your source that had 10 microliters of cell solution
spread out over the dish. Not much volume, not much thickness to call
"inside" either.

>As to whether you can get an efield into the meat, I found that the
>authors of the paper actually made a "helmet" to kill brain tumors in
>living patients:
>
>http://tinyurl.com/5aatcs

This is truly Bizarre.

>They use insulated electrodes (dozens of them, apparently), but you do
>have to shave your head so they are close to the scalp.

A very telling question, and one they should have asked, and answered
for themselves. This link points to some very inferior quality
experimentation.

>Are they really
>driving 1V/cm into someones brain without cooking it? Or is the actual
>field required to kill bacteria (and cancer) actually much smaller than
>1V/cm? If the voltage is low, why don't they just put the electrodes in
>contact with the skalp?

Another very telling question.

>I have not idea if the trial is working, but if the device is curing
>patients, then whatever this box does would kill the bacteria in the
>meat (whether its there or not) without cooking the meat. I'm assuming
>they have fancy DSP to control all of the electrodes, but they still
>have to obey the laws of physics.... I think the field intensity to do
>this job may be WAAAAAY less than 1V/cm.

In the 1960s, a product for cooking hotdogs (10cm) was sold. It
consisted of exposed metal prongs that penetrated to each end of the
hot dog, and were, in turn, plugged into the wall. Net result: in 3
minutes you had a broiled hot dog from 12V/cm.

73's
Richard Clark, KB7QHC

1874. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 19:51:36 UTC
From: No Spam <no@spam.com>
Message-ID: <Y4ednVURS8DVQI_VnZ2dnUVZ_oHinZ2d@comcast.com>
Source record: 22748

On Sat, 06 Sep 2008 10:07:22 -0700, PN2222A wrote:

> "Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message

All these are nice ideas and a marvel to engineering but I must say
this....

****
Whether it's radiated or E-fielded to kill the bacteria, there will still
be SHIT ON MY FOOD!
****

Why can't they just stop the contamination as I don't want any crap on my
food! I think it's very disgusting and would avoid radiated or
electrified foods as I believe manufactures would find they could offset
their cost be being less cleanly as long as they were not killing people.

1875. Re: E-Field across BRAIN ("MEAT")

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 21:03:16 UTC
From: Jon Mcleod <jonmcleod2003@yahoo.com>
Message-ID: <5OednU3pZrWxcl_VnZ2dnUVZ_hCdnZ2d@earthlink.com>
Source record: 22749

Richard Clark wrote:

> In the 1960s, a product for cooking hotdogs (10cm) was sold. It
> consisted of exposed metal prongs that penetrated to each end of the
> hot dog, and were, in turn, plugged into the wall. Net result: in 3
> minutes you had a broiled hot dog from 12V/cm.

http://www.youtube.com/watch?v=qu0fWRtA4mw

I have already drawn one preliminary conclusion from this whole
exercise: I have purchased a wired (old-school, not bluetooth) earpiece
for my cellphone.. e-field or no, it sure wont hurt anything to do it.

1876. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 21:13:06 UTC
From: PN2222A <pn2222a@sbcglobal.net>
Message-ID: <9qCwk.8712$np7.6911@flpi149.ffdc.sbc.com>
Source record: 22750

"Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
news:1ZidnTcVJ8bCR1_VnZ2dnUVZ_vadnZ2d@earthlink.com...
>
> I've been thinking about this. There is a question on how to get an
> e-field into the meat, and there is a question about whether bacteria
> exist in the meat.
>

Consider the meat as a resistive material, as I've already proposed.
If you apply a voltage across the meat, that voltage will distribute
itself
across the thickness of the slab. (but with interesting distortions
around the
marbling, which has a significantly higher resistivity).
The distributed capacitance will make some second order effects but the
basic
applied voltage across a medium / voltage field in the medium effect
will remain.

> I am assuming there is bacteria in the meat, but I've searched all
> kind of FDA and safety sites, and I don't see anything discussed
> except ground meat, so I don't know. Maybe there is not, just
> bacteria on the surface.
>

If there are no bacteria inside the meat, what is the purpose of aging?

>
> Are they really driving 1V/cm into someones brain without cooking it?

What's the power density of 1V/cm into a 1cm cube of meat (or brain)with
300 ohm-cm resitivity?
How does that compare to the power density reheating a quarter pounder
in a 600W microwave oven?

Quarter Pounder, Mmmmmmm.

Regards
PN2222A

Biased? Of course I'm biased!

1877. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 22:01:48 UTC
From: JB <nospam@goofball.net>
Message-ID: <g5Dwk.761$393.385@trnddc05>
Source record: 22601

"M0WYM" <Sansspam@peartreegreen.org> wrote in message
news:g9thcc$47f$1@news.albasani.net...
> John Smith wrote:
>
> >
> > What wasted verbiage, in response to wasted verbiage! My gawd man,
> > let's just toss some words back and forth ... <yawn>
> >
> > Regards,
> > JS
> >
>
> Codswallop :0)
>
If he wont have anything to God why would God want to have anything to do
with him? God made the firewood too.

1878. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 22:17:47 UTC
From: JB <nospam@goofball.net>
Message-ID: <fkDwk.764$393.84@trnddc05>
Source record: 22602

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9uavh$4uf$3@news.albasani.net...
> Cecil Moore wrote:
>
> > ...
> > God just toyed with Moses, like a cat with a mouse, and that
> > "negotiation" wasn't for real. Moses didn't know it, but God
> > already knew the outcome so any other outcome was impossible.
>
> To feed my sick sense of humor, and boredom. When in college brushing
> up, I would scan and print $20 bills, just one side, wrinkle them up a
> bit, and drop/plant then about. Observing from a distance, I kind of
> felt like God--I knew what the "outcome" would be every time some
> unsuspecting victim found one! <grin>
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

Lets see... Existentialism. Isn't that from Sartre and the Beat generation?
Then there's Atlas Shrugged. Did I get that right? Gee, I always hoped
my Philosophy from College would come in handy some day!

1879. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 22:19:35 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <7mDwk.21695$89.14681@nlpi069.nbdc.sbc.com>
Source record: 22603

PN2222A wrote:
> "Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
...
> If there are no bacteria inside the meat, what is the purpose of aging?...

>
> Regards
> PN2222A
>
> Biased? Of course I'm biased!
>
>

You don't suppose it might have something to do with enzymatic action do
you? You know, to make the meat more tender?
73,
Tom Donaly, KA6RUH

1880. <> Rexsy - Beautiful Relaxing Music <>

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 22:26:19 UTC
From: Rexsy <dr.tuan.thanh.ho@gmail.com>
Message-ID: <de6a5304-e71f-4266-abb1-7a15bb1c4801@q26g2000prq.googlegroups.com>
Source record: 22604
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Greetings!

Rexsy is curently offering free download on several Albums of
Romantic Symphonic Piano Music, which is about Love, Romance, and
Beauty!

The music is Great for Relaxation and Meditation!

http://www.rexsy.com/rexsy_music

Enjoy!

Rexsy
Rexsy.com
http://www.youtube.com/profile_videos?user=Lexsie2008

"The sunlight reflected indescribable joys over the ocean of beauty,
where the sea birds glided freely under the calm blue skies. Peaceful
state of being exists when the mind and feelings merge into the
Universe's reality as One. In this state, there is no energy
differential between the mind and the constant changing reality,
thus, the manifestation of life has transgressed into quiet state of
existence. The sunset traveled towards of the deep blue sea's
horizon, as the Earth rested quietly in the profound Universe." -
Rexsy

1881. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-06 23:25:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <RjEwk.582$Dj1.535@trnddc02>
Source record: 22605

"Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
news:1ZidnTcVJ8bCR1_VnZ2dnUVZ_vadnZ2d@earthlink.com...
> PN2222A wrote:
>
>> You will want to apply the field directly to conductive plates which are
>> in contact with the meat -- if you have any air gap between a plate and
>> the meat,
>> the voltage drop will essentially be all across the air gap, none across
>> the test sample.
>
> I've been thinking about this. There is a question on how to get an
> e-field into the meat, and there is a question about whether bacteria
> exist in the meat.

i think its normally assumed that bacteria contaminate the surface of cut meat during handling and from exposure to the air. ground meat is more likely to contain bacteria because it is ground... that is, the outer, possibly contaminated, surface is cut and chopped and put in contact with lots more meat surface, so bacteria can get spread throughout the mixture... and of course there is always the contamination probability on the grinding equipment which is much more complicated than a simple knife or saw used for sliced meats.

1882. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 02:17:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9vdkr$7ve$1@news.albasani.net>
Source record: 22606

Bubblesdee wrote:
> Hi

> ...
> I recently aquired a S350DL receiver. ...

Stumbled across this on the net (article describes an rf transformer/antenna he uses--pay attention to the direction of the windings on the toroid):

http://www.qrp.pops.net/swl-ant.asp

and thought about your S350Dl and thought I would let you give it a read ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1883. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 06:05:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1220767501@panix.com>
Source record: 22607
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

1884. Finally, some begins a real study of time ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 06:27:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <g9vs8akim1@news.albasani.net>
Source record: 22608

It will be interesting to eventually find out what that strange
placeholder in our equations really stands for:

http://www.physorg.com/news139830010.html

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1885. Re: Finally, some begins a real study of time ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 07:52:41 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <wHLwk.26554$bx1.17052@bignews1.bellsouth.net>
Source record: 22609

"John Smith" <assemblywizard@gmail.com> wrote in message
news:g9vs8akim1@news.albasani.net...
> It will be interesting to eventually find out what that strange
> placeholder in our equations really stands for:
>
> http://www.physorg.com/news139830010.html
>
> Regards,
> JS

Damn, John. That was a good article/discourse.

Ed Cregger

1886. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 09:36:03 UTC
From: Bubblesdee <Bubblesdee.309778f@radiobanter.com>
Message-ID: <Bubblesdee.309778f@radiobanter.com>
Source record: 22612

John Smith;645578 Wrote:
> Bubblesdee wrote:-
> Hi -
> -
> ...
> I recently aquired a S350DL receiver. ...-
>
> Stumbled across this on the net (article describes an rf
> transformer/antenna he uses--pay attention to the direction of the
> windings on the toroid):
>
> http://www.qrp.pops.net/swl-ant.asp
>
> and thought about your S350Dl and thought I would let you give it a
> read ...
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

Thanks John and everyone for your responses.

It looks like I am going to have to learn how to wind some baluns up.

I will keep you posted on progress

Thanks again

--
Bubblesdee

1887. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 10:00:19 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <I$w702PzY6wIFw8h@g3ohx.demon.co.uk>
Source record: 22610

In message <g9vdkr$7ve$1@news.albasani.net>, John Smith
<assemblywizard@gmail.com> writes
>Bubblesdee wrote:
>> Hi
>
>> ...
>> I recently aquired a S350DL receiver. ...
>
>Stumbled across this on the net (article describes an rf
>transformer/antenna he uses--pay attention to the direction of the
>windings on the toroid):
>
>http://www.qrp.pops.net/swl-ant.asp
>
>and thought about your S350Dl and thought I would let you give it a read ...
>
>Regards,
>JS
>
This is an example of the 'traditional' 9:1 impedance transformer which,
on most MW and SW frequencies, gives a better match between the antenna
impedance and a 50 or 75 ohm receiver input impedance. On relatively
narrow bands of frequencies where the antenna impedance is naturally
lowish (where it is near odd multiples of a quarterwave), the match will
actually be made worse than if the transformer were not used. This
obviously depends on the physical length of the antenna. In the diagram,
the antenna length shown is 33m (say 100'), which is not far short of a
quarterwave on 160m. However, on the MW band, and on various parts of
the SW band, the transformer should improve reception.

I note that the writer correctly stresses that that the transformer is
an 'UNUN' (an accurate - but ugly - word). Many similar articles about -
and adverts for - these devices WILL insist on calling them baluns
(which, of course, they are certainly not).

The direction of either winding on the torroid should not matter one
bit.
--
Ian.

1888. The Free Software Definition - Free Software Foundation

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 11:58:26 UTC
From: roseeec@gmail.com
Message-ID: <b0e06196-afa6-4b16-94e3-db5911c9e9b4@s20g2000prd.googlegroups.com>
Source record: 22611

The Free Software Definition - Free Software Foundation

----
http://freesoftware21.blogspot.com

http://helpdesksoftware21.blogspot.com

1889. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 11:59:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <JmPwk.752$Wd.619@trnddc01>
Source record: 22613

"Dave" <noone@nowhere.com> wrote in message
news:RjEwk.582$Dj1.535@trnddc02...
>
> "Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
> news:1ZidnTcVJ8bCR1_VnZ2dnUVZ_vadnZ2d@earthlink.com...
>> PN2222A wrote:
>>
>>> You will want to apply the field directly to conductive plates which are
>>> in contact with the meat -- if you have any air gap between a plate and
>>> the meat,
>>> the voltage drop will essentially be all across the air gap, none across
>>> the test sample.
>>
>> I've been thinking about this. There is a question on how to get an
>> e-field into the meat, and there is a question about whether bacteria
>> exist in the meat.
>
> i think its normally assumed that bacteria contaminate the surface of cut
> meat during handling and from exposure to the air. ground meat is more
> likely to contain bacteria because it is ground... that is, the outer,
> possibly contaminated, surface is cut and chopped and put in contact with
> lots more meat surface, so bacteria can get spread throughout the
> mixture... and of course there is always the contamination probability on
> the grinding equipment which is much more complicated than a simple knife
> or saw used for sliced meats.
>

along the lines of another poster i would propose an alternate experiment
that could be much more closely controlled. instead of starting with
unknown contamination in meat, which is in itself a non-homogonous
substance, it would be easier to setup and control a standard Petri dish
contaminated with known bacteria samples. Those should be easily provided
by any decent biology lab, and can be properly analyzed and scored using
standard methods for measuring bacterial growth. Those methods are well
documented, and again, any decent biology lab should be able to assist in
the analysis.

1890. Re: Odd Piece of Coaxial Cable

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 12:34:43 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <bda8116c-fd80-4f56-8e47-00e489b2b973@b1g2000hsg.googlegroups.com>
Source record: 22614

On Sep 6, 12:09 am, "Sal M. Onella" <salmone...@food.poisoning.org>
wrote:
> <j...@specsol.spam.sux.com> wrote in message
>
> news:cgt6p5-o5.ln1@mail.specsol.com...
> .
>
>
>
> > FWIW, there are several projects in the ARRL pubs, mostly for RDF, that
> > use a short piece of coax exactly as described as a loop.
>
> I've seen some in books and on the 'net. Years ago, I did a one-week job on
> a Coast Guard cutter and I got to see some HF loop antennas that are
> standard issue for cutters. I do not recall with certainty whether they
> were transmit or receive or both, but I think they were both, but not at the
> same time, as certain USN fanwire antennas are.
>
> HRO in San Diego usually has at least one HF loop on display.
>
> "Sal"

Ive seen sensors for SWR made his way. Slide a wire under the shield
from each end and termiate them in the middle with a resistor.

Jimmie

1891. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 13:54:49 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <8af14f25-e85d-42b4-8848-1a1fd763e9ca@l64g2000hse.googlegroups.com>
Source record: 22615

On 5 sep, 14:56, ml <m...@di.net> wrote:
> hi
>
> Over the years, I've found it interesting and disturbing even
> confusing, that there seems to be so much confusion regarding the
> above.
>
> Nothing gets a post responce, like the above topic and boy those
> threads quickly grow to large numbers
>
> I always read them trying to learn as well as books on the topics,
> i don't pretend to have any formal engineering /scientific
> knowledge just enjoy reading what i can
>
> but i ponder why there seems to be so many opposing /contradicting
> views on same subjects and topics and i am not referring to just
> those here on the news groups
>
> if i get x people in a room ask about baluns or chokes 1/2 say one
> thing the other 1/2 say something else
>
> dunno it's strange in all that confusion obviously we all pick
> what we interpert and believe to be best but i hate when that happens

Hello ML,

Is it really opposing /contradicting or just different?

Most baluns (in antenna systems) are used to make sure that the
current in the antenna structure is far higher then the common mode
current in the feedline.
Common mode current = Icenter + Iscreen.

To say in other words: function of balun is to make sure that the feed
line does not take part in the radiation process.

Some issues that may affect the type and actual design of the balun:

1. "far higher" (how good it mist be) is not a hard figure and depends
on the application. Requirements for a field day will be different
then for an EMC measuring antenna in an anechoic chamber.

2. The behavior of the balun depends on the impedance levels (both
common mode and differential mode) on both balanced and unbalanced
side. A balun for a full wave dipole "receives" more voltage stress
than a dipole for a HW dipole (at same power level).

3. A balun can be narrow band and wide band (ferrite core baluns [wide] versus resonating transmission line [narrow]).

4. Some baluns have the function to generate two opposite voltages with respect to another point (even when the load is not fully balanced [for example in electronic circuits]).

5. Financial issues may play a role (especially in mass volume products). A balun on PCB is far cheaper than a coaxial one with ferrite cores.

6. How much insertion / mismatch loss is allowed, what about power handling?

Just by mentioning 6 points, you can imagine that a certain balun does perform well in application A, but not in application B. A wrong type of balun for a certain application may even make the situation worse (while that balun is OK for another application).

Like Cecil, when 1:1 impedance is OK up to VHF, I prefer the current choke balun (the one with the ferrite cores). If possible with low Q factor for the common mode inductance.

For the upper UHF and SHF, performance of ferrite ceases and other types (like shorted quarter wave sections or tapered lines) can be used.

As there are many varieties, two poeple may say different things, but they are both right.

Best regards,

Wim
PA3DJS
www.tetech.nl
the address is OK but don't forget to remove abc

1892. Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 14:25:59 UTC
From: JoeSch <joeschultz1@lycos.com>
Message-ID: <3dc06661-0a64-4e5d-9449-6543cb2d9aba@l42g2000hsc.googlegroups.com>
Source record: 22616

I apologize for making this about TV reception instead of radio, but I did not know where to turn.

I live in Connecticut, about 100 miles from New York City, (102 miles by the lattitude-longitude charts) and I am about a block from the water, Long Island Sound.

I grew up in New York and am a NY Jets and Giants fan, which is broadcast from the Empire State building. The Giants' games are carried by one network, but the other Connecticut stations only carry Patriots games, not the Jets.

The Jets' games are carried on channel 2 New York, which is 102 miles as the crow flies from my house. Football packages on satellite TV are beyond present financial condition. I only care about channel 2, New York.

Does anyone have any ideas for a quick rooftop antenna I can put on a pole and run into my house for the Jets game? I really don't mind if the signal is somewhat snowy as long as I can make out what is happening on the field-beats radio. Besides, this is football-sometimes it snows for real and nobody complains, lol.

Anyway, any help would be greatly appreciated.

PS: I have seen websites for dipole antennas. My second question is: If I make a dipole antenna, what if I mounted it on a piece of cardboard or styrofoam for it's length, which cardboard or styrofoam has aluminum foil on the reverse side? The aluminum foil would not contact the dipole, and be separated from it by one quarter to one inch, depending on material thickness. The reason I ask is if this will cut off 180 degrees of reception, thereby improving the signal to noise ratio, (I know a little about electronics as an audio hobbyist, but very little about antennas even though I have tried to get a grasp).

1893. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 14:45:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga0pes$lj4$1@news.albasani.net>
Source record: 22617

Ian Jackson wrote:

> This is an example of the 'traditional' 9:1 impedance transformer which,
> on most MW and SW frequencies, gives a better match between the antenna
> impedance and a 50 or 75 ohm receiver input impedance. On relatively
> narrow bands of frequencies where the antenna impedance is naturally
> lowish (where it is near odd multiples of a quarterwave), the match will
> actually be made worse than if the transformer were not used. This
> obviously depends on the physical length of the antenna. In the diagram,
> the antenna length shown is 33m (say 100'), which is not far short of a
> quarterwave on 160m. However, on the MW band, and on various parts of
> the SW band, the transformer should improve reception.
>

Actually, the antenna terminals for the HF bands is marked "500 Ohm" on my S350DL, 9 X 500 = 4,500 Ohms (the transformation I would expect from a 9:1.) However, the author did claim an improvement of a number of S-Units on his S350DL. This made me wonder, since I didn't want to build it to see what was up, I just passed it along. I would not call the author a "liar" without absolute confirmation ... who knows, perhaps his "antenna arrangement" has resulted, somehow, in the end of that (actually off center feed point) being 4,500 Ohms--perhaps Grundig lied and the antenna terminals do exhibit a 50 Ohm impedance--I am lazy ... some youngster can figure it out ... ;-)

> I note that the writer correctly stresses that that the transformer is
> an 'UNUN' (an accurate - but ugly - word).

Actually, I would not refer to it as an UNUN. A balun is a TLT device, in following, and since UNUN was coined from balun, I would expect UNUN to only apply to TLT devices. The device in the article is a simple RF Transformer ... I like UN-UN, and the logic of following the naming convention of the Bal-Un is followed, making it "intuitive."

>> Many similar articles about -
> and adverts for - these devices WILL insist on calling them baluns
> (which, of course, they are certainly not).
>
> The direction of either winding on the torroid should not matter one bit.

The device here is not, IMHO, an UNUN, it is an RF Transformer, my first post referred to it as such ... The winding direction, in regards to the relationship of the direction of one winding to the other, matters a great deal--indeed, since a 180 degree phase relationship is at stake, the direction causes one to be an "opposite" of the other ... I have always found the phase reversal winding direction(s) to exhibit superior

behaviors ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1894. 20 and meter yagi question...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 15:49:37 UTC
From: James Barrett <xucaen@comcast.net>
Message-ID: <sr6dndYz75VYa17VnZ2dnUVZ_jSdnZ2d@comcast.com>
Source record: 22618

Can a 20 meter yagi be tuned down to 10 meters? can a 40 meter yagi be tuned down to 10?

Thanks,

1895. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 15:52:49 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <INSwk.747$1x6.137@edtnps82>
Source record: 22619

> The Jets' games are carried on channel 2 New York, which is 102 miles
> as the crow flies from my house. Football packages on satellite TV
> are beyond present financial condition. I only care about channel 2,
> New York.

I thought all VHF television transmission will be discontinued as of
February 2009. Building a VHF antenna would seem to be a
wasted effort. You need to think how you can receive the
same station on UHF digital. There are plenty of UHF antennas
available; you may also need a low noise, mast-head, pre-amplifier
to get a good signal.

Regards,

Frank

1896. Re: 20 and meter yagi question...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 16:27:31 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ThTwk.736$sq3.681@trnddc07>
Source record: 22620

"James Barrett" <xucaen@comcast.net> wrote in message
news:sr6dndYz75VYa17VnZ2dnUVZ_jSdnZ2d@comcast.com...
> Can a 20 meter yagi be tuned down to 10 meters? can a 40 meter yagi be
> tuned down to 10?
>
> Thanks,

yes, and yes.... would they work like a yagi designed for those bands, most
likely not.

1897. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 16:29:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3mu7c4d979t267er7l7fco74r8u24bthki@4ax.com>
Source record: 22621

On Sun, 7 Sep 2008 06:54:49 -0700 (PDT), Wimpie <wimabctel@tetech.nl>
wrote:

>Most baluns (in antenna systems) are used to make sure that the
>current in the antenna structure is far higher then the common mode
>current in the feedline.
> Common mode current = Icenter + Iscreen.

Hi Wim,

I presume "screen" is the coax shield. If there is any Common Mode
current, it is going to reside on the outside of the shield in a
different degree than inside the shield where it will be combined with
Differential Mode current.

In fact it would be simpler to measure it there too.

>To say in other words: function of balun is to make sure that the feed
>line does not take part in the radiation process.

Only if the BalUn is designed with choking properties, otherwise it
will make no difference at all in feed line radiation. To quickly
summarize from popular labels, you have Current BalUns and Voltage
Baluns. Such labels differentiate those that choke and those that do
not, but they are often misapplied and represent no real guarantee.
The informed buyer should always examine the construction details.

>Some issues that may affect the type and actual design of the balun:
>
>1. "far higher" (how good it mist be) is not a hard figure and depends
>on the application. Requirements for a field day will be different
>then for an EMC measuring antenna in an anechoic chamber.

This is an unusual issue. There is no correlation to need and
frequency. There is no correlation to application and frequency.
Motivation may even dictate you ignore chokes and BalUns altogether
during field day for simplicity's sake. If you demand performance,
then all the rules of choking and BalUn application apply at all
frequencies.

>2. The behavior of the balun depends on the impedance levels (both
>common mode and differential mode) on both balanced and unbalanced
>side. A balun for a full wave dipole "receives" more voltage stress
>than a dipole for a HW dipole (at same power level).

The point of a BalUn is to transform from the source Z to the load Z.
If the load Z happens to be high, you select a BalUn with its ratio

designed appropriately. Hence the variety of ratios as no single design is appropriate at all frequencies for a single antenna. Voltage (or current) stress is part of the design criteria, not a limitation to its application.

>5. Financial issues may play a role (especially in mass volume
>products). A balun on PCB is far cheaper than a coaxial one with
>ferrite cores.

This point, and two before it (not quoted here) seem to speak to small signal, board level applications. They have no application with antennas. For instance, no one is going to find any application for a BalUn on a PCB (for which I see no distinction) unless the antenna is also on the PCB.

>6. How much insertion / mismatch loss is allowed, what about power
>handling?

BalUns that are appropriately selected to the load have a far greater chance of performing without issue than many other matching solutions. Consider the insertion loss of a typical, external tuner compared to that of a BalUn that satisfies the same mismatch. I suspect you will probably lose far more power in the tuner, or at best achieve parity with the BalUn. This is not to say that a BalUn solves all problems and is the universal solution, however.

>I prefer the current
>choke balun (the one with the ferrite cores). If possible with low Q
>factor for the common mode inductance.

In fact, the 1:1 Choke BalUn has very little inductance to offer, and some formulations of ferrite may even present a minor capacitive reactance. The major characteristic of ferrite is Resistance, and it is the resistance that offers the isolation (choking) from input to output.

73's
Richard Clark, KB7QHC

1898. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 16:35:34 UTC
From: JB <nospam@goofball.net>
Message-ID: <qpTwk.737$sq3.468@trnddc07>
Source record: 22622

"JoeSch" <joeschultz1@lycos.com> wrote in message
news:3dc06661-0a64-4e5d-9449-6543cb2d9aba@l42g2000hsc.googlegroups.com...
> I apologize for making this about TV reception instead of radio, but I
> did not know where to turn.
>
> I live in Connecticut, about 100 miles from New York City, (102 miles
> by the lattitude-longitude charts) and I am about a block from the
> water, Long Island Sound.
>
> I grew up in New York and am a NY Jets and Giants fan, which is
> broadcast from the Empire State building. The Giants' games are
> carried by one network, but the other Connecticut stations only carry
> Patriots games, not the Jets.
>
> The Jets' games are carried on channel 2 New York, which is 102 miles
> as the crow flies from my house. Football packages on satellite TV
> are beyond present financial condition. I only care about channel 2,
> New York.
>
> Does anyone have any ideas for a quick rooftop antenna I can put on a
> pole and run into my house for the Jets game? I really don't mind if
> the signal is somewhat snowy as long as I can make out what is
> happening on the field-beats radio. Besides, this is football-
> sometimes it snows for real and nobody complains, lol.
>
> Anyway, any help would be greatly appreciated.
>
> PS: I have seen websites for dipole antennas. My second question
> is: If I make a dipole antenna, what if I mounted it on a piece of
> cardboard or styrofoam for it's length, which cardboard or styrofoam
> has aluminum foil on the reverse side? The aluminum foil would not
> contact the dipole, and be separated from it by one quarter to one
> inch, depending on material thickness. The reason I ask is if this
> will cut off 180 degrees of reception, thereby improving the signal to
> noise ratio, (I know a little about electronics as an audio hobbyist,
> but very little about antennas even though I have tried to get a
> grasp).
>

Quick would be a rabbit ears set on the roof. Space your reflector at some
distance so that your antenna and reflector look more like an H. What you
really want though is a Rhombic antenna. Google that. It is a diamond
shaped wire antenna with some real gain.

1899. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 16:47:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n318c4p1qgtqpmfoqqvfrolgld3u5a1as0@4ax.com>
Source record: 22623

On Sun, 7 Sep 2008 07:25:59 -0700 (PDT), JoeSch
<joeschultz1@lycos.com> wrote:

>I live in Connecticut, about 100 miles from New York City, (102 miles
>by the lattitude-longitude charts) and I am about a block from the
>water, Long Island Sound.
>
>I grew up in New York and am a NY Jets and Giants fan, which is
>broadcast from the Empire State building.

Hi Joe,

The long answer is No.

The short answer is that with the transmission antenna at 1250 feet
(give or take), it sees out to an horizon 25 miles away. An antenna
on the ground there would receive its signal, but you would have to
lift it as you pushed back. By the time you pushed back another 25
miles, that receiving antenna would also have to be 1250 feet in the
air. That is only 50 miles range for a very unlikely audience. You
are challenge by an additional 50 miles, which, from your perspective,
places the top of the Empire State building beneath the earth's
surface by a considerable depth. No amount of amplification will
rescue that situation.

73's
Richard Clark, KB7QHC

1900. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 16:52:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ef18c4hef7l2hidlji2i2nmvdg9p3lussk@4ax.com>
Source record: 22624

On Sun, 07 Sep 2008 09:47:26 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sun, 7 Sep 2008 07:25:59 -0700 (PDT), JoeSch
><joeschultz1@lycos.com> wrote:
>
>>I live in Connecticut, about 100 miles from New York City, (102 miles
>>by the lattitude-longitude charts) and I am about a block from the
>>water, Long Island Sound.

Hi Joe,

If you are a betting man, this frequency has a reputation for world
wide reception.... if.

It is an exotic topic, and you might astound yourself with seeing the
game, but don't invite the crew over expecting to happen. The odds
are strictly for Vegas as this exotic topic is called tropospheric
scattering, or ducting, or meteor shower DX, or any other number of
long-shot methods.

73's
Richard Clark, KB7QHC

1901. Re: 20 and meter yagi question...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 17:55:48 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <ga14j9vri1@news.netins.net>
Source record: 22625

Take them apart, recut the elements to 10M and reassemble with 10M spacing.
Lots of luck

"James Barrett" <xucaen@comcast.net> wrote in message
news:sr6dndYz75VYa17VnZ2dnUVZ_jSdnZ2d@comcast.com...
> Can a 20 meter yagi be tuned down to 10 meters? can a 40 meter yagi be
> tuned down to 10?
>
> Thanks,

1902. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 18:01:19 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <ga14tjujk1@news.netins.net>
Source record: 22626

Easiest and probably the cheapest is to buy a radio shack deep fringe antenna. A chimeny or Eve mount should be the easiest, it not feasible a 20 foot piece of 1" steel pipe would do nicely. I got denver stations in cheyenne in the 50-60s with a winegard antenna on a 20 foot pole. Transmitters were on lookout mountain or so I was told..... Channel Master and Wingard are two other great tv antenna manufacuters.

"JoeSch" <joeschultz1@lycos.com> wrote in message news:3dc06661-0a64-4e5d-9449-6543cb2d9aba@l42g2000hsc.googlegroups.com...
>I apologize for making this about TV reception instead of radio, but I
> did not know where to turn.
>
> I live in Connecticut, about 100 miles from New York City, (102 miles
> by the lattitude-longitude charts) and I am about a block from the
> water, Long Island Sound.
>
> I grew up in New York and am a NY Jets and Giants fan, which is
> broadcast from the Empire State building. The Giants' games are
> carried by one network, but the other Connecticut stations only carry
> Patriots games, not the Jets.
>
> The Jets' games are carried on channel 2 New York, which is 102 miles
> as the crow flies from my house. Football packages on satellite TV
> are beyond present financial condition. I only care about channel 2,
> New York.
>
> Does anyone have any ideas for a quick rooftop antenna I can put on a
> pole and run into my house for the Jets game? I really don't mind if
> the signal is somewhat snowy as long as I can make out what is
> happening on the field-beats radio. Besides, this is football-
> sometimes it snows for real and nobody complains, lol.
>
> Anyway, any help would be greatly appreciated.
>
> PS: I have seen websites for dipole antennas. My second question
> is: If I make a dipole antenna, what if I mounted it on a piece of
> cardboard or styrofoam for it's length, which cardboard or styrofoam
> has aluminum foil on the reverse side? The aluminum foil would not
> contact the dipole, and be separated from it by one quarter to one
> inch, depending on material thickness. The reason I ask is if this
> will cut off 180 degrees of reception, thereby improving the signal to
> noise ratio, (I know a little about electronics as an audio hobbyist,
> but very little about antennas even though I have tried to get a
> grasp).

>

1903. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 18:14:24 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <43858db0-70bb-4562-bf4b-96fc8a9d76f4@c65g2000hsa.googlegroups.com>
Source record: 22627

On Sep 6, 11:40 am, "Tom Donaly" <dtdon...@sbcglobal.net> wrote:
> Dave wrote:
> > <j...@specsol.spam.sux.com> wrote in message
> >news:io49p5-6bq.ln1@mail.specsol.com...
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >>> On Sep 5, 6:15?pm, j...@specsol.spam.sux.com wrote:
> >>>> Art Unwin <ArthurUn...@gmail.com> wrote:
> >>>>> On Sep 5, 2:25?pm, j...@specsol.spam.sux.com wrote:
> >>>>>> Art Unwin <ArthurUn...@gmail.com> wrote:
> >>>>>>> Jim, following your advice I just entered "cern" in Google.
> >>>>>> Yeah, sure, that's what I said.
> >>>>>>> It immediately states as correct everything I have stated in detail
> >>>>>> Yeah, sure, of course it does.
> >>>>>> Yeah, you're genius all right; sane too.
> >>>>>> --
> >>>>>> Jim Pennino
> >>>>>> Remove .spam.sux to reply.
> >>>>> Put in "cern"in google where the first item that comes up is Cern's
> >>>> Or you could have gone directly towww.cern.chlikeI told you at
> >>>> least 4 times.
> >
> >>>> --
> >>>> Jim Pennino
> >
> >>>> Remove .spam.sux to reply.
> >
> >>> READERS CLICK ON THIS FOR THE TRUTH
> >> You wouldn't recognize truth if it smacked you in the forehead with a
> >> two by four.
> >
> >> Why did you edit what I wrote, you babbling lunatic?
> >
> > art is just pulling everyone's leg with techno babble. note how it changes
> > with new news and how he latches on to meaningless terms. of course the
> > weak force has nothing to do with electromagnetic waves and antennas, but
> > because it got mentioned in something and is sometimes termed the
> > electro-weak force he fits it into his fantasy world. may the farce be with
> > you art... and keep writing, the wx is bad over here today and getting worse
> > so we could use some entertainment... maybe try to link up the possible
> > effects of beta decay caused by the weak force with your diamagnetic seeking
> > anti gravity particles, that might be fun.
> >
> The diamagnetic reference proves he's in leg-pulling mode, and not just
> being psychotic. Nice try, Art.

> 73,
> Tom Donaly, KA6RUH

Tom
A diamagnetic material (over 90% of the elements on earth are
diamagnetic)
does not absorb a free or non bonded electron into the subatomic
structure of the element!
So the many types of particles that enter the earth's atmosphere can
safely settle or be at rest.
Many particles arrive every second, some with spin which means they
have a straight line velocity
while others arrive with little or no spin and thus wander thru out
the stratosphere and some will get propelled
by solar winds. These particles number in the multi millions per cu
metre on earth but are so small and with little energy
that they are difficult to detect in science. One of these particles
consist of small energy which escapes from the Sun
similar to smoke where the" energy less" particles are carried away
without particular direction. But on entering the earth's boundary
they do become magnetized on a very small scale from the presence of
the earths magnetic field as they float down to rest
on the multiple diamagnetic materials on earth, which also includes
water on the ground and airborne droplets This is why the term
diamagnetic is so important in the science of particles and radiation
bearing in mind that minute particles from the Sun have a very short
nuclear life which is why the Sun expelled them in the first place!
So Tom, the reference of diamagnetic is not a form of " leg pulling "
or a maniacle uttering but an important part of radiation and antenna
phenomina.
Very best regards
Art Unwin KB9MZ.....xg

1904. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 18:30:10 UTC
From: Dave <noone@nowhere.com>
Message-ID: <S4Vwk.748$sq3.73@trnddc07>
Source record: 22628

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:43858db0-70bb-4562-bf4b-96fc8a9d76f4@c65g2000hsa.googlegroups.com...

the weak farce is strong in you...

may the farce be with you...

sorry, no time for more bad puns today, wx is too nice to sit in front of
the computer.

1905. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 19:01:27 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6d0f77ab-15f6-4ff6-a065-13e23309ec53@59g2000hsb.googlegroups.com>
Source record: 22629

On Sep 7, 1:30 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:43858db0-70bb-4562-bf4b-96fc8a9d76f4@c65g2000hsa.googlegroups.com...
>
> the weak farce is strong in you...
>
> may the farce be with you...
>
> sorry, no time for more bad puns today, wx is too nice to sit in front of
> the computer.

You should note that one of the particles I referred to is the
neutrino
which is oft times referred to an off spring of the big "W" which must
certainly occur
while contained within the arbitrary boundary of the Sun or solely in
the mind of Feynman.
The word neutrino will supply energy to the upcomming naysayers as
always who will
confirm that all is known about the Universe and the antenna radiation
phenomina
Art

1906. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 19:27:28 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <3d693214-ea82-48eb-b5d5-498a79df18b9@l42g2000hsc.googlegroups.com>
Source record: 22630

Hello Richard,

Please find comment under your text.

On 7 sep, 18:29, Richard Clark <kb7...@comcast.net> wrote:
> On Sun, 7 Sep 2008 06:54:49 -0700 (PDT), Wimpie <wimabc...@tetech.nl>
> wrote:
>
> >Most baluns (in antenna systems) are used to make sure that the
> >current in the antenna structure is far higher then the common mode
> >current in the feedline.
> > Common mode current = Icenter + Iscreen.
>
> Hi Wim,
>
> I presume "screen" is the coax shield.

Correct.

> If there is any Common Mode
> current, it is going to reside on the outside of the shield in a
> different degree than inside the shield where it will be combined with
> Differential Mode current.
>
> In fact it would be simpler to measure it there too.

For cable with solid screen, Iscreen = I_inner + I_outer.
To go in more detail (I thought) was not relevant for the original
question.
For radiation, and distance between currents <<< WL, only common mode
current counts (and you can measure that with a current probe).

>
> >To say in other words: function of balun is to make sure that the feed
> >line does not take part in the radiation process.
>
> Only if the BalUn is designed with choking properties, otherwise it
> will make no difference at all in feed line radiation. To quickly
> summarize from popular labels, you have Current BalUns and Voltage
> Baluns. Such labels differentiate those that choke and those that do
> not, but they are often misapplied and represent no real guarantee.
> The informed buyer should always examine the construction details.

A fully balanced load can be connected to an unbalanced feed line with
a voltage balun (for example center tapped transformer), a choking
type balun is not necessary for this. So I do not agree on your

point.

>
> >Some issues that may affect the type and actual design of the balun:
>
> >1. "far higher" (how good it mist be) is not a hard figure and depends
> >on the application. Requirements for a field day will be different
> >then for an EMC measuring antenna in an anechoic chamber.
>
> This is an unusual issue. There is no correlation to need and
> frequency. There is no correlation to application and frequency.
> Motivation may even dictate you ignore chokes and BalUns altogether
> during field day for simplicity's sake. If you demand performance,
> then all the rules of choking and BalUn application apply at all
> frequencies.

Did I mention frequency under point 1? I ment to say that requirements
for the balun (how good it must be) depends on your application. For a
field day you may ignore the balun function at all (you may burn your
fingers), but for an Antenna Range, you need a good one with high
common mode attenuation (when you use a balanced reference antenna).

>
> >2. The behavior of the balun depends on the impedance levels (both
> >common mode and differential mode) on both balanced and unbalanced
> >side. A balun for a full wave dipole "receives" more voltage stress
> >than a dipole for a HW dipole (at same power level).
>
> The point of a BalUn is to transform from the source Z to the load Z.
> If the load Z happens to be high, you select a BalUn with its ratio
> designed appropriately. Hence the variety of ratios as no single
> design is appropriate at all frequencies for a single antenna. Voltage
> (or current) stress is part of the design criteria, not a limitation
> to its application.

Impedance transformation is a "byproduct", main function is to couple
balanced circuit to unbalanced circuit without feed line radiation.
The stress applied to the balun depends on the impedance level. I
mentioned this to show that even with dipoles (and same power) you can
have different designs (or size). Yes, a choke type balun that can
handle max. 1kW into a HW dipole, will probably run hot (or flashes
over) when used on a thin FW dipole with same input power.

>
> >5. Financial issues may play a role (especially in mass volume
> >products). A balun on PCB is far cheaper than a coaxial one with
> >ferrite cores.
>
> This point, and two before it (not quoted here) seem to speak to small
> signal, board level applications. They have no application with
> antennas. For instance, no one is going to find any application for a
> BalUn on a PCB (for which I see no distinction) unless the antenna is

> also on the PCB.

I designed some PCB baluns for feeding PCB antennas and wire antennas
connected to the (tiny) PCB, because of ease of production (no other
handwork required). They perform not as good as a coaxial type, but
good enough for the application.

>
> >6. How much insertion / mismatch loss is allowed, what about power
> >handling?
>
> BalUns that are appropriately selected to the load have a far greater
> chance of performing without issue than many other matching solutions.
> Consider the insertion loss of a typical, external tuner compared to
> that of a BalUn that satisfies the same mismatch. I suspect you will
> probably lose far more power in the tuner, or at best achieve parity
> with the BalUn. This is not to say that a BalUn solves all problems
> and is the universal solution, however.
>
> >I prefer the current
> >choke balun (the one with the ferrite cores). If possible with low Q
> >factor for the common mode inductance.
>
> In fact, the 1:1 Choke BalUn has very little inductance to offer, and
> some formulations of ferrite may even present a minor capacitive
> reactance. The major characteristic of ferrite is Resistance, and it
> is the resistance that offers the isolation (choking) from input to
> output.

This depends on the type of ferrite, frequency and final geometry of
the balun. Although not preferred (possible change on parasitic
resonance with capacitive common mode impedance), an inductive common
mode choking action can provide good isolation (as long as reactance
is high enough with respect to the impedance at the balanced side).
For JOTA I use a choke type balun that is inductive (with low Q
factor) for 80m, while it is almost resistive for 40m.
>
> 73's
> Richard Clark, KB7QHC

Richard, I only wanted to make clear that there are many solutions for
the same problem and that one solution cannot fit all problems. It was
not my purpose to be complete.

Best regards,

Wim
PA3DJS
www.tetech.nl
without abc, the address is correct.

1907. Re: Finally, some begins a real study of time ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 21:32:21 UTC
From: dfinn1@nc.rr.com
Message-ID: <2a70263b-507e-4ede-9ae6-75b82cca005f@59g2000hsb.googlegroups.com>
Source record: 22631

On Sep 7, 2:27 am, John Smith <assemblywiz...@gmail.com> wrote:
> It will be interesting to eventually find out what that strange
> placeholder in our equations really stands for:
>
> http://www.physorg.com/news139830010.html
>

That article was a real snoozer. As most of them are, they associate an increase of entropy (2nd law) with an increase of randomness as time moves "forward". Thus, a beautiful (orderly) greek temple built in ancient times becomes a random disorderly pile of dust and rubble millenia later. Certainly such randomness happens but the error is that we must complete the observation until maximum condition is observed. As if by some revelation, "scientists" (according to the author) have found increases in time symmetry with increase in entropy with RNA. What they have really discovered is that they do not bound their observations into a closed system which would require observation until maximum condition occurs. Of course, in many cases that is not possible but certainly they should recognize that their observations are incomplete. One example of an observation that gets closer to a closed system in time would be Darwin, found in the evolution of life. As cells divide, randomness (entropy) assigns a certain probability that mutations will occur. Such mutations are examples of assymetric time moving irreeversibly towards randomness. However, when your expand the observation to include the entire system of time and environment, you find that certain benign mutations are much more suited to the environment and the life form becomes improved. We have evolved from single cell life forms to human life, which follows a path from a much lower level of orderliness to a much higher level of order. Entropy (disorder) is actually what gets us there. I suspect it is the concept of "entropy" and not "time" that needs to be better understood.

1908. Re: Baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 21:52:24 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <ga1ieoiqj1@news.albasani.net>
Source record: 22632

JB wrote:

>> Codswallop :0)
>>
> If he wont have anything to God why would God want to have
> anything to do with him? God made the firewood too.
>
>
And the bunnies wabbits, don't forget the bunnies he made for the
huntsmen to shoot so the beautiful rich ladies could have pretty
warm gloves - all part of his marvellous plan :)

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

1909. Re: Finally, some begins a real study of time ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 21:58:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga1ipdjbq1@news.albasani.net>
Source record: 22633

dfinn1@nc.rr.com wrote:
> On Sep 7, 2:27 am, John Smith <assemblywiz...@gmail.com> wrote:
>> It will be interesting to eventually find out what that strange
>> placeholder in our equations really stands for:
>>
>> http://www.physorg.com/news139830010.html
>>
>
> That article was a real ...

WOW! We are gifted with a REAL GENIUS here!

<YAWN> Yeah, been there done that ... still I do not really understand time ... just have a bunch of jerks, like you, around telling me I am STUPID! "FOR NOT UNDERSTANDING" ... again, been there done that ... it is your shallow thinking which is in error ... NOT my quest for real answers ... if you think I am going to stand around, hold your hand, and wait for you epiphany to strike ... take a ticket--get in line <grin> I'll be with you as soon as I have handle the present customer ...

You may have just found this news group, the rest of us have been here awhile ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1910. Re: ieee.org hosts presentation on new technology.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 22:03:47 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <6oj8c4hhhilj9i1vd9jjmk2ke40hp63bn8@4ax.com>
Source record: 22634

On Fri, 5 Sep 2008 10:47:19 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Sep 5, 12:14ï¿½pm, John Smith <assemblywiz...@gmail.com> wrote:
>> Cecil Moore wrote:
>> > John Smith wrote:
>> >>http://ewh.ieee.org/r1/providence/dlm.htm
>>
>> > Here's another one:
>>
>> >http://www.spectrum.ieee.org/aug08/6609
>>
>> > Two times zero doesn't always equal zero.
>>
>> ;-)
>>
>> Regards,
>> JS
>>
>> --
>> It is like a nightmare where the public servants are the people which
>> the police are supposed to protect us from!
>
>John, may I suggest that the term :"zero" represents the extreme of
>what can be perceived and not a total
>nothingness which cannot exist in science. Thus we can have two
>phenomina that cannot be identified
>in singular form but becomes identifiable when they act in concert.
>Best Regards
>Art

Lets see; zero exists in arithmetic, higher math and accounting.
Arithmetic and higher math are part of science. Zero is part of
science. Quod Erat Demontratum (QED)

1911. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 22:08:31 UTC
From: Bubblesdee <Bubblesdee.30a204d@radiobanter.com>
Message-ID: <Bubblesdee.30a204d@radiobanter.com>
Source record: 22642

John Smith;645632 Wrote:
> Ian Jackson wrote:
> -
> This is an example of the 'traditional' 9:1 impedance transformer
> which,
> on most MW and SW frequencies, gives a better match between the
> antenna
> impedance and a 50 or 75 ohm receiver input impedance. On relatively
> narrow bands of frequencies where the antenna impedance is naturally
> lowish (where it is near odd multiples of a quarterwave), the match
> will
> actually be made worse than if the transformer were not used. This
> obviously depends on the physical length of the antenna. In the
> diagram,
> the antenna length shown is 33m (say 100'), which is not far short of
> a
> quarterwave on 160m. However, on the MW band, and on various parts of
>
> the SW band, the transformer should improve reception.
> -
>
> Actually, the antenna terminals for the HF bands is marked "500 Ohm" on
>
> my S350DL, 9 X 500 = 4,500 Ohms (the transformation I would expect from
>
> a 9:1.) However, the author did claim an improvement of a number of
> S-Units on his S350DL. This made me wonder, since I didn't want to
> build it to see what was up, I just passed it along. I would not call
>
> the author a "liar" without absolute confirmation ... who knows,
> perhaps
> his "antenna arrangement" has resulted, somehow, in the end of that
> (actually off center feed point) being 4,500 Ohms--perhaps Grundig lied
>
> and the antenna terminals do exhibit a 50 Ohm impedance--I am lazy ...
>
> some youngster can figure it out ... ;-)
> -
> I note that the writer correctly stresses that that the transformer is
>
> an 'UNUN' (an accurate - but ugly - word). -
>
> Actually, I would not refer to it as an UNUN. A balun is a TLT device,
>

> in following, and since UNUN was coined from balun, I would expect UNUN
>
> to only apply to TLT devices. The device in the article is a simple RF
>
> Transformer ... I like UN-UN, and the logic of following the naming
> convention of the Bal-Un is followed, making it "intuitive."
> --
> Many similar articles about - -
> and adverts for - these devices WILL insist on calling them baluns
> (which, of course, they are certainly not).
>
> The direction of either winding on the torroid should not matter one
> bit.-
>
> The device here is not, IMHO, an UNUN, it is an RF Transformer, my
> first
> post referred to it as such ... The winding direction, in regards to
> the
> relationship of the direction of one winding to the other, matters a
> great deal--indeed, since a 180 degree phase relationship is at stake,
>
> the direction causes one to be an "opposite" of the other ... I have
> always found the phase reversal winding direction(s) to exhibit
> superior
> behaviors ...
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

John

You hit the nail right on the head about the S350DL having a 500 ohm input but no 50 ohm input. I had the exact same questions that you brought up so I E-mailed the author to clarify some of the questions. I have a feeling that he is not using a S350 but an actual comm receiver with a 50 ohm input.

Still waiting for a reply..

I have not experience winding baluns so I will ask one more question, making it as general as possible, So here goes.

How do I wind/build a "Current Balun" (I state a current balun because all I am try to do is reduce RFI noise and change from a balanced antenna to an unbalance input) That has a ratio of 1:1, and preserves the impedance on either side of it. I would preferr not to use bead but a Torrid instead

example :

450 ohm antenna input impedance (balanced)---- balun-----450 ohm external antenna jack on my radio.

Now, on another note, my problem might be that I do not fully understand that the input impedance of a T2FD antenna changes depending on what frequencies I am trying to receive. Would this be a correct statement?

If so, I will most likely need an atenna Tuner correct??

Once again, I appreciate everyones help. This continues to be a great learing experience.

--
Bubblesdee

1912. Re: ieee.org hosts presentation on new technology.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 22:09:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga1jdujai1@news.albasani.net>
Source record: 22635

John Smith wrote:

>> ...
> 2 guys X 0 dollars = 2 guys
>
> Clearly!, proof that the law/rule of multiplication my zero is in error!
>
> :-P
>
> Regards,
> JS
>

OK. No harm meant, let me be clear, I value your mind and logic ...
just having a bit of fun ...

Now, let us carry on towards the "more relevant."

Frankly, I thought you would come back with a "dark joke" to counter ...
yanno, when you fly with turkeys it is hard not to quack ... they do
quack don't they ... I mean turkeys, yanno? <grin>

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1913. Re: ieee.org hosts presentation on new technology.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 22:11:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga1jj1jai2@news.albasani.net>
Source record: 22636

JosephKK wrote:

> ...
> Lets see; zero exists in arithmetic, higher math and accounting.
> Arithmetic and higher math are part of science. Zero is part of
> science. Quod Erat Demontratum (QED)
>

ABSOLUTELY! ZERO EXISTS WITHIN YOUR MIND!

Now, make the box bigger (the one containing your mind, of course ...) :-|

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1914. Re: Finally, some begins a real study of time ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 22:40:45 UTC
From: dfinn1@nc.rr.com
Message-ID: <9472ca98-cd4f-4f50-ab44-5ec6d368a370@r66g2000hsg.googlegroups.com>
Source record: 22637

On Sep 7, 5:58 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:

> You may have just found this news group, the rest of us have been here
> awhile ...

Actually I have been posting here as dfinn, KR4AJ and AI4QJ, and on "policy", since 1995 on nando.net. There have been several John Smiths' and John Does' over the years who have posted anonymously and the Cecil Moores' Gary Caufmans' and Todd Littles' that did not. You can say that you were an original John Smith but I never believe anything that anonymous posters write. Certainly you can even accuse them of being senile and not feel bad because it is as if you are writing any other inanimate object that does not have a brain.

1915. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 23:20:52 UTC
From: Dave <noone@nowhere.com>
Message-ID: <olZwk.812$Wd.508@trnddc01>
Source record: 22638

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:6d0f77ab-15f6-4ff6-a065-13e23309ec53@59g2000hsb.googlegroups.com...
On Sep 7, 1:30 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message

nothing worth commenting about...

take another pill and go to bed art, it will all be ok in the morning.

1916. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 23:27:48 UTC
From: ltdoc@yahoo.com
Message-ID: <786631ce-0d50-4cae-8308-982d951f523f@k37g2000hsf.googlegroups.com>
Source record: 22639

Art,
To the best of my knowledge, the only time I have ever seen the
phrase "all is known about __(insert word of choice)__" is when you
have used it. I haven't seen it used in connection with anything
except when you use it. Can you give reference to two examples of
this phrase being used concerning radio, antennas, or physics? I
would appreciate it.
- 'Doc

1917. Re: Finally, some begins a real study of time ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 23:41:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga1or7$p9q$1@news.albasani.net>
Source record: 22640

dfinn1@nc.rr.com wrote:
> On Sep 7, 5:58 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> dfi...@nc.rr.com wrote:
>
>> You may have just found this news group, the rest of us have been here
>> awhile ...
>
> Actually I have been posting here as dfinn, KR4AJ and AI4QJ, and on
> "policy", since 1995 on nando.net. There have been several John
> Smiths' and John Does' over the years who have posted anonymously and
> the Cecil Moores' Gary Caufmans' and Todd Littles' that did not. You
> can say that you were an original John Smith but I never believe
> anything that anonymous posters write. Certainly you can even accuse
> them of being senile and not feel bad because it is as if you are
> writing any other inanimate object that does not have a brain.

Actually, you stand here as an idiot, sure, I am ashamed for your sure,
I pity you ... but that does not change your words ...

If you think I argue with those here in "less than what they expect
terms", the know you should expect nothing, and certainly, if your catch
me in a good mood--much less ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1918. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-07 23:47:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga1p64$p9q$2@news.albasani.net>
Source record: 22641

ltdoc@yahoo.com wrote:
> Art,
> To the best of my knowledge, the only time I have ever seen the
> phrase "all is known about __(insert word of choice)__" is when you
> have used it. I haven't seen it used in connection with anything
> except when you use it. Can you give reference to two examples of
> this phrase being used concerning radio, antennas, or physics? I
> would appreciate it.
> - 'Doc

Where do these idiots come from, and what entertainment do they think
they provide me/us--even in their weak arguments which speak insanity?
What flood-gates have opened which has released such a black plague on
this earth and this new group in particular? :-(

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1919. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 00:20:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga1r3t$r6c$1@news.albasani.net>
Source record: 22643

Bubblesdee wrote:

> ...
> Once again, I appreciate everyones help. This continues to be a great
> learing experience.

Oh, Bubblesdee, do not think "I know something." I have watched far stranger "hook-ups" than what we debate, work!

If you have the core, if you have the wire, you can attempt multiple configurations, hook them up to your receiver, and "KNOW FOR CERTAIN!" Wind 'em one way, then the other. If you do as "he" did, on a PCB, they a tough with a soldering iron, a few turns in the opposite direction--you have learned something new (self-education!)--the world it yours, quit asking these "dummies" and KNOW!

I am "caustic" to some of the "know it alls'" here, just because they are stupid and I have done the homework to know it ...

I honestly would expect the author in question noted an improvement, recorded it in his text--and let it stand. I would not be so surprised if you duplicated his instructions and met with an improvement(s) in the direction you are headed--indeed, this is the major reason I "passed them along to you."

Too often, you only find "idiots" here ... :-)

Good luck, "wind 'em a few ways", experiment, you have data close enough to achieve you ends easily, with only a few tweaks!

Warmest regards
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1920. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 00:54:01 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <da60eba6-0a76-42e1-98c6-31a64a8b2558@34g2000hsh.googlegroups.com>
Source record: 22644

On Sep 7, 6:47 pm, John Smith <assemblywiz...@gmail.com> wrote:
> lt...@yahoo.com wrote:
> > Art,
> > To the best of my knowledge, the only time I have ever seen the
> > phrase "all is known about __(insert word of choice)__" is when you
> > have used it. I haven't seen it used in connection with anything
> > except when you use it. Can you give reference to two examples of
> > this phrase being used concerning radio, antennas, or physics? I
> > would appreciate it.
> > - 'Doc
>
> Where do these idiots come from, and what entertainment do they think
> they provide me/us--even in their weak arguments which speak insanity?
> What flood-gates have opened which has released such a black plague on
> this earth and this new group in particular? :-(
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

John,
When in conversation with Hately of cross field claims he told me of
the difficulty
of getting the chance to explain his inventive antenna to the IEEE
international meeting.
He told me that he got the brush off with the statement that antennas
has been studied to death
and all is known about antennas. When I tried to share my ideas on
antennas to the antenna laboratory
of the University of ILLINOIS I pretty much received the same brush
off so I believe professor Hately
comments. When I share my hobby with people on this newsgroup I pretty
much get the same reception
tho in the case of this newsgroup you cannot have a conversation on
the physics of antennas as
many never made it thru a physics class!. Just a few days ago it was
suggested that the weak force was just fantasy
and the idea of particles involved in radiation was laughable. Some
time ago this group was universal
in denying the mathematical quality of extending a Gaussian to that of
Maxwell so the resposes that you get

can be measured against those in terms of quality.Some months ago I spoke about the fact that antennas such as a verticle must be tipped to achieve maximum gain. No curiousity just laughter and rude comments and one stated we don't need a new design antenna as we all ready have one.This inspite of the fact that Naval antennas in one sea port have universly tipped all their antennas for quality reception! Does the U.S. navy do silly things like tipping antennas without attaining irefutable facts? So with the above comments you cannot expect any questions reflecting curiousity about science and antennas as just like those of lower interlect or education who cannot find the words that are needed resort to swear words and insults to display a measure of testerone in the absence of brain power. The days have gone when radio hams became members of the group in search of the new science of radio propagation as now all is needed isan instruction on how to turn on the radio so talking heads can rattle without curiousity of the means to do it. But don't dispare, there are hams around of the old school it just happens that they do not dwell on this newsgroup as most want intelligent return with respect to conversation. If there was respect on this newsgroup we could all learn and advance but there are many that are limited in that respect and resort to actions that display testerone instead similar to the gang make up in our cities where the communities are not now self sustaining leaving rubble for self perceived desired turf.
Best regards
Art

1921. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 01:39:09 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <eNCdnWLkbKuvH1nVnZ2dnUVZ_uCdnZ2d@comcast.com>
Source record: 22645

"Frank" <frank599@nospam.telus.net> wrote in message
news:lNSwk.747$1x6.137@edtnps82...
>> The Jets' games are carried on channel 2 New York, which is 102 miles
>> as the crow flies from my house. Football packages on satellite TV
>> are beyond present financial condition. I only care about channel 2,
>> New York.
>
> I thought all VHF television transmission will be discontinued as of
> February 2009. Building a VHF antenna would seem to be a
> wasted effort. You need to think how you can receive the
> same station on UHF digital. There are plenty of UHF antennas
> available; you may also need a low noise, mast-head, pre-amplifier
> to get a good signal.
>
> Regards,
>
> Frank
WCBS, CH2 NY, will be on UHF channel 33 (digital) after 2/17/09. So, don't
waste your money on a ch 2 antenna.

Tam

1922. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 03:42:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga26v5$4cb$1@news.albasani.net>
Source record: 22646

Art Unwin wrote:

> ...
> John,
> When in conversation with Hately of cross field claims he told me of
> the difficulty
> of getting the chance to explain his inventive antenna to the IEEE
> international meeting.
> He told me that he got the brush off with the statement that antennas
> has been studied to death
> and all is known about antennas. When I tried to share my ideas on
> antennas to the antenna laboratory

> Best regards
> Art

I think it was Cecil who quoted that poor hapless individual who
inferred that all would shortly be "KNOWN" and the patent office duly
closed in response ...

Yeah, I know ... they are "out there" (in more ways than one!) :-)

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1923. Re: Finally, some begins a real study of time ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 04:01:55 UTC
From: dfinn1@nc.rr.com
Message-ID: <c76fb8f0-36b4-45c5-a187-16a115c8fdda@59g2000hsb.googlegroups.com>
Source record: 22647

On Sep 7, 7:41 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > On Sep 7, 5:58 pm, John Smith <assemblywiz...@gmail.com> wrote:
> >> dfi...@nc.rr.com wrote:
>
> >> You may have just found this news group, the rest of us have been here
> >> awhile ...
>
> > Actually I have been posting here as dfinn, KR4AJ and AI4QJ, and on
> > "policy", since 1995 on nando.net. There have been several John
> > Smiths' and John Does' over the years who have posted anonymously and
> > the Cecil Moores' Gary Caufmans' and Todd Littles' that did not. You
> > can say that you were an original John Smith but I never believe
> > anything that anonymous posters write. Certainly you can even accuse
> > them of being senile and not feel bad because it is as if you are
> > writing any other inanimate object that does not have a brain.
>
> Actually, you stand here as an idiot, sure, I am ashamed for your sure,

Please explain what it means to be ashamed for "your sure". What
exactly is a "your sure"?

> I pity you ... but that does not change your words ...

Of course not, nor was there any intent to do so.

>
> If you think I argue with those here in "less than what they expect
> terms",

This sentence is rather awkward. But it does reveal that you choices
to argue are not necesessarily founded on technical principles but
guidedn instead by the ad hominem.

>the know you should expect nothing,

"the know" I expect nothing.

> and certainly, if your catch
> me in a good mood--much less ...

Cool, we should expect less than nothing from you. Define less than
nothing.

>
> Regards,
> JS

It is difficult to have a discussion with an organism whose brain approaches the intellect of a paramecium caudatum.

1924. Re: Finally, some begins a real study of time ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 04:12:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga28mq$5ri$1@news.albasani.net>
Source record: 22648

dfinn1@nc.rr.com wrote:
> On Sep 7, 7:41 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> dfi...@nc.rr.com wrote:
>>> On Sep 7, 5:58 pm, John Smith <assemblywiz...@gmail.com> wrote:
>>>> dfi...@nc.rr.com wrote:
>>>> You may have just found this news group, the rest of us have been here
>>>> awhile ...
>>> Actually I have been posting here as dfinn, KR4AJ and AI4QJ, and on
>>> "policy", since 1995 on nando.net. There have been several John
>>> Smiths' and John Does' over the years who have posted anonymously and
>>> the Cecil Moores' Gary Caufmans' and Todd Littles' that did not. You
>>> can say that you were an original John Smith but I never believe
>>> anything that anonymous posters write. Certainly you can even accuse
>>> them of being senile and not feel bad because it is as if you are
>>> writing any other inanimate object that does not have a brain.
>> Actually, you stand here as an idiot, sure, I am ashamed for your sure,
>
> Please explain what it means to be ashamed for "your sure". What
> exactly is a "your sure"?
>
>> I pity you ... but that does not change your words ...
>
> Of course not, nor was there any intent to do so.
>
>> If you think I argue with those here in "less than what they expect
>> terms",
>
> This sentence is rather awkward. But it does reveal that you choices
> to argue are not necesessarily founded on technical principles but
> guidedn instead by the ad hominem.
>
>> the know you should expect nothing,
>
> "the know" I expect nothing.
>
>> and certainly, if your catch
>> me in a good mood--much less ...
>
> Cool, we should expect less than nothing from you. Define less than
> nothing.
>
>> Regards,
>> JS
>

> It is difficult to have a discussion with an organism whose brain
> approaches the intellect of a paramecium caudatum.

Yeah, I'll admit, there was a couple of errors in the grammer, I keep thinking I'll slow down and read before posting [shrug.]

When you have something to say which is logical, can you put it in caps ... sorry, but I just skim your text now--since nothing interesting has been seen for so long ... I am sure you understand ...

Regards,
JS
--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1925. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 04:17:51 UTC
From: ltdoc@yahoo.com
Message-ID: <e85e9856-f3eb-4e21-9efc-45fda23dade4@f63g2000hsf.googlegroups.com>
Source record: 22649

Art,
So it seems that this phrase was used privately between you and one other person who was not taken 'seriously'. I can believe that. So, this phrase has in fact not been used here on this forum except by you. Is that correct, or am I missing something?
- 'Doc

JS,
Get over it.
- 'Doc

1926. Re: 20 and meter yagi question...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 04:48:16 UTC
From: dfinn1@nc.rr.com
Message-ID: <ea34150d-0c36-464a-981a-3fb22f1da0df@b1g2000hsg.googlegroups.com>
Source record: 22650

On Sep 7, 1:55 pm, "Rollie" <rol...@iowatelecom.net> wrote:
> Take them apart, recut the elements to 10M and reassemble with 10M spacing.
> Lots of luck
>
> "James Barrett" <xuc...@comcast.net> wrote in message
>
> news:sr6dndYz75VYa17VnZ2dnUVZ_jSdnZ2d@comcast.com...
>
>
>
> > Can a 20 meter yagi be tuned down to 10 meters? can a 40 meter yagi be
> > tuned down to 10?
>
> > Thanks,- Hide quoted text -
>
> - Show quoted text -

And don't forget that a new gamma match must be calculated. See
http://www.ve3sqb.com/ and search "gamma" on the page for his antenna
design program "Gamma".

1927. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 05:19:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga2cl2$9n8$1@news.albasani.net>
Source record: 22551

ltdoc@yahoo.com wrote:
> ... Is that correct, or am I missing something?
> - 'Doc
>
>
>
> JS,
> Get over it.
> - 'Doc

Oh, you are quite correct, you are an idiot. I focused on that at the "get go!" (don't look now--I don't think I am the only one <grin>)

But then, you already knew that, others have told you, etc., etc. I'd imagine your mother was ashamed of you right along side your father--wonderful people really, they never mentioned it! <yawn>

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

1928. Re: 20 and meter yagi question...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 05:22:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga2cq1$9n8$2@news.albasani.net>
Source record: 22552

dfinn1@nc.rr.com wrote:
> On Sep 7, 1:55 pm, "Rollie" <rol...@iowatelecom.net> wrote:
>> Take them apart, recut the elements to 10M and reassemble with 10M spacing.
>> Lots of luck
>>
>> "James Barrett" <xuc...@comcast.net> wrote in message
>>
>> news:sr6dndYz75VYa17VnZ2dnUVZ_jSdnZ2d@comcast.com...
>>
>>
>>
>>> Can a 20 meter yagi be tuned down to 10 meters? can a 40 meter yagi be
>>> tuned down to 10?
>>> Thanks,- Hide quoted text -
>> - Show quoted text -
>
> And don't forget that a new gamma match must be calculated. See
> http://www.ve3sqb.com/ and search "gamma" on the page for his antenna
> design program "Gamma".

Yeah, most of have explored those "ballpark" equations/formulas for
gamma matches. I even translated one from the basic language to C.

In the end, it is "cut and match."

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1929. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 07:55:46 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <DV4xk.40562$_s1.15768@newsfe07.iad>
Source record: 22553

"JoeSch" <joeschultz1@lycos.com> wrote in message
news:3dc06661-0a64-4e5d-9449-6543cb2d9aba@l42g2000hsc.googlegroups.com...
> I apologize for making this about TV reception instead of radio, but I
> did not know where to turn.
>
> I live in Connecticut, about 100 miles from New York City, (102 miles
> by the lattitude-longitude charts) and I am about a block from the
> water, Long Island Sound.
>
> I grew up in New York and am a NY Jets and Giants fan, which is
> broadcast from the Empire State building. The Giants' games are
> carried by one network, but the other Connecticut stations only carry
> Patriots games, not the Jets.
>
> The Jets' games are carried on channel 2 New York, which is 102 miles
> as the crow flies from my house. Football packages on satellite TV
> are beyond present financial condition. I only care about channel 2,
> New York.
>
> Does anyone have any ideas for a quick rooftop antenna I can put on a
> pole and run into my house for the Jets game? I really don't mind if
> the signal is somewhat snowy as long as I can make out what is
> happening on the field-beats radio. Besides, this is football-
> sometimes it snows for real and nobody complains, lol.
>
> Anyway, any help would be greatly appreciated.
>
> PS: I have seen websites for dipole antennas. My second question
> is: If I make a dipole antenna, what if I mounted it on a piece of
> cardboard or styrofoam for it's length, which cardboard or styrofoam
> has aluminum foil on the reverse side? The aluminum foil would not
> contact the dipole, and be separated from it by one quarter to one
> inch, depending on material thickness. The reason I ask is if this
> will cut off 180 degrees of reception, thereby improving the signal to
> noise ratio, (I know a little about electronics as an audio hobbyist,
> but very little about antennas even though I have tried to get a
> grasp).
>

First of all, don't introduce any other metallic objects (foil, etc). Just
the elements described below.

You need to make a basic yagi antenna. When finished, it greatly resembles
a TV antenna, except the elements are all nearly the same size, optimized
for Channel 2. (Neglecting the fact that WCBS digital TV is on a UHF

channel. You asked for analog WCBS-TV, Channel 2.)

Fabricate a folded dipole for 57 MHz out of regular TV twinlead.
Here: http://www.wfu.edu/~matthews/misc/dipole.html
Looks like he uses Channel 2 as an example -- convenient! He says it's 2.5 meters long -- I think that's about 98.4 inches

Probably should mount it on an 8-foot piece of 1 X 2 wood to keep it straight and level. An inch or so will stick out at the ends -- no big deal. It will go on the roof, mounted crossways on another piece of wood called a "boom" which is aligned to New York City. The folded dipole's position on the boom should be about 2 feet from the end that will be away from New York.

That is the active or "driven" element of the yagi and it needs some helpers. The helpers are made of ordinary metal tubes, but have no direct electrical connection to the driven element. Old aluminum tubing is fine. Assorted pieces of old TV antennas will work if the pieces are tightly fastened together and carefully cleaned at the attaching points for a good connection.

One helper is called a "reflector" Make it 6 percent longer than the driven element and mount it on the boom behind the driven element (away from New York) by about 21 inches.

Next helper is called "Director #1." It's 1% shorter than the driven element and it's mounted on the boom 21 inches in front of the driven element, toward New York.

Next helper is called "Director #2." It's 8% shorter than the driven element and it's mounted 37 inches in front of Director #1.

You can add more directors, same length, same spacing as #2, but they won't capture a lot more signal after the first few. Plus, with more than two directors, the boom gets really, really long.

Note that this antenna is a 300-ohm antenna. Since your TV input is probab ly NOT 300 ohms, you have to transform the impedance to the 75-ohm coaxial cable that plugs into the TV. Do that near your antenna. What I mean is this: Have only about a foot or so of 300 ohm twinlead coming down from the folded dipole. Connect a 300/75 ohm transformer or "balun" at that point and run coaxial cable the rest of the way to the TV. Much better for interference rejection, especially at Channel 2. Such 300/75 ohm baluns are available at all radio stores as well as many variety, drug and department stores. Buy whatever one you think you can connect with the tools at hand. You may have a balun or two that came with an old TV or VCR.

The first one of these I ever helped build was made with coathangers on a broomstick for Channel 13. (Higher freq meant smaller elements -- easier.) It worked fine.

Let us know how this works for you. I'm interested to know if you were able to follow what I wrote.

1930. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 07:55:46 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <h85xk.40563$_s1.6304@newsfe07.iad>
Source record: 22554

"JoeSch" <joeschultz1@lycos.com> wrote in message
news:3dc06661-0a64-4e5d-9449-6543cb2d9aba@l42g2000hsc.googlegroups.com...
> I apologize for making this about TV reception instead of radio, but I
> did not know where to turn.
>
> I live in Connecticut, about 100 miles from New York City, (102 miles
> by the lattitude-longitude charts) and I am about a block from the
> water, Long Island Sound.
>
> I grew up in New York and am a NY Jets and Giants fan, which is
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> carried by one network, but the other Connecticut stations only carry
> Patriots games, not the Jets.
>
> The Jets' games are carried on channel 2 New York, which is 102 miles
> as the crow flies from my house. Football packages on satellite TV
> are beyond present financial condition. I only care about channel 2,
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>
> Does anyone have any ideas for a quick rooftop antenna I can put on a
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>
> Anyway, any help would be greatly appreciated.
>
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> is: If I make a dipole antenna, what if I mounted it on a piece of
> cardboard or styrofoam for it's length, which cardboard or styrofoam
> has aluminum foil on the reverse side? The aluminum foil would not
> contact the dipole, and be separated from it by one quarter to one
> inch, depending on material thickness. The reason I ask is if this
> will cut off 180 degrees of reception, thereby improving the signal to
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> but very little about antennas even though I have tried to get a
> grasp).
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a TV antenna, except the elements are all nearly the same size, optimized
for Channel 2. (Neglecting the fact that WCBS digital TV is on a UHF

channel. You asked for analog WCBS-TV, Channel 2.)

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One helper is called a "reflector" Make it 6 percent longer than the driven element and mount it on the boom behind the driven element (away from New York) by about 21 inches.

Next helper is called "Director #1." It's 1% shorter than the driven element and it's mounted on the boom 21 inches in front of the driven element, toward New York.

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You can add more directors, same length, same spacing as #2, but they won't capture a lot more signal after the first few. Plus, with more than two directors, the boom gets really, really long.

Note that this antenna is a 300-ohm antenna. Since your TV input is probab ly NOT 300 ohms, you have to transform the impedance to the 75-ohm coaxial cable that plugs into the TV. Do that near your antenna. What I mean is this: Have only about a foot or so of 300 ohm twinlead coming down from the folded dipole. Connect a 300/75 ohm transformer or "balun" at that point and run coaxial cable the rest of the way to the TV. Much better for interference rejection, especially at Channel 2. Such 300/75 ohm baluns are available at all radio stores as well as many variety, drug and department stores. Buy whatever one you think you can connect with the tools at hand. You may have a balun or two that came with an old TV or VCR.

The first one of these I ever helped build was made with coathangers on a broomstick for Channel 13. (Higher freq meant smaller elements -- easier.) It worked fine.

Let us know how this works for you. I'm interested to know if you were able to follow what I wrote.

1931. Test Mail

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 09:03:19 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <ga2poq$ji1$1@news.netins.net>
Source record: 22555

Checking to see if my server is still sending posts to newsgroups

1932. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 10:52:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <bu7xk.25183$N87.9809@nlpi068.nbdc.sbc.com>
Source record: 22556

Bubblesdee wrote:
> How do I wind/build a "Current Balun"

Ten turns of RG-400 on an FT-240-77 or
FT-240-43 toroid. That's what I did.
--
73, Cecil http://www.w5dxp.com

1933. Re;20 and 40 meter Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 12:58:55 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <ga37ijsmm1@news.netins.net>
Source record: 22557

Both can be taken apart, resize the element length and reassemble them with 10 meter element spacing. Maybe you could retain the 20 and 40 meter antennas for future use and make a new 10 meter from scratch. There are lots of plans on www.dxzone.com. Lots of luck

1934. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 13:22:53 UTC
From: Brian Morrison <scrapspam@fenrir.org.uk>
Message-ID: <ga38vd$5v8$1@news.datemas.de>
Source record: 22558
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

Walt Davidson wrote:
> On Sat, 9 Aug 2008 14:35:25 +0100, "Alec" <alec@e-hopley.fsnet.co.uk>
> wrote:
>
>> Back at about the same time the BBC had (and still has) a powerful
>> transmitter on 200khz (now198) a local farmer who lived close to the station
>> built a large tuning coil in the loft and lit his house using fluorescent
>> tubes.
>>
>> He was successfully prosecuted for stealing electricity or something
>> similar.
>
> If this is true (and I have no reason to doubt it), did it make the
> signal weaker for everybody else?

Unlikely anywhere other than in the very near vicinity, and at that
range who would have noticed.

--

Brian

1935. Re: Test Mail

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 13:33:42 UTC
From: Spamm Trappe <bit-bucket@config.com>
Message-ID: <slrngcaadm.163m.bit-bucket@shell.config.com>
Source record: 22559

On Mon, 8 Sep 2008 04:03:19 -0500, Rollie wrote:
> Checking to see if my server is still sending posts to newsgroups

Yes, but it's not sending any quoted material in your followups.

1936. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 14:04:35 UTC
From: Jeff <jeff@local.host>
Message-ID: <48c530e4$0$1334$834e42db@reader.greatnowhere.com>
Source record: 22560
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

```
">>Back at about the same time the BBC had (and still has) a powerful
>>transmitter on 200khz (now198) a local farmer who lived close to the
>>station
>>built a large tuning coil in the loft and lit his house using fluorescent
>>tubes.
>>
>>He was successfully prosecuted for stealing electricity or something
>>similar.
>
> If this is true (and I have no reason to doubt it), did it make the
> signal weaker for everybody else?
>
> 73 de G3NYY
>

In the version that I heard it was the null that the 'suck out' caused that
led to an investigation that resulted in the prosecution.

Now whether this is true or not is another matter.

73
Jeff
```

1937. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 14:27:24 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <90245aa9-6b2c-4250-a244-2cb076cd42a0@c58g2000hsc.googlegroups.com>
Source record: 22561

On Sep 7, 11:17 pm, lt...@yahoo.com wrote:
> Art,
> So it seems that this phrase was used privately between you and one
> other person who was not taken 'seriously'. I can believe that. So,
> this phrase has in fact not been used here on this forum except by
> you. Is that correct, or am I missing something?
> - 'Doc
>
> JS,
> Get over it.
> - 'Doc

I seem to be under the prosecutors gaze!
The prevailing theme of this group is to deny change!
They deny the tipping of antennas
They deny the extension of Gauss's law mathematics
They deny the existance of four forces in the standard model
They deny the role of particle science with respect to radiation.
They deny the requirement of equilibrium in all Universal laws
All of this is not bad in itself as long as they provide evidence to
the contrary
but none is provided only contempt of the new. If one did not think
all was known
there would be natural curiousity by those who have searched for truth
via education.
For those who have not endeavered to search for the truth excercise
the freedom of free speech
so that others are able to determine who and what they are so they may
be avoided.

1938. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 14:28:26 UTC
From: Brian Morrison <scrapspam@fenrir.org.uk>
Message-ID: <ga3cqf$d23$1@news.datemas.de>
Source record: 22562
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

Jeff wrote:
> ">>Back at about the same time the BBC had (and still has) a powerful
>>> transmitter on 200khz (now198) a local farmer who lived close to the
>>> station
>>> built a large tuning coil in the loft and lit his house using fluorescent
>>> tubes.
>>>
>>> He was successfully prosecuted for stealing electricity or something
>>> similar.
>> If this is true (and I have no reason to doubt it), did it make the
>> signal weaker for everybody else?
>>
>> 73 de G3NYY
>>
>
> In the version that I heard it was the null that the 'suck out' caused that
> led to an investigation that resulted in the prosecution.
>
> Now whether this is true or not is another matter.

It seems to me that a resonant structure to capture energy would
re-radiate so I can't see where such a null would come from, the
wavelength is long so the path difference between the main tx and the
re-radiator would make such a phase shift difficult to achieve.

--

Brian

1939. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 14:37:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga3dai$c7h$2@news.albasani.net>
Source record: 22563

Cecil Moore wrote:

> ...
> Ten turns of RG-400 on an FT-240-77 or
> FT-240-43 toroid. That's what I did.

... you have a way of making it sound too easy ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1940. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 14:47:53 UTC
From: Jeff <jeff@local.host>
Message-ID: <48c53add$0$1337$834e42db@reader.greatnowhere.com>
Source record: 22564
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

```
>> In the version that I heard it was the null that the 'suck out' caused
>> that
>> led to an investigation that resulted in the prosecution.
>>
>> Now whether this is true or not is another matter.
>
> It seems to me that a resonant structure to capture energy would
> re-radiate so I can't see where such a null would come from, the
> wavelength is long so the path difference between the main tx and the
> re-radiator would make such a phase shift difficult to achieve.
>
> --
>
> Brian
```

Surely that would only be true if the power was not dumped into a load? The power in the load has to come from somewhere, and if it is in the load it is not in the aether.

Jeff

1941. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 15:07:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ncbxk.22384$uE5.16099@flpi144.ffdc.sbc.com>
Source record: 22565

John Smith wrote:
> Cecil Moore wrote:
>> Ten turns of RG-400 on an FT-240-77 or
>> FT-240-43 toroid. That's what I did.
>
> ... you have a way of making it sound too easy ...

If you want more difficulty, stack the two toroids
together and wind ten turns of RG-400 on them. :-)
--
73, Cecil http://www.w5dxp.com

1942. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 15:16:48 UTC
From: Brian Morrison <scrapspam@fenrir.org.uk>
Message-ID: <ga3fl0hqa1@news.datemas.de>
Source record: 22566
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

Jeff wrote:
>>> In the version that I heard it was the null that the 'suck out' caused
>>> that
>>> led to an investigation that resulted in the prosecution.
>>>
>>> Now whether this is true or not is another matter.
>> It seems to me that a resonant structure to capture energy would
>> re-radiate so I can't see where such a null would come from, the
>> wavelength is long so the path difference between the main tx and the
>> re-radiator would make such a phase shift difficult to achieve.
>>
>
> Surely that would only be true if the power was not dumped into a load? The
> power in the load has to come from somewhere, and if it is in the load it is
> not in the aether.

It depends on the power captured vs the power in the load, but in any
case the aperture of the loop is fairly small and cannot allow energy to
be captured from outside that aperture. In comparison with the size of
the transmitting antenna and the field it generates this must be
insignificant I think.

In fact, I wonder if he could really run a house full of fluorescent
lights this way.

--

Brian

1943. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 15:19:14 UTC
From: John Byrns <byrnsj@sbcglobal.net>
Message-ID: <byrnsj-851167.10191208092008@newsclstr03.news.prodigy.net>
Source record: 22567
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

In article <48c530e4$0$1334$834e42db@reader.greatnowhere.com>,
"Jeff" <jeff@local.host> wrote:

> ">>Back at about the same time the BBC had (and still has) a powerful
> >>transmitter on 200khz (now198) a local farmer who lived close to the
> >>station
> >>built a large tuning coil in the loft and lit his house using fluorescent
> >>tubes.
> >>
> >>He was successfully prosecuted for stealing electricity or something
> >>similar.
> >
> > If this is true (and I have no reason to doubt it), did it make the
> > signal weaker for everybody else?
> >
> > 73 de G3NYY
> >
>
> In the version that I heard it was the null that the 'suck out' caused that
> led to an investigation that resulted in the prosecution.
>
> Now whether this is true or not is another matter.
>
> 73
> Jeff

I thought the farmers equipment caused four "nulls", or local minima, in the
radiation pattern.

--
Regards,

John Byrns

Surf my web pages at, http://fmamradios.com/

1944. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 15:26:58 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ga3g83$fi8$1@f04n12.cac.psu.edu>
Source record: 22568

No Spam wrote:
> On Sat, 06 Sep 2008 10:07:22 -0700, PN2222A wrote:
>
>> "Jon Mcleod" <jonmcleod2003@yahoo.com> wrote in message
>
> All these are nice ideas and a marvel to engineering but I must say
> this....
>
> *******
> Whether it's radiated or E-fielded to kill the bacteria, there will still
> be SHIT ON MY FOOD!
> *********

Well put! I notice that the rules have been changed so that veggies
will be irradiated to kill the e.coli and salmonella bacteria on them.

But as you say, the food will still be spiced with whatever excrement is
present.

This will of course have the end effect of making the food filthier, as
teh new Attitude will be "The radiation will get the germs, so I don't
have to clean it.

I guess we'll have to change the name to "Jalepeno Poopers".

- 73 de Mike N3LI -

1945. Re: 20 and meter yagi question...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 15:37:27 UTC
From: ltdoc@yahoo.com
Message-ID: <6b621da2-b679-475e-a6fe-dea4d33325f6@x35g2000hsb.googlegroups.com>
Source record: 22569

Can a 20 or 40 meter antenna be used to transmit on different bands?
Yes. It depends on how you mean that, though. Either can be 'cut
down' for use on higher frequencies, or 'trapped' and used on lower
ones (so some ridiculous point). If you mean used as a directional
antenna as they work on their design bands, then no, they won't work
that way without that physical modification. There may be some
'directionality' to it, but not like they are supposed to be (that
make sense?). It can work, but not 'well'.
- 'Doc

1946. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 15:42:50 UTC
From: ltdoc@yahoo.com
Message-ID: <b9d3371c-ad4a-4bcf-bbcc-ec47fa3f1ee7@y38g2000hsy.googlegroups.com>
Source record: 22570

Art,
A 'prosecutor'? Not hardly. I'm trying to understand your way of
thinking about this. Asking questions is a fairly typical way of
finding things out. If I'm asking the wrong questions, then show me
what's wrong with them.
- 'Doc

1947. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 15:49:28 UTC
From: ltdoc@yahoo.com
Message-ID: <ee2752ae-ee2a-4051-9e30-c628bd813369@m36g2000hse.googlegroups.com>
Source record: 22571

JS,
You are approaching a 'line' you really don't want to cross. While
it may not be exactly 'welcome', saying things about me is one thing.
Bringing my family into that, right/wrong/indifferent, is a very
different story. Please don't go there, we will both regret it. Or,
as it's said in this redneck part of the world, watch your mouth.
- 'Doc

1948. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 15:55:47 UTC
From: Jon Mcleod <jonmcleod2003@yahoo.com>
Message-ID: <P9Sdnc_XaPCA11jVnZ2dnUVZ_g6dnZ2d@earthlink.com>
Source record: 22572

Michael Coslo wrote:

> Well put! I notice that the rules have been changed so that veggies
> will be irradiated to kill the e.coli and salmonella bacteria on them.

Actually, e-field could be a much better way to kill bacteria on the surface of vegetables, if this whole kooky idea works. I mean, holy crap, if they're using it to cure brain tumors, it can probably sterilize the food without genetically damaging it.

1949. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 15:59:56 UTC
From: msg <msg@_cybertheque.org_>
Message-ID: <tdmdnQcVL7gx11jVnZ2dnUVZ_j2dnZ2d@posted.cpinternet>
Source record: 22573
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

Alec wrote:

> Back at about the same time the BBC had (and still has) a powerful
> transmitter on 200khz (now198) a local farmer who lived close to the station
> built a large tuning coil in the loft and lit his house using fluorescent
> tubes.
>
> He was successfully prosecuted for stealing electricity or something
> similar.
>
Please provide citations for this story; it retells what appears to be
an "urban legend". Here is another take on the story:

==========QUOTED MATERIAL==========
From: "Steve Maudsley" <ne...@sjmaudsley.fsnet.co.uk>
Message-ID: <ASSYEE523B15@assayer.co.uk>
Newsgroups: uk.legal
Subject: Re: Theft of electricity?
Date: Mon, 23 Feb 2004 18:12:00 -0000
NNTP-Posting-Host: 81.103.216.21
NNTP-Posting-Date: Mon, 23 Feb 2004 18:14:40 GMT
Organization: Virgin Net Usenet Service

"Jeff" <j...@local.host> wrote in message
news:403A198E.D91195F2@local.host...
>
>
>
> > But a transformer still involves a direct physical connection to the
> > mains via the primary. The primary is consuming current via its
> > physical connection, whatever may happen to the current after it has
> > entered the primary.
> >
>
> The power line *is the primary*!! It is just that the secondary is
> separated from it by a larger distance than normal.
>
> In any case I believe that someone was prosecuted some years ago
> for doing what it being suggested.

I do recall a story about 30 years ago (possibly apocryphal) about a farmer
who lived on the UK side of the Radio Luxemburg transmitter and powered his
cattle shed from the radio waves, and was prosecuted. Radio Luxemburg had

some sort of phased array and the cows electrical use disrupted the beam.
================END OF QUOTED MATERIAL=====================================

Michael

1950. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 16:30:37 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8867597c-3017-41e0-9a90-de5cdc6e3d42@p25g2000hsf.googlegroups.com>
Source record: 22574

On Sep 8, 10:42 am, lt...@yahoo.com wrote:
> Art,
> A 'prosecutor'? Not hardly. I'm trying to understand your way of
> thinking about this. Asking questions is a fairly typical way of
> finding things out. If I'm asking the wrong questions, then show me
> what's wrong with them.
> - 'Doc

Nothing wrong in your line of questioning but your pattern is usually
of stirring
so it depends on what you do with your answers. As to how I think I
will give you an example
Reference was made to "Cosmic particles:" which is a term given to
the" bombardment" of particulates.
So to me that makes me think of what names are applied to particles
that "bombard" which by itself suggests
the possession of spin and velocity, characteristics that are
different from those of neutrinos.
If you know the answer and where they come from I too will be
gratefull if you give me an answer!
Another thought extension of Gaussian law of statics equates to
Maxwells laws thus if one equates both of these to zero
statics particles in space without the influence of gravity and the
responding" weak force" cannot possibly, on their own, radiate
in space UNLESS external components are applied that magnetize the
static particles. Food for thought I would say.
and a measure of how I think. I believe that J.S. thinks in a similar
fashion.

1951. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 16:31:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga3k09$k5m$1@news.albasani.net>
Source record: 22575

Cecil Moore wrote:

> ...
> If you want more difficulty, stack the two toroids
> together and wind ten turns of RG-400 on them. :-)

Well, I was wondering about that, you at least did the crossover and
wound half the turns in the opposing clockwise direction, I HOPE! ;-)

Even though this guy:

http://www.w8ji.com/toroid_balun_winding.htm

poses an argument against it!

And, this guy:

http://www.arising.com.au/people/Holland/Ralph/CMBalun.htm

implies, "What the heck, wind 30T on a junk-box ferrite rod and do 160m!"

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1952. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 16:32:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga3k3g$k5m$2@news.albasani.net>
Source record: 22576

Art Unwin wrote:
>> ... Food for thought I would say.
> and a measure of how I think. I believe that J.S. thinks in a similar
> fashion.

When you mention my name, could you try to toss in a bit of Shakespeare,
I have gotten used to it, yanno? ;-)

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1953. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 16:43:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga3knbkvd1@news.albasani.net>
Source record: 22577

ltdoc@yahoo.com wrote:
> JS,
> You are approaching a 'line' you really don't want to cross. While
> it may not be exactly 'welcome', saying things about me is one thing.
> Bringing my family into that, right/wrong/indifferent, is a very
> different story. Please don't go there, we will both regret it. Or,
> as it's said in this redneck part of the world, watch your mouth.
> - 'Doc
>

You have a family, rather surprising ...

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1954. Re: Welfare babies, greasy diners and other tidbits

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 16:50:48 UTC
From: expat <jackmeoffwithabreastpump@gmail.com>
Message-ID: <e7c12c28-e1b2-42ff-bb3e-465e3cbc3761@a70g2000hsh.googlegroups.com>
Source record: 22578
Cross-posted to: rec.aquaria.marine.reefs,rec.radio.amateur.antenna,alt.usenet.kooks,alt.callahans,rec.ponds

On Sep 8, 9:33 am, John Smith <assemblywiz...@gmail.com> wrote:
> James Nasium wrote:
> > ...
> > Go play with your fishies, boy. You must be a faggot. Do you like to
> > lather the barber pole, do the tube steak boogie, lay a little pipe on
> > the hershey highway?
>
> Oh no, now we get to hear from expats' spouse?
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

These trashy posts brought to this group coutesy of John Smith aka
assembly wizard. Give John a chance and he will lay some pipe on that
old hershey highway fo yours, that is if you can get him off his
momma.

1955. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 17:07:26 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <41262d41-db8a-426b-9578-9d474027f873@s50g2000hsb.googlegroups.com>
Source record: 22579

On Sep 8, 11:32 am, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> >> ... Food for thought I would say.
> > > and a measure of how I think. I believe that J.S. thinks in a similar
> > > fashion.
>
> When you mention my name, could you try to toss in a bit of Shakespeare,
> I have gotten used to it, yanno? ;-)
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

The last time such utterences were made with the follow up
explanation
stated as "Shakesphere" in a haughty manner.
I lifted up a monkey wrench and stated " Sears and Roebuck"
which implied that the "olde english" speaker was devoid of testerone.
and drank tea with three fingers stuck up into the air
Best Regards
Art
to bring him down to Earth

1956. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 17:34:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f1oac4hagsraf9i43sprheotbbv7pnpohq@4ax.com>
Source record: 22581

On Mon, 08 Sep 2008 11:55:47 -0400, Jon Mcleod
<jonmcleod2003@yahoo.com> wrote:

>Michael Coslo wrote:
>
>> Well put! I notice that the rules have been changed so that veggies
>> will be irradiated to kill the e.coli and salmonella bacteria on them.
>
>Actually, e-field could be a much better way to kill bacteria on the
>surface of vegetables, if this whole kooky idea works. I mean, holy
>crap, if they're using it to cure brain tumors, it can probably
>sterilize the food without genetically damaging it.

Hi All,

All of this remains highly suppositional and suspicious both. One
need only graze beneath a common 110KV transmission line to experience
field levels of 1KV/ft (33V/cm) to find no lower bacterial risk (and
frequent claims to the contrary of these fields having healative
powers).

As for this last parenthetical, it demonstrates you can pick any topic
and populate it with vapid ideas that embrace conflicting claims for
the same weak evidence.

73's
Richard Clark, KB7QHC

1957. Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 17:34:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3420610a-5fd3-40b8-8fdd-bbdc51320f58@79g2000hsk.googlegroups.com>
Source record: 22580

Centuries past there was a cold spell on Earth where it is stated
radiation propagation did not occur because of the lack of sun spot
observations. This period lasted about 30 years if my memory is
correct.
Now we appear to be in a state of global warming presumably because of
the actions of the Suns vibrancy which would suggest the present
increase in sunspot activity of the past century will continue to
increase and the next Sun spot cycle will be a good one. So don't give
up on antenna experiments just yet as the particulates will be a
coming
Art KB9MZ...xg

1958. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 17:43:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6ooac4l7gh5bmmou4jo43fbarae5k6l4ce@4ax.com>
Source record: 22582

On Mon, 8 Sep 2008 09:30:37 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>the" bombardment" of particulates.

the usual misspelling of peculiar.

>I believe that J.S. thinks in a similar fashion.

Now THERE's validation (and Authur doesn't even know his name)! What's
left to be said?

OK, yeah, I know. Both will have to explain it again, if only to each
other, and then one or the other will claim the other hasn't the
vaguest idea. This should happen in the space of 3 postings.

73's
Richard Clark, KB7QHC

1959. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 18:06:29 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ga3pj4$54e$1@news.jpl.nasa.gov>
Source record: 22586

>
> All of this remains highly suppositional and suspicious both. One
> need only graze beneath a common 110KV transmission line to experience
> field levels of 1KV/ft (33V/cm) to find no lower bacterial risk (and
> frequent claims to the contrary of these fields having healative
> powers).

While the field under the tower, in the absence of any conductors, is as you say (actually, the earth has a field on the order of 1kV/m just from thunderstorm return currents). If there's a conductor in that field, though, that does not imply that the field within the conductor is the same.

1960. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 18:43:09 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <deeccd70-29ac-4639-9293-4f7b331953fd@m44g2000hsc.googlegroups.com>
Source record: 22583

On Sep 8, 12:43 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Mon, 8 Sep 2008 09:30:37 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >the" bombardment" of particulates.
>
> the usual misspelling of peculiar.
>
> >I believe that J.S. thinks in a similar fashion.
>
> Now THERE's validation (and Authur doesn't even know his name)! What's
> left to be said?
>
> OK, yeah, I know. Both will have to explain it again, if only to each
> other, and then one or the other will claim the other hasn't the
> vaguest idea. This should happen in the space of 3 postings.
>
> 73's
> Richard Clark, KB7QHC

Have you still got a girl friend or have you retreated to your old
habits?
Shakesphere?

1961. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 18:43:17 UTC
From: christopher <caveman@commspeed.net>
Message-ID: <saWdnQCSR_zY71jVnZ2dnUVZ_vSdnZ2d@posted.commspeed>
Source record: 22584
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

On Mon, 08 Sep 2008 10:59:56 -0500, msg wrote:

> Alec wrote:
>
>> Back at about the same time the BBC had (and still has) a powerful
>> transmitter on 200khz (now198) a local farmer who lived close to the
>> station built a large tuning coil in the loft and lit his house using
>> fluorescent tubes.
>>
>> He was successfully prosecuted for stealing electricity or something
>> similar.
>>
> Please provide citations for this story; it retells what appears to be
> an "urban legend". Here is another take on the story:
>
> ============QUOTED MATERIAL==
> From: "Steve Maudsley" <ne...@sjmaudsley.fsnet.co.uk> Message-ID:
> <ASSYEE523B15@assayer.co.uk> Newsgroups: uk.legal
> Subject: Re: Theft of electricity?
> Date: Mon, 23 Feb 2004 18:12:00 -0000 NNTP-Posting-Host: 81.103.216.21
> NNTP-Posting-Date: Mon, 23 Feb 2004 18:14:40 GMT Organization: Virgin
> Net Usenet Service
>
>
> "Jeff" <j...@local.host> wrote in message
> news:403A198E.D91195F2@local.host...
> >
> >
> >
> > > But a transformer still involves a direct physical connection to
> > > the mains via the primary. The primary is consuming current via
> > > its physical connection, whatever may happen to the current after
> > > it has entered the primary.
> > >
> > >
> > The power line *is the primary*!! It is just that the secondary is
> > separated from it by a larger distance than normal.
> >
> > In any case I believe that someone was prosecuted some years ago for
> > doing what it being suggested.
>
> I do recall a story about 30 years ago (possibly apocryphal) about a

> farmer who lived on the UK side of the Radio Luxemburg transmitter and
> powered his cattle shed from the radio waves, and was prosecuted.
> Radio Luxemburg had some sort of phased array and the cows electrical
> use disrupted the beam.
> ================END OF QUOTED
> MATERIAL====================================
>
> Michael

Didn't Tesla propose using DC current, basically broadcast/produced from thousands of transmitters. In order to use the electrical current/field, all one had to do was ground one side/wire to Earth. The other side or wire would be the receptor/antenna for lack of a better term.

I'm not a technical person but I think I have the basic premise right.

1962. Re: The Strange True Story of a Radio Station's Transmitter in NewYork State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 18:51:25 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <16qdnYBZfZiz6VjVnZ2dnUVZ_sDinZ2d@earthlink.com>
Source record: 22585
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

christopher wrote:
>
> Didn't Tesla propose using DC current, basically broadcast/produced from
> thousands of transmitters. In order to use the electrical current/field,
> all one had to do was ground one side/wire to Earth. The other side or
> wire would be the receptor/antenna for lack of a better term.
>
> I'm not a technical person but I think I have the basic premise right.

No. It wasn't DC, since DC is direct current. That was Edison who
would have needed a power plant every half mile or so. Tesla was hyping
"Broadcast power" which was lossy broadband RF power that would wipe out
most of the usable RF spectrum. Due to the 'Inverse Square Law', it was
impractical, and always will be.

Tesla was responsible for AC power distribution, which pissed Edison
off.

--
http://improve-usenet.org/index.html

aioe.org, Goggle Groups, and Web TV users must request to be white
listed, or I will not see your messages.

If you have broadband, your ISP may have a NNTP news server included in
your account: http://www.usenettools.net/ISP.htm

There are two kinds of people on this earth:
The crazy, and the insane.
The first sign of insanity is denying that you're crazy.

1963. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 19:11:38 UTC
From: msg <msg@_cybertheque.org_>
Message-ID: <XvOdnQ7MZr4H6ljVnZ2dnUVZ_tHinZ2d@posted.cpinternet>
Source record: 22587
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

christopher wrote:

<snip>
> Didn't Tesla propose using DC current, basically broadcast/produced from
> thousands of transmitters. In order to use the electrical current/field,
> all one had to do was ground one side/wire to Earth. The other side or
> wire would be the receptor/antenna for lack of a better term.

FWIW, the Wikipedia article:
http://en.wikipedia.org/wiki/Wireless_energy_transfer
describes some of Tesla's ideas and also has a list of references to more
recent wireless energy distribution schemes.

Michael

1964. Re: Coupling a T2FD to a S350DL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 19:14:43 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <cOexk.26511$Ri.9135@flpi146.ffdc.sbc.com>
Source record: 22588

John Smith wrote:
> Well, I was wondering about that, you at least did the crossover and
> wound half the turns in the opposing clockwise direction, I HOPE! ;-)
>
> Even though this guy:
> poses an argument against it!

The main advantage I see for the crossover is that the output
is on the opposite side of the toroid from the input. :-)
--
73, Cecil http://www.w5dxp.com

1965. Re: The Strange True Story of a Radio Station's Transmitter in NewYork State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 19:20:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <8Texk.26513$Ri.18562@flpi146.ffdc.sbc.com>
Source record: 22589
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

Michael A. Terrell wrote:
> Tesla was responsible for AC power distribution, which pissed Edison
> off.

Rumor was that Edison couldn't understand how one could
measure 120 volts between any two of three terminals.
--
73, Cecil http://www.w5dxp.com

1966. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 19:41:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <34fdec23-fb3d-4b52-9632-247e88014434@l64g2000hse.googlegroups.com>
Source record: 22590

On Sep 8, 1:06 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> > All of this remains highly suppositional and suspicious both. One
> > need only graze beneath a common 110KV transmission line to experience
> > field levels of 1KV/ft (33V/cm) to find no lower bacterial risk (and
> > frequent claims to the contrary of these fields having healative
> > powers).
>
> While the field under the tower, in the absence of any conductors, is as
> you say (actually, the earth has a field on the order of 1kV/m just from
>   thunderstorm return currents). If there's a conductor in that field,
> though, that does not imply that the field within the conductor is the
> same.

Jim
Since you are with the space agency I jumped threads to ask a
question.
When a space ship leaves earth or a satellite is stable in the sky I
assume that all
are in thier own magnetic field because of relative motion of earth.
Is it possible that there are a connecting magnetic
field in the Universe of a like polarity tp that of a geo satellite?
I would assume spacecraft record magnetic changes on their journey
but I have read no details of such measurements. When I use computer
programs to determine
a radiation field in free space of an antenna in equilibrium the
resulting radiation is zero as predicted by the extension of Gaussian
law!
Which begs the question, what provides the two like magnetic fields in
a geosatellite or are charges just sliding off the end
of antennas not in equilibrium? (no gravity or combative weak fields
being present)
Regards
Art

1967. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 19:58:55 UTC
From: an old friend <kb9rqz@yahoo.net>
Message-ID: <ga4068$3mf$1@news.albasani.net>
Source record: 22591
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"javawizard" <javawizard@aol.com> wrote in message
news:149f9f0e-86d6-40bb-971a-d763b5a35bb8@w24g2000prd.googlegroups.com...
> In the 1920's a radio station in Schenectady, NY built a powerful
> transmitter. In those days before FCC regulations, not knowing just
> how big to make a transmitter in order for the signal to be received
> some distance away, the station set up to broadcast at 500,000 watts.
> It requires about one watt to be received four blocks away. A cell
> phone is three watts. This station broadcast at such tremendous power
> that they could be heard around the world. People in New York didn't
> even need radios. They could sometimes hear voices in their furnaces
> and coming off chain-link fences. Light bulbs lit up in people's
> houses even if they were switched off. - from www.clip-text.com
>
>
congat four teh on topic poast

1968. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 20:25:33 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <luqdneZ8H9jcF1jVnZ2dnUVZ_gGdnZ2d@giganews.com>
Source record: 22592
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:3j9ac4tffqccda2at3r1076fqhonsrjd95@4ax.com...
> On Sat, 9 Aug 2008 14:35:25 +0100, "Alec" <alec@e-hopley.fsnet.co.uk>
> wrote:
>
>>Back at about the same time the BBC had (and still has) a powerful
>>transmitter on 200khz (now198) a local farmer who lived close to the
>>station
>>built a large tuning coil in the loft and lit his house using fluorescent
>>tubes.
>>
>>He was successfully prosecuted for stealing electricity or something
>>similar.
>
> If this is true (and I have no reason to doubt it), did it make the
> signal weaker for everybody else?
>
> 73 de G3NYY
>

Only in the near field (at the site). Theoretically, there is a limit to the number of receivers for any one signal (swamping), but that number has never been approached.

As for the original story, I can verify that it CAN be done, and is done inadvertantly in places where homes are found in the area of an 'antenna farm'. In Portland, for instance, the antenna farm for the high powered FM signals is in a residential shared area. Some homes within that area that use fluorescent lighting still have some light from the tubes with the switch turned off. This is not full light, but neither are they using a tuned circuit.

1969. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 21:04:56 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ga441leri1@news.jpl.nasa.gov>
Source record: 22596

Art Unwin wrote:
> On Sep 8, 1:06 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>>> All of this remains highly suppositional and suspicious both. One
>>> need only graze beneath a common 110KV transmission line to experience
>>> field levels of 1KV/ft (33V/cm) to find no lower bacterial risk (and
>>> frequent claims to the contrary of these fields having healative
>>> powers).
>> While the field under the tower, in the absence of any conductors, is as
>> you say (actually, the earth has a field on the order of 1kV/m just from
>> thunderstorm return currents). If there's a conductor in that field,
>> though, that does not imply that the field within the conductor is the
>> same.
>
> Jim
> Since you are with the space agency I jumped threads to ask a
> question.
> When a space ship leaves earth or a satellite is stable in the sky I
> assume that all
> are in thier own magnetic field because of relative motion of earth.
> Is it possible that there are a connecting magnetic
> field in the Universe of a like polarity tp that of a geo satellite?
> I would assume spacecraft record magnetic changes on their journey
> but I have read no details of such measurements. When I use computer
> programs to determine
> a radiation field in free space of an antenna in equilibrium the
> resulting radiation is zero as predicted by the extension of Gaussian
> law!
> Which begs the question, what provides the two like magnetic fields in
> a geosatellite or are charges just sliding off the end
> of antennas not in equilibrium? (no gravity or combative weak fields
> being present)
> Regards
> Art

A spacecraft, like any other body, is immersed in whatever magnetic field there is around it, plus whatever field it has itself (imagine launching a bar magnet into space). In the case of an earth orbiter, the field of the earth is strong enough that electromagnets in the spacecraft can be used to change the orientation. Some spacecraft record the magnetic field as part of experiments to measure the solar system's magnetic field distribution. For these measurements, the spacecraft's own field is subtracted out. It's either measured or inferred from a series of measurements (e.g. if you spin the satellite, and measure the field, the varying component is due to the surroundings

and the fixed component is due to the spacecraft... well, it's actually
more complex, because any soft magnetic material on the s/c affects it
too. The process is like swinging and calibrating a ship's compass,
see, e.g., Chapter 6 of Bowditch:
http://www.irbs.com/bowditch/pdf/chapt06.pdf
)

1970. Re: The Strange True Story of a Radio Station's Transmitter in NewYork State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 21:21:57 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <MMCdnekVnbTlCljVnZ2dnUVZ_g-dnZ2d@pghconnect.com>
Source record: 22593
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

> Rumor was that Edison couldn't understand how one could
> measure 120 volts between any two of three terminals.

No rumor about it. Westinghouse published several papers on electricity where he described voltage and current phase and had a true understanding of it. Edison was a hands-on experimenter who had little theoretical physics or mathematics background. That's why the two had a feud about AC vs DC. After Edison's assistant died of radiation poisoning, he was very leary of things he didn't understand and tried to convince people that AC current was just too dangerous. He also refused any more experiments concerning radiation.

1971. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 21:30:14 UTC
From: Dave <noone@nowhere.com>
Message-ID: <GPgxk.18$SA.9@nwrddc02.gnilink.net>
Source record: 22594

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:34fdec23-fb3d-4b52-9632-247e88014434@l64g2000hse.googlegroups.com...

>Jim
>Since you are with the space agency I jumped threads to ask a
>question.
>When a space ship leaves earth or a satellite is stable in the sky I
>assume that all
>are in thier own magnetic field because of relative motion of earth.
>Is it possible that there are a connecting magnetic
>field in the Universe of a like polarity tp that of a geo satellite?
>I would assume spacecraft record magnetic changes on their journey
> but I have read no details of such measurements. When I use computer
>programs to determine
>a radiation field in free space of an antenna in equilibrium the
>resulting radiation is zero as predicted by the extension of Gaussian
>law!
>Which begs the question, what provides the two like magnetic fields in
>a geosatellite or are charges just sliding off the end
>of antennas not in equilibrium? (no gravity or combative weak fields
>being present)
>Regards
>Art

well art, this sounds like a challenging situation for your theory to
predict what happens... if there is no gravity to cause the magical mystery
particles to settle on the diamagnetic elements and therefore they keep
sliding off, how do satellites communicate with each other? a zero
radiation by your extended guassian law sure doesn't help either! maybe you
need to do some more thinking about all this stuff.... or you could do some
actual research and see what the magnetic field environment is at
geosynchronous altitude... just as a hint, take a look at this GOES Hp plot
here: http://www.swpc.noaa.gov/today.html then to get a look even farther
out you can see the magnetic field that is part of the solar wind that moves
your magical particles here:
http://www.swpc.noaa.gov/ace/MAG_SWEPAM_24h.html maybe the particle
densities they measure can actually be related to your magical mystery
particles?

1972. Re: The Strange True Story of a Radio Station's Transmitter in NewYork State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 21:32:44 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <wRgxk.508$Z64.185@flpi143.ffdc.sbc.com>
Source record: 22595
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

Michael A. Terrell wrote:
> christopher wrote:
>> Didn't Tesla propose using DC current, basically broadcast/produced from
>> thousands of transmitters. In order to use the electrical current/field,
>> all one had to do was ground one side/wire to Earth. The other side or
>> wire would be the receptor/antenna for lack of a better term.
>>
>> I'm not a technical person but I think I have the basic premise right.
>
>
> No. It wasn't DC, since DC is direct current. That was Edison who
> would have needed a power plant every half mile or so. Tesla was hyping
> "Broadcast power" which was lossy broadband RF power that would wipe out
> most of the usable RF spectrum. Due to the 'Inverse Square Law', it was
> impractical, and always will be.
>
> Tesla was responsible for AC power distribution, which pissed Edison
> off.
>
>
Tesla worked for Edison when he came up with AC power distribution.
Edison favored DC for some reason and Tesla quit and went to work for
Westinghouse. When the electric chair was proposed Edison did everything
he could to discredit it because it used Tesla's AC power.

Dave N

1973. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 22:16:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kj8bc49pnv64vedq3rn7qs3h3boqa2detj@4ax.com>
Source record: 22597

On Mon, 8 Sep 2008 11:43:09 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Have you still got a girl friend or have you retreated to your old
>habits?

Authur,

You have some curious sexual interests. Don't you think you should
leave them undiscussed? There are some things that cannot be
fulfilled for you here, after all; and you may as well keep that
restricted to anderstanding untennas.

>Shakesphere?
Gesundheit.

73's
Richard Clark, KB7QHC

1974. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 22:18:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ec55b873-1aea-4117-97b7-0d48c79209af@y21g2000hsf.googlegroups.com>
Source record: 22598

On Sep 8, 4:30 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:34fdec23-fb3d-4b52-9632-247e88014434@l64g2000hse.googlegroups.com...
>
> >Jim
> >Since you are with the space agency I jumped threads to ask a
> >question.
> >When a space ship leaves earth or a satellite is stable in the sky I
> >assume that all
> >are in thier own magnetic field because of relative motion of earth.
>
> >Is it possible that there are a connecting magnetic
>
> >field in the Universe of a like polarity tp that of a geo satellite?
> >I would assume spacecraft record magnetic changes on their journey
> > but I have read no details of such measurements. When I use computer
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> >a radiation field in free space of an antenna in equilibrium the
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> >law!
> >Which begs the question, what provides the two like magnetic fields in
> >a geosatellite or are charges just sliding off the end
> >of antennas not in equilibrium? (no gravity or combative weak fields
> >being present)
> >Regards
> >Art
>
> well art, this sounds like a challenging situation for your theory to
> predict what happens... if there is no gravity to cause the magical mystery
> particles to settle on the diamagnetic elements and therefore they keep
> sliding off, how do satellites communicate with each other? a zero
> radiation by your extended guassian law sure doesn't help either! maybe you
> need to do some more thinking about all this stuff.... or you could do some
> actual research and see what the magnetic field environment is at
> geosynchronous altitude... just as a hint, take a look at this GOES Hp plot
> here:http://www.swpc.noaa.gov/today.html then to get a look even farther
> out you can see the magnetic field that is part of the solar wind that moves
> your magical particles here:http://www.swpc.noaa.gov/ace/MAG_SWEPAM_24h.html maybe the
particle
> densities they measure can actually be related to your magical mystery
> particles?

David, yes it was a challenge to my theory which led me down many paths of thought.
You may remember that I expoused that charges travel thru the center of a conductor that is not in equilibrium.
From the laws around equilibrium a charge on the outside of a radiator has no sideways motion thus per Newtons laws
of action and reaction.Thus if the charge does move sideways then a charge also moves on the inside of the radiator
again by Newtons laws. This suggests that in the case of a non equilibrium radiator the circuit at the end of the radiator has two choices.
! to creat an arc to complete the circuit
2 to travel down the center of the conductor where the resistance to flow is solely wire resistance.
Quito Equador showed that in a thin atmosphere using a radiator not in equilibrium arcs would flowat the ends of the radiator.
This phenomina was cured by using a closed circuit antenna such as the Quad where the same choices did not occur.(it is in equilibrium)
So in my reasoning in outer space which is a vacuum an antenna cannot radiate without external components.
When using a antenna program with an optimizer when inserting an arrangement in equilibrium first you get more gain on Earth
than one of the present state of the art where "weak force is not included in the algerithums and
2 when placing a array in free space the resulting radiation is ZERO.
Exactly what one would expect of a Gaussian field of statics when there is no fracture of the arbitrary boundary. So David that is how I resolved that question before I spoke of current flowing thru the center
of a radiator. By the way there is no evudence that particles eminating from the Sun arrive by Solar winds where particles receive a charge
by relative movement to Earth (Einstein?) Remember, Einstein only established the Laws of Relativity because of his disapointment of not determining the Weak force which he needed for the Grand Theory of a Universal Science/laws otherwise know as GUT. Using my aproach to radiation I consider Einsteins
thoughts to be proven correct, tho not accepted as I am not an academic involved in a scientific structure, otherwise known as not invented here syndrom.
I will look at the URL's supplied by you to see what they have to offer.
Now I can say
Best regards
Art Unwin KB9MZ.....xg

1975. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 22:22:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <729bc4l2ohu9l9d44bck8bo4sctaq1m2eq@4ax.com>
Source record: 22599

On Mon, 08 Sep 2008 11:06:29 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>
>>
>> All of this remains highly suppositional and suspicious both. One
>> need only graze beneath a common 110KV transmission line to experience
>> field levels of 1KV/ft (33V/cm) to find no lower bacterial risk (and
>> frequent claims to the contrary of these fields having healative
>> powers).
>
>While the field under the tower, in the absence of any conductors, is as
>you say (actually, the earth has a field on the order of 1kV/m just from
> thunderstorm return currents). If there's a conductor in that field,
>though, that does not imply that the field within the conductor is the
>same.

Try it at any scale, and that certainly is true. Roll back this tape
to the beginning and offer the same observation.

There you would find upwards to 800V laid across 1mm of separation.
Within that 1mm are two .25mm probes measuring a field described to be
1V/cm. Those same probes fall prey to your observation. Then carry
that forward to a medical (sic) device doing the same (sic) thing with
far less potential to the same (apparent) field, for a vastly greater
bulk of conductive tissue.

Yes, "fields" have been trotted out as the universal panacea - in the
face of a counter argument for those same "fields" neither of which
have any real science between them.

73's
Richard Clark, KB7QHC

1976. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 22:29:48 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9f7f2b9c-c676-49fb-88bc-034a5597f496@f36g2000hsa.googlegroups.com>
Source record: 22600

On Sep 8, 4:04 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Art Unwin wrote:
> > On Sep 8, 1:06 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> >>> All of this remains highly suppositional and suspicious both. One
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> field there is around it, plus whatever field it has itself (imagine
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> field of the earth is strong enough that electromagnets in the
> spacecraft can be used to change the orientation. Some spacecraft
> record the magnetic field as part of experiments to measure the solar
> system's magnetic field distribution. For these measurements, the
> spacecraft's own field is subtracted out. It's either measured or
> inferred from a series of measurements (e.g. if you spin the satellite,

> and measure the field, the varying component is due to the surroundings
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> too. The process is like swinging and calibrating a ship's compass,
> see, e.g., Chapter 6 of Bowditch:http://www.irbs.com/bowditch/pdf/chapt06.pdf
>)

Very good. So here are two separate magnetic fields external to the
boundary enclosed
static particles which migrate to a diagmatic surface (the antenna)
and since radiation does occur
we can assume a collision of these magnetic fields which is opposed by
the synthetic gravity
of the space craft that generates the weak force. That leaves one
gigantic problem of apparent weightless ness
as seen on TV unless it is still there but not readily evident given a
particular time segment.
Thank you very much for supplying the above comment and I will now
look at the URL presented
Best regards
Art Unwin.....KB9MZ....xg

1977. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 22:33:28 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0afa1621-b13e-46ff-84b2-c17897c25cf0@i76g2000hsf.googlegroups.com>
Source record: 22651

On Sep 8, 5:16 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Mon, 8 Sep 2008 11:43:09 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >Have you still got a girl friend or have you retreated to your old
> >habits?
>
> Authur,
>
> You have some curious sexual interests. Don't you think you should
> leave them undiscussed? There are some things that cannot be
> fulfilled for you here, after all; and you may as well keep that
> restricted to anderstanding untennas.
>
> >Shakesphere?
>
> Gesundheit.
>
> 73's
> Richard Clark, KB7QHC

I am referring to your past habits of using shakespere with science to
stir the pot.
That ceased when you said you had a girlfreind but now you are back
doing the same old thing
ie past habits

1978. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 22:59:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga4aos$m5f$2@news.albasani.net>
Source record: 22652

Art Unwin wrote:
> Centuries past there was a cold spell on Earth where it is stated
> radiation propagation did not occur because of the lack of sun spot
> observations. This period lasted about 30 years if my memory is
> correct. ...
> Art KB9MZ...xg

With "radio" being discovered in 1895 by Tesla:

http://www.pbs.org/tesla/ll/ll_whoradio.html

how many "centuries" are you talking about?; and, can you provide a
lead to this data you are referencing?

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1979. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 23:15:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga4bmandf1@news.albasani.net>
Source record: 22653

Art Unwin wrote:
> On Sep 8, 5:16 pm, Richard Clark <kb7...@comcast.net> wrote:
>> On Mon, 8 Sep 2008 11:43:09 -0700 (PDT), Art Unwin
>>
>> <ArthurUn...@gmail.com> wrote:
>>> Have you still got a girl friend or have you retreated to your old
>>> habits?
>> Authur,
>>
>> You have some curious sexual interests. Don't you think you should
>> leave them undiscussed? There are some things that cannot be
>> fulfilled for you here, after all; and you may as well keep that
>> restricted to anderstanding untennas.
>>
>>> Shakesphere?
>> Gesundheit.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> I am referring to your past habits of using shakespere with science to
> stir the pot.
> That ceased when you said you had a girlfreind but now you are back
> doing the same old thing
> ie past habits

Art:

Exercise more caution in your choice of words, I do believe he thought
you were asking him for a date! :-(

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

1980. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 23:27:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qecbc4pagqfkda9g66sk3i9mlbnht8tcf3@4ax.com>
Source record: 22654

On Mon, 8 Sep 2008 15:33:28 -0700 (PDT), Art Unwin >
<ArthurUn...@gmail.com> wrote:
>> >Have you still got a girl friend or have you retreated to your old
>> >habits?
>> You have some curious sexual interests.
<ArthurUnwin@gmail.com> wrote:
>I am referring to your past habits of using shakespere with science to
>stir the pot.

Ah! My mistake. You have no sexual interest at all. It was merely a
weak -feeble- reference mixed into your confusion of CERN's mission.

Are you suggesting that CERN is an extension of a sonnet, or do you
simply spit on Shakespeare to see who you can get wet in the crowd?

73's
Richard Clark, KB7QHC

1981. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-08 23:53:50 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c1e46e45-a943-4869-a141-3aa9bc18143b@r66g2000hsg.googlegroups.com>
Source record: 22655

On Sep 8, 5:59 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > Centuries past there was a cold spell on Earth where it is stated
> > radiation propagation did not occur because of the lack of sun spot
> > observations. This period lasted about 30 years if my memory is
> > correct. ...
> > Art KB9MZ...xg
>
> With "radio" being discovered in 1895 by Tesla:
>
> http://www.pbs.org/tesla/ll/ll_whoradio.html
>
> how many "centuries" are you talking about?; and, can you provide a
> lead to this data you are referencing?
>
> Regards,
> JS
>
> --
> It is like a nightmare where the public servants are the people which
> the police are supposed to protect us from!

I do believe it was in the early 1800s because the River Thames froze
in London such that they were able to
have a fair on the ice.Remember the river is tidal ! I seem to
remember that there were no sunspots observed for some thirty years!
Not a good time for radio if it happens again. I will research for the
actual facts and get back to the forum
Regards
Art Unwin KB9MZ.......xg

1982. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 00:04:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <q4jxk.22417$uE5.17255@flpi144.ffdc.sbc.com>
Source record: 22656

Art Unwin wrote:
> I do believe it was in the early 1800s ...

From Wikipedia: "Some confine the Little Ice Age to
approximately the 16th century to the mid 19th century."
--
73, Cecil http://www.w5dxp.com

1983. Re: The Strange True Story of a Radio Station's Transmitter in NewYork State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 00:25:13 UTC
From: HagstAr <yonnyKILL@SPAMMERSatt.net>
Message-ID: <waGdnQE-7IXvX1jVnZ2dnUVZ_u2dnZ2d@posted.greenmountainaccess>
Source record: 22657
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"David G. Nagel" <nagel.david@sbcglobal.net> wrote in message
news:wRgxk.508$Z64.185@flpi143.ffdc.sbc.com...
> > Tesla worked for Edison when he came up with AC power distribution.
> Edison favored DC for some reason and Tesla quit and went to work for
> Westinghouse. When the electric chair was proposed Edison did everything
> he could to discredit it because it used Tesla's AC power.
>

"The first electric chair was made by Harold P. Brown. Brown was an employee of Thomas Edison, hired for the purpose of researching electrocution and for the development of the electric chair. Since Brown worked for Edison, and Edison promoted Brown's work, the development of the electric chair is often erroneously credited to Edison himself. Brown's design was based on use of Nikola Tesla's alternating current (AC), which was marketed by George Westinghouse and was then just emerging as the rival to Edison's less transport-efficient direct current (DC), which was further along in commercial development. The decision to use AC was partly driven by Edison's claims that AC was more lethal than DC."

http://en.wikipedia.org/wiki/Electric_chair

John H.

1984. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 00:47:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <502c2cfb-e236-42ad-b54f-9fbbaafbcf41@d45g2000hsc.googlegroups.com>
Source record: 22658

On Sep 8, 4:30 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:34fdec23-fb3d-4b52-9632-247e88014434@l64g2000hse.googlegroups.com...
>
> >Jim
> >Since you are with the space agency I jumped threads to ask a
> >question.
> >When a space ship leaves earth or a satellite is stable in the sky I
> >assume that all
> >are in thier own magnetic field because of relative motion of earth.
>
> >Is it possible that there are a connecting magnetic
>
> >field in the Universe of a like polarity tp that of a geo satellite?
> >I would assume spacecraft record magnetic changes on their journey
> > but I have read no details of such measurements. When I use computer
> >programs to determine
> >a radiation field in free space of an antenna in equilibrium the
> >resulting radiation is zero as predicted by the extension of Gaussian
> >law!
> >Which begs the question, what provides the two like magnetic fields in
> >a geosatellite or are charges just sliding off the end
> >of antennas not in equilibrium? (no gravity or combative weak fields
> >being present)
> >Regards
> >Art
>
> well art, this sounds like a challenging situation for your theory to
> predict what happens... if there is no gravity to cause the magical mystery
> particles to settle on the diamagnetic elements and therefore they keep
> sliding off, how do satellites communicate with each other? a zero
> radiation by your extended guassian law sure doesn't help either! maybe you
> need to do some more thinking about all this stuff.... or you could do some
> actual research and see what the magnetic field environment is at
> geosynchronous altitude... just as a hint, take a look at this GOES Hp plot
> here:http://www.swpc.noaa.gov/today.html then to get a look even farther
> out you can see the magnetic field that is part of the solar wind that moves
> your magical particles here:http://www.swpc.noaa.gov/ace/MAG_SWEPAM_24h.html maybe the
particle
> densities they measure can actually be related to your magical mystery
> particles?

David what you presented is way beyond my pay scale and requires a detailed knoweledge of the particular procedures and measurements Same goes for the URL of the compass presented by NAVY? But with reference to your term "magical mystery"
which I take as a knock on my knoweledge of physics. David you cannot deny that the intersection of two magnetic fields provides a extra force that is not in line. A short study on levitation should resolve that one. The other one is the sorting methods used in savaging materials. There are many pictures and references to the use of levitation and non invasive metal measurements all of which are a following of Newtons laws as well as the well founded reference to eddy currents as the return force which creates stabalization. As I stated before this same law of Newton can be visualed by reviewing the mode of rotation of the two rotors on a helicopter to achieve stabalization or equilibrium in movement Knowing the above which I am sure you do, the use of "magical mystery" can be seen as a some what mocking statement, and for why? And where does particle density fit in as opposed the energy content
of something that is so small. If indications such as Weber or Gauss were measured maybe it would make sense thus I am totally lost. With respect to compasses I never realized that it consistedf of so many components to protect against so many actions as well as the induced magnetism created during manufacture . the disasters in the golden triangle as well as with Amy in the pacific it would seem that all should carry a sextant as a backup!
Art
Art

1985. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 01:07:57 UTC
From: dfinn1@nc.rr.com
Message-ID: <f60d45fe-55c3-4a55-ae54-1a23cdfd2ced@a1g2000hsb.googlegroups.com>
Source record: 22659

On Sep 8, 8:04 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Art Unwin wrote:
> > I do believe it was in the early 1800s ...
>
> From Wikipedia: "Some confine the Little Ice Age to
> approximately the 16th century to the mid 19th century."
> --
> 73, Cecil http://www.w5dxp.com

It was recently reported that zero sunspots were recorded in August of this year. However, there must be some charged material up there since I consistently hear CQ's from Europe in the morning hours and Western states (and sometime Europe in the afternoons) on 20m. The Maritime Mobile net is alive and well. I know there's nothing on 10m, which I believe should be more more utilized in the FM mode with repeaters to promote local utilization. Otherwise the unlicensed 18 wheeler transportation industry will take it over for us.

1986. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 01:17:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <48a23a97-0421-4eab-81c8-41a32df1202b@m36g2000hse.googlegroups.com>
Source record: 22660

On Sep 8, 7:04 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Art Unwin wrote:
> > I do believe it was in the early 1800s ...
>
> From Wikipedia: "Some confine the Little Ice Age to
> approximately the 16th century to the mid 19th century."
> --
> 73, Cecil http://www.w5dxp.com

I read it in either the Smithsonian or the Scientific American
and as I remember the article involved Black Holes which at the time i
likened to
the Newton reaction to the Big Bang which I apothesized the Black Hole
duplicating
the swirl of an eddy current to create balance in the Universe. Yes, I
know I am mad, or insane
but without imagination and "what if's" I would wither away. Soooooo
you will have to go to the library
and look at back copies say for four months and then you will find it.
When I say early 1800 I remember seeing
the old sailing barges on oil paintings of the same era which traveled
up river from the tidal basin where my grandfather was a customs
inspector
I was born in the docklands less than a mile from the Tower of London
so the rivers history stays with you as well as the destroyed
residence near St Georges!.
I remember waiting for the tide to go down and then pick up pieces of
thrown away clay pipes of Elisabethan
times in the hope that I would get a match. Very Very difficult to do
but I guess they only used the pipe once and then threw it away
thus many pieces. The docks were all bombed and set afire with
magnesium so it was natural to demolish them when shipping boxes
came into fashion and they moved the docks to a sea port on the East
coast. Union tickets were prized for workers as they were handed down
in the family
One Uncle was a stevedore but I turned the ticket down to become an
engineer with peanut salary!
Art
Art

1987. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 01:20:23 UTC
From: dfinn1@nc.rr.com
Message-ID: <c1733a44-fb78-4edd-9a54-220cda9fc38f@k37g2000hsf.googlegroups.com>
Source record: 22661

On Sep 5, 2:27 pm, Jon Mcleod <jonmcleod2...@yahoo.com> wrote:
> Art Unwin wrote:
> > What you are refering to is the induction process as applied to
> > present day induction cookers
> > available in stors for the general consumer
> > Best regards
>
> Actually, no, the induction cooker uses a much stronger field. This is
> a low voltage field (1v/cm) that doesn't cook (or heat) the steak.
> Supposedly it disrupts internal structures inside bacteria when they try
> to divide, at least so goes the hypothesis.

Hmmm...I thought the induction cooking process was merely a "cool-top"
cooking appliance using a large inductor to generate an AC magnetic
field. The h field does nothing at all to the food but it induces
currents in the (ferrous) cookware which heats the cookware allowing
it to be used in a manner similar to "hot" top resistive cooking
elements. In this case the resistance is in the cookware itself,
dissipating power from the induced current. That's what I thought it
was anyways...

If you want to really prevent bacteria growth in food, may I suggest a
good dose of Cobalt 60.

1988. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 01:29:11 UTC
From: dfinn1@nc.rr.com
Message-ID: <d0421bf2-c83b-4462-9be9-1455c94e648a@k13g2000hse.googlegroups.com>
Source record: 22662

On Sep 6, 3:48 pm, Richard Clark <kb7...@comcast.net> wrote:

> In the 1960s, a product for cooking hotdogs (10cm) was sold. It
> consisted of exposed metal prongs that penetrated to each end of the
> hot dog, and were, in turn, plugged into the wall. Net result: in 3
> minutes you had a broiled hot dog from 12V/cm.
>
> 73's
> Richard Clark, KB7QHC

I remember that: It was called the "Hot Dogger". It worked quite well.
Oscar Mayer hot dogs and the like are assisted in the hot dog zap-
cooking process by the large amount of electrolyes (salt content) used
in processing the "meat". It was a resistive heat cooking process of
course, nothing exotic, but 12V/cm it was.

1989. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 02:17:24 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <20fbcfa0-38ef-44ba-9cc0-44aa2b082da1@25g2000hsx.googlegroups.com>
Source record: 22663

On Sep 8, 8:07 pm, dfi...@nc.rr.com wrote:
> On Sep 8, 8:04 pm, Cecil Moore <nos...@w5dxp.com> wrote:
>
> > Art Unwin wrote:
> > > I do believe it was in the early 1800s ...
>
> > From Wikipedia: "Some confine the Little Ice Age to
> > approximately the 16th century to the mid 19th century."
> > --
> > 73, Cecil http://www.w5dxp.com
>
> It was recently reported that zero sunspots were recorded in August of
> this year. However, there must be some charged material up there since
> I consistently hear CQ's from Europe in the morning hours and Western
> states (and sometime Europe in the afternoons) on 20m. The Maritime
> Mobile net is alive and well. I know there's nothing on 10m, which I
> believe should be more more utilized in the FM mode with repeaters to
> promote local utilization. Otherwise the unlicensed 18 wheeler
> transportation industry will take it over for us.

Sunspot are not the only indication of Neutron release just an
indication somewhat under a solar flare where
release includes particles of more than half life such as wreckage/
debris and fumes. The rotation of the poles
ensure fracture of the arbitrary boundary for emmisions of particles
but if the Suns core cools due to the pole shifting
then there is less expansion within the boundary providing less
straying from equilibrium.
Now with the earth heating up scientists say that the sun is
expanding and in a zillion years will
swallow the earth no less, A extra large flare or eruption literally
is a releaso of nuclear energy
which goes to power lines as an impulse similar to the electrical
outage created in
Hawaii when they exploded a hydrogen bomb at low elevation.Which is
why yhe Navy suddenly reverted back to tube technology with radios.
In each of these cases it is the debris composed of more than half
live
nuclear products which does not compare to the miniscule energy of a
unbound electron called a neutrino. However when neutrinos
congregate in bunches they have a large energy input creates by color
binding which when split apart creats an aurora for thousands of miles
which amount s to a lot of energy release within our arbitrary border
which some say provides energy to the upper atmosphere and

provide worldly circulation of weather clouds, storms e.t.c.
Certainly a lot of speculation with regard to the arrival of
particulates the majority of which have not been identified.
Nuf said

1990. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 02:23:52 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <heydnYN3if9aQ1jVnZ2dnUVZ_h6dnZ2d@bright.net>
Source record: 22664

OK. Not quite about antennas, but before 1960 such very non-UL devices existed. Since my dorm room had a 120/208 system, and students in those days actually knew what that was, with a different phase on one side of the room than on the other side of the room, one could zap a dog in a short period of time with a cross connection. .... and I still have all of my digits and such. Learning took place in multiple places - in those days. Of course, one needed to survive....

73, Mac N8TT

--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
<dfinn1@nc.rr.com> wrote in message
news:d0421bf2-c83b-4462-9be9-1455c94e648a@k13g2000hse.googlegroups.com...
On Sep 6, 3:48 pm, Richard Clark <kb7...@comcast.net> wrote:

> In the 1960s, a product for cooking hotdogs (10cm) was sold. It
> consisted of exposed metal prongs that penetrated to each end of the
> hot dog, and were, in turn, plugged into the wall. Net result: in 3
> minutes you had a broiled hot dog from 12V/cm.
>
> 73's
> Richard Clark, KB7QHC

I remember that: It was called the "Hot Dogger". It worked quite well. Oscar Mayer hot dogs and the like are assisted in the hot dog zap-cooking process by the large amount of electrolyes (salt content) used in processing the "meat". It was a resistive heat cooking process of course, nothing exotic, but 12V/cm it was.

1991. Re: E-Field across MEAT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 02:29:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b17c8f5a-12c1-4a4b-a815-1014ddf0d906@m73g2000hsh.googlegroups.com>
Source record: 22665

On Sep 8, 8:20 pm, dfi...@nc.rr.com wrote:
> On Sep 5, 2:27 pm, Jon Mcleod <jonmcleod2...@yahoo.com> wrote:
>
> > Art Unwin wrote:
> > > What you are refering to is the induction process as applied to
> > > present day induction cookers
> > > available in stors for the general consumer
> > > Best regards
>
> > Actually, no, the induction cooker uses a much stronger field. This is
> > a low voltage field (1v/cm) that doesn't cook (or heat) the steak.
> > Supposedly it disrupts internal structures inside bacteria when they try
> > to divide, at least so goes the hypothesis.
>
> Hmmm...I thought the induction cooking process was merely a "cool-top"
> cooking appliance using a large inductor to generate an AC magnetic
> field. The h field does nothing at all to the food but it induces
> currents in the (ferrous) cookware which heats the cookware allowing
> it to be used in a manner similar to "hot" top resistive cooking
> elements. In this case the resistance is in the cookware itself,
> dissipating power from the induced current. That's what I thought it
> was anyways...
>
> If you want to really prevent bacteria growth in food, may I suggest a
> good dose of Cobalt 60.

I believe you are correct since special cookware is required with
induction cooking
and I would imagine it also has a large magnet inside the inductance
as opposed to air

1992. Re: The Strange True Story of a Radio Station's Transmitter in NewYorkState

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 02:54:53 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <arudnUdJjaLjeFjVnZ2dnUVZ_j2dnZ2d@earthlink.com>
Source record: 22666
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

"David G. Nagel" wrote:
>
> Michael A. Terrell wrote:
> > christopher wrote:
> >> Didn't Tesla propose using DC current, basically broadcast/produced from
> >> thousands of transmitters. In order to use the electrical current/field,
> >> all one had to do was ground one side/wire to Earth. The other side or
> >> wire would be the receptor/antenna for lack of a better term.
> >>
> >> I'm not a technical person but I think I have the basic premise right.
> > >
> > >
> > > No. It wasn't DC, since DC is direct current. That was Edison who
> > > would have needed a power plant every half mile or so. Tesla was hyping
> > > "Broadcast power" which was lossy broadband RF power that would wipe out
> > > most of the usable RF spectrum. Due to the 'Inverse Square Law', it was
> > > impractical, and always will be.
> > >
> > > Tesla was responsible for AC power distribution, which pissed Edison
> > > off.
> > >
> > >
> > Tesla worked for Edison when he came up with AC power distribution.
> > Edison favored DC for some reason and Tesla quit and went to work for
> > Westinghouse. When the electric chair was proposed Edison did everything
> > he could to discredit it because it used Tesla's AC power.

Explain why Edison Electrocuted an Elephant with AC. He wanted people
to think AC was too dangerous to use.

http://en.wikipedia.org/wiki/Topsy_(elephant)

--
http://improve-usenet.org/index.html

aioe.org, Goggle Groups, and Web TV users must request to be white
listed, or I will not see your messages.

If you have broadband, your ISP may have a NNTP news server included in
your account: http://www.usenettools.net/ISP.htm

There are two kinds of people on this earth:
The crazy, and the insane.
The first sign of insanity is denying that you're crazy.

1993. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 03:11:23 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <wPlxk.53660$Rs1.14654@newsfe08.iad>
Source record: 22667

<dfinn1@nc.rr.com> wrote in message
news:f60d45fe-55c3-4a55-ae54-1a23cdfd2ced@a1g2000hsb.googlegroups.com...

It was recently reported that zero sunspots were recorded in August of
this year. However, there must be some charged material up there since
I consistently hear CQ's from Europe in the morning hours and Western
states (and sometime Europe in the afternoons) on 20m. The Maritime
Mobile net is alive and well. I know there's nothing on 10m, which I
believe should be more more utilized in the FM mode with repeaters to
promote local utilization. Otherwise the unlicensed 18 wheeler
transportation industry will take it over for us.

--

I have only been on HF for a year and a half, so my history with propagation
is limited. However, I understand that the sunspots augment/boost the
charged material which will always be there at a minimum baseline value. A
common measurement is the 10.7 cm solar flux level, now running in the 60s.
This level of solar radiation will provide us functional propagation, but
solar flux can jump into the hundreds. http://www.arrl.org/w1aw/prop/
[solar flux numbers at the end]

I'm no great DXer but I tune around and pay attention. (I have a simple
wire dipole laying on my garage roof for 20m, my usual hangout.) Just
yesterday, I worked two Japan stations and a Spanish station from San Diego
with 100W into that wire dipole. There were many others doing the same
thing and it took me quite a while to get those three in the log.

My point: HF still works at the bottom.

1994. Re: 20 and meter yagi question...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 04:14:26 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <pGmxk.29897$Ep1.29228@bignews2.bellsouth.net>
Source record: 22668

"James Barrett" <xucaen@comcast.net> wrote in message
news:sr6dndYz75VYa17VnZ2dnUVZ_jSdnZ2d@comcast.com...
> Can a 20 meter yagi be tuned down to 10 meters? can a 40 meter yagi be
> tuned down to 10?
>

Don't mess up a good 20-meter beam.
And that 40-meter yagi must be huge! If its working, I wouldn't want to mess
with it, either.
You can make a 10-meter beam easy enough.
I could replace my pickup's hemi with a lawn-mower engine, but then how
would I cut the grass?

1995. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 04:21:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <569d8857-83aa-4259-a1bc-830ecd3fa5f2@f36g2000hsa.googlegroups.com>
Source record: 22669

On Sep 8, 10:11 pm, "Sal M. Onella" <salmone...@food.poisoning.org>
wrote:
> <dfi...@nc.rr.com> wrote in message
>
> news:f60d45fe-55c3-4a55-ae54-1a23cdfd2ced@a1g2000hsb.googlegroups.com...
>
> It was recently reported that zero sunspots were recorded in August of
> this year. However, there must be some charged material up there since
> I consistently hear CQ's from Europe in the morning hours and Western
> states (and sometime Europe in the afternoons) on 20m. The Maritime
> Mobile net is alive and well. I know there's nothing on 10m, which I
> believe should be more more utilized in the FM mode with repeaters to
> promote local utilization. Otherwise the unlicensed 18 wheeler
> transportation industry will take it over for us.
>
> ---
> --
>
> I have only been on HF for a year and a half, so my history with propagation
> is limited. However, I understand that the sunspots augment/boost the
> charged material which will always be there at a minimum baseline value. A
> common measurement is the 10.7 cm solar flux level, now running in the 60s.
> This level of solar radiation will provide us functional propagation, but
> solar flux can jump into the hundreds. http://www.arrl.org/w1aw/prop/
> [solar flux numbers at the end]
>
> I'm no great DXer but I tune around and pay attention. (I have a simple
> wire dipole laying on my garage roof for 20m, my usual hangout.) Just
> yesterday, I worked two Japan stations and a Spanish station from San Diego
> with 100W into that wire dipole. There were many others doing the same
> thing and it took me quite a while to get those three in the log.
>
> My point: HF still works at the bottom.

Makes sense. The poles of the Sun never stop turning or burning so
periodically
the arbitrary boundary must have fissures that allow for the escape of
low level neutrinos.
When equillibrium of the Sun is continous it means thje lights have
gone outand the pre historic human running for President
will be dug up in a 1000 years from now and the human race will be the
subject of speculation Vice president Gore will be dug up wearing only
a swimming costume and two fifty gallons of sun burn preventive and
living in an igloo !

1996. Re: The Strange True Story of a Radio Station's Transmitter in NewYork State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 04:52:55 UTC
From: m II <C@in.the.hat>
Message-ID: <Hinxk.1771$yS5.861@edtnps83>
Source record: 22670
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.policy,rec.antiques.radio+phono,rec.radio.amateur.antenna

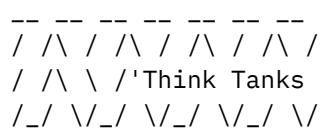
David G. Nagel wrote:

> Tesla worked for Edison when he came up with AC power distribution.
> Edison favored DC for some reason and Tesla quit and went to work for
> Westinghouse. When the electric chair was proposed Edison did everything
> he could to discredit it because it used Tesla's AC power.

Just the opposite. He was trying to discredit AC power by using the
electric chair as an example of how dangerous it was. Edison had a lot
of money tied up in DC generators and distribution. He didn't want
competition, especially from a superior technology.

mike

--



Densa International©
For the OTHER two percent.

Due to the insane amount of spam and garbage,
I block all postings with a Gmail, Google Mail,
Google Groups or HOTMAIL address.
I also filter everything from a .cn server.

For solutions which may work for you, please check:
http://improve-usenet.org/

1997. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 11:12:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <YSsxk.20781$cW3.4355@nlpi064.nbdc.sbc.com>
Source record: 22671

dfinn1@nc.rr.com wrote:
> It was recently reported that zero sunspots were recorded in August of
> this year. However, there must be some charged material up there ...

From the high of the sunspot cycle to the low,
the energy output of the sun only varies by ~0.1%.
There's plenty of "charged material" even when
there are no sun spots.
--
73, Cecil http://www.w5dxp.com

1998. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 11:20:33 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <l_sxk.20782$cW3.19614@nlpi064.nbdc.sbc.com>
Source record: 22672

Art Unwin wrote:
> ... I apothesized the Black Hole duplicating
> the swirl of an eddy current to create balance in the Universe.

Not all that unlike the touching "branes" theory of today.
--
73, Cecil http://www.w5dxp.com

1999. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 14:04:46 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <ga5vq4ufg1@registered.motzarella.org>
Source record: 22673

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:qecbc4pagqfkda9g66sk3i9mlbnht8tcf3@4ax.com...
> On Mon, 8 Sep 2008 15:33:28 -0700 (PDT), Art Unwin >
> <ArthurUn...@gmail.com> wrote:
>>> >Have you still got a girl friend or have you retreated to your old
>>> >habits?
>>> You have some curious sexual interests.
> <ArthurUnwin@gmail.com> wrote:
>>I am referring to your past habits of using shakespere with science to
>>stir the pot.
>
> Ah! My mistake. You have no sexual interest at all. It was merely a
> weak -feeble- reference mixed into your confusion of CERN's mission.
>
> Are you suggesting that CERN is an extension of a sonnet, or do you
> simply spit on Shakespeare to see who you can get wet in the crowd?
>
> 73's
> Richard Clark, KB7QHC

You guys sound like a bunch of nuclear physiatrists. <G>

Ed, NM2K

2000. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 14:11:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <3svxk.26540$Ri.25629@flpi146.ffdc.sbc.com>
Source record: 22675

Ed Cregger wrote:
> You guys sound like a bunch of nuclear physiatrists. <G>

They are practicing psycho-logic.
--
73, Cecil http://www.w5dxp.com

2001. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 14:11:44 UTC
From: ml <m@di.net>
Message-ID: <m-7FC946.10114409092008@news.optonline.net>
Source record: 22674

In article <lNSwk.747$1x6.137@edtnps82>,
"Frank" <frank599@nospam.telus.net> wrote:

> > The Jets' games are carried on channel 2 New York, which is 102 miles
> > as the crow flies from my house. Football packages on satellite TV
> > are beyond present financial condition. I only care about channel 2,
> > New York.
>
> I thought all VHF television transmission will be discontinued as of
> February 2009. Building a VHF antenna would seem to be a
> wasted effort. You need to think how you can receive the
> same station on UHF digital. There are plenty of UHF antennas
> available; you may also need a low noise, mast-head, pre-amplifier
> to get a good signal.
>
> Regards,
>
> Frank

hmm I thought not all the channels will necessarily change meaning
some of the vhf stations will still be there just switching from analog
to digital?

i have received some tv stations from about 100m away from
nyc in the catskill region, perhaps the natural elevation helped

but in that same area of ct i have also received ch 2 using
regular antenna however receving the ny ch wasn't the problem
the closer local ch 2 was more of an issue so pic wasn't
perfect

i used a regular but large radioshack antenna and coax

2002. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 14:13:07 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <ga609p$213$1@registered.motzarella.org>
Source record: 22676

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:YSsxk.20781$cW3.4355@nlpi064.nbdc.sbc.com...
> dfinn1@nc.rr.com wrote:
>> It was recently reported that zero sunspots were recorded in August of
>> this year. However, there must be some charged material up there ...
>
> From the high of the sunspot cycle to the low,
> the energy output of the sun only varies by ~0.1%.
> There's plenty of "charged material" even when
> there are no sun spots.
> --
> 73, Cecil http://www.w5dxp.com

However, in very recent times, while the Earth was heating up, Martian ice caps also melted in a most unusual manner as did some other planetary bodies display signs of heating above normal levels. Increased Solar output? Would they tell us if it were so? I doubt it.

Anyone remember President Bush's press release in early 2002/3 that the government has decided that it will not inform "The People" if known dangerous phenomena concerning Earth and astronomical events were to be discovered? I do.

Ed, NM2K

2003. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 14:24:34 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <AGvxk.24635$xZ.11057@nlpi070.nbdc.sbc.com>
Source record: 22677

Ed Cregger wrote:
> However, in very recent times, while the Earth was heating up, Martian ice
> caps also melted in a most unusual manner as did some other planetary bodies
> display signs of heating above normal levels. Increased Solar output?

Last thing I read is that this last year's cooling wiped
out 100 years of global warming. Since the present cycle
temps peaked 8000 years ago, I suspect we are 8000 years
into the next ice age. Anything we can do to prolong
global warming will be beneficial.
--
73, Cecil http://www.w5dxp.com

2004. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 14:26:31 UTC
From: JB <nospam@goofball.net>
Message-ID: <rIvxk.905$jE1.398@trnddc03>
Source record: 22678

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:wPlxk.53660$Rs1.14654@newsfe08.iad...
> I have only been on HF for a year and a half, so my history with
propagation
> is limited. However, I understand that the sunspots augment/boost the...

> My point: HF still works at the bottom.
>
>
You will be astonished when propagation comes back to life. I used to work
Austrailia daily with 5 watts FM into a dipole DFQ.

More than half of my DX cards were from chance contacts while I was
commuting to school. The other half was mostly from ARRL DX QSO parties.
Last Field Day I worked 1 Canadian as my only DX contact. Truly SAD. A
few years back I worked Asia on 50 watts CW and more than 100 DX contacts
despite a continuous pileups from band edge to band edge.

For the interlopers on 10 I suggest regular code practice sessions. Long
CQs from the keyer can help with that too. Rest assured they will be
drummed off when propagation comes back and the bands are full.

For the time being, there are rare opportunities. Learn about the beacons
and DX clusters. Some of us have time on their hands and some don't.

2005. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 15:01:02 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Mcwxk.40980$ZE5.16995@nlpi061.nbdc.sbc.com>
Source record: 22679

JB wrote:
> I used to work
> Austrailia daily with 5 watts FM into a dipole DFQ.

The 10m repeaters make it all the more interesting.
--
73, Cecil http://www.w5dxp.com

2006. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 15:25:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga64h2gid1@news.albasani.net>
Source record: 22680

Cecil Moore wrote:
> Ed Cregger wrote:
>> You guys sound like a bunch of nuclear physiatrists. <G>
>
> They are practicing psycho-logic.

Interesting comment ... obviously the sub-conscious mind is doing overtime; as, when reading biographys' on both Edison and Tesla, one is struck by the seeming "psycho-nature-quirks" of their personalities. (I remember some words from the bible, I paraphrase, "The ways of God seem but foolishness to man.")

Perhaps a "necessary-character-defect" for those investigating subjects which more lazy minds ignore, and especially those involving electrical/electronic/wave-propagation?

Regards,
JS

--
It is like a nightmare where the public servants are the people which the police are supposed to protect us from!

2007. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 15:36:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <430a4beb-7a35-43a0-990a-cd706ddceee1@y38g2000hsy.googlegroups.com>
Source record: 22681

On Sep 9, 10:06 am, Jim Higgins <inva...@invalid.invalid> wrote:
> On Mon, 8 Sep 2008 10:34:45 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >Centuries past there was a cold spell on Earth where it is stated
> >radiation propagation did not occur because of the lack of sun spot
> >observations. This period lasted about 30 years if my memory is
> >correct.
> >Now we appear to be in a state of global warming presumably because of
> >the actions of the Suns vibrancy which would suggest the present
> >increase in sunspot activity of the past century will continue to
> >increase and the next Sun spot cycle will be a good one. So don't give
> >up on antenna experiments just yet as the particulates will be a
> >coming
> >Art KB9MZ...xg
>
> A clear case of combining incomplete bits and pieces and coming up
> with utter crap!
>
> Folks, you just plain can't have a meaningful discussion with a
> lunatic.

So now we move on to the Higgs field or is it Higgins?
.
To view the future one must also review the past
The past shows that naysayers will always be around.
If you know the true story COME ON DOWN AND SHARE IT WITH US

2008. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 15:38:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <XKwxk.585$Z64.379@flpi143.ffdc.sbc.com>
Source record: 22682

John Smith wrote:
> "The ways of God seem but foolishness to man.")

If man had never existed, would foolishness exist?
If man had never existed, would God exist? :-)
--
73, Cecil http://www.w5dxp.com

2009. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 15:47:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga65q6hss1@news.albasani.net>
Source record: 22683

Cecil Moore wrote:
> John Smith wrote:
>> "The ways of God seem but foolishness to man.")
>
> If man had never existed, would foolishness exist?
> If man had never existed, would God exist? :-)

Cecil:

Don't look now, but I fear you speak in riddles!

However, translation:

If antennas did not exist, neither would the "nuts" here? ;-)

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

2010. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 16:50:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l0adc4di0s41huqruti261lee9tl3rv33u@4ax.com>
Source record: 22684

On Tue, 9 Sep 2008 10:04:46 -0400, "Ed Cregger"
<ecregger@bellsouff.net> wrote:

>You guys sound like a bunch of nuclear physiatrists. <G>
>
Unclear Psycosmiclysts (the study of peculiar particles) actually.

73's
Richard Clark, KB7QHC

2011. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 17:51:51 UTC
From: JB <nospam@goofball.net>
Message-ID: <XIyxk.63$I25.35@nwrddc01.gnilink.net>
Source record: 22685

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:Mcwxk.40980$ZE5.16995@nlpi061.nbdc.sbc.com...
> JB wrote:
> > I used to work
> > Austrailia daily with 5 watts FM into a dipole DFQ.
>
> The 10m repeaters make it all the more interesting.
> --
> 73, Cecil http://www.w5dxp.com

You mean the QRM from co-channel repeaters in Australia, New York, Hawaii,
Virgin Islands, Florida and San Diego on the same PL? Gee, you could trash
a whole band with repeaters just so everyone could have their own kerchunk.

2012. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 17:59:20 UTC
From: JB <nospam@goofball.net>
Message-ID: <YPyxk.904$393.242@trnddc05>
Source record: 22686

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:Mcwxk.40980$ZE5.16995@nlpi061.nbdc.sbc.com...
> JB wrote:
> > I used to work
> > Austrailia daily with 5 watts FM into a dipole DFQ.
>
> The 10m repeaters make it all the more interesting.
> --
> 73, Cecil http://www.w5dxp.com

How about remote controlled base stations all over the world accessible at
will from VOIP?

2013. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 18:05:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga6dtv$r7u$1@news.albasani.net>
Source record: 22687

JB wrote:

> ...
> How about remote controlled base stations all over the world accessible at
> will from VOIP?

Now that would provide the scope of argument(s) needed to justify
expanded amateur bands/freqs; you are on the correct path now!

Regards,
JS

--
It is like a nightmare where the public servants are the people which
the police are supposed to protect us from!

2014. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-09 18:33:48 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1d6963e3-ca52-4d7e-a63e-a168210b0b6a@25g2000hsx.googlegroups.com>
Source record: 22688

On Sep 9, 10:06 am, Jim Higgins <inva...@invalid.invalid> wrote:
> On Mon, 8 Sep 2008 10:34:45 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >Centuries past there was a cold spell on Earth where it is stated
> >radiation propagation did not occur because of the lack of sun spot
> >observations. This period lasted about 30 years if my memory is
> >correct.
> >Now we appear to be in a state of global warming presumably because of
> >the actions of the Suns vibrancy which would suggest the present
> >increase in sunspot activity of the past century will continue to
> >increase and the next Sun spot cycle will be a good one. So don't give
> >up on antenna experiments just yet as the particulates will be a
> >coming
> >Art KB9MZ...xg
>
> A clear case of combining incomplete bits and pieces and coming up
> with utter crap!
>
> Folks, you just plain can't have a meaningful discussion with a
> lunatic.
Mark
We can't expect much from you but have you been listed in the Guiness
book of records yet?
The thousand upon thousand postings every month and every year ,20,000
i believe in one month
is terrific. Ofourse no time for anything meaningfull or for reading,
just a foot in your mouth comment and off
you go to another group. A terrific show of tenacity and lunacy!
Good luck in the contest assuming that others are doing it in the UK
also
Your friend Art
for a hit and run again

2015. Re: E-Field across MEAT - remove contamination

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 00:10:37 UTC
From: Grumpy The Mule <s_foonly@foo.bar>
Message-ID: <Xns9B14C315413742MDWN@194.177.96.78>
Source record: 22689

Jon Mcleod <jonmcleod2003@yahoo.com> wrote in
news:P9Sdnc_XaPCA11jVnZ2dnUVZ_g6dnZ2d@earthlink.com:

> Michael Coslo wrote:
>
>> Well put! I notice that the rules have been changed so that veggies
>> will be irradiated to kill the e.coli and salmonella bacteria on them.
>
> Actually, e-field could be a much better way to kill bacteria on the
> surface of vegetables, if this whole kooky idea works. I mean, holy
> crap, if they're using it to cure brain tumors, it can probably
> sterilize the food without genetically damaging it.

It's already an FDA approved device, first application I've heard of
is pasturization of apple juice. Google PEF (pulsed electric field)
Diversified Technologies in MA manufactured the device. They're experts
in generating pulses for the DOD and seem to be venturing into new
applications now.

2016. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 02:39:12 UTC
From: dfinn1@nc.rr.com
Message-ID: <21608b39-06b8-4a29-975d-04294fee37f6@25g2000hsx.googlegroups.com>
Source record: 22690

On Sep 9, 1:51 pm, "JB" <nos...@goofball.net> wrote:
> "Cecil Moore" <nos...@w5dxp.com> wrote in message
>
> news:Mcwxk.40980$ZE5.16995@nlpi061.nbdc.sbc.com...
>
> > JB wrote:
> > > I used to work
> > > Austrailia daily with 5 watts FM into a dipole DFQ.
>
> > The 10m repeaters make it all the more interesting.
> > --
> > 73, Cecil http://www.w5dxp.com
>
> You mean the QRM from co-channel repeaters in Australia, New York, Hawaii,
> Virgin Islands, Florida and San Diego on the same PL? Gee, you could trash
> a whole band with repeaters just so everyone could have their own kerchunk.

Gosh, QRM on 10? Up on the FM side close to 30 where repeaters are
used, which is hardly even used in the high portion of the cycle, I
have never heard enough stations to cause QRM! In fact I have only
heard just a few repeaters there since the early nineties.

Tell you what: Better the band is full of ham kerchunkers and being
used than not being used by hams at all. As I recall, demand by the CB
services is what caused us to lose 11m and it also could cause us to
lose 10m. Ten meters reminds me of Lake Superior in Wisconsin some
years after the opening of the St. Lawrence seaway. Lake Superior was
a thriving resource fishery at one time for lake perch and lake trout.
The opening of the seaway brought in the sea lamprey which killed all
the fish. With no fish, even the the lampreys died. By the 1970's,
Lake Superior was like an empty aquarium: No fish, clean and clear.
Unused. Empty and and unused like 10 meters today.

2017. Re: THE WEAK FORCE AND THE C.E.R.N. EXPERIMENT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 13:06:36 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ga8gosnbs1@f04n12.cac.psu.edu>
Source record: 22691

```
Cecil Moore wrote:
> John Smith wrote:
>> "The ways of God seem but foolishness to man.")
>
> If man had never existed, would foolishness exist?
> If man had never existed, would God exist? :-)

Can he create a burrito that is too hot for him to eat?

- 73 d eMike N3LI -
```

2018. I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 16:14:43 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <9da10c51-0edc-468c-b39b-413786c19ec2@25g2000hsx.googlegroups.com>
Source record: 22692

Thats why I live in California and practice the homoosexual way of life since I love little boys and hairy men. But I would do Nancy Pelosi push come to shove as I do my own momma when she is in heat, but I really prefer Arnold baby.

2019. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 17:02:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1e38069b-bd05-434d-b6bb-df19a3acc841@s50g2000hsb.googlegroups.com>
Source record: 22693

On Sep 10, 11:14 am, John Smith <assemblywizz...@gmail.com> wrote:
> Thats why I live in California and practice the homoosexual way of
> life since I love little boys and hairy men. But I would do Nancy
> Pelosi push come to shove as I do my own momma when she is in heat,
> but I really prefer Arnold baby.

What are you saying and why? You are not stupid at least not in my
eyesArt

2020. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 17:08:04 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ga8utk$16f8$1@f04n12.cac.psu.edu>
Source record: 22694

Art Unwin wrote:
> On Sep 10, 11:14 am, John Smith <assemblywizz...@gmail.com> wrote:
>> Thats why I live in California and practice the homoosexual way of
>> life since I love little boys and hairy men. But I would do Nancy
>> Pelosi push come to shove as I do my own momma when she is in heat,
>> but I really prefer Arnold baby.
>
> What are you saying and why? You are not stupid at least not in my
> eyesArt

John is being spoofed by someone - that really wasn't his post, Art.

- 73 de Mike N3LI -

2021. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 17:57:15 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <q52gc4lv5bunidpgj8qoqbc12tvqvq5rib@4ax.com>
Source record: 22695

On Wed, 10 Sep 2008 10:02:54 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>What are you saying and why? You are not stupid at least not in my
>eyesArt

It's a forgery. Reverse DNS of the IP address yields:
dialup-4.255.242.103.Dial1.Atlanta1.Level3.net

Well, we know he's in the Atlanta Georgia area. He's using Google
Groups to post his forgeries. Google is terrible about responding to
usenet related problems. If you want to persue it, you can probably
email a complaint to his ISP at:
abuse@level3.com

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2022. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 19:11:14 UTC
From: JB <nospam@goofball.net>
Message-ID: <mZUxk.982$1a2.805@trnddc04>
Source record: 22696

<dfinn1@nc.rr.com> wrote in message
news:21608b39-06b8-4a29-975d-04294fee37f6@25g2000hsx.googlegroups.com...
On Sep 9, 1:51 pm, "JB" <nos...@goofball.net> wrote:
> "Cecil Moore" <nos...@w5dxp.com> wrote in message
>
> news:Mcwxk.40980$ZE5.16995@nlpi061.nbdc.sbc.com...
>
> > JB wrote:
> > > I used to work
> > > Austrailia daily with 5 watts FM into a dipole DFQ.
>
> > The 10m repeaters make it all the more interesting.
> > --
> > 73, Cecil http://www.w5dxp.com
>
> You mean the QRM from co-channel repeaters in Australia, New York, Hawaii,
> Virgin Islands, Florida and San Diego on the same PL? Gee, you could trash
> a whole band with repeaters just so everyone could have their own
kerchunk.

Gosh, QRM on 10? Up on the FM side close to 30 where repeaters are
used, which is hardly even used in the high portion of the cycle, I
have never heard enough stations to cause QRM! In fact I have only
heard just a few repeaters there since the early nineties.

I guess your radio's numb then. When the sunspot cycle kicks in it happens
every day. Skip causes way too much QRM because of PL duplication. It was
bread and butter for the radio company because so many customers would
complain and complain and complain about "other people using their
frequency" and they couldn't block them out with the mic hanger. Lots of
commercial users left low band FM for VHF and above because of that and
because a gain antenna needs to be so big that they don't last a year at a
repeater site. Ten and 11 meters is considered to be useless because the
daytime absorption is so bad it limits range to worthless. FCC made a
mistake to put CB on 11 if they didn't mean for them to play skip. And if
it weren't for modified CB's we wouldn't have a problem with interlopers at
all. As far as I know, most of the Ham Bands are useless for commercial
exploitation either because they are too small of a block like 220 was, or
because they aren't in the propagation sweet spot for a particular usage.
Hence, they are left to HAMS to experiment and toy with.

That doesn't mean we shouldn't be vigilant and fight tooth and nail when
some idiot tries to sell somebody onto our bands. The real shame is that we
LET GO of half of 220 just because UPS asked for it, and because a bunch of
newbie no-code techs that flooded 2 meters at the time had convinced

themselves FCC might cut 2 meters if they couldn't have 220. They were even crying to "take 440 if you have to, just spare 2 meters". If it weren't for that NOISE, the FCC might have simply denied the petition on recommendations from those in the know. So the Ham repeaters and control links that were on 220 either had to go away or move to 2 and 440 anyway. That was a boondoggle for everyone involved since most wanted to go to 800 anyway. It's been a money LOSER for everyone that invested in it. Now Hams can't get it back because there are a few ACSSB systems still there that customers got stuck with.

2023. Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 20:16:59 UTC
From: john Wiener <jawod@fuse.net>
Message-ID: <3bc02$48c82a8d$d844ba4e$32342@FUSE.NET>
Source record: 22697

I am putting up a Carolina Windom using ladderline instead of the
variant that uses ten feet of coax.
As an OCF the antenna should drive RF to radiate from the vertical
ladderline (coupled to the coax via 4:1 balun)

Odd multiples of the desired wavelength are recommended for the
calculated length of the vertical component.

I have 47 feet of ladderline and my question is:
Does it make much difference whether a low odd multiple or high odd
multiple of the wavelength is used. i.e., 1/3 lambda, 3/5 lambda, 5/3, etc?

I don't have direct access to EZNEC right now.

If you gotta flame, OK but at least this is question about ANTENNAS.

JOhn
AB8O

2024. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 20:29:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q5bgc4liqrps526a80coad9qi2705dkv9a@4ax.com>
Source record: 22698

On Wed, 10 Sep 2008 16:16:59 -0400, john Wiener <jawod@fuse.net>
wrote:

>I have 47 feet of ladderline and my question is:
>Does it make much difference whether a low odd multiple or high odd
>multiple of the wavelength is used. i.e., 1/3 lambda, 3/5 lambda, 5/3, etc?

Hi John,

Your reference to Odd Multiples is incomplete. It is Odd Multiples of
quarterwave lengths: 1/4, 3/4, 5/4, and so on; otherwise every odd
number coming down the pike (3/7ths, 7/9ths....) would lead to unusual
claims that were wholly fanciful.

>If you gotta flame, OK but at least this is question about ANTENNAS.

Windoms, Carolina Windoms, OCF dipoles, and any number of names for
what the authors "think" represents the same antenna, is a can of
worms from the beginning (as evidenced by the Odd Multiples, a loose
reference you undoubtedly picked up from one of those seers). You
would get further if you simply state what you want to achieve instead
of trying to put lipstick on this pig.

73's
Richard Clark, KB7QHC

2025. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 20:46:00 UTC
From: john Wiener <jawod@fuse.net>
Message-ID: <48C83208.3000702@fuse.net>
Source record: 22699

Richard Clark wrote:
> On Wed, 10 Sep 2008 16:16:59 -0400, john Wiener <jawod@fuse.net>
> wrote:
>
>> I have 47 feet of ladderline and my question is:
>> Does it make much difference whether a low odd multiple or high odd
>> multiple of the wavelength is used. i.e., 1/3 lambda, 3/5 lambda, 5/3, etc?
>
> Hi John,
>
> Your reference to Odd Multiples is incomplete. It is Odd Multiples of
> quarterwave lengths: 1/4, 3/4, 5/4, and so on; otherwise every odd
> number coming down the pike (3/7ths, 7/9ths....) would lead to unusual
> claims that were wholly fanciful.
>
>> If you gotta flame, OK but at least this is question about ANTENNAS.
>
> Windoms, Carolina Windoms, OCF dipoles, and any number of names for
> what the authors "think" represents the same antenna, is a can of
> worms from the beginning (as evidenced by the Odd Multiples, a loose
> reference you undoubtedly picked up from one of those seers). You
> would get further if you simply state what you want to achieve instead
> of trying to put lipstick on this pig.
>
> 73's
> Richard Clark, KB7QHC
Richard

Fair enough. You used the "L" word.

I want to use this antenna for 30M but also for multiband use.
Thanks for correcting my fuzzy math.

I have read several articles that state inferiority of the OCF to the
dipole. Perhaps they are misunderestimating?

John
AB8O

2026. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 21:21:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6rdgc45bkd41nupvlc9nhh1lcuudc5ngl9@4ax.com>
Source record: 22700

On Wed, 10 Sep 2008 16:46:00 -0400, john Wiener <jawod@fuse.net>
wrote:

>I want to use this antenna for 30M but also for multiband use.
>Thanks for correcting my fuzzy math.
>
>I have read several articles that state inferiority of the OCF to the
>dipole. Perhaps they are misunderestimating?

Hi John,

You have a problem with too many references with too little knowledge,
I'm afraid. Of course my own posting could easily fulfill that
dilemma, but that doesn't stop me from proceeding.

First off, the OCF is a dipole. And here begins what would be a
pointless debate of semantics into the meaning, definition, and quest
for what a dipole "is." As a dipole, it simply has a different
feedpoint placement along its length.

As it happens, that same wire will resonate at very nearly every
harmonic no matter where it is tapped: in the conventional middle, or
to one side by whatever degree. What changes by shifting that point
is the match of resonance.

Over the course of time, some wag either brute forced worked it out,
did a model, or thought he measured it to demonstrate that a certain
sweet spot, in combination with a 4:1 BalUn produced an antenna that
was a most useful connection to a rig for little further tuning.

In some large part, that is true. The devil is in the details
however, and those details are rarely discussed by the sons of that
cult of worship. You may well already be aware that such an antenna
is prone to Common Mode problems (otherwise claimed as benefits by
those who couldn't solve them); and these problems are directly
attributable to the off center (or unbalanced) state. As truth be
known, nearly every dipole is unbalanced to some degree, so this OCF
is more so, and deliberately more so.

How do people reconcile using their own common dipole with its
unintended unbalance? Choking. Hence the same admonition goes with
the OCF, by that greater degree of "more so." Thus if you can
successfully choke it, the OCF could bring you all the claimed
virtues.

Now if you only knew the location of that sweet spot drive point....

If you got this far, we go to that length too.

73's
Richard Clark, KB7QHC

2027. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 21:39:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <L8Xxk.30$2D1.0@nlpi068.nbdc.sbc.com>
Source record: 22501

john Wiener wrote:
> I am putting up a Carolina Windom using ladderline ...

Technically, if you use ladderline (or twinlead) it
is not a "Carolina Windom" and also not a "Windom".

I ran such an off-center-fed dipole 57 years ago
at Texas A&M fed with 300 ohm twinlead and a 6:1
Heathkit balun at the DX-40. It worked very well.
--
73, Cecil http://www.w5dxp.com

2028. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 22:16:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga9gvt$8bh$1@news.albasani.net>
Source record: 22502

John Smith wrote:
> Thats why I live in California and practice the homoosexual way of
> life since I love little boys and hairy men. But I would do Nancy
> Pelosi push come to shove as I do my own momma when she is in heat,
> but I really prefer Arnold baby.

You certainly are!

You just are not me ... :-(Fool, I pity you, this is the best you have
to occupy your time ... sad, so sad ...

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2029. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 22:19:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga9h64$8bh$2@news.albasani.net>
Source record: 22503

Art Unwin wrote:
> On Sep 10, 11:14 am, John Smith <assemblywizz...@gmail.com> wrote:
>> Thats why I live in California and practice the homoosexual way of
>> life since I love little boys and hairy men. But I would do Nancy
>> Pelosi push come to shove as I do my own momma when she is in heat,
>> but I really prefer Arnold baby.
>
> What are you saying and why? You are not stupid at least not in my
> eyesArt

Art:

You deal with a fool which has a "few" computer skill and attempts "to be me", please look closer--you should be able to tell my posts from his/hers/its'/the-disgruntled-hams/the-aliens/etc.

Do you wish to give a fool such "powers", he/she/it has done it in the past--I always took it for granted you "guys" knew ...

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you have to use it.

2030. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 22:20:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga9h7n$8bh$3@news.albasani.net>
Source record: 22504

Michael Coslo wrote:

> ...
> John is being spoofed by someone - that really wasn't his post, Art.
>
> - 73 de Mike N3LI -

Thanks Mike, I owe ya one! :-)

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2031. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 22:23:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga9hck$8bh$4@news.albasani.net>
Source record: 22505

Jeff Liebermann wrote:
> On Wed, 10 Sep 2008 10:02:54 -0700 (PDT), Art Unwin
> <ArthurUnwin@gmail.com> wrote:
>
>> What are you saying and why? You are not stupid at least not in my
>> eyesArt
>
> It's a forgery. Reverse DNS of the IP address yields:
> dialup-4.255.242.103.Dial1.Atlanta1.Level3.net
>
> Well, we know he's in the Atlanta Georgia area. He's using Google
> Groups to post his forgeries. Google is terrible about responding to
> usenet related problems. If you want to persue it, you can probably
> email a complaint to his ISP at:
> abuse@level3.com

Thanks Jeff ... this guy/gal/it is a particular vile fool, I am ashamed
to have my posts even associated with its' ... :-(

We may choose to disagree, but such is below human conduct ...

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2032. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 22:30:11 UTC
From: dfinn1@nc.rr.com
Message-ID: <2554331f-0081-4dbc-b2fa-faea2407c2e6@y38g2000hsy.googlegroups.com>
Source record: 22506

On Sep 10, 12:14 pm, John Smith <assemblywizz...@gmail.com> wrote:
> Thats why I live in California and practice the homoosexual way of
> life since I love little boys and hairy men. But I would do Nancy
> Pelosi push come to shove as I do my own momma when she is in heat,
> but I really prefer Arnold baby.

John, your sexual orientation is not relevant to this group. Please
clean up your act.
Thank you.

2033. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 22:41:42 UTC
From: dfinn1@nc.rr.com
Message-ID: <47db078d-4bcd-4330-86db-cba013576215@f63g2000hsf.googlegroups.com>
Source record: 22507

On Sep 10, 3:11 pm, "JB" <nos...@goofball.net> wrote:
> <dfi...@nc.rr.com> wrote in message
>
> news:21608b39-06b8-4a29-975d-04294fee37f6@25g2000hsx.googlegroups.com...
> On Sep 9, 1:51 pm, "JB" <nos...@goofball.net> wrote:> "Cecil Moore" <nos...@w5dxp.com>
wrote in message
>
> >news:Mcwxk.40980$ZE5.16995@nlpi061.nbdc.sbc.com...
>
> > > JB wrote:
> > > > I used to work
> > > > Austrailia daily with 5 watts FM into a dipole DFQ.
>
> > > The 10m repeaters make it all the more interesting.
> > > --
> > > 73, Cecilhttp://www.w5dxp.com
>
> > You mean the QRM from co-channel repeaters in Australia, New York, Hawaii,
> > Virgin Islands, Florida and San Diego on the same PL? Gee, you could trash
> > a whole band with repeaters just so everyone could have their own
>
> kerchunk.
>
> Gosh, QRM on 10? Up on the FM side close to 30 where repeaters are
> used, which is hardly even used in the high portion of the cycle, I
> have never heard enough stations to cause QRM! In fact I have only
> heard just a few repeaters there since the early nineties.
>
> I guess your radio's numb then. When the sunspot cycle kicks in it happens
> every day. Skip causes way too much QRM because of PL duplication. It was
> bread and butter for the radio company because so many customers would
> complain and complain and complain about "other people using their
> frequency" and they couldn't block them out with the mic hanger. Lots of
> commercial users left low band FM for VHF and above because of that and
> because a gain antenna needs to be so big that they don't last a year at a
> repeater site. Ten and 11 meters is considered to be useless because the
> daytime absorption is so bad it limits range to worthless.   FCC made a
> mistake to put CB on 11 if they didn't mean for them to play skip. And if
> it weren't for modified CB's we wouldn't have a problem with interlopers at
> all. As far as I know, most of the Ham Bands are useless for commercial
> exploitation either because they are too small of a block like 220 was, or
> because they aren't in the propagation sweet spot for a particular usage.
> Hence, they are left to HAMS to experiment and toy with.
>

> That doesn't mean we shouldn't be vigilant and fight tooth and nail when
> some idiot tries to sell somebody onto our bands. The real shame is that we
> LET GO of half of 220 just because UPS asked for it, and because a bunch of
> newbie no-code techs that flooded 2 meters at the time had convinced
> themselves FCC might cut 2 meters if they couldn't have 220. They were even
> crying to "take 440 if you have to, just spare 2 meters".   If it weren't
> for that NOISE, the FCC might have simply denied the petition on
> recommendations from those in the know. So the Ham repeaters and control
> links that were on 220 either had to go away or move to 2 and 440 anyway.
> That was a boondoggle for everyone involved since most wanted to go to 800
> anyway. It's been a money LOSER for everyone that invested in it. Now Hams
> can't get it back because there are a few ACSSB systems still there that
> customers got stuck with.

How do we want to use 10m?

1. Use it all the time similar to 2m using repeaters and some simplex,
or
2. Use it for DX but only during solar peaks which may be present for
3-4 years out of every 11 year cycle?

There are plenty of illegit users on our highways who use it for 1.
above. Purist hams prefer 2..More of the illegits than purists! If we
abandon the band for 7-8 out of every 11 years, you can be sure
someone will try to take it away, Think of all the channels they could
add with an extra 2 MHz. Think of the added commerce for Galaxy, Cobra
and even Uniden at the truckstops across the USA. Truth be told, 10m
most of the time is more suited for 2m style operation than 20m style,
again, most of the time.

2034. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 22:45:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga9ilv$a4e$1@news.albasani.net>
Source record: 22508

dfinn1@nc.rr.com wrote:

> ...
> John, your sexual orientation is not relevant to this group. Please
> clean up your act.
> Thank you.

Gee, thanks, I'll attempt to remember your advice to my name-sake ...

However, I am happily married ... I don't think I have any particular
"sexual deviancies", but then--you should really ask the wife! :-P

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2035. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 22:53:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga9j5o$b25$1@news.albasani.net>
Source record: 22509

John Smith wrote:

> ...
> Gee, thanks, I'll attempt to remember your advice to my name-sake ...
>
> However, I am happily married ... I don't think I have any particular
> "sexual deviancies", but then--you should really ask the wife! :-P
>
> Regards,
> JS
>

But then, ya' never know, she might lie for me ... :-(

Heck, she might like it! (bet ya never thought about that!)

Yanno, I always thought her a bit more of a "sexual deviant" than myself
... ROFLOL!!! Get a clue ...

Sad, but then we are both quite boring. Really, you are probably better
off not inquiring into the wifes' and mine sexual relation ship ...
well, kind of! :-P

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2036. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-10 23:56:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7f6d431d-8a62-439d-88be-25b0517528a4@w7g2000hsa.googlegroups.com>
Source record: 22510

```
On Sep 10, 12:57 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Wed, 10 Sep 2008 10:02:54 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >What are you saying and why? You are not stupid at least not in my
> >eyesArt
>
> It's a forgery.  Reverse DNS of the IP address yields:
>   dialup-4.255.242.103.Dial1.Atlanta1.Level3.net
>
> Well, we know he's in the Atlanta Georgia area.  He's using Google
> Groups to post his forgeries.  Google is terrible about responding to
> usenet related problems.  If you want to persue it, you can probably
> email a complaint to his ISP at:
>   ab...@level3.com
>
> --
> Jeff Liebermann     je...@cruzio.com
> 150 Felker St #D    http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann     AE6KS    831-336-2558

Sounds like he is struggling from a sexual desease
of some sort. Some one who makes bad choices.
Isn't there a hospital for that in Atlanta?
```

2037. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 00:22:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga9obg$fu3$1@news.albasani.net>
Source record: 22511

Art Unwin wrote:

> ...
> Sounds like he is struggling from a sexual desease
> of some sort. Some one who makes bad choices.
> Isn't there a hospital for that in Atlanta?

Brother, don't come to California--and if you do, wait 'till you see
those guys with a "girlfriend" with a beard! ... luckily, that "disease"
mostly strikes San Francisco (the Gay Bay!) ;-)

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2038. I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 00:57:12 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <e63d391e-436c-4f19-bc34-ec634bafbcbe@m73g2000hsh.googlegroups.com>
Source record: 22512

as suggested by some under the thread "Ham or CB Antenna?". (the thread about picking up CB and/or ham transmissions through my stereo and TV's) and they did absolutely *nothing*.

As suggested, I bought a few and experimented with them on my HT (home theater) system first since that is my major concern. I bought 3 "big" filters that would fit on my large speaker leads. (L/F - CC - R/F speakers). I also bought 2 smaller filters that would fit on the receiver and main power amp AC cords.

At first I placed one filter on each speaker at the speaker input and a filter on each AC cord (one on the receiver and one on the main power amp) No change

So then I moved the filters to the amp/receivers outputs. No change.

Then I disconnected the RF and CC speakers placed 2 filters at the LF speakers input. No change. Put one filter at the LF speaker input and one at the amps output. No change. Placed all three of the filters on the LF speaker lead. No change.

And when I say no change, there is absolutely NO drop in the transmission audio that I'm picking up.

So, now what?

AFA my TV's, the only TV that wasn't being effected (horizontal lines on certain channels) was my big screen that is hooked up to my home theater system. After some experimentation, the reason it's not being effected is because it is hooked up to a digital cable box. So, I shelled out the extra bucks per month for a digital box for the TV in my master bedroom. Can't afford boxes for the other two TV's.

Also, as a few of you mentioned, I do now believe that the person that is transmitting is in fact using a CB and a ham. I believe that I'm picking up his CB transmissions, and not his ham transmissions.

I NEVER hear his call letters. He's now using profanity on occasion. He sings to himself for 5 minutes at a time. Tonight he was telling "nigger" jokes. And he has now added some kind of device that allows him to transmit his voice with an echoing effect.

Anyway, all help will be greatly appreciated. I believe someone asked if I was in the US, yes I am.

2039. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 01:05:09 UTC
From: jawod <jawod@fuse.net>
Message-ID: <48C86EC5.7020602@fuse.net>
Source record: 22513

> Hi John,
>
> You have a problem with too many references with too little knowledge,

You talkin' to ME?

> I'm afraid.

I thought so.

Of course my own posting could easily fulfill that
> dilemma, but that doesn't stop me from proceeding.
>
> First off, the OCF is a dipole. And here begins what would be a
> pointless debate of semantics into the meaning, definition, and quest
> for what a dipole "is." As a dipole, it simply has a different
> feedpoint placement along its length.
>
> As it happens, that same wire will resonate at very nearly every
> harmonic no matter where it is tapped: in the conventional middle, or
> to one side by whatever degree. What changes by shifting that point
> is the match of resonance.
>
> Over the course of time, some wag

(I would assume that would be Windom)

>
> In some large part, that is true. The devil is in the details
> however, and those details are rarely discussed by the sons of that
> cult of worship. You may well already be aware that such an antenna
> is prone to Common Mode problems (otherwise claimed as benefits by
> those who couldn't solve them); and these problems are directly
> attributable to the off center (or unbalanced) state. As truth be
> known, nearly every dipole is unbalanced to some degree, so this OCF
> is more so, and deliberately more so.
>
> How do people reconcile using their own common dipole with its
> unintended unbalance? Choking. Hence the same admonition goes with
> the OCF, by that greater degree of "more so." Thus if you can
> successfully choke it, the OCF could bring you all the claimed
> virtues.
>
> Now if you only knew the location of that sweet spot drive point....
>
> If you got this far, we go to that length too.

Gee, I think I follow, professor. Do tell.
>
> 73's
> Richard Clark, KB7QHC

Appreciate the warning about choking beyond the balun. Ferrite beads
come to mind...easy and I don't like "wasting" cable in coils but I'll
do it if necessary.

73

John
AB8O

2040. Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 01:16:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <78c87ca6-2be0-46bd-b84c-0cc59a30c691@l43g2000hsh.googlegroups.com>
Source record: 22514

What is the main factor that prevents HF radiation from focussing
for extra gain?

2041. Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 01:16:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ba76e79c-3df7-4890-8cca-38f8c2d37c76@z66g2000hsc.googlegroups.com>
Source record: 22515

What is the main factor that prevents HF radiation from focussing
for extra gain?

2042. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 01:18:24 UTC
From: jawod <jawod@fuse.net>
Message-ID: <48C871E0.1020901@fuse.net>
Source record: 22516

Cecil Moore wrote:
> john Wiener wrote:
>
>> I am putting up a Carolina Windom using ladderline ...
>
>
> Technically, if you use ladderline (or twinlead) it
> is not a "Carolina Windom" and also not a "Windom".
>
> I ran such an off-center-fed dipole 57 years ago
> at Texas A&M fed with 300 ohm twinlead and a 6:1
> Heathkit balun at the DX-40. It worked very well.

Hi Cecil,

Thanks for that report.
Amazing how many different views there are of the Windom.

According to one source (K4IWL, Carlson):

Original Windom is a single wire feed OCF dipole

Carolina Windom is a twin lead OCF dipole with balun below the twin lead segment

New Carolina Windom is a OCF dipole to a 4:1 balun and a short coax length followed by a 1:1 unun (choke)

Each using a .378/.622 OCF feedpoint.

I think I'll just call mine the Wiener Dipole and be done with it :)

John
AB8O

2043. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 01:29:48 UTC
From: dfinn1@nc.rr.com
Message-ID: <6698c885-d01b-4f0e-a9c5-fac8dbb6886c@34g2000hsh.googlegroups.com>
Source record: 22517

On Sep 10, 6:53 pm, John Smith <assemblywiz...@gmail.com> wrote:

> Sad, but then we are both quite boring. Really, you are probably better
> off not inquiring into the wifes' and mine sexual relation ship ...
> well, kind of! :-P
>
> Regards,
> JS

Again, your personal activities within the privacy of your own home is
none of our business and has nothing to do with antennas, or so I
would assume.

2044. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 01:45:07 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <bn9mp5-oga.ln1@mail.specsol.com>
Source record: 22519

Art Unwin <ArthurUnwin@gmail.com> wrote:
> What is the main factor that prevents HF radiation from focussing
> for extra gain?

Money.

If you can afford to build a 20m parabola about 2,000 feet in diameter
and the place to mount it, you'll get lots of gain.

--
Jim Pennino

Remove .spam.sux to reply.

2045. Re: I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 01:54:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ga9tojljv1@news.albasani.net>
Source record: 22520

DES wrote:

>> ...
> Anyway, all help will be greatly appreciated. I believe someone asked
> if I was in the US, yes I am.

OK. What "really did work" for me in the past. A 100Mh choke in series with the "hot" speaker lead and with a 500pf cap across the leads just before entering the amp/receiver "box."

If RF is also encountered on your phone lines, a 0.01 cap across the leads at the "head piece", or ear phone unit of the phone ... if the rf is of a VERY HIGH LEVEL, the 100mh choke, alone with the cap, do it ...

NO crap, just what I found worked when I live next to a "high powered "CB'er", you mileage may vary ...

And, I know, these are cheap and dirty fixes, but THEY WORKED!

Cheap, unshielded leads/audio-amps are HIGHLY influenced by RF ... you get what you pay for. But then, you still have to fix the problem. :-(

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you have to use it.

2046. Re: I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 01:57:09 UTC
From: Danny Richardson <>
Message-ID: <8jugc498bnl04konsjui7f03h9dub06r25@4ax.com>
Source record: 22521

On Wed, 10 Sep 2008 17:57:12 -0700 (PDT), DES <BigELilE05@msn.com>
wrote:

[snip]
>
>Anyway, all help will be greatly appreciated. I believe someone asked
>if I was in the US, yes I am.
>
>

You can get a lot of good information that should help you here:

http://audiosystemsgroup.com/RFI-Ham.pdf

2047. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 02:23:31 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <24225873-e6a8-4e7c-984c-0d2178330531@e39g2000hsf.googlegroups.com>
Source record: 22522

On Sep 10, 8:45 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > What is the main factor that prevents HF radiation from focussing
> > for extra gain?
>
> Money.
>
> If you can afford to build a 20m parabola about 2,000 feet in diameter
> and the place to mount it, you'll get lots of gain.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Then are you saying it is the antenna size that is the main factor?.
So my antenna which is physically small
can be focussed on a dish which would provide straight line radiation
or a radiation beam?
Working on a single element on the ground with a optimizer instead of
a half sphere I got a
straight vertical line at the sides which suggested a gun barrel
radiation with a perfect earth as the reflector.
Gain was around 8db vertical which is why the question regarding
focussing! If it was properly focussed the gain should be more.
2000 foot dish seems somewhat odd, probably based on a "straight"
wavelength and not a small volume in equilibriumas the directer
right?
Art

2048. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 02:29:16 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6caed76d-8d27-42e0-901d-ae1572933ba5@r66g2000hsg.googlegroups.com>
Source record: 22523

On Sep 10, 9:23 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 10, 8:45 pm, j...@specsol.spam.sux.com wrote:
>
> > Art Unwin <ArthurUn...@gmail.com> wrote:
> > > What is the main factor that prevents HF radiation from focussing
> > > for extra gain?
>
> > Money.
>
> > If you can afford to build a 20m parabola about 2,000 feet in diameter
> > and the place to mount it, you'll get lots of gain.
>
> > --
> > Jim Pennino
>
> > Remove .spam.sux to reply.
>
> Then are you saying it is the antenna size that is the main factor?.
> So my antenna which is physically small
> can be focussed on a dish which would provide straight line radiation
> or a radiation beam?
> Working on a single element on the ground with a optimizer instead of
> a half sphere I got a
> straight vertical line at the sides which suggested a gun barrel
> radiation with a perfect earth as the reflector.
> Gain was around 8db vertical which is why the question regarding
> focussing! If it was properly focussed the gain should be more.
> 2000 foot dish seems somewhat odd, probably based on a "straight"
> wavelength and not a small volume in equilibriumas the directer
> right?
> Art

Let me ask the question another way. Whether it is believed or not,
if a 80 Metre antenna was compressed to the size of a couple of shoe
boxes
would the dish be reduced in size accordingly?
Regagards
Art

2049. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 02:39:01 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <QsWdnfBgd8ru61XVnZ2dnUVZ_sLinZ2d@earthlink.com>
Source record: 22518

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:ba76e79c-3df7-4890-8cca-38f8c2d37c76@z66g2000hsc.googlegroups.com...
> What is the main factor that prevents HF radiation from focussing
> for extra gain?

HF can be focused for gain. Main factor is that it takes a big antenna to
focus a signal on 3.5 MHz or so. Even a 2 or 3 element beam is too large
for most people , but it has been done.
To get any gain from a dish at that frequency would take a dish larger than
400 to 500 feet in diameter, maybe much larger. Hard to put that up a
tower.

2050. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 03:05:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <h9emp5-2im.ln1@mail.specsol.com>
Source record: 22524

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Sep 10, 8:45?pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > What is the main factor that prevents HF radiation from focussing
>> > for extra gain?
>>
>> Money.
>>
>> If you can afford to build a 20m parabola about 2,000 feet in diameter
>> and the place to mount it, you'll get lots of gain.
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> Then are you saying it is the antenna size that is the main factor?.

Of course.

Everyone knows the gain of a parabola is directly proportional to
the size in wavelengths, or:

G=10*log k(pi*D/L)^2

Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
D is the diameter, and L is the wavelength (wavelength and diameter
in the same units.

So a 2,000 foot parabola on 20m would have just about 58db gain.

--
Jim Pennino

Remove .spam.sux to reply.

2051. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 03:16:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <XuSdnUWbMpI8EFXVnZ2dnUVZ_vninZ2d@posted.easystreetonline>
Source record: 22525

jimp@specsol.spam.sux.com wrote:
>
> Of course.
>
> Everyone knows the gain of a parabola is directly proportional to
> the size in wavelengths, or:
>
> G=10*log k(pi*D/L)^2
>
> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
> D is the diameter, and L is the wavelength (wavelength and diameter
> in the same units.
>
> So a 2,000 foot parabola on 20m would have just about 58db gain.
>

Hm. I get 47.

Roy Lewallen, W7EL

2052. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 03:56:41 UTC
From: dfinn1@nc.rr.com
Message-ID: <f7b8ab40-b704-493b-9f25-ba95c5273b71@e39g2000hsf.googlegroups.com>
Source record: 22526

On Sep 10, 10:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 10, 9:23 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
>
>
> > On Sep 10, 8:45 pm, j...@specsol.spam.sux.com wrote:
>
> > > Art Unwin <ArthurUn...@gmail.com> wrote:
> > > > What is the main factor that prevents HF radiation from focussing
> > > > for extra gain?
>
> > > Money.
>
> > > If you can afford to build a 20m parabola about 2,000 feet in diameter
> > > and the place to mount it, you'll get lots of gain.
>
> > > --
> > > Jim Pennino
>
> > > Remove .spam.sux to reply.
>
> > Then are you saying it is the antenna size that is the main factor?.
> > So my antenna which is physically small
> > can be focussed on a dish which would provide straight line radiation
> > or a radiation beam?
> > Working on a single element on the ground with a optimizer instead of
> > a half sphere I got a
> > straight vertical line at the sides which suggested a gun barrel
> > radiation with a perfect earth as the reflector.
> > Gain was around 8db vertical which is why the question regarding
> > focussing! If it was properly focussed the gain should be more.
> > 2000 foot dish seems somewhat odd, probably based on a "straight"
> > wavelength and not a small volume in equilibriumas the directer
> > right?
> > Art
>
> Let me ask the question another way. Whether it is believed or not,
> if a 80 Metre antenna was compressed to the size of a couple of shoe
> boxes
> would the dish be reduced in size accordingly?
> Regagards
> Art- Hide quoted text -

>
> - Show quoted text -

No. The shoebox size antenna would approximate an isotropic if it did radiate. It would still have to be placed at the focal point of a very large parabola due to the size of the wave length. Such an antenna, I believe, on the island of Puerto Rico (the SETI antenna) although it is currently used primarily as a receiving antenna. That parabola is positioned to have a very high radiation angle and might not be be that good for terrestrial DX.

2053. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 04:45:05 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <t7kmp5-rtb.ln1@mail.specsol.com>
Source record: 22527

Roy Lewallen <w7el@eznec.com> wrote:
> jimp@specsol.spam.sux.com wrote:
>>
>> Of course.
>>
>> Everyone knows the gain of a parabola is directly proportional to
>> the size in wavelengths, or:
>>
>> G=10*log k(pi*D/L)^2
>>
>> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
>> D is the diameter, and L is the wavelength (wavelength and diameter
>> in the same units.
>>
>> So a 2,000 foot parabola on 20m would have just about 58db gain.
>>
>
> Hm. I get 47.
>
> Roy Lewallen, W7EL

Hmm, when I use 14 Mhz and 6 decimal places I get 37; must have fat
fingered it the first time.

Working backward from 47 I get a wavelength of 21 feet.

--
Jim Pennino

Remove .spam.sux to reply.

2054. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 05:52:46 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <8n2yk.22605$uE5.15329@flpi144.ffdc.sbc.com>
Source record: 22528

dfinn1@nc.rr.com wrote:
> On Sep 10, 10:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>> On Sep 10, 9:23 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>>
>>
>>
>>
>>
>>> On Sep 10, 8:45 pm, j...@specsol.spam.sux.com wrote:
>>>> Art Unwin <ArthurUn...@gmail.com> wrote:
>>>>> What is the main factor that prevents HF radiation from focussing
>>>>> for extra gain?
>>>> Money.
>>>> If you can afford to build a 20m parabola about 2,000 feet in diameter
>>>> and the place to mount it, you'll get lots of gain.
>>>> --
>>>> Jim Pennino
>>>> Remove .spam.sux to reply.
>>> Then are you saying it is the antenna size that is the main factor?.
>>> So my antenna which is physically small
>>> can be focussed on a dish which would provide straight line radiation
>>> or a radiation beam?
>>> Working on a single element on the ground with a optimizer instead of
>>> a half sphere I got a
>>> straight vertical line at the sides which suggested a gun barrel
>>> radiation with a perfect earth as the reflector.
>>> Gain was around 8db vertical which is why the question regarding
>>> focussing! If it was properly focussed the gain should be more.
>>> 2000 foot dish seems somewhat odd, probably based on a "straight"
>>> wavelength and not a small volume in equilibriumas the directer
>>> right?
>>> Art
>> Let me ask the question another way. Whether it is believed or not,
>> if a 80 Metre antenna was compressed to the size of a couple of shoe
>> boxes
>> would the dish be reduced in size accordingly?
>> Regagards
>> Art- Hide quoted text -
>>
>> - Show quoted text -
>
> No. The shoebox size antenna would approximate an isotropic if it did
> radiate. It would still have to be placed at the focal point of a very
> large parabola due to the size of the wave length. Such an antenna, I

> believe, on the island of Puerto Rico (the SETI antenna) although it
> is currently used primarily as a receiving antenna. That parabola is
> positioned to have a very high radiation angle and might not be be
> that good for terrestrial DX.
>

Actually that is the Arecibo Puerto Rico Radio Astronomy Telescope. The
SETI project used it for a while but now has it's own antenna farm in
the US Southwest.

Dave N

2055. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 06:58:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kbghc4lrgs2h72j0p47ps7s0eioqppojqq@4ax.com>
Source record: 22529

On Wed, 10 Sep 2008 21:05:09 -0400, jawod <jawod@fuse.net> wrote:

>Gee, I think I follow, professor. Do tell.
>73
>
>John
>AB8O

Hi John,

This (attached) should give you some sense of the rich variation of matching opportunities for the same length of wire under variations of tapping it with a drivepoint. The complexity of that data eludes simple discussion.

73's
Richard Clark, KB7QHC

2056. Re: I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 07:08:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6mghc4ls89q7vdp8j4b2tthahaijtjevh7@4ax.com>
Source record: 22530

On Wed, 10 Sep 2008 17:57:12 -0700 (PDT), DES <BigELilE05@msn.com>
wrote:

>So, now what?

It sounds like you passed the audio cables through the center once in any of your various experiments. Try as many runs (wraps) through the center as you can manage. The effect goes by the square of the number of turns. That is, if one pass through is barely noticeable (yes, I am aware you noticed nothing) then 5 passes through the center will give you 25 times that effect.

You've already done the hard part of obtaining the ferrites, going these steps further is fairly simple.

73's
Richard Clark, KB7QHC

2057. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 07:53:23 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mtzcndsp8.fsf@persaunet.uninett.no>
Source record: 22531

jimp@specsol.spam.sux.com writes:

> Roy Lewallen <w7el@eznec.com> wrote:
>> jimp@specsol.spam.sux.com wrote:
>>>
>>> Of course.
>>>
>>> Everyone knows the gain of a parabola is directly proportional to
>>> the size in wavelengths, or:
>>>
>>> G=10*log k(pi*D/L)^2
>>>
>>> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
>>> D is the diameter, and L is the wavelength (wavelength and diameter
>>> in the same units.
>>>
>>> So a 2,000 foot parabola on 20m would have just about 58db gain.
>>>
>>
>> Hm. I get 47.
>>
>> Roy Lewallen, W7EL
>
> Hmm, when I use 14 Mhz and 6 decimal places I get 37; must have fat
> fingered it the first time.

Going a different way, I also get about 37.

Aperture of a dish is the area, pi*r^2. r is about 14.2 wl, so area
is about 635 sq. wl.

Aperture of a dipole is 1/4 * 1/2 wl = 1/8 sq. wl.

That makes gain 635/(1/8) = 635*8, i.e about 5100 or just over 37
dBd. This assumes 100 % illumination of the dish, which we won't
achieve. So make it 35 dBd or so, i.e. 37 dBi. Using the o.p.'s
formula, I get 36.5 dBi.

It's odd that pi is squared in the formula. The squared part must be
to account for the area of the dish, which is pi*r^2. Obviously, this
can has been compensated for by the choice of 'k'.

2058. Re: I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 07:56:00 UTC
From: DES <BigELilE05@msn.com>
Message-ID: <9a8250a6-780f-49e3-8033-b215c105d130@a70g2000hsh.googlegroups.com>
Source record: 22532

On Sep 11, 3:08 am, Richard Clark <kb7...@comcast.net> wrote:
> On Wed, 10 Sep 2008 17:57:12 -0700 (PDT), DES <BigELil...@msn.com>
> wrote:
>
> >So, now what?
>
> It sounds like you passed the audio cables through the center once in
> any of your various experiments. Try as many runs (wraps) through the
> center as you can manage. The effect goes by the square of the number
> of turns. That is, if one pass through is barely noticeable (yes, I
> am aware you noticed nothing) then 5 passes through the center will
> give you 25 times that effect.
>
> You've already done the hard part of obtaining the ferrites, going
> these steps further is fairly simple.
>
> 73's
> Richard Clark, KB7QHC

It can only go through the center once. It is a clam type "filter"
that snaps in place. This is the type that I bought

http://rocky.digikey.com/weblib/Steward/New%20photos/28A0592-0A2.jpg

What kind of filters are you talking about?

2059. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 08:02:14 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mprnbdsah.fsf@persaunet.uninett.no>
Source record: 22533

dfinn1@nc.rr.com writes:

> On Sep 10, 10:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>> No. The shoebox size antenna would approximate an isotropic if it did
> radiate. It would still have to be placed at the focal point of a very
> large parabola due to the size of the wave length. Such an antenna, I
> believe, on the island of Puerto Rico (the SETI antenna) although it
> is currently used primarily as a receiving antenna. That parabola is
> positioned to have a very high radiation angle and might not be be
> that good for terrestrial DX.

I believe that hams once were allowed to use Arecibo for EME on 80m.

2060. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 08:21:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <DfmdnZGPa8maSFXVnZ2dnUVZ_qfinZ2d@posted.easystreetonline>
Source record: 22534

[Slaps self upside the head] 47 dB for a 2000 meter dish, 37 dB for a 2000 foot dish. And that's why I didn't choose bridge design for a career. . .

Roy Lewallen, W7EL

jimp@specsol.spam.sux.com wrote:
> Roy Lewallen <w7el@eznec.com> wrote:
>> jimp@specsol.spam.sux.com wrote:
>>> Of course.
>>>
>>> Everyone knows the gain of a parabola is directly proportional to
>>> the size in wavelengths, or:
>>>
>>> G=10*log k(pi*D/L)^2
>>>
>>> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
>>> D is the diameter, and L is the wavelength (wavelength and diameter
>>> in the same units.
>>>
>>> So a 2,000 foot parabola on 20m would have just about 58db gain.
>>>
>> Hm. I get 47.
>>
>> Roy Lewallen, W7EL
>
> Hmm, when I use 14 Mhz and 6 decimal places I get 37; must have fat
> fingered it the first time.
>
> Working backward from 47 I get a wavelength of 21 feet.
>
>

2061. Re: I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 09:51:45 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <evC1QafxoOyIFwrm@g3ohx.demon.co.uk>
Source record: 22535

In message
<9a8250a6-780f-49e3-8033-b215c105d130@a70g2000hsh.googlegroups.com>, DES
<BigELilE05@msn.com> writes
>On Sep 11, 3:08ï¿½am, Richard Clark <kb7...@comcast.net> wrote:
>> On Wed, 10 Sep 2008 17:57:12 -0700 (PDT), DES <BigELil...@msn.com>
>> wrote:
>>
>> >So, now what?
>>
>> It sounds like you passed the audio cables through the center once in
>> any of your various experiments. ï¿½Try as many runs (wraps) through the
>> center as you can manage. ï¿½The effect goes by the square of the number
>> of turns. ï¿½That is, if one pass through is barely noticeable (yes, I
>> am aware you noticed nothing) then 5 passes through the center will
>> give you 25 times that effect.
>>
>> You've already done the hard part of obtaining the ferrites, going
>> these steps further is fairly simple.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>It can only go through the center once. It is a clam type "filter"
>that snaps in place. This is the type that I bought
>
>http://rocky.digikey.com/weblib/Steward/New%20photos/28A0592-0A2.jpg
>
>What kind of filters are you talking about?
>

When dealing with problems of interference, it is best not simply to
'throw filters at it'. It might work, but a slightly more analytical and
diagnostic approach is usually more effective. From the original
postings (a couple of weeks ago), it would seem the OP has no expertise
in radio and electronics. I was therefore rather surprised when most of
the advice was 'go out and buy some filters, and fit them'.

However, the first mistake is when the OP adopted an adversarial
approach to his neighbour. Usually, the person causing the interference
is (a) initially unaware of the problem and (b) technically not at
fault. The diagnosis and successful elimination of the interference
often relies on the close co-operation of the two parties. The radio
amateur (or CBer) concerned may already be experienced in curing such
problems. There is now little chance of there being much co-operation.
Maybe a bottle of Jack Daniels might help?

Getting back to technicalities...
With a normal stereo hi-fi system, the most common cause of interference is that the speaker leads act as a dipole receiving antenna. Fitting ferrite chokes only works if they have sufficient inductance to kill the interfering RF currents. As suggested, a single turn through a snap-on ferrite is unlikely to provide much inductance and, because of the small hole, it is usually difficult to add more turns. [In fact, when I see these chokes already fitted to new equipment, I feel that they are more cosmetic than functional.] What really should have been used is the larger type of ferrite ring core (typically around 1.5" diameter, 0.5" long, with a 1" diameter hole). This is easy to wind with many turns of wire. [For optimum effect, it is useful to know which frequency (or frequencies) are causing the interference, as this may influence the choice of ferrite material and number of turns required. I'm sure that others will provide references and links to the relevant information.]

Of course, it is also possible that the interfering signal is NOT being picked up on the speaker leads. If this is the case, chokes on the leads are not going to help at all. You might need a choke on the power lead instead, or on both the power lead and the speaker leads. [Of course, you should usually fit the filters at the amplifier end of the leads.]

However, as I said, before throwing 'filters' at the problem, you should first have carried out a few simple diagnostic checks. These might include:
*Is there interference if I unplug the loudspeakers, and listen on headphones?
*Can I hear interference even when the equipment is switched off (honestly!)?
*Do the volume control (and other controls) affect the level of the interference?
*Is there interference if I unplug all external inputs?
The results of these simple tests may give a pretty good clue as to where the interference is getting into the audio equipment.

I do feel that the OP should try to enlist the help of the his interfering neighbour (JD?). Failing that, maybe some local radio amateurs may be prepared to help. However, he must remember that it is almost certainly HIS equipment which is 'at fault', and not the person 'causing' the interference. Indignation won't help at all.
--
Ian.

2062. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 11:25:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <jc7yk.9688$cn7.371@flpi145.ffdc.sbc.com>
Source record: 22536

jawod wrote:
> Original Windom is a single wire feed OCF dipole

A "dipole" is usually two wires with an insulator between
them. The original Windom was a single wire fed with a
single wire against ground. It's radiation was primarily
vertically polarized. The horizontal wire acted more like
a top hat than a dipole.

> Carolina Windom is a twin lead OCF dipole with balun below the twin lead
> segment

This is one I was ignorant of - sorry.

> New Carolina Windom is a OCF dipole to a 4:1 balun and a short coax
> length followed by a 1:1 unun (choke)

I didn't know the present one is a "New" one. My
apologies for my ignorance of the Carolina Windom
history.

P.S. IMO, they should not have called it a "Windom".
--
73, Cecil http://www.w5dxp.com

2063. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 11:28:01 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <pe7yk.9689$cn7.649@flpi145.ffdc.sbc.com>
Source record: 22537

jimp@specsol.spam.sux.com wrote:
> If you can afford to build a 20m parabola about 2,000 feet in diameter
> and the place to mount it, you'll get lots of gain.

Is there any kind of material from which to build
a 14.2 MHz Maser? :-)
--
73, Cecil http://www.w5dxp.com

2064. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 11:38:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Tn7yk.9690$cn7.2749@flpi145.ffdc.sbc.com>
Source record: 22538

jimp@specsol.spam.sux.com wrote:
> So a 2,000 foot parabola on 20m would have just about 58db gain.

Arecibo? :-)
--
73, Cecil http://www.w5dxp.com

2065. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 12:20:58 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <5edb522d-2687-4181-a1f3-0c984404ed0b@d45g2000hsc.googlegroups.com>
Source record: 22539

On Sep 10, 11:56 pm, dfi...@nc.rr.com wrote:
> On Sep 10, 10:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
>
>
> > On Sep 10, 9:23 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > > On Sep 10, 8:45 pm, j...@specsol.spam.sux.com wrote:
>
> > > > Art Unwin <ArthurUn...@gmail.com> wrote:
> > > > > What is the main factor that prevents HF radiation from focussing
> > > > > for extra gain?
>
> > > > Money.
>
> > > > If you can afford to build a 20m parabola about 2,000 feet in diameter
> > > > and the place to mount it, you'll get lots of gain.
>
> > > > --
> > > > Jim Pennino
>
> > > > Remove .spam.sux to reply.
>
> > > Then are you saying it is the antenna size that is the main factor?.
> > > So my antenna which is physically small
> > > can be focussed on a dish which would provide straight line radiation
> > > or a radiation beam?
> > > Working on a single element on the ground with a optimizer instead of
> > > a half sphere I got a
> > > straight vertical line at the sides which suggested a gun barrel
> > > radiation with a perfect earth as the reflector.
> > > Gain was around 8db vertical which is why the question regarding
> > > focussing! If it was properly focussed the gain should be more.
> > > 2000 foot dish seems somewhat odd, probably based on a "straight"
> > > wavelength and not a small volume in equilibriumas the directer
> > > right?
> > > Art
>
> > Let me ask the question another way. Whether it is believed or not,
> > if a 80 Metre antenna was compressed to the size of a couple of shoe
> > boxes
> > would the dish be reduced in size accordingly?

> > Regagards
> > Art- Hide quoted text -
>
> > - Show quoted text -
>
> No. The shoebox size antenna would approximate an isotropic if it did
> radiate. It would still have to be placed at the focal point of a very
> large parabola due to the size of the wave length. Such an antenna, I
> believe, on the island of Puerto Rico (the SETI antenna) although it
> is currently used primarily as a receiving antenna. That parabola is
> positioned to have a very high radiation angle and might not be be
> that good for terrestrial DX.- Hide quoted text -
>
> - Show quoted text -

Is it possible to ploink threads based on the person who starts them?

Jimmie

2066. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 13:18:14 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <40dce489-db73-4191-9de9-f18533dd3d6c@z66g2000hsc.googlegroups.com>
Source record: 22540

On Sep 11, 2:53 am, Jon Kåre Hellan <d...@null.com> wrote:
> j...@specsol.spam.sux.com writes:
> > Roy Lewallen <w...@eznec.com> wrote:
> >> j...@specsol.spam.sux.com wrote:
>
> >>> Of course.
>
> >>> Everyone knows the gain of a parabola is directly proportional to
> >>> the size in wavelengths, or:
>
> >>> G=10*log k(pi*D/L)^2
>
> >>> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
> >>> D is the diameter, and L is the wavelength (wavelength and diameter
> >>> in the same units.
>
> >>> So a 2,000 foot parabola on 20m would have just about 58db gain.
>
> >> Hm. I get 47.
>
> >> Roy Lewallen, W7EL
>
> > Hmm, when I use 14 Mhz and 6 decimal places I get 37; must have fat
> > fingered it the first time.
>
> Going a different way, I also get about 37.
>
> Aperture of a dish is the area, pi*r^2. r is about 14.2 wl, so area
> is about 635 sq. wl.
>
> Aperture of a dipole is 1/4 * 1/2 wl = 1/8 sq. wl.
>
> That makes gain 635/(1/8) = 635*8, i.e about 5100 or just over 37
> dBd. This assumes 100 % illumination of the dish, which we won't
> achieve. So make it 35 dBd or so, i.e. 37 dBi. Using the o.p.'s
> formula, I get 36.5 dBi.
>
> It's odd that pi is squared in the formula. The squared part must be
> to account for the area of the dish, which is pi*r^2. Obviously, this
> can has been compensated for by the choice of 'k'.

Whoaaa guys.....!

Let us think a bit more regarding the basics presented instead of
parrotting

dish's as used in the present state of the art.
Isn't a dish built around phase change of a half wave dipole in inter
magnetic coupling?
If I have a flash light that is focussed does this wavelength aproach
still apply?
I thought it would be a question of action and reaction. Trow a ball
against the wall and it bounces back
in a reflective manner to the angle of velocity.
A dish as presently used changes the phase of a given signal to
reverse it's direction.
In physics we can also talk about mechanical force that rebound and
rebound has nothing to do
with wavelength! If we consider radiation as being the projection
of particles instead of wavelike oscillation
then surely the size of the reflector is solely based on what can be
collected from the
emmitter such that it rebounds to a point or a focussed form ?
I ask the question as I know nothing about the reflective phenomina
of dish's tho I have visited
the one in P.R. where the dish is formed with the knoweledge that the
radiation spreads out
according to the emmiter used and thus when it reaches the reflector
the unit strength is weaker which the
dish attempts to reverse by refocussing. But then I could be totally
in error thus the question to the experts
Best regards
Art Unwin KB9MZ
.

2067. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 13:32:20 UTC
From: jawod <jawod@fuse.net>
Message-ID: <7ecbe$48c916bb$4ad7b981$18431@FUSE.NET>
Source record: 22541

Richard Clark wrote:
> On Wed, 10 Sep 2008 21:05:09 -0400, jawod <jawod@fuse.net> wrote:
>
>
>>Gee, I think I follow, professor. Do tell.
>>73
>>
>>John
>>AB8O
>
>
> Hi John,
>
> This (attached) should give you some sense of the rich variation of
> matching opportunities for the same length of wire under variations of
> tapping it with a drivepoint. The complexity of that data eludes
> simple discussion.
>
> 73's
> Richard Clark, KB7QHC

Thanks for your help Richard. Always enjoy your posts.
BTW this one had no attachments (on my end anyway)

73

John
AB8O

2068. Re: Carolina Windom using 300 ohm ladderline

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 15:02:16 UTC
From: John Passaneau <w3jxp@arrl.net>
Message-ID: <Xns9B167054C84CFjxp16psuedu@128.118.141.40>
Source record: 22542

Cecil Moore <nospam@w5dxp.com> wrote in
news:jc7yk.9688$cn7.371@flpi145.ffdc.sbc.com:

> jawod wrote:
>> Original Windom is a single wire feed OCF dipole
>
> A "dipole" is usually two wires with an insulator between
> them. The original Windom was a single wire fed with a
> single wire against ground. It's radiation was primarily
> vertically polarized. The horizontal wire acted more like
> a top hat than a dipole.
>
>> Carolina Windom is a twin lead OCF dipole with balun below the twin
>> lead segment
>
> This is one I was ignorant of - sorry.
>
>> New Carolina Windom is a OCF dipole to a 4:1 balun and a short coax
>> length followed by a 1:1 unun (choke)
>
> I didn't know the present one is a "New" one. My
> apologies for my ignorance of the Carolina Windom
> history.
>
> P.S. IMO, they should not have called it a "Windom".

Just to add to that, the idea behind the twin lead is that it is supposed to give some vertical radiation to "fill" in the holes in the pattern cause by the antenna being longer than a half wave at 20m and above. Seems like a not so good idea to me. I like the OCF dipole. I've had good luck with them. But they are not a "Holy Grail" antenna, just one more tool to solve the problem of what antenna to fill a need with. Also the ones I've built and modeled do not work well on 30m or it lest they need a wide range tuner rather than one that's built into the radio. One of the other myths is that OCF's don't need a tuner. On most bands they do.

John Passaneau W3JXP

2069. Translate Smith-Chart statement to English?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 15:06:42 UTC
From: "Myron A. Calhoun" <mcalhoun@ksu.edu>
Message-ID: <b29b723c-5c39-41a0-b39a-1c893fa70e89@l43g2000hsh.googlegroups.com>
Source record: 22543

I recently bought an automatic tuner (I know, I know; I wasted my money since manual tuners are so easy to build) which could supposedly tune "8-1000" ohms resistance. I first asked the manufacturer if maybe they meant "impedance", and they replied "Yes, thanks for the correction". That lead to a followup question:

(NOTE: My keyboard doesn't have keys for "plus or minus" or "square root" so I'll use "#" and "SQRT()", respectively.)

"Does '8-1000 ohms impedance' include ALL COMBINATIONS of #X#jY SUCH THAT SQRT (Xsquare + Ysquare) is in the range of 8 to 1000 (such as #8+j0 to #1000+j0 and 0#j8 to 0#j1000), or are there some "holes" in coverage?"

Their response was:

" We use the polar coordinate system and it covers all phase angles at 14 MHz. Obviously, plotted on a smith chart you would see the range decrease as you depart from 14 MHz."

I haven't used a Smith Chart since I was first introduced to them in college (1963!-() Could someone please translate their response to simple English that I can understand. In particular, what range of impedances might their tuner cover on 80 meters? 40 meters? 15 meters? 10 meters?

2070. Re: I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 15:27:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mjdic4p4ns3anrnph3sdsdc30ma96ikm65@4ax.com>
Source record: 22544

On Thu, 11 Sep 2008 00:56:00 -0700 (PDT), DES <BigELilE05@msn.com>
wrote:

>It can only go through the center once. It is a clam type "filter"
>that snaps in place. This is the type that I bought
>
>http://rocky.digikey.com/weblib/Steward/New%20photos/28A0592-0A2.jpg
>
>What kind of filters are you talking about?

First, you have done a good job in locating a source of materials.
When I browsed around using the part number, I found this page:
http://dkc3.digikey.com/PDF/T083/P1503.pdf
which reveals your ferrite is optimized for frequencies that are much
higher than the ones used by your most obnoxious neighbor.

What you want is on the page before:
http://dkc3.digikey.com/PDF/T083/P1502.pdf
called out as Low Frequency (300kHz - 30MHz)
Cores for Round Cables part number 240-2287-ND which I chose not for
its impedance so much as for the largest opening. I did that because
these are not clam shell designs, and you will need room to pass
connectors through, and even then it might get tight for the 5 turn
specification. See the illustration and take note that you would be
passing two wires through as a pair, and doing this as many times as
you could within the constraints of fit.

Also, respond to Ian's posting, point by point as a way to give us
some feel for the actual location in your system that is most
vulnerable.

73's
Richard Clark, KB7QHC

2071. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 15:31:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o8eic41ul2vvctcgt09sd3nu7gtg54tn7r@4ax.com>
Source record: 22545

On Thu, 11 Sep 2008 05:20:58 -0700 (PDT), JIMMIE
<JIMMIEDEE123@yahoo.com> wrote:

>Is it possible to ploink threads based on the person who starts them?

Hi Jimmie,

If you used Forte's Agent, yes. It would be thread wide and ignore
all contributors, or you could simply kill-file (what it is called)
one contributor. Other reader's offer some variant of this capacity.

73's
Richard Clark, KB7QHC

2072. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 15:37:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pfeic4t3u216uq2m2i5nrobe4vu1o8dq5o@4ax.com>
Source record: 22546

On Thu, 11 Sep 2008 06:18:14 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>If I have a flash light that is focussed does this wavelength aproach
>still apply?

The reflector (or magnifier lens, take your pick) is on order of at
least 1 centimeter. The light wavelength is on order of 500
nanometers.

Ratio = 20,000:1

Beam is generally no narrower than 15 degrees. At a distance of, say,
6 feet, that beam would cover a diameter of 18 inches. Nothing like a
Lazer (sic) if that is the goal.

73's
Richard Clark, KB7QHC

2073. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 16:25:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <s8tnp5-1gb.ln1@mail.specsol.com>
Source record: 22547

```
Jon K??re Hellan <dev@null.com> wrote:
> jimp@specsol.spam.sux.com writes:
>
>> Roy Lewallen <w7el@eznec.com> wrote:
>>> jimp@specsol.spam.sux.com wrote:
>>>>
>>>> Of course.
>>>>
>>>> Everyone knows the gain of a parabola is directly proportional to
>>>> the size in wavelengths, or:
>>>>
>>>> G=10*log k(pi*D/L)^2
>>>>
>>>> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
>>>> D is the diameter, and L is the wavelength (wavelength and diameter
>>>> in the same units.
>>>>
>>>> So a 2,000 foot parabola on 20m would have just about 58db gain.
>>>>
>>>
>>> Hm. I get 47.
>>>
>>> Roy Lewallen, W7EL
>>
>> Hmm, when I use 14 Mhz and 6 decimal places I get 37; must have fat
>> fingered it the first time.
>
> Going a different way, I also get about 37.
>
> Aperture of a dish is the area, pi*r^2. r is about 14.2 wl, so area
> is about 635 sq. wl.
>
> Aperture of a dipole is 1/4 * 1/2 wl = 1/8 sq. wl.
>
> That makes gain 635/(1/8) = 635*8, i.e about 5100 or just over 37
> dBd. This assumes 100 % illumination of the dish, which we won't
> achieve. So make it 35 dBd or so, i.e. 37 dBi. Using the o.p.'s
> formula, I get 36.5 dBi.
>
> It's odd that pi is squared in the formula. The squared part must be
> to account for the area of the dish, which is pi*r^2. Obviously, this
> can has been compensated for by the choice of 'k'.
```

The k is generally called the "efficiency factor" which is supposed to account for diversions from the theoretical optimum.

From what I've read, it appears most real, well constructed and fed parabolas wind up with a k of around .55, which is why I used that number.

--
Jim Pennino

Remove .spam.sux to reply.

2074. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 16:28:56 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <YFbyk.7$Ei5.2@flpi143.ffdc.sbc.com>
Source record: 22548

```
Roy Lewallen wrote:
> [Slaps self upside the head] 47 dB for a 2000 meter dish, 37 dB for a
> 2000 foot dish. And that's why I didn't choose bridge design for a
> career. . .
>
> Roy Lewallen, W7EL
>
> jimp@specsol.spam.sux.com wrote:
>> Roy Lewallen <w7el@eznec.com> wrote:
>>> jimp@specsol.spam.sux.com wrote:
>>>> Of course.
>>>>
>>>> Everyone knows the gain of a parabola is directly proportional to
>>>> the size in wavelengths, or:
>>>>
>>>> G=10*log k(pi*D/L)^2
>>>>
>>>> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
>>>> D is the diameter, and L is the wavelength (wavelength and diameter
>>>> in the same units.
>>>>
>>>> So a 2,000 foot parabola on 20m would have just about 58db gain.
>>>>
>>> Hm. I get 47.
>>>
>>> Roy Lewallen, W7EL
>>
>> Hmm, when I use 14 Mhz and 6 decimal places I get 37; must have fat
>> fingered it the first time.
>>
>> Working backward from 47 I get a wavelength of 21 feet.
>>
>>

It's always dangerous to do math in public.
73,
Tom Donaly, KA6RUH
```

2075. Re: Translate Smith-Chart statement to English?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 16:29:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <NLednSTPFfDL2lTVnZ2dnUVZ_rjinZ2d@posted.easystreetonline>
Source record: 22549

Myron A. Calhoun wrote:
> I recently bought an automatic tuner (I know, I know; I wasted my
> money since manual tuners are so easy to build) which could supposedly
> tune "8-1000" ohms resistance. I first asked the manufacturer if
> maybe they meant "impedance", and they replied
> "Yes, thanks for the correction". That lead to a followup question:
>
> (NOTE: My keyboard doesn't have keys for "plus or minus" or "square
> root" so I'll use "#" and "SQRT()", respectively.)
>
> "Does '8-1000 ohms impedance' include ALL COMBINATIONS of #X#jY SUCH
> THAT SQRT (Xsquare + Ysquare) is in the range of 8 to 1000 (such as
> #8+j0 to #1000+j0 and 0#j8 to 0#j1000), or are there some "holes" in
> coverage?"
>
> Their response was:
>
> " We use the polar coordinate system and it covers all phase angles at
> 14 MHz. Obviously, plotted on a smith chart you would see the range
> decrease as you depart from 14 MHz."
>
> I haven't used a Smith Chart since I was first introduced to them in
> college (1963!-() Could someone please translate their response to
> simple English that I can understand. In particular, what range of
> impedances might their tuner cover on 80 meters? 40 meters? 15
> meters? 10 meters?

The response translates to: "The range is less at other frequencies than
at 14 MHz."

Roy Lewallen, W7EL

2076. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 16:38:46 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <70210186-3322-4a3a-90f5-15264a5b1a91@b1g2000hsg.googlegroups.com>
Source record: 22550

On Sep 11, 10:37 am, Richard Clark <kb7...@comcast.net> wrote:
> On Thu, 11 Sep 2008 06:18:14 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >If I have a flash light that is focussed does this wavelength aproach
> >still apply?
>
> The reflector (or magnifier lens, take your pick) is on order of at
> least 1 centimeter. The light wavelength is on order of 500
> nanometers.
>
> Ratio = 20,000:1
>
> Beam is generally no narrower than 15 degrees. At a distance of, say,
> 6 feet, that beam would cover a diameter of 18 inches. Nothing like a
> Lazer (sic) if that is the goal.
>
> 73's
> Richard Clark, KB7QHC

I see no basis for the inclusion of wavelengths when one is not using
a straight radiator
A straight radiator requires one type of reflector an array that is
condensed to a smaller volume
requires a reflector that is based on the propagation from that
radiator. If propagation flares out
then you can calculate dish size via WL. If propagation is of a
different form then
the dish must be designed accordingly.The important factor as I see
it is the mode of propagation
and what area is required at a distance to account for tha propagation
mode. If one starts with a
lazer then the reflecting surface need not be larger than the
initiating beam area assuming zero scattering.
Your thinking is based solely on the state of the art via reading
matter. You need to go back in physics
to the four forces of the standard model to analyse this question on
the basis of the unification
theory which is all conclusive where one can determine relative
ejection paths from the radiator.
The latter may well gyrate to WL I suppose

2077. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 16:48:43 UTC
From: JB <nospam@goofball.net>
Message-ID: <LZbyk.56$ia.40@nwrddc02.gnilink.net>
Source record: 22451

> Sad, but then we are both quite boring. Really, you are probably better
> off not inquiring into the wifes' and mine sexual relation ship ...
> well, kind of! :-P
>
> Regards,
> JS

Again, your personal activities within the privacy of your own home is
none of our business and has nothing to do with antennas, or so I
would assume.

Actually, it is probably a complete breakdown from living in California and
realizing that ALL MARRIAGES IN CALIFORNIA ARE NOW GAY MARRIAGES BECAUSE THE
DATA BASES AND RECORDS HAVE STRICKEN ALL REFERENCES TO HUSBANDS AND WIVES.
It comes from the horror that they have all been grandfathered (gay raped)
without even realizing it. So it really has nothing to do with your
personal activities, it's all about WHERE YOU LIVE!

2078. Re: Translate Smith-Chart statement to English?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 17:07:04 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <34dce51f-a204-4e9e-80c5-0fabcdcf987a@1g2000pre.googlegroups.com>
Source record: 22452

On Sep 11, 8:06 am, "Myron A. Calhoun" <mcalh...@ksu.edu> wrote:
> I recently bought an automatic tuner (I know, I know; I wasted my
> money since manual tuners are so easy to build) which could supposedly
> tune "8-1000" ohms resistance. I first asked the manufacturer if
> maybe they meant "impedance", and they replied
> "Yes, thanks for the correction". That lead to a followup question:
>
> (NOTE: My keyboard doesn't have keys for "plus or minus" or "square
> root" so I'll use "#" and "SQRT()", respectively.)
>
> "Does '8-1000 ohms impedance' include ALL COMBINATIONS of #X#jY SUCH
> THAT SQRT (Xsquare + Ysquare) is in the range of 8 to 1000 (such as
> #8+j0 to #1000+j0 and 0#j8 to 0#j1000), or are there some "holes" in
> coverage?"
>
> Their response was:
>
> " We use the polar coordinate system and it covers all phase angles at
> 14 MHz. Obviously, plotted on a smith chart you would see the range
> decrease as you depart from 14 MHz."
>
> I haven't used a Smith Chart since I was first introduced to them in
> college (1963!-() Could someone please translate their response to
> simple English that I can understand. In particular, what range of
> impedances might their tuner cover on 80 meters? 40 meters? 15
> meters? 10 meters?

Hi Myron,

Their response _suggests_ to me that the tuner can match loads inside the circle on the Smith chart that's centered on the real axis and passes through R=8 and R=1000, when used at 14MHz. I guess that's equivalent to loads representing up to about 11:1 SWR in an 89 ohm line. They didn't exactly say that, but it seems a reasonable guess. It does seem like they denied that there would be holes in the coverage.

Other than not being able to match as wide a range on other frequencies, their response really doesn't tell me anything about the capabilities away from 14MHz. You might be able to nail them down a bit better if you can get them to tell you what range they can match at 3.5MHz and at 30MHz, or other frequency you particularly care about.

Cheers,
Tom

2079. Re: Translate Smith-Chart statement to English?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 17:23:47 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Bucyk.6$yr3.4@nlpi068.nbdc.sbc.com>
Source record: 22453

Myron A. Calhoun wrote:
> "Does '8-1000 ohms impedance' include ALL COMBINATIONS of #X#jY SUCH
> THAT SQRT (Xsquare + Ysquare) is in the range of 8 to 1000 (such as
> #8+j0 to #1000+j0 and 0#j8 to 0#j1000), or are there some "holes" in
> coverage?"

This should be a rhetorical question. There is no tuner on
earth that will deliver power, i.e. "match" 0+j1000 ohms.
--
73, Cecil http://www.w5dxp.com

2080. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 17:43:02 UTC
From: JB <nospam@goofball.net>
Message-ID: <GMcyk.56$N5.9@nwrddc01.gnilink.net>
Source record: 22454

How do we want to use 10m?

1. Use it all the time similar to 2m using repeaters and some simplex,
or
2. Use it for DX but only during solar peaks which may be present for
3-4 years out of every 11 year cycle?

There are plenty of illegit users on our highways who use it for 1.
above. Purist hams prefer 2..More of the illegits than purists! If we
abandon the band for 7-8 out of every 11 years, you can be sure
someone will try to take it away, Think of all the channels they could
add with an extra 2 MHz. Think of the added commerce for Galaxy, Cobra
and even Uniden at the truckstops across the USA. Truth be told, 10m
most of the time is more suited for 2m style operation than 20m style,
again, most of the time.

Again, 10 and to a great extent 6 also, are unreliable 7 to 8 years out of
the 11 because of the skip. As for the interlopers, When the band is down,
they will be using it, we won't know about it because we can't hear them and
they can't hear us even if we ARE using it. In fact we usually can't hear
each other when we are using it so how can you say it isn't being used.
When the band is up, then we can do something about it, but what good does
it do to trash the band with uncontrolled repeaters, so that we can't use it
either.

The thing is, it is a doable thing, but most people aren't doing it right.
You got to think ahead, think of the other Hams, and ask questions. Never
be afraid to ask as many different people because the only people who aren't
humbled are the newbies that think they know it all, but haven't done it
yet.

Actually, I'm all for remote bases in lieu of repeaters because when the
band is up, everyone forgets to shut down their repeaters so people can use
the frequency. Fully automated stations render us all obsolete. Another
possibility is to use Touch Tone Access to activate the repeater, which will
time out after 10 minutes or so if no one is using it, and forced TT
shutdown as well. This allows usage without leaving it to thrash by itself.

Antennas are a big problem. If you have mountain tops, Ice, snow and wind
kill antennas a lot and the large 6 and 10m antennas are by far the worst.
Several groups have 6 and 10 but every time they get around to replacing the
antenna, it's cool for a few months then it all goes down for a couple of
years until someone finds a good deal again.

If you don't have mountain tops, you are just as well to use VOIP links to
different home stations all over. This is like how FCC and Coast Guard

operate. They have base stations all over that they can dial into remotely. There are actually several Multi-Band, Multi-mode Ham stations already around that you can get in on with the right software and DSL line. You can put yours on line too. Google TS-2000 remote and look into that.

Look up IRLP too because there are repeaters and remote bases that can be controlled via IRLP from all over the world and some have 10 and 6 capabilities. Keep an eye on the beacon stations too or monitor 29.6 FM for band openings because that is where it's at. If you do have a multi-band mobile you CAN always QSY to 10 for local stuff too. Don't expect that to chase off any interlopers in the next town though.

2081. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 18:04:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <528c1fb1-6248-4066-ac8a-697d9f6f0ac5@j22g2000hsf.googlegroups.com>
Source record: 22455

On Sep 10, 10:56 pm, dfi...@nc.rr.com wrote:
> On Sep 10, 10:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > On Sep 10, 9:23 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > > On Sep 10, 8:45 pm, j...@specsol.spam.sux.com wrote:
>
> > > > Art Unwin <ArthurUn...@gmail.com> wrote:
> > > > > What is the main factor that prevents HF radiation from focussing
> > > > > for extra gain?
>
> > > > Money.
>
> > > > If you can afford to build a 20m parabola about 2,000 feet in diameter
> > > > and the place to mount it, you'll get lots of gain.
>
> > > > --
> > > > Jim Pennino
>
> > > > Remove .spam.sux to reply.
>
> > > Then are you saying it is the antenna size that is the main factor?.
> > > So my antenna which is physically small
> > > can be focussed on a dish which would provide straight line radiation
> > > or a radiation beam?
> > > Working on a single element on the ground with a optimizer instead of
> > > a half sphere I got a
> > > straight vertical line at the sides which suggested a gun barrel
> > > radiation with a perfect earth as the reflector.
> > > Gain was around 8db vertical which is why the question regarding
> > > focussing! If it was properly focussed the gain should be more.
> > > 2000 foot dish seems somewhat odd, probably based on a "straight"
> > > wavelength and not a small volume in equilibriumas the directer
> > > right?
> > > Art
>
> > Let me ask the question another way. Whether it is believed or not,
> > if a 80 Metre antenna was compressed to the size of a couple of shoe
> > boxes
> > would the dish be reduced in size accordingly?
> > Regagards
> > Art- Hide quoted text -

>
> > - Show quoted text -
>
> No. The shoebox size antenna would approximate an isotropic if it did
> radiate. It would still have to be placed at the focal point of a very
> large parabola due to the size of the wave length. Such an antenna, I
> believe, on the island of Puerto Rico (the SETI antenna) although it
> is currently used primarily as a receiving antenna. That parabola is
> positioned to have a very high radiation angle and might not be be
> that good for terrestrial DX.

The antenna at PR has a stable reflector and a moveable receiver
thus the take off angle depends on the angular position of the
receiver
and the center of the reflector. The receiver is moved regularly so
the
sky can be traversed for listening. This was the idea when the antenna
was set up initialy by Princeton University before they gave up
possesion of it.
With respect to WL no facts have been presented to support that fact.
If you go back to the arbitrary border analysis a force thru the paper
of the center
of the border will present resultant forces around the outside of the
border representing
ripples on water in wave like fashion, that does not correlate to the
ejection
of a particle thru a fissure in the border. Mixing apples and oranges
no less
Nuf said

2082. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 18:25:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7cb70df4-f490-423d-a7b7-432e8c39f804@f63g2000hsf.googlegroups.com>
Source record: 22456

On Sep 10, 10:05 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Sep 10, 8:45?pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > What is the main factor that prevents HF radiation from focussing
> >> > for extra gain?
>
> >> Money.
>
> >> If you can afford to build a 20m parabola about 2,000 feet in diameter
> >> and the place to mount it, you'll get lots of gain.
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > Then are you saying it is the antenna size that is the main factor?.
>
> Of course.
>
> Everyone knows the gain of a parabola is directly proportional to
> the size in wavelengths, or:

Not so!,

That is totally depended on the conditions assumed or assumptions made
such as the shape and size of the emmitter from which scattering of
radiation
can be calculated i.e. the shape of the cone if the scattering is
confined to a specific angle.
If radiation is determined from all four forces of the standard model
then the radiator can
be any size, shape or elevation as long as it is in equilibrium, thus
the "weak" force
must be taken into consideration. Period .
This also means one must think beyond the books
where radiation is a mystery and not fully understood by the masses.
Progress can only be made by following the Universal laws via first
principles
and not by selected extractions of formula from reading matter.
Don't they parrot that in the Universities of the U.S.A.?
Best regards unless you are in a nasty mood
Art Unwin KB9MZ.....xg

>
> G=10*log k(pi*D/L)^2
>
> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
> D is the diameter, and L is the wavelength (wavelength and diameter
> in the same units.
>
> So a 2,000 foot parabola on 20m would have just about 58db gain.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

2083. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 18:28:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <yrdyk.21$Ws1.4@nlpi064.nbdc.sbc.com>
Source record: 22457

JB wrote:
> How do we want to use 10m?
>
> 1. Use it all the time similar to 2m using repeaters and some simplex,
> or
> 2. Use it for DX but only during solar peaks which may be present for
> 3-4 years out of every 11 year cycle?

Repeaters are normally FM, only legal from
29.51 - 29.7 MHz. What about 28.0 - 29.51 MHz?

10m simplex is not very attractive or functional
during the low of the sun spot cycle. That's why
it is not much being used today.

From 1650 to 1700, the sun went without sunspots.
It could happen again.

http://en.wikipedia.org/wiki/Image:Sunspot_Numbers.png
--
73, Cecil http://www.w5dxp.com

2084. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 18:40:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gabomlotd1@news.albasani.net>
Source record: 22458

JIMMIE wrote:

> ...
> Is it possible to ploink threads based on the person who starts them?
>
> Jimmie

Thunderbird, with the addition of the addon "right click ignore" will
pretty much do what you want; however, you must right-click and pick
ignore for every thread you wish to ignore--a very minor inconvenience ...

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2085. elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 18:58:47 UTC
From: ml <m@di.net>
Message-ID: <m-002BC7.14584711092008@news.optonline.net>
Source record: 22459

hi

a while ago i posted hoping to get some ideas how to eliminate
some s9 noise caused by my buildings new elevators

only took them 9months to install some electrical filters but the
guy doing it was very nice and showed me a few things

since the filters didn't help seemingly at all, i wanted to provide
some more information and see what anyone might think would be
either some good tests to make and or further corrective actions

a recap, jan 08 we got a new elevator system the original 1940's unit
was just a rack of relays there are 2 elevators motor and stuff in
a small room rooftop noise was always s0 or s1

the new system i can see is made by galaxy believe it or not made in
the bronx ny i am told they are a large world wide supplier since i
live in the bronx at least they are local

my first look in there today shows they did at least take pride
in there work, all the wiring in there is really nice

there is kinda 2 main parts in the cabinet a large pc board and a
magnetek HPV 600

i took my ft817 shut the other elevator off and moving the rig
around i see i got no interference from the computer board getting
near the magnetek big time noise

they have the manual online
http://www.elevatorcontrols.com/downloads/files/hpv600.pdf

pretty interesting a section in there on how to mitigate noise
perhaps a few things in there i could maybe double check

when noone is using the elevator they throw out some noise like about
s2 maybe more when the elevator starts moving it jumps naturally
to about s9

i was wondering how to first see where the noise is leaking from
the metal cabinet is pretty think i say double the gague of say a
file cabnet , it does have slits on either side for air a few
holes for conduit which runs to the power and to the motor

they seemed to pay attention to grounding the door had a little
ground wire on it, etc naturally this is all fast first impression
stuff i didn't have a lot of time up there

i thought perhaps painting the cabinet w/rf paint and getting some screens over the vent slits thou obv that wouldn't help if it's radiating along the conduit didn't have a chance to measure for that

the magnetek is a bread sized box it gets hot and has a fan so i can't cover it, but perhaps a perferated copper/lead enclousure might help?(assuming it's not radiating along its wires)

as a last resort perhaps replacing the magnatek w/another brand known to be rf quite however i personally don't know how i would find that out and no garantee they would risk swaping the unit oout

so i am hoping that there might be some brainstorming and thoughts you all might share?

any advice tips much appreciated

thanks for all

2086. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 19:05:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <7l6op5-lh7.ln1@mail.specsol.com>
Source record: 22460

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Sep 10, 10:05?pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > On Sep 10, 8:45?pm, j...@specsol.spam.sux.com wrote:
>> >> Art Unwin <ArthurUn...@gmail.com> wrote:
>> >> > What is the main factor that prevents HF radiation from focussing
>> >> > for extra gain?
>>
>> >> Money.
>>
>> >> If you can afford to build a 20m parabola about 2,000 feet in diameter
>> >> and the place to mount it, you'll get lots of gain.
>>
>> >> --
>> >> Jim Pennino
>>
>> >> Remove .spam.sux to reply.
>>
>> > Then are you saying it is the antenna size that is the main factor?.
>>
>> Of course.
>>
>> Everyone knows the gain of a parabola is directly proportional to
>> the size in wavelengths, or:
>
> Not so!,

Well, yes, I guess that's true as only those with an education in
electromagnetics would know that.

So I doubt many participants in rec.folk-dancing would know that, but
this isn't rec.folk-dancing, though some posters here do seem to dance
around a lot.

--
Jim Pennino

Remove .spam.sux to reply.

2087. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 19:42:11 UTC
From: nm5k@wt.net
Message-ID: <8067d5d5-8ac4-4e0b-8a68-f8f862ac2f62@r15g2000prd.googlegroups.com>
Source record: 22461

On Sep 11, 1:28 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> JB wrote:
> > How do we want to use 10m?
>
> > 1. Use it all the time similar to 2m using repeaters and some simplex,
> > or
> > 2. Use it for DX but only during solar peaks which may be present for
> > 3-4 years out of every 11 year cycle?
>
> Repeaters are normally FM, only legal from
> 29.51 - 29.7 MHz. What about 28.0 - 29.51 MHz?
>
> 10m simplex is not very attractive or functional
> during the low of the sun spot cycle. That's why
> it is not much being used today.

Well, I think that's cuz activity in general has been
declining. But 10m used to be very popular for
local use in this area, sunspots or not.
I imagine there are a few still out there, but I haven't
been on there myself much lately to know.

2088. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 19:55:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k1tic4pp4t52t78t80obg8asku0cbmurq0@4ax.com>
Source record: 22462

On Thu, 11 Sep 2008 09:38:46 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Sep 11, 10:37ï¿½am, Richard Clark <kb7...@comcast.net> wrote:
>> On Thu, 11 Sep 2008 06:18:14 -0700 (PDT), Art Unwin
>> <ArthurUn...@gmail.com> wrote:
>> >If I have a flash light that is focussed does this wavelength aproach
>> >still apply?
>>
>> The reflector (or magnifier lens, take your pick) is on order of at
>> least 1 centimeter. ï¿½The light wavelength is on order of 500
>> nanometers.
>>
>> Ratio = 20,000:1
>>
>> Beam is generally no narrower than 15 degrees. ï¿½At a distance of, say,
>> 6 feet, that beam would cover a diameter of 18 inches. ï¿½Nothing like a
>> Lazer (sic) if that is the goal.

>I see no basis for the inclusion of wavelengths when one is not using
>a straight radiator

Read your own question. There is no such thing as a "straight
radiator" of light. There is everything to do with wavelength or you
could never see light.

73's
Richard Clark, KB7QHC

2089. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 20:07:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vbuic41g4b5go0c87u415lb65k9psuuk5p@4ax.com>
Source record: 22463

On Thu, 11 Sep 2008 14:58:47 -0400, ml <m@di.net> wrote:

>i took my ft817 shut the other elevator off and moving the rig
>around i see i got no interference from the computer board getting
>near the magnetek big time noise

Hi Myles,

One thing that I observed in the PDF you supplied was the Input Power
specification that states:
Line Impedance: 3% without choke / 1% with choke
Check to see if the input power is choked.

73's
Richard Clark, KB7QHC

2090. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 20:14:33 UTC
From: JB <nospam@goofball.net>
Message-ID: <J_eyk.1057$jE1.69@trnddc03>
Source record: 22464

> Repeaters are normally FM, only legal from
> 29.51 - 29.7 MHz. What about 28.0 - 29.51 MHz?

That was the point. I was explaining why you shouldn't open up a lot more
of the band to repeaters
>
> 10m simplex is not very attractive or functional
> during the low of the sun spot cycle. That's why
> it is not much being used today.

Well, I think that's cuz activity in general has been
declining. But 10m used to be very popular for
local use in this area, sunspots or not.
I imagine there are a few still out there, but I haven't
been on there myself much lately to know.

When the bands are down, activity is fairly local
I guess I didn't make it clear that you can't make blanket statements about
activity on the band just because you don't hear anything.
Did anyone read my post?

2091. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 20:21:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ab8178c1-dc26-47f7-b1ad-3c757855c210@m73g2000hsh.googlegroups.com>
Source record: 22465

On Sep 11, 2:55 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Thu, 11 Sep 2008 09:38:46 -0700 (PDT), Art Unwin
>
>
>
> <ArthurUn...@gmail.com> wrote:
> >On Sep 11, 10:37 am, Richard Clark <kb7...@comcast.net> wrote:
> >> On Thu, 11 Sep 2008 06:18:14 -0700 (PDT), Art Unwin
> >> <ArthurUn...@gmail.com> wrote:
> >> >If I have a flash light that is focussed does this wavelength aproach
> >> >still apply?
>
> >> The reflector (or magnifier lens, take your pick) is on order of at
> >> least 1 centimeter. The light wavelength is on order of 500
> >> nanometers.
>
> >> Ratio = 20,000:1
>
> >> Beam is generally no narrower than 15 degrees. At a distance of, say,
> >> 6 feet, that beam would cover a diameter of 18 inches. Nothing like a
> >> Lazer (sic) if that is the goal.
> >I see no basis for the inclusion of wavelengths when one is not using
> >a straight radiator
>
> Read your own question. There is no such thing as a "straight
> radiator" of light. There is everything to do with wavelength or you
> could never see light.
>
> 73's
> Richard Clark, KB7QHC

If you say so and are comfortable with that then stick with it !
My thoughts are with the reflector and it's design

2092. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 20:34:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <dd212ee3-246f-47e7-aaaf-32cc99f638f3@k30g2000hse.googlegroups.com>
Source record: 22466

On Sep 11, 2:05 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Sep 10, 10:05?pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > On Sep 10, 8:45?pm, j...@specsol.spam.sux.com wrote:
> >> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> >> > What is the main factor that prevents HF radiation from focussing
> >> >> > for extra gain?
>
> >> >> Money.
>
> >> >> If you can afford to build a 20m parabola about 2,000 feet in diameter
> >> >> and the place to mount it, you'll get lots of gain.
>
> >> >> --
> >> >> Jim Pennino
>
> >> >> Remove .spam.sux to reply.
>
> >> > Then are you saying it is the antenna size that is the main factor?.
>
> >> Of course.
>
> >> Everyone knows the gain of a parabola is directly proportional to
> >> the size in wavelengths, or:
>
> > Not so!,
>
> Well, yes, I guess that's true as only those with an education in
> electromagnetics would know that.
>
> So I doubt many participants in rec.folk-dancing would know that, but
> this isn't rec.folk-dancing, though some posters here do seem to dance
> around a lot.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Yes Jim. Unless one accepts the weak force for what it is, what
creaates it
and what it does for overall vector angles discussion is moot. For
instance

the emmitter cannot be parallel to the axis of the reflector, it must be tilted
per the recognition of the weak force otherwise the mathematic and symbols such as
equal or zero are meaningless. You must begin with symetry or equilibrium.
You surely must know Jim that many hams do not have an understanding of
electromagnetics only on how a microphone is used or a particular part of ham
radio where their interests are,
The hobby is all inclusive and where one expertise does not necessarilly spill over to the other
except only in the eyes of the speaker

2093. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 20:35:14 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1eab6cdb-8528-441d-aaba-a893f0ba4dee@m73g2000hsh.googlegroups.com>
Source record: 22467

On Sep 11, 2:55 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Thu, 11 Sep 2008 09:38:46 -0700 (PDT), Art Unwin
>
>
>
> <ArthurUn...@gmail.com> wrote:
> >On Sep 11, 10:37 am, Richard Clark <kb7...@comcast.net> wrote:
> >> On Thu, 11 Sep 2008 06:18:14 -0700 (PDT), Art Unwin
> >> <ArthurUn...@gmail.com> wrote:
> >> >If I have a flash light that is focussed does this wavelength aproach
> >> >still apply?
>
> >> The reflector (or magnifier lens, take your pick) is on order of at
> >> least 1 centimeter. The light wavelength is on order of 500
> >> nanometers.
>
> >> Ratio = 20,000:1
>
> >> Beam is generally no narrower than 15 degrees. At a distance of, say,
> >> 6 feet, that beam would cover a diameter of 18 inches. Nothing like a
> >> Lazer (sic) if that is the goal.
> >I see no basis for the inclusion of wavelengths when one is not using
> >a straight radiator
>
> Read your own question. There is no such thing as a "straight
> radiator" of light. There is everything to do with wavelength or you
> could never see light.
>
> 73's
> Richard Clark, KB7QHC

If you say so and are comfortable with that then stick with it !
My thoughts are with the reflector and it's design

2094. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 20:54:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <afvic4192kaba2ghlpc0dj1uvshokg9rav@4ax.com>
Source record: 22468

On Thu, 11 Sep 2008 13:21:15 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>> Read your own question. ï¿½There is no such thing as a "straight
>> radiator" of light. ï¿½There is everything to do with wavelength or you
>> could never see light.

>If you say so and are comfortable with that then stick with it !
>My thoughts are with the reflector and it's design

Let's just confine this to light, wavelength, and reflection. Try
looking at yourself in a full wavelength mirror. It would be
somewhere between 450 and 650 nanometers wide or roughly the size of a
virus or bacteria.

Practicality demands a reflector vastly larger than that for simple
and ordinary usage. I seriously doubt you have seen a mirror smaller
than 20,000 times that size. Even so you wouldn't be able to see
anything more than your eye in it - or with advanced optics, your
face.

Would that larger mirror have any more gain that one that was one
thousandth its size? No, not to speak of in any practical sense.
Texas Instruments invented the DMD for today's projection TV systems
that use mirrors that small.... for one pixel of light. Their DMD
chip has a vast array of at least 1000000 of these mirrors. Most of
the light in the system is lost. Efficiency is thus very poor, but
that is not an economic issue.

In a way, it most conforms to the same issues of poor efficiency in a
small radiator: most of the RF power is wasted before it gets into the
sky. Unfortunately, for most practicing Hams, this is a very serious
economic issue.

Here's a practical challenge for the reader: Take a Christmas tree
bulb of 7.5W. Employing every trick of the trade of optics, how much
of that available power can you get into a 100 micron fiber optic?

73's
Richard Clark, KB7QHC

2095. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 21:05:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <ahdop5-hpq.ln1@mail.specsol.com>
Source record: 22469

```
Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Sep 11, 2:05?pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > On Sep 10, 10:05?pm, j...@specsol.spam.sux.com wrote:
>> >> Art Unwin <ArthurUn...@gmail.com> wrote:
>> >> > On Sep 10, 8:45?pm, j...@specsol.spam.sux.com wrote:
>> >> >> Art Unwin <ArthurUn...@gmail.com> wrote:
>> >> >> > What is the main factor that prevents HF radiation from focussing
>> >> >> > for extra gain?
>>
>> >> >> Money.
>>
>> >> >> If you can afford to build a 20m parabola about 2,000 feet in diameter
>> >> >> and the place to mount it, you'll get lots of gain.
>>
>> >> >> --
>> >> >> Jim Pennino
>>
>> >> >> Remove .spam.sux to reply.
>>
>> >> > Then are you saying it is the antenna size that is the main factor?.
>>
>> >> Of course.
>>
>> >> Everyone knows the gain of a parabola is directly proportional to
>> >> the size in wavelengths, or:
>>
>> > Not so!,
>>
>> Well, yes, I guess that's true as only those with an education in
>> electromagnetics would know that.
>>
>> So I doubt many participants in rec.folk-dancing would know that, but
>> this isn't rec.folk-dancing, though some posters here do seem to dance
>> around a lot.
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> Yes Jim. Unless one accepts the weak force for what it is, what
> creaates it
```

You mean the weak interaction which is often called the weak force or
sometimes the weak nuclear force which is due to the exchange of
W and Z bosons and which affects all left-handed leptons and quarks
and whose typical field strength is 10^11 times less than that of
the electromagnetic force?

What about it?

--
Jim Pennino

Remove .spam.sux to reply.

2096. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 21:45:11 UTC
From: ml <m@di.net>
Message-ID: <m-17109C.17451111092008@news.optonline.net>
Source record: 22470

In article <vbuic41g4b5go0c87u415lb65k9psuuk5p@4ax.com>,
Richard Clark <kb7qhc@comcast.net> wrote:

> On Thu, 11 Sep 2008 14:58:47 -0400, ml <m@di.net> wrote:
>
> >i took my ft817 shut the other elevator off and moving the rig
> >around i see i got no interference from the computer board getting
> >near the magnetek big time noise
>
> Hi Myles,
>
> One thing that I observed in the PDF you supplied was the Input Power
> specification that states:
> Line Impedance: 3% without choke / 1% with choke
> Check to see if the input power is choked.
>
> 73's
> Richard Clark, KB7QHC

previously i can say there was no chokes power went right into the
unit

today we installed the line filters they have some chokes

i noticed that line, in the manual, not really sure what it means
the power as supplied by con ed is rock solid as far as volts etc
power here is great

maybe i had a rough day , not sure what they mean by impedance
i mean i know what impedance is per say but not applied to 3phase
are they implying that say if one leg is %3 off phase or has
lower voltage or like a spike?

i also checked the pwm settings they were at default

thanks very much for taking a look Rich appreciate it

2097. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 22:07:37 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <fbd9e2e8-6449-4269-acc6-c950bb1958f3@e39g2000hsf.googlegroups.com>
Source record: 22471

On Sep 11, 4:05 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Sep 11, 2:05?pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > On Sep 10, 10:05?pm, j...@specsol.spam.sux.com wrote:
> >> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> >> > On Sep 10, 8:45?pm, j...@specsol.spam.sux.com wrote:
> >> >> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> >> >> > What is the main factor that prevents HF radiation from focussing
> >> >> >> > for extra gain?
>
> >> >> >> Money.
>
> >> >> >> If you can afford to build a 20m parabola about 2,000 feet in diameter
> >> >> >> and the place to mount it, you'll get lots of gain.
>
> >> >> >> --
> >> >> >> Jim Pennino
>
> >> >> >> Remove .spam.sux to reply.
>
> >> >> > Then are you saying it is the antenna size that is the main factor?.
>
> >> >> Of course.
>
> >> >> Everyone knows the gain of a parabola is directly proportional to
> >> >> the size in wavelengths, or:
>
> >> > Not so!,
>
> >> Well, yes, I guess that's true as only those with an education in
> >> electromagnetics would know that.
>
> >> So I doubt many participants in rec.folk-dancing would know that, but
> >> this isn't rec.folk-dancing, though some posters here do seem to dance
> >> around a lot.
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > Yes Jim. Unless one accepts the weak force for what it is, what
> > creaates it

>
> You mean the weak interaction which is often called the weak force or
> sometimes the weak nuclear force which is due to the exchange of
> W and Z bosons and which affects all left-handed leptons and quarks
> and whose typical field strength is 10^11 times less than that of
> the electromagnetic force?
>
> What about it?
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

No. You are referring to what Feynman brought about with his vector
scheme which analyses the progression of partical format.
The standard model of our Universe has four forces.
Gravity which is the weakest
The weak force a misnomer is the second weakest
The electromagnetic force and the strong force.
For a state of equilibrium all of these vectors must sum to zero.
The weak force can be ascertained from the sum of the other vectors
From Newtons law on action and reaction both the weak force and that
which produces it
is a combination of two forces that evolves from a single force.
Thus when you apply a time varying current to a non magnetic radiator
you also produce the weak force which is the Newton reaction force
which
is a rotating surface current which amateurs refer to as "skin depth"
which is not a homogenous
resistive skin but the Newton opposing current which is a requirment
for equilibrium.
When Yagi used a planar arrangement of parallel conductors parallel to
the ground surface he does
not include this weak force and just assumes that the arrangement is
one opposing the gravitational pull.
This is a good approximation but not totaly accurrate since the
arrangement is not in equilibrium which
is a requirement with respect to all the laws of the Masters including
Maxwell.
The inclusion of the weak force is the rotating force at right angles
ie the Foucault current ala skin depth
which is what a helicopter has at the rear to provide stabalization.
Thus when this force vector is added
to the gravitational force it tips the radiator as opposed to being
equal and opposite to the gravitational force
as is often surmised by physiscists. I t is this weak force that is
directed away from a radiator which also produces a magnet field
when in contact with a resting particle which has its own magnetic
field which was imposed on entry to Earth

and thus in conflict with the initial time varying field results in
the parting of the ways in the form of levitation.
When levitation is shown in experiments in high school you may
remember the difficulty of achieving stabalization
since the article levitated always want;'s to turn ala the circulating
field.
The above is How I see as the weak force in action with radiation tho
you will not see it in books as the weak
force has not been presented as I have above. Important note the two
vectors of the magnetic fields imp[osed upon the partical
creates a spinning motion as well as a elevating motion and it is this
combination applied to a static particle that profides a straight
line
ejection to the particle which is straight like the bullet of a rifle
and where the spin makes it impervious to gravity which is why some
tem it as a anti gravity force All the above is a result of my work
over the last few years and has not as yet been acknowledged as b eing
correct in the scientific world
unless an academic comes along with the same thinking for examination
an impossibility based on the not invented here syndrome.
A long answer to your question but a simple yes or no would not
involve sharing which is what I alway strive for despite the loose
mouths of naysayers

Because of my above findings I am comfortable calling the particles
neutrinos as nearly spent nuclear particals ejected from the suns
border
without spin which do arrive to alight on a diamagnetic material in
the Universe with varying intensity according to the suns 11 year
cycle
Best regards
Art Unwin KB9MZ.......XG

2098. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 22:33:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <un6jc4hteqe89nr5o9gm1t97cs72voq05d@4ax.com>
Source record: 22472

On Thu, 11 Sep 2008 15:07:37 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>> ...the weak nuclear force which is due to the exchange of
>> W and Z bosons and which affects all left-handed leptons and quarks
>> and whose typical field strength is 10^11 times less than that of
>> the electromagnetic force?

>The standard model of our Universe has four forces.
>Gravity which is the weakest
>The weak force a misnomer is the second weakest
>The electromagnetic force and the strong force.

Try reading the two again. They are identical. The only difference
is you don't know the magnitudes of those forces (the length of their
vectors) like Jim obviously does.

Gravity is abysmally pathetic where it needs several trillion tons of
earth's mass to keep us glued to the surface. If you were an electron
and earth was a proton, you couldn't survive being on the surface
without being crushed by the staggering electromagnetic force.

The Weak force, as Jim carefully explained, is only slightly more
powerful than gravity - which is to say feeble to 11 decimal places.

73's
Richard Clark, KB7QHC

2099. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 22:44:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i77jc45po5nnskqb43fcujv9d7kvu5q01f@4ax.com>
Source record: 22473

On Thu, 11 Sep 2008 17:45:11 -0400, ml <m@di.net> wrote:
>previously i can say there was no chokes power went right into the
>unit
>
>today we installed the line filters they have some chokes
>
>
>i noticed that line, in the manual, not really sure what it means
>the power as supplied by con ed is rock solid as far as volts etc
>power here is great

Hi Myles,

I'm not sure what that specification line means either, but choking is a standard term for reducing the influence of inductive kick, something those motors are going to do aggressively and spread RF trash throughout the spectrum.

However, in the context of motor controllers, solid state triacs can also be quite noisy and inject trash into the line. This has nothing to do with Consolidated Edison, except that they, too, could become annoyed with noise. However, they have a large industrial customer base that they serve, and they deal with it.

Returning to your desire to add covers, mesh, and the rest. I suspect that the metal casing already does what it should and requires no further attention. Instead, it is a matter of the lines that emerge from those cases that are carrying the noise. They are passing it along to you through two possible means: radiation or conduction.

If your rig shares the same power line, noise may arrive through that shared conduction path. This would be part of a ground loop. Barring that explanation, those lines are radiating like antennas, and their proximity to your antenna provides over-the-air coupling. This means you have to reduce that radiation (again, some form of choking, in this case ferrites) or you move to increase distance and enjoy the square law (10 times the separation pushes down the noise from S-9 to S-7 or something like that). Obviously, in your situation, choking is the simpler, and more effective solution. This will be choking that is an entirely separate issue from that one line in the manual.

73's
Richard Clark, KB7QHC

2100. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-11 23:14:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <86eba1da-1e1d-487c-9774-842dc10e0c18@a70g2000hsh.googlegroups.com>
Source record: 22474

On Sep 11, 5:33 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Thu, 11 Sep 2008 15:07:37 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >> ...the weak nuclear force which is due to the exchange of
> >> W and Z bosons and which affects all left-handed leptons and quarks
> >> and whose typical field strength is 10^11 times less than that of
> >> the electromagnetic force?
> >The standard model of our Universe has four forces.
> >Gravity which is the weakest
> >The weak force a misnomer is the second weakest
> >The electromagnetic force and the strong force.
>
> Try reading the two again. They are identical. The only difference
> is you don't know the magnitudes of those forces (the length of their
> vectors) like Jim obviously does.
>
> Gravity is abysmally pathetic where it needs several trillion tons of
> earth's mass to keep us glued to the surface. If you were an electron
> and earth was a proton, you couldn't survive being on the surface
> without being crushed by the staggering electromagnetic force.
>
> The Weak force, as Jim carefully explained, is only slightly more
> powerful than gravity - which is to say feeble to 11 decimal places.
>
> 73's
> Richard Clark, KB7QHC

I don't know what you are talking about
At the top I stated Gravity was the weakest force .At the bottom of
your post
you state gravity was the weakest force and the weak force was a bit
stronger,
again what I said.
So what are you talking about, a bunch of IFs. What exactly do you
want me to confirm or deny?

2101. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 00:01:41 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gacbh5$l3s$1@news.jpl.nasa.gov>
Source record: 22475

Richard Clark wrote:
> On Thu, 11 Sep 2008 17:45:11 -0400, ml <m@di.net> wrote:
>> previously i can say there was no chokes power went right into the
>> unit
>>
>> today we installed the line filters they have some chokes
>>
>>
>> i noticed that line, in the manual, not really sure what it means
>> the power as supplied by con ed is rock solid as far as volts etc
>> power here is great
>
> Hi Myles,
>
Industrial equipment is often rated in percent or per unit impedance.
http://en.wikipedia.org/wiki/Per-unit_system

For something like this, the impedance is probably mostly reactive. That is, 1% impedance means a PF of about 0.99 (well, sqrt(1-.01^2).. that is, you'd draw 1% reactive current.

> I'm not sure what that specification line means either, but choking is
> a standard term for reducing the influence of inductive kick,
> something those motors are going to do aggressively and spread RF
> trash throughout the spectrum.
>
> However, in the context of motor controllers, solid state triacs can
> also be quite noisy and inject trash into the line. This has nothing
> to do with Consolidated Edison, except that they, too, could become
> annoyed with noise. However, they have a large industrial customer
> base that they serve, and they deal with it.
>

I would venture that there are no TRIACs in that controller. It's a standard 3 phase IGBT based inverter drive. The default PWM frequency is 10 kHz, and you'll probably see significant harmonic content at multiples of that, although CE compliance means that they've filtered a fair amount out. There's recommendations on page 164 for line filters. You could probably check with Magnetek for details on conducted emissions with and without filters.

2102. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 01:07:11 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d7244eab-f2ee-4a32-ae16-5a3807e97bf4@k37g2000hsf.googlegroups.com>
Source record: 22476

There is obviously a lot of confusion between some of the posters that
need to be corrected
Mention has been made of a bosun' and higgs field as something as
being factual.
In fact it is very contraversal an d is only a theory that has not
been confirmed≥
CERN experiments are trying to put something substantial behind this
theory but
nobody really knows the extent of a Higg field and nobody has caught a
bosun'
Feynman with his vectors took the notion that a additional particle
combination
provided mass, this at a time that neutrons were considered without
mass.
Feymans assumption lingers on inspite of the fact that it is now
proven that
neutrinos really do have mass. All of this talk is based around
something
that is not present on this earth, not seen thus not counted just
names
searching for a subject to be tagged upon.
Now we come to the subject of "wave length" as in radiation , the
subject of this post.
Wavelength only has meaning if a radiator only has two degrees of
freedom which means "straight".
But a wavelength can move in many directions and elevations such that
it has a shape of a sphere or worse.
To talk of something of" such and such" a wavelength does not pertain
to a straight line or a three
dimensional shape such as a cube or sphere so the idea of refering to
a wavelength as a linear length
is absolutely meaningles because one is using a three dimensional
object to describe a two dimensional linear dimention.
And for the last one I refer to Newtons law of action and reaction. On
this earth of ours there is no such thing as a single force
which is why Newton refers to "action": If one tries to pull a piece
of caramel apart there is not just one force at play but four fources
since one must include the right angle forces that is "necking" the
caramel at the center. Thus a force cannot exist in a straight line
but must include a rotational force for equilibrium. It is that action
which Newton is referring to and not a single straight vector
The confusion comes about when Newtons laws are paraphrased as a
"force" when it must state an "action"
My posting is clearly placed within the Earth's boundary so talk of

Quarks ,Bosun" Higgs field etc is clearly irrevalent to the subject
of radiation
unless it is a attempt to bait me or to create confusion about the
subject of radiation when its aim should be education and debate.
Art Unwin KB9MZ....xg

2103. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 02:05:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <s0vop5-tti.ln1@mail.specsol.com>
Source record: 22477

Art Unwin <ArthurUnwin@gmail.com> wrote:
> There is obviously a lot of confusion between some of the posters that
> need to be corrected

Only one that I've seen.

> Mention has been made of a bosun' and higgs field as something as

Bosun?

Are we in the Navy now?

--
Jim Pennino

Remove .spam.sux to reply.

2104. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 02:30:45 UTC
From: dfinn1@nc.rr.com
Message-ID: <1b9b3f41-b4f0-44ae-8c79-f09239d26a9d@x35g2000hsb.googlegroups.com>
Source record: 22478

On Sep 11, 4:02 am, Jon Kåre Hellan <d...@null.com> wrote:
> dfi...@nc.rr.com writes:
> > On Sep 10, 10:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> >> No. The shoebox size antenna would approximate an isotropic if it did
> > radiate. It would still have to be placed at the focal point of a very
> > large parabola due to the size of the wave length. Such an antenna, I
> > believe, on the island of Puerto Rico (the SETI antenna) although it
> > is currently used primarily as a receiving antenna. That parabola is
> > positioned to have a very high radiation angle and might not be be
> > that good for terrestrial DX.
>
> I believe that hams once were allowed to use Arecibo for EME on 80m.

I wonder what the used at the focal point. Assuming a yago directed to
the center was impractical, next best choice would be a full wave loop
(in my opinion).

2105. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 02:37:30 UTC
From: dfinn1@nc.rr.com
Message-ID: <7451b404-6102-4803-995a-cbf2153536c1@d77g2000hsb.googlegroups.com>
Source record: 22479

On Sep 11, 9:18 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 11, 2:53 am, Jon Kåre Hellan <d...@null.com> wrote:
>
>
>
>
>
> > j...@specsol.spam.sux.com writes:
> > > Roy Lewallen <w...@eznec.com> wrote:
> > >> j...@specsol.spam.sux.com wrote:
>
> > >>> Of course.
>
> > >>> Everyone knows the gain of a parabola is directly proportional to
> > >>> the size in wavelengths, or:
>
> > >>> G=10*log k(pi*D/L)^2
>
> > >>> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
> > >>> D is the diameter, and L is the wavelength (wavelength and diameter
> > >>> in the same units.
>
> > >>> So a 2,000 foot parabola on 20m would have just about 58db gain.
>
> > >> Hm. I get 47.
>
> > >> Roy Lewallen, W7EL
>
> > > Hmm, when I use 14 Mhz and 6 decimal places I get 37; must have fat
> > > fingered it the first time.
>
> > Going a different way, I also get about 37.
>
> > Aperture of a dish is the area, pi*r^2. r is about 14.2 wl, so area
> > is about 635 sq. wl.
>
> > Aperture of a dipole is 1/4 * 1/2 wl = 1/8 sq. wl.
>
> > That makes gain 635/(1/8) = 635*8, i.e about 5100 or just over 37
> > dBd. This assumes 100 % illumination of the dish, which we won't
> > achieve. So make it 35 dBd or so, i.e. 37 dBi. Using the o.p.'s
> > formula, I get 36.5 dBi.
>
> > It's odd that pi is squared in the formula. The squared part must be

> > to account for the area of the dish, which is pi*r^2. Obviously, this
> > can has been compensated for by the choice of 'k'.
>
> Whoaaa guys.....!
>
> Let us think a bit more regarding the basics presented instead of
> parrotting
> dish's as used in the present state of the art.
> Isn't a dish built around phase change of a half wave dipole in inter
> magnetic coupling?
> If I have a flash light that is focussed does this wavelength aproach
> still apply?
> I thought it would be a question of action and reaction. Trow a ball
> against the wall and it bounces back
> in a reflective manner to the angle of velocity.
> A dish as presently used changes the phase of a given signal to
> reverse it's direction.
> In physics we can also talk about mechanical force that rebound and
> rebound has nothing to do
> with wavelength!   If we consider radiation as being the projection
> of particles instead of wavelike oscillation
> then surely the size of the reflector is solely based on what can be
> collected from the
> emmitter such that it rebounds to a point or a focussed form ?
> I ask the question as I know nothing about the reflective phenomina
> of dish's tho I have visited
> the one in P.R. where the dish is formed with the knoweledge that the
> radiation spreads out
> according to the emmiter used and thus when it reaches the reflector
> the unit strength is weaker which the
> dish attempts to reverse by refocussing. But then I could be totally
> in error thus the question to the experts
> Best regards
> Art Unwin KB9MZ
> .- Hide quoted text -
>
> - Show quoted text -

I think you cannot use the particle analogy with HF when dish size is
not >> greater than wavelength. For a small dish at HF, the waves will
simply bend around the dish and act as if it wasn't there. At much
higher frequencies, particle concepts become more accurate.

2106. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 02:39:50 UTC
From: dfinn1@nc.rr.com
Message-ID: <c7ddd481-a417-437c-bc54-1780e7e16eba@w7g2000hsa.googlegroups.com>
Source record: 22480

On Sep 11, 12:28 pm, "Tom Donaly" <dtdon...@sbcglobal.net> wrote:
> Roy Lewallen wrote:
> > [Slaps self upside the head] 47 dB for a 2000 meter dish, 37 dB for a
> > 2000 foot dish. And that's why I didn't choose bridge design for a
> > career. . .
>
> > Roy Lewallen, W7EL
>
> > j...@specsol.spam.sux.com wrote:
> >> Roy Lewallen <w...@eznec.com> wrote:
> >>> j...@specsol.spam.sux.com wrote:
> >>>> Of course.
>
> >>>> Everyone knows the gain of a parabola is directly proportional to
> >>>> the size in wavelengths, or:
>
> >>>> G=10*log k(pi*D/L)^2
>
> >>>> Where G= gain in DB over an isotropic, k ~ .55 for most real parabolas,
> >>>> D is the diameter, and L is the wavelength (wavelength and diameter
> >>>> in the same units.
>
> >>>> So a 2,000 foot parabola on 20m would have just about 58db gain.
>
> >>> Hm. I get 47.
>
> >>> Roy Lewallen, W7EL
>
> >> Hmm, when I use 14 Mhz and 6 decimal places I get 37; must have fat
> >> fingered it the first time.
>
> >> Working backward from 47 I get a wavelength of 21 feet.
>
> It's always dangerous to do math in public.
> 73,
>   Tom Donaly, KA6RUH- Hide quoted text -
>
> - Show quoted text -

Yes! I think it is best to just give the formula and tell the reader
to calculate!

2107. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 02:58:15 UTC
From: dfinn1@nc.rr.com
Message-ID: <682a4c2d-53c6-403f-9de9-670a170215d8@c58g2000hsc.googlegroups.com>
Source record: 22481

On Sep 11, 2:04 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 10, 10:56 pm, dfi...@nc.rr.com wrote:
>
>
>
>
>
> > On Sep 10, 10:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > > On Sep 10, 9:23 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > > > On Sep 10, 8:45 pm, j...@specsol.spam.sux.com wrote:
>
> > > > > Art Unwin <ArthurUn...@gmail.com> wrote:
> > > > > > What is the main factor that prevents HF radiation from focussing
> > > > > > for extra gain?
>
> > > > > Money.
>
> > > > > If you can afford to build a 20m parabola about 2,000 feet in diameter
> > > > > and the place to mount it, you'll get lots of gain.
>
> > > > > --
> > > > > Jim Pennino
>
> > > > > Remove .spam.sux to reply.
>
> > > > Then are you saying it is the antenna size that is the main factor?.
> > > > So my antenna which is physically small
> > > > can be focussed on a dish which would provide straight line radiation
> > > > or a radiation beam?
> > > > Working on a single element on the ground with a optimizer instead of
> > > > a half sphere I got a
> > > > straight vertical line at the sides which suggested a gun barrel
> > > > radiation with a perfect earth as the reflector.
> > > > Gain was around 8db vertical which is why the question regarding
> > > > focussing! If it was properly focussed the gain should be more.
> > > > 2000 foot dish seems somewhat odd, probably based on a "straight"
> > > > wavelength and not a small volume in equilibriumas the directer
> > > > right?
> > > > Art
>
> > > Let me ask the question another way. Whether it is believed or not,
> > > if a 80 Metre antenna was compressed to the size of a couple of shoe

> > > boxes
> > > would the dish be reduced in size accordingly?
> > > Regagards
> > > Art- Hide quoted text -
>
> > > - Show quoted text -
>
> > No. The shoebox size antenna would approximate an isotropic if it did
> > radiate. It would still have to be placed at the focal point of a very
> > large parabola due to the size of the wave length. Such an antenna, I
> > believe, on the island of Puerto Rico (the SETI antenna) although it
> > is currently used primarily as a receiving antenna. That parabola is
> > positioned to have a very high radiation angle and might not be be
> > that good for terrestrial DX.
>
> The antenna at PR has a stable reflector and a moveable receiver
> thus the take off angle depends on the angular position of the
> receiver
> and the center of the reflector. The receiver is moved regularly so
> the
> sky can be traversed for listening. This was the idea when the antenna
> was set up initialy by Princeton University before they gave up
> possesion of it.
> With respect to WL no facts have been presented to support that fact.
> If you go back to the arbitrary border analysis a force thru the paper
> of the center
> of the border will present resultant forces around the outside of the
> border representing
> ripples on water in wave like fashion, that does not correlate to the
> ejection
> of a particle thru a fissure in the border. Mixing apples and oranges
> no less
> Nuf said- Hide quoted text -
>
> - Show quoted text -

That is interesting. I thought the PR dish was parabolic. As a
parabola, the reflected waves (or particles if you will) of a
transmitter at focal point can only traverse in one direction, that
is, in a direction parallel to the tangent of a line drawn at the
lowest point of the parabola. If the parabolic reflector is
stationary, how can transmitted waves/particles go in any direction
but straight up in that perpendiculr direction? If you move the focal
point as you say they do, then the antenna does not finction as
parabola anymore and gain should drop drastically, agree? I am afraid
I must be missing something and request your technical advice. Thanks.

2108. Re: I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 03:36:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaco52$qc3$1@news.albasani.net>
Source record: 22482

DES wrote:

> Anyway, all help will be greatly appreciated. I believe someone asked
> if I was in the US, yes I am.

Chuck Counselman -- W1HIS has a great page on common mode chokes:

http://www.yccc.org/Articles/W1HIS/CommonModeChokesW1HIS2006Apr06.pdf

He cover HF to power-line uses of them. It is an interesting read;
and, there is a LOT of data/uses/cores there!

Regards,
JS
--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2109. Re: Translate Smith-Chart statement to English?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 03:37:26 UTC
From: dfinn1@nc.rr.com
Message-ID: <6e9167c8-7b09-47b2-8cc9-dd6d9d567282@f63g2000hsf.googlegroups.com>
Source record: 22483

On Sep 11, 1:23 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Myron A. Calhoun wrote:
> > "Does '8-1000 ohms impedance' include ALL COMBINATIONS of #X#jY SUCH
> > THAT SQRT (Xsquare + Ysquare) is in the range of 8 to 1000 (such as
> > #8+j0 to #1000+j0 and 0#j8 to 0#j1000), or are there some "holes" in
> > coverage?"
>
> This should be a rhetorical question. There is no tuner on
> earth that will deliver power, i.e. "match" 0+j1000 ohms.
> --
> 73, Cecil http://www.w5dxp.com

2110. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 04:11:10 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <TUlyk.32896$De7.24289@bignews7.bellsouth.net>
Source record: 22484

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:78c87ca6-2be0-46bd-b84c-0cc59a30c691@l43g2000hsh.googlegroups.com...
> What is the main factor that prevents HF radiation from focussing
> for extra gain?

1, Focusing the radiation involves using a parabolic antenna whose surface area is several wavelengths in length
2. Since our definition of HF includes frequencies between 1.8 Mhz and 50mhz, the physical size of the reflector required would be too large for the average ham to handle.
3. However, that does not prevent HF radiation from being focused, it just address the practicality concerning costs.
Therefore the answer is: There's nothing to prevent HF radiation for focusing for extra gain, as long as you build the antenna or beam in proportion to the wavelengths. If the wavelength is 10,000 times larger than that old TV dish, then simply build your "dish" 10,000 times larger, and in the same proportions.

2111. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 04:59:37 UTC
From: Mark Cudworth <usenet@markc.users.panix.com>
Message-ID: <gacsvk$3b1$1@reader1.panix.com>
Source record: 22485

dfinn1@nc.rr.com wrote:

> That is interesting. I thought the PR dish was parabolic. As a
> parabola, the reflected waves (or particles if you will) of a
> transmitter at focal point can only traverse in one direction, that
> is, in a direction parallel to the tangent of a line drawn at the
> lowest point of the parabola. If the parabolic reflector is
> stationary, how can transmitted waves/particles go in any direction
> but straight up in that perpendiculr direction? If you move the focal
> point as you say they do, then the antenna does not finction as
> parabola anymore and gain should drop drastically, agree? I am afraid
> I must be missing something and request your technical advice. Thanks.

The Arecibo radio telescope has a spherical reflector, not parabolic.
This is mentioned on the official web page:

http://www.naic.edu/public/the_telescope.htm

It also gives details on how the telescope operates.

--
Mark Cudworth

2112. Modeling Hygain element clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 06:12:13 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <DInyk.28547$kh2.23950@bignews3.bellsouth.net>
Source record: 22486

I am running the numbers on several 10 meter OWA 6 element antennas
with boom lengths of 24 to 26 ft. Tools on hand are "Yagi Analyzer",
"Yagi for Windows" by Dean Straw, and the spreadsheets by W6NL.
Several designs look promising, but I've gotten myself confused about
how to correctly model the clamps. The official Hygain YO files from
Roger Cox are not consistant as to equivalent diameter or length in
comparing the 203BA, 204BA, and the 205CA.
"What's the problem?" you say. Well, I'd like to use the inboard
sections of some 204BA elements for the driven element and the first,
close-spaced director.
An email to ARRL Technical Services was not enlightening, and
re-reading Jim Lawson's and Dave Leeson's works did not give me that
warm, confidant feeling that I'd like.
Anyone care to enlighten me with actual numbers, or websites??
Gud Lk in the contest!

Mike W5CHR
Memphis Tenn

2113. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 06:40:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7l0kc4diih014vah6ir6efms5j16itu1i0@4ax.com>
Source record: 22487

On Thu, 11 Sep 2008 16:14:56 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>> Try reading the two again. =A0They are identical. =A0The only difference
>> is you don't know the magnitudes of those forces (the length of their
>> vectors) like Jim obviously does.

>I don't know what you are talking about

Two identical statements, one is yours. How is it that you don't
understand?

The electromagnetic vector for a 1V field imparts 100 Billion times
more force than the "weak force." This is why they call it "Weak."

The Gravity vector is weaker than that by far.

All of this has been known for years. The experiments at CERN are
merely adding precision to that number of 100 Billion to say it may
actually be 100.015 Billion instead (or perhaps 99.8992 Billion times
more force). This goal too, has been reported for years. One day in
the future they will know it to that higher precision which will allow
them to discern the finer degree of weaker Gravity's disturbance,
which, after all, is the whole point of this.

No one gives a shit about the Weak force. It is merely the universe's
S9+50dB noise from a 5th dimensional neighbor's aquarium heater that
is blanking out the S1 DX signal from a graviton.

73's
Richard Clark, KB7QHC

2114. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 11:18:36 UTC
From: Dave <noone@nowhere.com>
Message-ID: <gesyk.865$Dj1.215@trnddc02>
Source record: 22488

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:d7244eab-f2ee-4a32-ae16-5a3807e97bf4@k37g2000hsf.googlegroups.com...
>My posting is clearly placed within the Earth's boundary so talk of
>Quarks ,Bosun" Higgs field etc is clearly irrevalent to the subject
>of radiation
>unless it is a attempt to bait me or to create confusion about the
>subject of radiation when its aim should be education and debate.
>Art Unwin KB9MZ....xg

well, art, how dare you think we could be trying to bait you or create more confusion. i hardly think we could possibly create more confusion than you have right now. try to explain these for instance... if it takes that magical mystery particle settling on diamagnetics to create an electromagnetic wave, how does the sun which is all plasma create electromagnetic waves? and if the weak force is so much stronger than gravity, and it interacts with the multitude of these magical mystery particles that spew forth from the sun how come we haven't collapsed into a weak force black hole? it takes lots of mass to create a black hole because gravity is so weak, but if the weak force is stronger than it should collapse us even easier. and if the neutrino's well measured interaction with matter is so weak it must take a huge number of them to be your magical mystery particle so we should really have collapsed under their weak force a long time ago! oh wait, maybe their weak force is what does spin so we are really talking about a spindizzy effect that if captured would allow remote manipulation of matter, i always wondered where Blish came up with that device, maybe you have hit on the secret! come on art, the wx is going to be bad across much of the country here this weekend and we need some good entertainment!

2115. Re: Welfare babies, greasy diners and other tidbits

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 12:54:19 UTC
From: Synthetic Networked Android Responsible for Killing and Yardwork <mhm29x21@meow.empire>
Message-ID: <pan.2008.09.12.12.54.17.920777@hail.eris.flonk.meow.all.hail.discordia.meow.flonk.mockery.demon.flonk.meow.killer.snot-monsters.from.outer.space>
Source record: 22489
Cross-posted to: rec.aquaria.marine.reefs,rec.radio.amateur.antenna,alt.usenet.kooks,alt.callahans,rec.ponds

Hail Eris! On Mon, 08 Sep 2008 09:50:48 -0700, Eris Kallisti Discordia was laughing at the antics of expat, when they suddenly burst out in tears:
> On Sep 8, 9:33ï¿½am, John Smith wrote:
>> James Nasium wrote:
>> > ...
>> > Go play with your fishies, boy. You must be a faggot. ï¿½Do you like to
>> > lather the barber pole, do the tube steak boogie, lay a little pipe on
>> > the hershey highway?
>>
>> Oh no, now we get to hear from expats' spouse?
>
> These trashy posts brought to this group coutesy of John Smith aka
> assembly wizard. Give John a chance and he will lay some pipe on that old
> hershey highway fo yours, that is if you can get him off his momma.

What fun, gay lames and mommy lames. Do you do IKYABWAI, projection, and PKB, as well?

--
____
PorscheMonkey4Life COOSN-029-06-71069; Lits Slut #16
Butcher Knife Natalia; Gutter Chix0r #17; AUK Psycho & Felon #21
BowTie's Spuriously Accused Pedo Photographer #4; Parrot & Zombie #2
Usenet Ruiner #5; Top Asshole #3; Official Chung Demon
Most Hated Usenetizen of All Time #13; Anonymous Psycho Criminal #18
Jader Addict
No holy posting of any kind, to email.
"It can't rain all the time"

"Anyone who considers protocol unimportant has never dealt with a cat."
Robert Heinlein

Homeland Security: Most Successful Bureaucracy Ever.

"Everything Burnore has posted in the last ten years just screams of his obsession with me. The old fart is clearly still smarting from the various whoopings I've given him." -- No, Tim Thorne doesn't have an ego problem. Of course not. What would make you think otherwise? Message-ID: <7eek94hfjvd7mvursingkfu0c560j0fdif@4ax.com>

"A vote for Obama is a vote for this simpleton." -- Frank the Gray Ghost is being unnecessarily hard on himself, IMO. Message-ID: <Xns9ACABD05541E2Wereofftoseethewizrd@216.196.97.142>

"How can you possibly have an international agreement that's effective unless countries like China and India are not full participants?" -- George W. Bush, Camp David, April 19, 2008

"this brain stem cannot leave well enough alone." -- Lady Veteran has been demonstrating this truth for many years. Her honesty is refreshing. Message-ID: <e62224t05er85vvpe1r3u2dhoebjv1p3vg@4ax.com>

"FAILED BULLSHITBOYS WHOSE CANDY HAS NO RED ON IT! YOU KNOW IT TO BE TRUE! I LICKED THE RED OFF YOUR CANDY BECAUSE YOU ARE YOUR ILK HAVEN'T GOT ANY FURY!" -- Gibbered by Johnny in Message-ID: <qiA3k.2556$Xe.1871@bignews1.bellsouth.net>

"Not supporting me is equivalent to forfeiting your own rights." -- John D. Wentzky: Warrior For Your Freedumb! Message-ID: <33km2419sg6fnq3shtbatqa602eagfbskl@4ax.com>

"I know how you special busboys are.
You're crazy." -- John "special busboy" Wentzky, in Message-ID: <HMb3k.2413$bh5.2204@bignews4.bellsouth.net>

http://www.runescape.com/
Join my RuneScape clan!
http://z11.invisionfree.com/Holy_Pretzel_Cabal/index.php
Full name of clan: Cabal of the Holy International Discordian Internet And Usenet Terrorist Pretzel

Xander: "I still don't get why we had to come here to get info about a killer snot monster."
Giles: "Because it's a killer snot monster from outer space. (pause) I did not say that." -- "Listening to Fear" (87/509), Buffy the Vampire Slayer
"Actually, I quit. Nobody takes my frock." -- Captain Jack, "The Doctor Dances" (27.10), Doctor Who

Barbara Woodhouse Memorial Dog Whistle
Trainer of PorchMonkey4Life
http://www.screedbomb.info/porchie/
The MonkeyLJ: http://porchmonkey.livejournal.com/ -- nuked!

Pierre Salinger Memorial Hook, Line & Sinker, June 2008
Hammer of Thor, July 2008

8. OK, so who's this "Dev McKinHole", then?

I dunno, some guy named Devon McKinnon of Dawson Creek, allegedly, and according to the Monkey, a pedophile. However, I wouldn't take that too seriously. The Monkey keeps changing his mind about who I am, so there's no reason to think he won't change it about Mr. McKinnon, too.

"I am mentally stable, fool...I am going to be a bishop's wife." -- Sure you are, Olympiada. MID: <45e21b75$0$16373$88260bb3@free.teranews.com>

"yes you are definitely retarded. See a neurologist immediate. And if you don't have monet, blow a neurologist immediately." -- Farky the

Monkey-man to peachy ashie passion. No, no trace of irony in his post.
MID: <4h6xh.802$hH2.233@trnddc02>

"I was told there would be cookies."
Cross-Poasters For Goddess!
Remember: Straight people can't help it!
A petition to make the Five-Fingered Hand of Eris
the official symbol for the planet Eris:
http://www.petitiononline.com/ffhoeris/

"If you don't have pedicures AT LEAST every two weeks, don't talk to me. If you don't floss every night and morning and brush at least twice a day, don't talk to me. If you don't spend money on you hair and get great cuts and color, don't talk to me. If you are heavy, don't talk to me. If you don't shower every morning and take a nice bubble bath every night, don't talk to me. If you don't have a loved one in your arms, don't talk to me. If you don't keep an immaculate house, don't talk to me. If you don't work, don't talk to me." -- Clearly, Martha Vandella never wants to talk to me, which is for the best, really.
MID: <1161934857.062934.91900@i42g2000cwa.googlegroups.com>

"You're fighting a Furry Giant

"He delivers a long speech about how you shouldn't judge him just because he's an animal deep down inside and you're all intolerant and dressing up like an animal in easy-access furry pants doesn't make you a pervert... you fall asleep halfway through." -- The Kingdom of Loathing

2116. Re: Welfare babies, greasy diners and other tidbits

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 14:27:49 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <d4e6e553-8aee-41f2-ba5f-cae0b790124f@f63g2000hsf.googlegroups.com>
Source record: 22490
Cross-posted to: rec.aquaria.marine.reefs,rec.radio.amateur.antenna,alt.usenet.kooks,alt.callahans,rec.ponds

On Sep 12, 7:54 am, Synthetic Networked Android Responsible for
Killing and Yardwork <mhm29...@meow.empire> wrote:
> Hail Eris! On Mon, 08 Sep 2008 09:50:48 -0700, Eris Kallisti Discordia was
> laughing at the antics of expat, when they suddenly burst out in tears:
>
> > On Sep 8, 9:33 am, John Smith wrote:
> >> James Nasium wrote:
> >> > ...
> >> > Go play with your fishies, boy. You must be a faggot. Do you like to
> >> > lather the barber pole, do the tube steak boogie, lay a little pipe on
> >> > the hershey highway?
>
> >> Oh no, now we get to hear from expats' spouse?
>
> > These trashy posts brought to this group coutesy of John Smith aka
> > assembly wizard. Give John a chance and he will lay some pipe on that old
> > hershey highway fo yours, that is if you can get him off his momma.
>
> What fun, gay lames and mommy lames. Do you do IKYABWAI, projection, and
> PKB, as well?
>
> --
> ____
> PorscheMonkey4Life COOSN-029-06-71069; Lits Slut #16
> Butcher Knife Natalia; Gutter Chix0r #17; AUK Psycho & Felon #21
> BowTie's Spuriously Accused Pedo Photographer #4; Parrot & Zombie #2
> Usenet Ruiner #5; Top Asshole #3; Official Chung Demon
> Most Hated Usenetizen of All Time #13; Anonymous Psycho Criminal #18
> Jader Addict
> No holy posting of any kind, to email.
> "It can't rain all the time"
>
> "Anyone who considers protocol unimportant has never dealt with a cat."
> Robert Heinlein
>
> Homeland Security: Most Successful Bureaucracy Ever.
>
> "Everything Burnore has posted in the last ten years just screams of his
> obsession with me. The old fart is clearly still smarting from the
> various whoopings I've given him." -- No, Tim Thorne doesn't have an ego
> problem. Of course not. What would make you think otherwise? Message-ID:
> <7eek94hfjvd7mvursingkfu0c560j0f...@4ax.com>
>

> "A vote for Obama is a vote for this simpleton." -- Frank the Gray Ghost
> is being unnecessarily hard on himself, IMO. Message-ID:
> <Xns9ACABD05541E2Wereofftoseethewi...@216.196.97.142>
>
> "How can you possibly have an international agreement that's effective
> unless countries like China and India are not full participants?" --
> George W. Bush, Camp David, April 19, 2008
>
> "this brain stem cannot leave well enough alone." -- Lady Veteran has
> been demonstrating this truth for many years. Her honesty is refreshing.
> Message-ID: <e62224t05er85vvpe1r3u2dhoebjv1p...@4ax.com>
>
> "FAILED BULLSHITBOYS WHOSE CANDY HAS NO RED ON IT! YOU KNOW IT TO BE
> TRUE! I LICKED THE RED OFF YOUR CANDY BECAUSE YOU ARE YOUR ILK HAVEN'T
> GOT ANY FURY!" -- Gibbered by Johnny in Message-ID:
> <qiA3k.2556$Xe.1...@bignews1.bellsouth.net>
>
> "Not supporting me is equivalent to forfeiting your own rights." --
> John D. Wentzky: Warrior For Your Freedumb! Message-ID:
> <33km2419sg6fnq3shtbatqa602eagfb...@4ax.com>
>
> "I know how you special busboys are.
> You're crazy." -- John "special busboy" Wentzky, in Message-ID:
> <HMb3k.2413$bh5.2...@bignews4.bellsouth.net>
>
> http://www.runescape.com/
> Join my RuneScape clan!http://z11.invisionfree.com/Holy_Pretzel_Cabal/index.php
> Full name of clan: Cabal of the Holy International Discordian Internet
> And Usenet Terrorist Pretzel
>
> Xander: "I still don't get why we had to come here to get info about a
> killer snot monster."
> Giles: "Because it's a killer snot monster from outer space. (pause) I
> did not say that." -- "Listening to Fear" (87/509), Buffy the Vampire
> Slayer
> "Actually, I quit. Nobody takes my frock." -- Captain Jack, "The Doctor
> Dances" (27.10), Doctor Who
>
> Barbara Woodhouse Memorial Dog Whistle
> Trainer of PorchMonkey4Lifehttp://www.screedbomb.info/porchie/
> The MonkeyLJ:http://porchmonkey.livejournal.com/-- nuked!
>
> Pierre Salinger Memorial Hook, Line & Sinker, June 2008
> Hammer of Thor, July 2008
>
> 8. OK, so who's this "Dev McKinHole", then?
>
> I dunno, some guy named Devon McKinnon of Dawson Creek, allegedly, and
> according to the Monkey, a pedophile. However, I wouldn't take that too
> seriously. The Monkey keeps changing his mind about who I am, so there's

> no reason to think he won't change it about Mr. McKinnon, too.
>
> "I am mentally stable, fool...I am going to be a bishop's wife." -- Sure
> you are, Olympiada. MID: <45e21b75$0$16373$88260...@free.teranews.com>
>
> "yes you are definitely retarded. See a neurologist immediate. And if
> you don't have monet, blow a neurologist immediately." -- Farky the
> Monkey-man to peachy ashie passion. No, no trace of irony in his post.
> MID: <4h6xh.802$hH2.233@trnddc02>
>
> "I was told there would be cookies."
> Cross-Poasters For Goddess!
> Remember: Straight people can't help it!
> A petition to make the Five-Fingered Hand of Eris
> the official symbol for the planet Eris:http://www.petitiononline.com/ffhoeris/
>
> "If you don't have pedicures AT LEAST every two weeks, don't talk to me.
> If you don't floss every night and morning and brush at least twice a
> day, don't talk to me. If you don't spend money on you hair and get
> great cuts and color, don't talk to me. If you are heavy, don't talk to
> me. If you don't shower every morning and take a nice bubble bath every
> night, don't talk to me. If you don't have a loved one in your arms,
> don't talk to me. If you don't keep an immaculate house, don't talk to
> me. If you don't work, don't talk to me." -- Clearly, Martha Vandella
> never wants to talk to me, which is for the best, really.
> MID: <1161934857.062934.91...@i42g2000cwa.googlegroups.com>
>
> "You're fighting a Furry Giant
>
> "He delivers a long speech about how you shouldn't judge him just because
> he's an animal deep down inside and you're all intolerant and dressing up
> like an animal in easy-access furry pants doesn't make you a pervert...
> you fall asleep halfway through." -- The Kingdom of Loathing

Keep this shit out of our group or I will be forced to kick your hairy
ass!

2117. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 14:35:42 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a15dcb0c-2ac4-4bc6-9116-a8bdc53a70bc@34g2000hsh.googlegroups.com>
Source record: 22491

On Sep 12, 6:18 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
David, what I have stated is based on known laws and phenomina and
started with the recognision
that applying a time varying field and radiators to a Gaussian field
equates to Maxwell's laws.
Right from the start you could not concentrate on proving or
disproving that statement !
Until you can determine whether that is correct or not you cannot
move forward.
As yet, nobody has disproved that statement with counter facts. If you
cannot explain that simple fact
you surely cannot understand Newtons laws and how the use of such laws
provide the presence
of eddy current which provides a skin depth of mechanical resistance.
I use the term mechanic
because I recognise the importance of the four forces in the standard
model and the Grand Universal Theory.
So until you are able to concentrate and tackle the Gauss and Maxwell
connection that I started with
there is no hope for you to procede in a scientific matter, and that
goes for every body, not just you.
Best regards
Art

2118. Re: Welfare babies, greasy diners and other tidbits

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 14:57:37 UTC
From: 0mn1vore <SeeSig@BitBucket.nul>
Message-ID: <pan.2008.09.12.14.46.04.190772@giganews.com>
Source record: 22492

In <d4e6e553-8aee-41f2-ba5f-cae0b790124f@f63g2000hsf.googlegroups.com>
Fri, 12 Sep 2008 07:27:49 -0700, John Smith said:

> Subject: Re: Welfare babies, greasy diners and other tidbits
> From: John Smith <assemblywizzard@gmail.com>
> Newsgroups: rec.aquaria.marine.reefs,rec.radio.amateur.antenna,alt.usenet.kooks,alt.call
ahans,rec.ponds
^^^

but fix the (a) and the comma first.

Perl is designed to give you several ways to do anything, so
consider picking the most readable one.
-- Larry Wall in the perl man page

2119. Re: Gay BDSM Site

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 15:47:34 UTC
From: "n8wwm mrbindwell (fatboy)" <dougay@nospam.com>
Message-ID: <gae2ur$k7j$1@news.mixmin.net>
Source record: 22270
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"badyoungmaster" <badyoungmaster@yahoo.ca> wrote in message
news:9074480e-8e81-4884-8534-36758662a2d0@27g2000hsf.googlegroups.com...
> There is a free gay bdsm site at www.men4bdsm.com
>
>
Do you have one for gay BDSM ham radio operators? I'm ready load up my long
wire. (wink wink)

--
n8wwm mrbindwell
http://img137.imageshack.us/my.php?image=n8wwmpetroad2ie4.jpg

2120. Re: Modeling Hygain element clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 15:56:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2e3lc4hphc9i6gbtn7qtmfeudsj6n0kmos@4ax.com>
Source record: 22493

On Fri, 12 Sep 2008 01:12:13 -0500, "Mike Lucas" <w5chr@bellsouth.net>
wrote:

> "What's the problem?" you say. Well, I'd like to use the inboard
>sections of some 204BA elements for the driven element and the first,
>close-spaced director.

Hi Mike,

I would say "have at it," but what has this got to do with clamps?

They cannot present any perturbation to the calculations that wouldn't be lost in the fourth right most digit after the decimal point. Even more un-compelling, modeling probably wouldn't get you any closer to reality than the second right most digit after the decimal point.

There are too many confounding properties of earth, nearby objects, and the usual variability in materials and construction to imagine you are going to both model and build one right out of the box, so to speak.

On the other hand, actually setting your mind to it and doing it is merely a matter of planning and performance right down to the size of the clamp nuts. This is nothing more than a geometrical description using wire sections of various diameters. The clamp is a half turn of a loop of a certain wire diameter, and the nut is merely a wider wire short section along the straight part of that half loop. Getting it to wrap around an even thicker wire (the boom), and pierce thick wires (the elements) will be a trick, and you will soon discover that you have violated at least one rule of the MANA engine (about proximity of, or overlapping segments). Myself, I would simply make the boom of a series of sections, where the clamp area has a slightly greater diameter.

This exercise is useful to do once for the drill. You get to learn what counts and what does not, and then keep only those lessons that actually offer something that lifts above the background noise of mathematical error.

73's
Richard Clark, KB7QHC

2121. Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 16:02:15 UTC
From: KC8QJP Crisco Kathy <kc8qjp@criscointherear.com>
Message-ID: <48ca928a$0$529$c5fe31e7@reader.usenet4all.se>
Source record: 22494
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

http://cgi.ebay.com/Xforce-Amp-1000-watt-Mobile-Linear-Amplifier_W0QQitemZ130253740730QQihZ003QQcategoryZ48700QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

FREE SHIPPING!

XFORCE WILL ROCK YOUR WORLD!

--
n8wwm mrbindwell's wife

2122. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 16:18:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gae4o7$bh0$1@news.albasani.net>
Source record: 22495
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

KC8QJP Crisco Kathy wrote:
> http://cgi.ebay.com/Xforce-Amp-1000-watt-Mobile-Linear-Amplifier_W0QQitemZ130253740730QQihZ003QQcategoryZ48700QQssPageNameZWDVWQQrdZ1QQcmdZViewItem
>
> FREE SHIPPING!
>
> XFORCE WILL ROCK YOUR WORLD!
>
>
> --
> n8wwm mrbindwell's wife
>
>

Here is a real amp, just so you know what one looks like:

http://www.hfpower.com/new/a2000a.htm

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2123. Re: Modeling Hygain element clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 16:33:02 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <mPwyk.33561$vX2.4637@bignews6.bellsouth.net>
Source record: 22496

"Richard Clark" wrote:
> Hi Mike,
>
> I would say "have at it," but what has this got to do with clamps?

Richard: Tnx for the post- I enjoy slogging through the math to 4 places, but then I usually round off to the nearest 1/16th when building something. My brain had become numb from particals (sic) with spin, dripping from tilted elements. I decided to restart a construction project, just on the odd chance that I'll get it finished and on the tower before (if) the next Solar Cycle happens. So why not some poetry or at least free verse next time???

Mike W5CHR
Memphis Tenn

2124. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 16:39:40 UTC
From: Dave <noone@nowhere.com>
Message-ID: <gXwyk.16$pp3.2@trnddc06>
Source record: 22497

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:a15dcb0c-2ac4-4bc6-9116-a8bdc53a70bc@34g2000hsh.googlegroups.com...
On Sep 12, 6:18 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
>David, what I have stated is based on known laws and phenomina and
>started with the recognision
>that applying a time varying field and radiators to a Gaussian field
>equates to Maxwell's laws.
>Right from the start you could not concentrate on proving or
>disproving that statement !

around and around we go... i quoted the required passages from jackson and
ramo/whinnery/vanduzer to show that adding time to gauss'es law was
incorrect. the law is time independent, meaning it does not require a time
term, it applies for all time instantaneously and it is properly included in
maxwell's equations as is. your addition of 't' is not necessary. proof
is not necessary, it is by definition and intuitively obvious to anyone with
the proper background.

2125. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 16:43:49 UTC
From: Dave <noone@nowhere.com>
Message-ID: <9%wyk.17$pp3.12@trnddc06>
Source record: 22498
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

you should stick to fur coats, the posting has been reported to ebay as a
violation of listing policy.

"KC8QJP Crisco Kathy" <kc8qjp@criscointherear.com> wrote in message
news:48ca928a$0$529$c5fe31e7@reader.usenet4all.se...
> http://cgi.ebay.com/Xforce-Amp-1000-watt-Mobile-Linear-Amplifier_W0QQitemZ130253740730QQ
ihZ003QQcategoryZ48700QQssPageNameZWDVWQQrdZ1QQcmdZViewItem
>
> FREE SHIPPING!
>
> XFORCE WILL ROCK YOUR WORLD!
>
>
> --
> n8wwm mrbindwell's wife
>

2126. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 16:55:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6b99e77e-179b-42b2-839b-8d2ec2e404a1@r66g2000hsg.googlegroups.com>
Source record: 22499

On Sep 11, 11:11 pm, "Hal Rosser" <hmros...@bellsouth.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:78c87ca6-2be0-46bd-b84c-0cc59a30c691@l43g2000hsh.googlegroups.com...
>
> > What is the main factor that prevents HF radiation from focussing
> > for extra gain?
>
> 1, Focusing the radiation involves using a parabolic antenna whose surface
> area is several wavelengths in length
> 2. Since our definition of HF includes frequencies between 1.8 Mhz and
> 50mhz, the physical size of the reflector required would be too large for
> the average ham to handle.
> 3. However, that does not prevent HF radiation from being focused, it just
> address the practicality concerning costs.
> Therefore the answer is: There's nothing to prevent HF radiation for
> focusing for extra gain, as long as you build the antenna or beam in
> proportion to the wavelengths. If the wavelength is 10,000 times larger than
> that old TV dish, then simply build your "dish" 10,000 times larger, and in
> the same proportions.

Hal
I have a antenna the size of two shoe boxes. This antenna is multi
wave lengths long
and will radiate on top band. In making this antenna so small I added
inductance
which I consequently cancelled as lumped loads have not been included
in the laws of radiation
as espoused by Maxwell. The opinion of this group is that I place a
reflector at a great distance
from this small physical box and call it a reflector!
I place this same small antenna upon the ground and with the use of a
antenna program
determine that I have produced gain based on a perfect ground. The
design on the antenna
is based upon the laws of Gauss since the laws of Maxwell has not
provided any impetus to the
solving of the phenomina of radiation . The laws of Gauss correlate
with each other and a person came on board
to verify such. But the trail that I offered has been rejected
Not.... because the association presented is in error
it was rejected by.....well.....well just because..... without
providing evidence to the contrary.
This has lead us to the obsurd present point where a cubic foot size

antenna for top band should have
its reflecter a couple of blocks away and of a size stretching for
several thousand feet instead of a few inches
where if the antenna was a ball of presureized water the close
reflector would prevent the jet of water spreading to the rear.
Regards
Art KB9MZ.....XG

2127. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 17:29:31 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <d58lc41o450s4qrqja5cd2k5c261235pkj@4ax.com>
Source record: 22500

On Wed, 10 Sep 2008 15:23:12 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Jeff Liebermann wrote:
>> On Wed, 10 Sep 2008 10:02:54 -0700 (PDT), Art Unwin
>> <ArthurUnwin@gmail.com> wrote:
>>
>>> What are you saying and why? You are not stupid at least not in my
>>> eyesArt
>>
>> It's a forgery. Reverse DNS of the IP address yields:
>> dialup-4.255.242.103.Dial1.Atlanta1.Level3.net
>>
>> Well, we know he's in the Atlanta Georgia area. He's using Google
>> Groups to post his forgeries. Google is terrible about responding to
>> usenet related problems. If you want to persue it, you can probably
>> email a complaint to his ISP at:
>> abuse@level3.com
>
>Thanks Jeff ... this guy/gal/it is a particular vile fool, I am ashamed
>to have my posts even associated with its' ... :-(
>
>We may choose to disagree, but such is below human conduct ...
>
>Regards,
>JS

Note that you can also email the Google groups admin to have the
forgeries and follow ups that include forgeries removed. I've
received email from Google requesting my permission to remove one of
my postings that quoted a forgery. My guess is that it's a liability
issue. However, the email arrived something like a year after the
forgeries were posted, which may be an indication of Google's response
time. The problem is that I can't seem to find any information on
exactly how initiate the removal procedure with Google. If I find
anything useful, I'll pass it on.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2128. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 18:14:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaebib$jk0$1@news.albasani.net>
Source record: 22351
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Dave wrote:
> you should stick to fur coats, the posting has been reported to ebay as a
> violation of listing policy.
>

Actually, I run a similar amp on 10-40m in my pickup, what makes the
listing a violation? If I ever decide to get rid of it, I can't sell it
on ebay?

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2129. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 18:25:53 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Ruyyk.9$Yw1.0@trnddc03>
Source record: 22352

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:6b99e77e-179b-42b2-839b-8d2ec2e404a1@r66g2000hsg.googlegroups.com...
On Sep 11, 11:11 pm, "Hal Rosser" <hmros...@bellsouth.net> wrote:
>This has lead us to the obsurd present point where a cubic foot size
>antenna for top band should have
>its reflecter a couple of blocks away and of a size stretching for
>several thousand feet instead of a few inches
>where if the antenna was a ball of presureized water the close
>reflector would prevent the jet of water spreading to the rear.

better, getting better... keep going, this concept has potential to keep me
amused for the weekend with this bad wx. pressurized water vs 160m size
photons is a good combination!

2130. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 18:58:39 UTC
From: an_old_friend <kb9rqz@gmail.com>
Message-ID: <f4d68b26-07d2-4928-87fa-9da4d0ae1e88@8g2000hse.googlegroups.com>
Source record: 22353
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sep 12, 2:14 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Dave wrote:
> > you should stick to fur coats, the posting has been reported to ebay as a
> > violation of listing policy.
>
> Actually, I run a similar amp on 10-40m in my pickup, what makes the
> listing a violation? If I ever decide to get rid of it, I can't sell it
> on ebay?
>
> Regards,
> JS
>
> --
> loudobbs.com -- you do have the power to be informed; but, first you
> have to use it.

it offends certain folks and ebay can't tell legal amps so the
whinners win

2131. Re: Modeling Hygain element clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 19:06:58 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <8663p1p4j1.fsf@qmc.ph.msstate.edu>
Source record: 22356

I have never built a yagi using Hygain elements, but I have built
some 6 element OWA's like you want to build. The effect of
the clamps will be larger than "4th digit", probably a couple of
inches at 28 MHz. But you can ssume to a very good approximation the clamp
will just shift the resonant freq of those elements by a certain amount.

When I built my OWA's I used DX engineering insulated element mounts. With
these, the SWR curve of the real antenna matched the tapered NEC2 model
perfectly. I didn't even need to adjust the length of the driven element.

If you were using a Hygain element for only the driven element, I would
just allow for a few inches of adjustment + or - (hose clamp on last segment),
and just adjust the tip length of the final antenna to get the correct
SWR curve. If you want to use Hygain elements for Dr and 1st Dir, just do
the same, but adjust the lengths of both Dr and 1stDir by the same amount.
In the OWA design changing the length of the Dr and 1st Dir is mostly
going to affect the matching of the antenna.

Tor
N4OGW

2132. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 19:07:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaeelvnaj1@news.albasani.net>
Source record: 22354
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

an_old_friend wrote:

> ...
> it offends certain folks and ebay can't tell legal amps so the
> whinners win

Wow. I am certainly no attorney, but ebay seems "ripe for picking on
that one."

I mean, if they are illegally preventing some from participating in the
God-given-right-of-capitalism, it seems like a sin; doesn't it? LOL

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2133. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 19:11:52 UTC
From: an_old_friend <kb9rqz@gmail.com>
Message-ID: <86386957-d8cc-4b45-b1a9-8f33b998284d@m73g2000hsh.googlegroups.com>
Source record: 22355
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sep 12, 3:07 pm, John Smith <assemblywiz...@gmail.com> wrote:
> an_old_friend wrote:
> > ...
> > it offends certain folks and ebay can't tell legal amps so the
> > whinners win
>
> Wow. I am certainly no attorney, but ebay seems "ripe for picking on
> that one."

poetencaily but they seem to have decided the fcc is a bigger threat
to te whole system, and I assume their lawyers have weighed that
>
> I mean, if they are illegally preventing some from participating in the
> God-given-right-of-capitalism, it seems like a sin; doesn't it? LOL

well sins are not crimes or suable civil torts
>
> Regards,
> JS
>
> --
> loudobbs.com -- you do have the power to be informed; but, first you
> have to use it.

2134. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 19:15:10 UTC
From: Channel Cop <nedrog@yahoo.com>
Message-ID: <KIednTfrTfQnIlfVnZ2dnUVZ_hqdnZ2d@comcast.com>
Source record: 22357
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

"an_old_friend" <kb9rqz@gmail.com> wrote in message
news:f4d68b26-07d2-4928-87fa-9da4d0ae1e88@8g2000hse.googlegroups.com...
On Sep 12, 2:14 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Dave wrote:
> > you should stick to fur coats, the posting has been reported to ebay as
> > a
> > violation of listing policy.
>
> Actually, I run a similar amp on 10-40m in my pickup, what makes the
> listing a violation? If I ever decide to get rid of it, I can't sell it
> on ebay?
>
> Regards,
> JS
>
> --
> loudobbs.com -- you do have the power to be informed; but, first you
> have to use it.

it offends certain folks and ebay can't tell legal amps so the
whinners win

maybe you should inform ebay which ones are illegal and be a good guy to the
ham community!

2135. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 19:22:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaefhromf1@news.albasani.net>
Source record: 22358
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Channel Cop wrote:

> ...
> it offends certain folks and ebay can't tell legal amps so the
> whinners win
>
> maybe you should inform ebay which ones are illegal and be a good guy to the
> ham community!

Since the "legal" ones either have a tuned circuit with takes the output
to ground and burns up the finals if you attempt to hit 11 meters, or a
choke which cuts drive at 11 meter freqs, or both ... I don't think they
can tell at ebay!

Most truckers actually use ham equip. (or, "legal equipment"), they just
have cut out the "protections."

So in the end, what good is all of it?

And, every ham I know, knows that if you want top dollar for ancient
equipment he/she is done with--sell it to a trucker! LOL

I mean, it is sort of like the "copy protection" on movies--it doesn't
work, teenagers worldwide copy and burn movies with free software--but
the industry claims it works! Go figure ...

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2136. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 19:34:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7ffa626c-2d27-475e-8ac4-bd7fbf7bda9e@l43g2000hsh.googlegroups.com>
Source record: 22359

On Sep 12, 1:25 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:6b99e77e-179b-42b2-839b-8d2ec2e404a1@r66g2000hsg.googlegroups.com...
> On Sep 11, 11:11 pm, "Hal Rosser" <hmros...@bellsouth.net> wrote:
>
> >This has lead us to the obsurd present point where a cubic foot size
> >antenna for top band should have
> >its reflecter a couple of blocks away and of a size stretching for
> >several thousand feet instead of a few inches
> >where if the antenna was a ball of presureized water the close
> >reflector would prevent the jet of water spreading to the rear.
>
> better, getting better... keep going, this concept has potential to keep me
> amused for the weekend with this bad wx. pressurized water vs 160m size
> photons is a good combination!

I have no idea of how a photon affects radiation. I do know that when
a building is being drenched by a jet of water
you do not cover the building with a protective shield or reflector
you put a reflector close to the source.
You have to be the only guy in the country with a 2000 foot diameter
umbrella to keep your hair dry! You were the leader in this ham group
that denied the mathematics of the comparison
of Maxwell and Gauss. Because the rest of the hams on this group could
not handle the transition of the different units involved
or have not studied physics they followed you over the cliff like
lemmings.
All because you were exercising free speech where verification was not
available
I assume you know how to turn on a transmitter but beyond that your
education is a great mystery.
For sure you never received a pass in physics of any sort and debate
with such a person is impossible
I await the day when a ham comes along with sufficient education to
verify or discredit the Maxwell/Gauss
mathematics but I know a ham is not around in the U.S. that can
discredit it.

2137. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 19:41:26 UTC
From: Dave <noone@nowhere.com>
Message-ID: <GBzyk.23$1a2.19@trnddc04>
Source record: 22360

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:7ffa626c-2d27-475e-8ac4-bd7fbf7bda9e@l43g2000hsh.googlegroups.com...
>I await the day when a ham comes along with sufficient education to
>verify or discredit the Maxwell/Gauss
>mathematics but I know a ham is not around in the U.S. that can
>discredit it.

of course not, we are all educated enough to know the proper relationship
between gauss and maxwell, and the fact that gauss's law is an accepted part
of maxwell's equations... and works fine just as it is without your extra
't' added to it. it would take someone graduating from the warped art's
college of mystical electromagnetics with an advanced degree in
neutrino-anti-gravity-weak-force-jumping-particles to handle that proof!

2138. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 19:50:12 UTC
From: Dave <noone@nowhere.com>
Message-ID: <UJzyk.24$1a2.13@trnddc04>
Source record: 22361

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:7ffa626c-2d27-475e-8ac4-bd7fbf7bda9e@l43g2000hsh.googlegroups.com...

>You have to be the only guy in the country with a 2000 foot diameter
>umbrella to keep your hair dry!
not quite, but i do have a 120' tall by about 250' long 160m vertical array
and an inverted V at 180' that will beat your shoebox even without the amp
turned on.

>You were the leader in this ham group
>that denied the mathematics of the comparison
>of Maxwell and Gauss.
on the contrary, i keep pointing out that Gauss is an integral part of
Maxwell's equations.

>I assume you know how to turn on a transmitter but beyond that your
>education is a great mystery.
>For sure you never received a pass in physics of any sort and debate
>with such a person is impossible
well, i did receive a bachelor of science and engineering in electrical
engineering cum laude from an ivy league university, but it was here in the
states, so that probably doesn't mean anything to you. And i did graduate
from the u.s. navy officers nuclear power school, which at least in some
areas was considered equivalent to a masters degree in nuclear engineering
at the time. but that probably doesn't mean anything either since it was in
the states again.

2139. Re: I appologize to all you assholes but I admit I am a real dumbass without a clue.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 19:55:27 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <5e4da613-645f-40f1-9230-f1f62af1c4dd@z72g2000hsb.googlegroups.com>
Source record: 22362

On Sep 12, 12:29 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Wed, 10 Sep 2008 15:23:12 -0700, John Smith
>
>
>
>
>
> <assemblywiz...@gmail.com> wrote:
> >Jeff Liebermann wrote:
> >> On Wed, 10 Sep 2008 10:02:54 -0700 (PDT), Art Unwin
> >> <ArthurUn...@gmail.com> wrote:
>
> >>> What are you saying and why? You are not stupid at least not in my
> >>> eyesArt
>
> >> It's a forgery. Reverse DNS of the IP address yields:
> >>   dialup-4.255.242.103.Dial1.Atlanta1.Level3.net
>
> >> Well, we know he's in the Atlanta Georgia area. He's using Google
> >> Groups to post his forgeries. Google is terrible about responding to
> >> usenet related problems. If you want to persue it, you can probably
> >> email a complaint to his ISP at:
> >>   ab...@level3.com
>
> >Thanks Jeff ... this guy/gal/it is a particular vile fool, I am ashamed
> >to have my posts even associated with its' ... :-(
>
> >We may choose to disagree, but such is below human conduct ...
>
> >Regards,
> >JS
>
> Note that you can also email the Google groups admin to have the
> forgeries and follow ups that include forgeries removed. I've
> received email from Google requesting my permission to remove one of
> my postings that quoted a forgery. My guess is that it's a liability
> issue. However, the email arrived something like a year after the
> forgeries were posted, which may be an indication of Google's response
> time. The problem is that I can't seem to find any information on
> exactly how initiate the removal procedure with Google. If I find
> anything useful, I'll pass it on.
>
> --

> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558- Hide quoted text -
>
> - Show quoted text -

You all live in such a fairy tail and dillusional world.
hahahahahahahahaahahahahhaah Typical sheep!

2140. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 20:03:26 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <iWzyk.2033$1x6.488@edtnps82>
Source record: 22363

>This has lead us to the obsurd present point where a cubic foot size
>antenna for top band should have
>its reflecter a couple of blocks away and of a size stretching for
>several thousand feet instead of a few inches
>where if the antenna was a ball of presureized water the close
>reflector would prevent the jet of water spreading to the rear.

Given a 3 ft copper dipole on 1.9 MHz the free space gain is -4.6 dbi,
and exhibits a classic dipole radiation pattern. Placing a 6 ft diameter,
radial reflector 3 ft from the antenna has no effect on the radiation
pattern,
other than a slight reduction in gain to -5.2 dbi.

Frank

2141. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 20:17:21 UTC
From: Dave <noone@nowhere.com>
Message-ID: <l7Ayk.26$1a2.18@trnddc04>
Source record: 22364

"Frank" <frank599@nospam.telus.net> wrote in message
news:iWzyk.2033$1x6.488@edtnps82...
> >This has lead us to the obsurd present point where a cubic foot size
>>antenna for top band should have
>>its reflecter a couple of blocks away and of a size stretching for
>>several thousand feet instead of a few inches
>>where if the antenna was a ball of presureized water the close
>>reflector would prevent the jet of water spreading to the rear.
>
> Given a 3 ft copper dipole on 1.9 MHz the free space gain is -4.6 dbi,
> and exhibits a classic dipole radiation pattern. Placing a 6 ft diameter,
> radial reflector 3 ft from the antenna has no effect on the radiation
> pattern,
> other than a slight reduction in gain to -5.2 dbi.
>
> Frank
>

you really don't think art is going to believe that do you?? it is after
all based on a piece of software using maxwell's equations... which he has
said he believes in and that the software works, because it obviously shows
that his antenna produces a spotlight beam when you tilt it the right
angle... but he won't believe yours.

2142. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 21:21:20 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <81b5e9bd-c73a-4d28-b9bb-00df84daa5a8@59g2000hsb.googlegroups.com>
Source record: 22365

On Sep 12, 3:17 pm, "Dave" <no...@nowhere.com> wrote:
> "Frank" <frank...@nospam.telus.net> wrote in message
>
> news:iWzyk.2033$1x6.488@edtnps82...
>
> > >This has lead us to the obsurd present point where a cubic foot size
> >>antenna for top band should have
> >>its reflecter a couple of blocks away and of a size stretching for
> >>several thousand feet instead of a few inches
> >>where if the antenna was a ball of presureized water the close
> >>reflector would prevent the jet of water spreading to the rear.
>
> > Given a 3 ft copper dipole on 1.9 MHz the free space gain is -4.6 dbi,
> > and exhibits a classic dipole radiation pattern. Placing a 6 ft diameter,
> > radial reflector 3 ft from the antenna has no effect on the radiation
> > pattern,
> > other than a slight reduction in gain to -5.2 dbi.
>
> > Frank
>
> you really don't think art is going to believe that do you?? it is after
> all based on a piece of software using maxwell's equations... which he has
> said he believes in and that the software works, because it obviously shows
> that his antenna produces a spotlight beam when you tilt it the right
> angle... but he won't believe yours.

Ofcourse I do! it is very logical
You certainly must have a reflector that extends beyond the emmiter
dimensions
A dipole extends about 500 feet where as mine extends one
foot.!........Big difference. Like comparing a miniature light bulb
with a string of flourescent lights in an office building.
Has it quit raining yet? you seem to be all wet I think you need to
speak to the Navy and provide some of your expertise.
One Navy port has tilted all of their antennas for better performance
per the permission of an Admiral no less.
Do you know more about antennas than they do? This analysis is easily
proved per Maxwell equations so you should be able to
dispute what the Navy did. Why are they tilted? Because they are
including the "weak" force present in Maxwells calculations.
Is Maxwell all wet too? Computer programs based on Maxwells laws prove
it is correct so try Eznec for your self.
Tilt a long wire from vertical until it is fully resistive and the
field will show gain. You just do not have any clothes.

2143. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 21:35:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8c2c16a6-1bd0-4ed6-92e4-e69f0a09ff7c@d45g2000hsc.googlegroups.com>
Source record: 22366

On Sep 12, 2:41 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:7ffa626c-2d27-475e-8ac4-bd7fbf7bda9e@l43g2000hsh.googlegroups.com...
>
> >I await the day when a ham comes along with sufficient education to
> >verify or discredit the Maxwell/Gauss
> >mathematics but I know a ham is not around in the U.S. that can
> >discredit it.
>
> of course not, we are all educated enough to know the proper relationship
> between gauss and maxwell, and the fact that gauss's law is an accepted part
> of maxwell's equations... and works fine just as it is without your extra
> 't' added to it. it would take someone graduating from the warped art's
> college of mystical electromagnetics with an advanced degree in
> neutrino-anti-gravity-weak-force-jumping-particles to handle that proof!

David you have had every chance of exposing mathematical error when
the proof
was presented on this newsgroup site. Every point of rebuttal
presented was shown to be in error
It was not provided by me but by a mathematician skilled in the trade,
with a doctorate, working on a NASA project at M.I.T
who came to my defence and showed the mathematical proof. Did you
report the good doctor to the Dean of M.I.T. and NASA
declaring him unfit as seen by your eyes. What credentials did you
present on your own behalf to provide credibility to your
observations ?
Did you mention your finding was based on..........well.......well
because.........well because it was me that said so.................
well I don't have to explain it to you.....................I KNOW HE
IS INCOMPETANT!!!!!.................YOU ARE A FOOL DEAN......

2144. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 21:39:42 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <41b0d4bf-2457-465a-802b-e679f33bc3cf@x35g2000hsb.googlegroups.com>
Source record: 22367

On Sep 12, 2:41 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:7ffa626c-2d27-475e-8ac4-bd7fbf7bda9e@l43g2000hsh.googlegroups.com...
>
> >I await the day when a ham comes along with sufficient education to
> >verify or discredit the Maxwell/Gauss
> >mathematics but I know a ham is not around in the U.S. that can
> >discredit it.
>
> of course not, we are all educated enough to know the proper relationship
> between gauss and maxwell, and the fact that gauss's law is an accepted part
> of maxwell's equations... and works fine just as it is without your extra
> 't' added to it. it would take someone graduating from the warped art's
> college of mystical electromagnetics with an advanced degree in
> neutrino-anti-gravity-weak-force-jumping-particles to handle that proof!

2145. Re: Modeling Hygain element clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 21:47:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9hmlc4hvb0nrnq2n9ggurobcc62v63asn5@4ax.com>
Source record: 22368

On Fri, 12 Sep 2008 11:33:02 -0500, "Mike Lucas" <w5chr@bellsouth.net>
wrote:

>Richard: Tnx for the post- I enjoy slogging through the math to 4 places,

An occupation that pleases me too.

>So why not some poetry or at least free verse next time???

Sorry Mike,

Tilting untennas is suggestive of the crusades of the Man of La Mancha
and particals (sic) with spin remind me of Singing in the Rain -
derivative humor at best here, which is improved by decanting only for
the ranting author. Examples abound.

However, you can rest assured that using a couple of three syllable
words in a sentence is bound to be hooted at as being lifted from
Shakespeare, or undecipherable trappings of a foreign language. The
hayseed mentality is fairly distributed across the globe but we sure
get a unique crop cultivated here.

However, as I plunge into your suggestion, one quote comes to mind
from Herman Melville's "White Jacket":
"It is often observable, that, in vessels of all kinds,
the men who talk the most sailor lingo are the least
sailor-like in reality. You may sometimes hear even
marines jerk out more salt phrases than the Captain
of the Forecastle himself. On the other hand, when
not actively engaged in his vocation, you would take
the best specimen of a seaman for a landsman.
When you see a fellow yawning about the docks like
a homeward-bound Indiaman, a long Commodore's
pennant of black ribbon flying from his mast-
head, and fetching up at a grog-shop with a
slew of his hull, as if an Admiral were coming
alongside a three-decker in his barge;
you may put that man down for what
man-of-war's-men call a 'damn-my-eyes-tar',
that is, a humbug. And many damn-my-eyes hum-bugs
there are in this man-of-war world of ours."

73's
Richard Clark, KB7QHC

2146. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 21:52:40 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7966703e-3b29-41a9-adb8-a9c636290950@j22g2000hsf.googlegroups.com>
Source record: 22369

On Sep 12, 2:41 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:7ffa626c-2d27-475e-8ac4-bd7fbf7bda9e@l43g2000hsh.googlegroups.com...
>
> >I await the day when a ham comes along with sufficient education to
> >verify or discredit the Maxwell/Gauss
> >mathematics but I know a ham is not around in the U.S. that can
> >discredit it.
>
> of course not, we are all educated enough to know the proper relationship
> between gauss and maxwell, and the fact that gauss's law is an accepted part
> of maxwell's equations...

No,No,No. I understand that Maxwell only used the Mathematics to
encapsulate
observations from about 28 contributors most of which were duplicates.
He never extended Gauss law of statics to express the mathematical
results that he came up with. Extending Gaussian law by adding a
radiator and a time varying field
provides all that Maxwell presented. On top of that it supplies
pictures where radiation can be
isolated and solved where as Maxwell only supplied numbers which
included the requirement
of equilibrium as stated by all contributors which is a reflection of
Newton's laws
all of whichcan be determined by transitioning from a static field to
a dynamic field he d.
Are you going to rewrite history?

and works fine just as it is without your extra
> 't' added to it. it would take someone graduating from the warped art's
> college of mystical electromagnetics with an advanced degree in
> neutrino-anti-gravity-weak-force-jumping-particles to handle that proof!

2147. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 22:12:09 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ZOByk.18$MN3.15@nwrddc01.gnilink.net>
Source record: 22370

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:7966703e-3b29-41a9-adb8-a9c636290950@j22g2000hsf.googlegroups.com...
>Are you going to rewrite history?

sure, i'll rewrite the history as soon as you write something that makes
sense.

2148. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 22:20:00 UTC
From: Dave <noone@nowhere.com>
Message-ID: <kWByk.19$MN3.14@nwrddc01.gnilink.net>
Source record: 22371

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:81b5e9bd-c73a-4d28-b9bb-00df84daa5a8@59g2000hsb.googlegroups.com...
>Because they are
>including the "weak" force present in Maxwells calculations.
you think the 'weak' force is in maxwell's equations? please state the
equation and term that describes the weak force. do that and i will
personally nominate you for an emmy award.... i would say a nobel prize, but
i really expect to see more handwaving and backpedeling that is more suited
to a bad actor than a physicist.

2149. Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 22:22:43 UTC
From: "Green Xenon [Radium]" <glucegen1x@gmail.com>
Message-ID: <fa12c21d-d60b-43a5-9dc2-bb9b485bea88@s1g2000pra.googlegroups.com>
Source record: 22372
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Hi:

What would be heard on a 40 Hz AM DX receiver that uses the most sensitive type of magnetic loop antenna? I doubt there would be any hissing since that artifact would involve high-frequency sounds and a 40 Hz carrier cannot transport modulation-signals higher than 40 Hz [violation of Nyquist theorem].

I also don't think power lines would have any perceptible affect on a 40 Hz receiver. In USA, the electric power has a frequency of 60 Hz -- in Europe, its 50 Hz. Since 40 Hz is below these power frequencies, I doubt they would cause interference on 40 Hz. If I was receiving at or above the power frequencies, I do think there would be disturbance but not if below.

Would any interferences from outer space be perceptible on a 40 Hz AM receiver? Galactic noise?

Thanks,

Radium

2150. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 22:26:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <998810bf-93b9-4efd-92c0-0bf0ae63befa@k7g2000hsd.googlegroups.com>
Source record: 22373

On Sep 12, 2:50 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:7ffa626c-2d27-475e-8ac4-bd7fbf7bda9e@l43g2000hsh.googlegroups.com...
>
> >You have to be the only guy in the country with a 2000 foot diameter
> >umbrella to keep your hair dry!
>
> not quite, but i do have a 120' tall by about 250' long 160m vertical array
> and an inverted V at 180' that will beat your shoebox even without the amp
> turned on.
>
> >You were the leader in this ham group
> >that denied the mathematics of the comparison
> >of Maxwell and Gauss.
>
> on the contrary, i keep pointing out that Gauss is an integral part of
> Maxwell's equations.
>
> >I assume you know how to turn on a transmitter but beyond that your
> >education is a great mystery.
> >For sure you never received a pass in physics of any sort and debate
> >with such a person is impossible
>
> well, i did receive a bachelor of science and engineering in electrical
> engineering cum laude from an ivy league university, but it was here in the
> states, so that probably doesn't mean anything to you. And i did graduate
> from the u.s. navy officers nuclear power school, which at least in some
> areas was considered equivalent to a masters degree in nuclear engineering
> at the time. but that probably doesn't mean anything either since it was in
> the states again.

Yes it does. Navy recruiters were under so much pressure for nucklear
recruits that
all tuition costs were covered by the navy if the recruit promised to
serve.
When it came to graduation time they found out that the recruits had
not been tested for color blindness.
Pretty good gig for students but you had to work hard at school which
obviously you did.
Boeing by and large benefited from those errors by employing them.
What nuclear function did you serve in the navy or were you as blind
in color as you are in other things?

2151. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 22:29:32 UTC
From: nitespark <nitespark@cox.net>
Message-ID: <i3Cyk.8782$cr4.65@newsfe02.iad>
Source record: 22374
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

KC8QJP Crisco Kathy wrote:

> http://cgi.ebay.com/Xforce-Amp-1000-watt-Mobile-Linear-Amplifier_W0QQitemZ130253740730QQihZ003QQcategoryZ48700QQssPageNameZWDVWQQrdZ1QQcmdZViewItem
>
> FREE SHIPPING!
>
> XFORCE WILL ROCK YOUR WORLD!
>
>
> --
> n8wwm mrbindwell's wife
>
>

Where do they get "1000 Watt Amp"?

"Power Output (RMS) 350 Watts
Power Output (PEP) 650 Watts
Driven Power (RMS) 450 Watts
Driven Power (PEP) 1000 Watts"

Sounds more like an attenuator to me.

2152. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 22:46:24 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2jCyk.208$YU2.87@nlpi066.nbdc.sbc.com>
Source record: 22375
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

nitespark wrote:
> Sounds more like an attenuator to me.

I once attended a CB shootout where they only measured
forward power, not power delivered to the antenna. The
higher the SWR, the better they liked it.
--
73, Cecil http://www.w5dxp.com

2153. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 22:49:17 UTC
From: Richard Crowley <rcrowley@xp7rt.net>
Message-ID: <9L-dnYbvdJFsbFfVnZ2dnUVZ_rPinZ2d@posted.pcez>
Source record: 22376
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

He's baaaaaaaack.

2154. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 22:51:19 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gaerp8$k08$1@aioe.org>
Source record: 22377

"ml" <m@di.net> wrote in message <clipped>

Just curious, what is your definition of the word "deaux" in your subject line?

It may help the rest of us to understand you and your post a bit better.

2155. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 23:05:13 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <96556a60-1ac2-4ffc-87fc-e513cd326780@m36g2000hse.googlegroups.com>
Source record: 22378

On Sep 12, 5:20 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:81b5e9bd-c73a-4d28-b9bb-00df84daa5a8@59g2000hsb.googlegroups.com...>Because they are
> >including the "weak" force present in Maxwells calculations.
>
> you think the 'weak' force is in maxwell's equations? please state the
> equation and term that describes the weak force. do that and i will
> personally nominate you for an emmy award.... i would say a nobel prize, but
> i really expect to see more handwaving and backpedeling that is more suited
> to a bad actor than a physicist.

Oh my! It is in Maxwells laws, without the weak force you cannot have
equilibrium.
You are getting a bit silly now. There was a guy in this group who
stated that the weak force was ficticious.
He must be a submariner to. All computer programs based around
Maxwells laws have it to if one wants to
account for all radiation but most just want to design a Yagi because
it is easy to build.
Art

2156. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 23:06:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaesmh$7bl$1@news.albasani.net>
Source record: 22379
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

nitespark wrote:

>> ...
> Where do they get "1000 Watt Amp"?
>
> "Power Output (RMS) 350 Watts
> Power Output (PEP) 650 Watts
> Driven Power (RMS) 450 Watts
> Driven Power (PEP) 1000 Watts"
>
> Sounds more like an attenuator to me.

Yeah, screwy specs. Although I have never used this particular amp, it probably hits full out at ~40w-80w rms. That is what the small box amp they usually sell is for (most will have them when selling amps this big), takes 4w to ~80w then you drive the amp ...

I have an ancient CMI (has a Palo Alto/Menlo Park address and a couple of hams/engineers there built and sold them) which does a solid 80m-10m, 500w rms at 40w rms drive (I drive it with ~25w), pep follows the same linear curve ... it is marked "Amateur Amplifier" on the front panel and was purchased at an electronics surplus store in Livermore, CA in the 80's. I got it for next to nothing thinking I would have to replace one or more of the power transistors--it was only a diode in the thermal protection circuit which had failed ...

It seems quite legal to me, even though I know they were marketed to CB'ers in the 70's and enjoyed widespread "diesel usage." On a scope it puts out a beautiful signal on all the bands I have used/measured, however, as with any high power amp, the drive signal needs to be clean to excellent tolerances. However, I would entertain arguments on how it is "illegal."

I am guessing, but I guess it is the fact it spans 80m to ~40 Mhz which makes it illegal? However, when it was sold, I don't believe it was illegal to allow amps to cover the 10m and 11m bands ... but would have to research that now to make sure ...

Nowadays, I don't believe you can even buy an amp which covers the 10m band ... you must first "modify" the amp ... someone more knowledgeable on the fine points of the rules/regs would know for sure ...

My antenna on the pickup has been though h*ll, bent, dented, etc. (I have forgotten to fold it down on low overhangs), at one time the amp was operating into a 4+:1 SWR by the time I noticed (smelled something

getting hot, grabbed the unit behind the seat and burnt my hand!) It is one tough amp! I run a shortened 1/2 wave with a gamma match on 40m and a simple 10m SS whip, switchable ...

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you have to use it.

2157. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 23:12:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <14367874-ce92-442f-9666-bbaa6ee41dd8@m45g2000hsb.googlegroups.com>
Source record: 22380

On Sep 12, 5:20 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:81b5e9bd-c73a-4d28-b9bb-00df84daa5a8@59g2000hsb.googlegroups.com...>Because they are
> >including the "weak" force present in Maxwells calculations.
>
> you think the 'weak' force is in maxwell's equations? please state the
> equation and term that describes the weak force. do that and i will
> personally nominate you for an emmy award.... i would say a nobel prize, but
> i really expect to see more handwaving and backpedeling that is more suited
> to a bad actor than a physicist.

If you have an optimizer program I will identify it for you.
Where do I pick up the money:

2158. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 23:15:05 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <km9rp5-s88.ln1@mail.specsol.com>
Source record: 22381
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

In rec.radio.amateur.antenna Green Xenon [Radium] <glucegen1x@gmail.com> wrote:
> Hi:
>
> What would be heard on a 40 Hz AM DX receiver that uses the most
> sensitive type of magnetic loop antenna? I doubt there would be any
> hissing since that artifact would involve high-frequency sounds and a
> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
> [violation of Nyquist theorem].

Most likely YOU would hear "Hab SoslI' Quch!" (your mother has a
smooth forehead!) as this is the command and control frequency for
Klingon Battle Cruisers.

--
Jim Pennino

Remove .spam.sux to reply.

2159. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 23:30:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f20675f8-1b0c-4b1f-b796-9747cb79980b@j22g2000hsf.googlegroups.com>
Source record: 22382

On Sep 12, 11:39 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:a15dcb0c-2ac4-4bc6-9116-a8bdc53a70bc@34g2000hsh.googlegroups.com...
> On Sep 12, 6:18 am, "Dave" <no...@nowhere.com> wrote:
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >David, what I have stated is based on known laws and phenomina and
> >started with the recognision
> >that applying a time varying field and radiators to a Gaussian field
> >equates to Maxwell's laws.
> >Right from the start you could not concentrate on proving or
> >disproving that statement !
>
> around and around we go... i quoted the required passages from jackson and
> ramo/whinnery/vanduzer to show that adding time to gauss'es law was
> incorrect. the law is time independent, meaning it does not require a time
> term, it applies for all time instantaneously and it is properly included in
> maxwell's equations as is. your addition of 't' is not necessary. proof
> is not necessary, it is by definition and intuitively obvious to anyone with
> the proper background.

Oh David I extended it to make it dynamic by adding a time varying
current where it duplicates Maxwells law
Find a ham who is conversant with physics and mathematics bring him
forward on your behalf for debate.
Tell him what you want debated say, what is stated above. Do that and
you will do a service for ham radio.
Warn him that the question as to whether a static field can be
transformed to a dynamic field quoting any book
that says you can't. He will then refuse to appear. End of story.
Art...is it still raining? Are you still all wet?

2160. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 23:34:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaeu9s$8tj$1@news.albasani.net>
Source record: 22383
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Green Xenon [Radium] wrote:

> ...
> Would any interferences from outer space be perceptible on a 40 Hz AM
> receiver? Galactic noise?
>
>
> Thanks,
>
> Radium

Possibly "bleedover" from some guy next door operating his subwoofer(s),
60Hz equip., noise, etc. ...

Why not just run a big loop of wire about and hook it to the mic/aux.
input on some old high quality/low-audio-freq. capable stereo? You
could catch all the "bands" from 20Hz-40,000Hz! LOL

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you
have to use it.

2161. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 23:38:22 UTC
From: ml <m@di.net>
Message-ID: <m-455634.19382212092008@news.optonline.net>
Source record: 22384

In article <gacbh5$l3s$1@news.jpl.nasa.gov>,
Jim Lux <james.p.lux@jpl.nasa.gov> wrote:

> Richard Clark wrote:
> > On Thu, 11 Sep 2008 17:45:11 -0400, ml <m@di.net> wrote:
> >> previously i can say there was no chokes power went right into the
> >> unit
> >>
> >> today we installed the line filters they have some chokes
> >>
> >>
> >> i noticed that line, in the manual, not really sure what it means
> >> the power as supplied by con ed is rock solid as far as volts etc
> >> power here is great
> >
> > Hi Myles,
> >
> Industrial equipment is often rated in percent or per unit impedance.
> http://en.wikipedia.org/wiki/Per-unit_system
>
> For something like this, the impedance is probably mostly reactive. That
> is, 1% impedance means a PF of about 0.99 (well, sqrt(1-.01^2).. that
> is, you'd draw 1% reactive current.
>
>
>
> > I'm not sure what that specification line means either, but choking is
> > a standard term for reducing the influence of inductive kick,
> > something those motors are going to do aggressively and spread RF
> > trash throughout the spectrum.
> >
> > However, in the context of motor controllers, solid state triacs can
> > also be quite noisy and inject trash into the line. This has nothing
> > to do with Consolidated Edison, except that they, too, could become
> > annoyed with noise. However, they have a large industrial customer
> > base that they serve, and they deal with it.
> >
>
> I would venture that there are no TRIACs in that controller. It's a
> standard 3 phase IGBT based inverter drive. The default PWM frequency is
> 10 kHz, and you'll probably see significant harmonic content at
> multiples of that, although CE compliance means that they've filtered a
> fair amount out. There's recommendations on page 164 for line filters.
> You could probably check with Magnetek for details on conducted

> emissions with and without filters.

thanks for the responce,
as far as filters go my original post specified they just
added filters for me to no avail, hence my post hoping to see if
perhaps somone might have some ideas how to mitigate this type of
noise

2162. Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-12 23:43:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <acd85469-dfbb-4b2a-8c84-0afaca9c6bdb@l43g2000hsh.googlegroups.com>
Source record: 22385

A sloper antenna when resonant produces more gain
than a vertical dipole resonant at the same frequency.
True or false? prove it

2163. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:01:55 UTC
From: Dave <noone@nowhere.com>
Message-ID: <TpDyk.35$1a2.7@trnddc04>
Source record: 22386

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:998810bf-93b9-4efd-92c0-0bf0ae63befa@k7g2000hsd.googlegroups.com...
On Sep 12, 2:50 pm, "Dave" <no...@nowhere.com> wrote:
> What nuclear function did you serve in the navy or were you as blind
>in color as you are in other things?

fortunately my eyes were perfectly fine and i served my time just fine thank
you.

2164. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:03:27 UTC
From: Dave <noone@nowhere.com>
Message-ID: <jrDyk.37$1a2.16@trnddc04>
Source record: 22387

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:96556a60-1ac2-4ffc-87fc-e513cd326780@m36g2000hse.googlegroups.com...
>Oh my! It is in Maxwells laws, without the weak force you cannot have
>equilibrium.

identify the specific term in maxwell's equations that incorporates the weak force... no hand waving now, you have a specific question, identify the term in the equations. they are published, pick your reference and identify it.

2165. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:04:54 UTC
From: Dave <noone@nowhere.com>
Message-ID: <GsDyk.38$1a2.30@trnddc04>
Source record: 22388

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:14367874-ce92-442f-9666-bbaa6ee41dd8@m45g2000hsb.googlegroups.com...
On Sep 12, 5:20 pm, "Dave" <no...@nowhere.com> wrote:

>If you have an optimizer program I will identify it for you.
i have YO and AO but have played with EZNEC and some others... pick your
program and tell me where to put in the weak force term.

>Where do I pick up the money:
the emmy's don't have money, just funny statues or some such junk... you
aren't worth the cash, just a good laugh.

2166. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:05:58 UTC
From: ml <m@di.net>
Message-ID: <m-ED59CA.20055812092008@news.optonline.net>
Source record: 22389

In article <i77jc45po5nnskqb43fcujv9d7kvu5q01f@4ax.com>,
Richard Clark <kb7qhc@comcast.net> wrote:

> On Thu, 11 Sep 2008 17:45:11 -0400, ml <m@di.net> wrote:
> >previously i can say there was no chokes power went right into the
> >unit
> >
> >today we installed the line filters they have some chokes
> >
> >
> >i noticed that line, in the manual, not really sure what it means
> >the power as supplied by con ed is rock solid as far as volts etc
> >power here is great
>
> Hi Myles,
>
> I'm not sure what that specification line means either, but choking is
> a standard term for reducing the influence of inductive kick,
> something those motors are going to do aggressively and spread RF
> trash throughout the spectrum.
>
> However, in the context of motor controllers, solid state triacs can
> also be quite noisy and inject trash into the line. This has nothing
> to do with Consolidated Edison, except that they, too, could become
> annoyed with noise. However, they have a large industrial customer
> base that they serve, and they deal with it.
>
> Returning to your desire to add covers, mesh, and the rest. I suspect
> that the metal casing already does what it should and requires no
> further attention. Instead, it is a matter of the lines that emerge
> from those cases that are carrying the noise. They are passing it
> along to you through two possible means: radiation or conduction.
>
> If your rig shares the same power line, noise may arrive through that
> shared conduction path. This would be part of a ground loop. Barring
> that explanation, those lines are radiating like antennas, and their
> proximity to your antenna provides over-the-air coupling. This means
> you have to reduce that radiation (again, some form of choking, in
> this case ferrites) or you move to increase distance and enjoy the
> square law (10 times the separation pushes down the noise from S-9 to
> S-7 or something like that). Obviously, in your situation, choking is
> the simpler, and more effective solution. This will be choking that
> is an entirely separate issue from that one line in the manual.
>

> 73's
> Richard Clark, KB7QHC

thanks Rich, i think i need to confirm that theory thou it gives
me the willies

my gut tells me that box in the cabinet is where most if nt all the
noise is comming from and while its in a nice metal cabinet its not rf
tight just my gut

the left side has conduit going to the fuse box on the wall for power
on the right side 2 conduits , it goes up to celing almost makes a U
and down to the motor the other some sensor on the motor and break

the cabinet is very close to motor

one thing i did just realize thou it prob effects them more then me,
the guy showed me how they rand the 2 conduits to the motor one for
power one for sensor wires they were about 2 inchs appart he said if
they were in same conduit the'd interfere the manual says it
ougtta be 12" appart hope i am not in the elevator when self
interference occurs egads

the test i made so far was to walk up to the magnateck it was
obviously way noisy i walked over to the motor i didn't test
along the conduit and i didn't test w/the cabnet door closed

and along the cabnet ie the wall of it vs the vent holes

IF i could put some chokes perhaps on the power out put of the
magnatek, the filter unit they added was on the con ed power side
and i might be able to also add some chokes to the control lines to
the motor

what i'd really like to know is if that big filter unit they used can
also be used on the output to the motor i presume thats where the noise
is if it's wire related (my rigs on battery get same noise) i am
afraid to tell the guy to try it as that unit controls the motor
speeds breaking etc

i can only do this inside the cabinet since they are all loose
wires the motor is a sealed box

so assuming , they let me do that, and my test reveils noise
along the wires , what types of snap on chokes /material would
be recomened?

i wonder if they conduit is a 'poor' shield i could easily wrap that
w/rf tape

i can say the noise is s9 from 1.7mhz to 14mhz or so , and from
18mhz up to 28 it starts to drop to s7 on ssb it just sounds like
background noise on 160m or 80 am you also hear a particular
sound every few k that thing works much better as a wide band

transmitter than a motor controller below 1.7 practically no noise

the manual also states if it's default 10khz freq is moved it makes less noise i suspect the noise would 'shift' i wonder if it would possibly shift enought to be far enough i mean from 1.8 to 28 is a lot i dunno

on one hand it's kinda complex on the other it's kinda simple if i was smarter and had the keys /carteblanch to that elevator room

thanks again for all the tips

2167. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:08:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <9wDyk.39$1a2.34@trnddc04>
Source record: 22390

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:f20675f8-1b0c-4b1f-b796-9747cb79980b@j22g2000hsf.googlegroups.com...
On Sep 12, 11:39 am, "Dave" <no...@nowhere.com> wrote:

>Oh David I extended it to make it dynamic by adding a time varying
>current where it duplicates Maxwells law

so you had to extend a set of equations that you say is giving proper results as they were written oh so long ago and have been implemented in all sorts of antenna modeling software that you say works just fine... so what did your extension do? if the software works as is without your changes to the equations then how are your changes necessary? what does your change to them predict that isn't already in there?? since you didn't write your own software, but are fond of quoting results of whatever you use, then obviously your change wasn't necessary and yet you rely on it... very strange... and no, its still raining and should be raining all weekend... so keep ranting... i still want to know about the neutrinos and how they settle on plasmas that are decidedly not diamagnetic and cause them to radiate.

2168. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:11:19 UTC
From: Dave <noone@nowhere.com>
Message-ID: <HyDyk.40$1a2.10@trnddc04>
Source record: 22391
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

"Green Xenon [Radium]" <glucegen1x@gmail.com> wrote in message
news:fa12c21d-d60b-43a5-9dc2-bb9b485bea88@s1g2000pra.googlegroups.com...
> Hi:
>
> What would be heard on a 40 Hz AM DX receiver that uses the most
> sensitive type of magnetic loop antenna? I doubt there would be any
> hissing since that artifact would involve high-frequency sounds and a
> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
> [violation of Nyquist theorem].
>
> I also don't think power lines would have any perceptible affect on a
> 40 Hz receiver. In USA, the electric power has a frequency of 60 Hz --
> in Europe, its 50 Hz. Since 40 Hz is below these power frequencies, I
> doubt they would cause interference on 40 Hz. If I was receiving at or
> above the power frequencies, I do think there would be disturbance but
> not if below.
>
> Would any interferences from outer space be perceptible on a 40 Hz AM
> receiver? Galactic noise?
>
>
> Thanks,
>
> Radium

hey, its our favorite troll next to art back for more abuse... you should
really talk to art, he'll build you a 40hz antenna that you can aim like a
laser beam and see just what you can hear. why don't you ask the elf
researchers what they 'hear' at those frequencies.

2169. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:12:26 UTC
From: Dave <noone@nowhere.com>
Message-ID: <KzDyk.41$1a2.4@trnddc04>
Source record: 22392

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:acd85469-dfbb-4b2a-8c84-0afaca9c6bdb@l43g2000hsh.googlegroups.com...
>A sloper antenna when resonant produces more gain
> than a vertical dipole resonant at the same frequency.
> True or false? prove it

run it through your neutrino based weak force enabled optimizer program and
see what you get!

2170. Re: I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:15:50 UTC
From: ml <m@di.net>
Message-ID: <m-36E177.20155012092008@news.optonline.net>
Source record: 22393

In article <ga9tojljv1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> DES wrote:
>
> >> ...
> > > Anyway, all help will be greatly appreciated. I believe someone asked
> > > if I was in the US, yes I am.
>
> OK. What "really did work" for me in the past. A 100Mh choke in series
> with the "hot" speaker lead and with a 500pf cap across the leads just
> before entering the amp/receiver "box."
>
> If RF is also encountered on your phone lines, a 0.01 cap across the
> leads at the "head piece", or ear phone unit of the phone ... if the rf
> is of a VERY HIGH LEVEL, the 100mh choke, alone with the cap, do it ...
>
> NO crap, just what I found worked when I live next to a "high powered
> "CB'er", you mileage may vary ...
>
> And, I know, these are cheap and dirty fixes, but THEY WORKED!
>
> Cheap, unshielded leads/audio-amps are HIGHLY influenced by RF ... you
> get what you pay for. But then, you still have to fix the problem. :-(
>
> Regards,
> JS

this might sound silly but it's still illegal to use bad language
and alot of the other stuff the cb'er is doing, if he is also a ham
that puts his ham license at risk as well

given how bad cb is, ie un policed, and how lax the fcc often is
in general it might be moot

but if all elese fails if for no other reason than to document it,
you can file a formal complaignt to the fcc

2171. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:38:46 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <296f2ef0-4a48-463a-97ee-8dcf939a8093@r66g2000hsg.googlegroups.com>
Source record: 22394

On Sep 12, 7:12 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:acd85469-dfbb-4b2a-8c84-0afaca9c6bdb@l43g2000hsh.googlegroups.com...
>
> >A sloper antenna when resonant produces more gain
> > than a vertical dipole resonant at the same frequency.
> > True or false? prove it
>
> run it through your neutrino based weak force enabled optimizer program and
> see what you get!

a tilted radiator

2172. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:47:55 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <%4Eyk.2123$1x6.1343@edtnps82>
Source record: 22395

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:acd85469-dfbb-4b2a-8c84-0afaca9c6bdb@l43g2000hsh.googlegroups.com...
>A sloper antenna when resonant produces more gain
> than a vertical dipole resonant at the same frequency.
> True or false? prove it

Model parameters for sloping dipole: 60 ft at one end
13.3 ft at the other (45 deg slope). Horizontal dipole
at 60 ft. Length of both antennas 66 ft. Sloping dipole
resonant at 7.225 MHz, same length horizontal 7.3 MHz.
Average ground parameters: conductivity 5 mS/m, and
relative permittivity 13. Horizontal dipole maximum
gain off the sides (As expected). Sloping antenna
double lobed pattern with maximum gain at 80 degrees
either side of lowest end. Software: Nittany's GNEC.

Simulation results:

EL. angle Sloping dipole Horizontal dipole
(deg.) Gain (dbi) Gain (dbi)
10 -1.5 +1.2
20 +1.4 +6
30 +2.4 +7
40 +2.7 +6.4
50 +2.7 +4.7
70 +2 -0.6
90 +1.5 -3.5

73, Frank

2173. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 00:55:57 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <xcEyk.2127$1x6.1692@edtnps82>
Source record: 22396

> Simulation results:
>
> EL. angle Sloping dipole Horizontal dipole
> (deg.) Gain (dbi) Gain (dbi)
> 10 -1.5 +1.2
> 20 +1.4 +6
> 30 +2.4 +7
> 40 +2.7 +6.4
> 50 +2.7 +4.7
> 70 +2 -0.6
> 90 +1.5 -3.5
>
> 73, Frank

PS. Finite ground (Sommerfeld/Norton method).

2174. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 01:04:55 UTC
From: "pdrahn@coinet.com" <co_farmer@yahoo.com>
Message-ID: <26ee0c60-dd0f-4c9a-adc3-46a669d5cf9f@a18g2000pra.googlegroups.com>
Source record: 22397

>
> so assuming , they let me do that, and my test reveils noise
> along the wires , what types of snap on chokes /material would
> be recomened?
>
> i wonder if they conduit is a 'poor' shield i could easily wrap that
> w/rf tape

Hi.
I am coming into ths discussion kind of late, but see no mention as to changes in the noise level as the elevator is operating or not. Is the motor and control circuit live all the time or just when the elevator is occupied or in motion.

As far as snap-on ferrite chokes, they must allow the largest wire to pass and should be fairly large for the low frequency involved.

Perhaps this has been mentioned before, but conduit will certainly radiate if it is not connected to a common ground point at each end. Otherwise, it is an antenna. No amount of tape will stop that. If connected to two "ground" points, the conduit could still radiate as a loop antenna. The building framework may make an electrical ground, but not an RF ground.

Do you have a portable am shortwave radio with an external antenna? Use it to explore (safely!) the wiring with the external antenna. I did this at home and discovered lots of HF noise coming from a VCR, DVD player and TV that were always on, but on standby. I think this exercise will let you track the noise a lot easier than your expensive ham rig.

Good luck!

Paul, KD7HB

2175. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 01:16:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4925f851-be7a-4cd1-b90b-608e6fde636e@k37g2000hsf.googlegroups.com>
Source record: 22398

On Sep 12, 7:04 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:14367874-ce92-442f-9666-bbaa6ee41dd8@m45g2000hsb.googlegroups.com...
> On Sep 12, 5:20 pm, "Dave" <no...@nowhere.com> wrote:
>
> >If you have an optimizer program I will identify it for you.
>
> i have YO and AO but have played with EZNEC and some others... pick your
> program and tell me where to put in the weak force term.
>
> >Where do I pick up the money:
>
> the emmy's don't have money, just funny statues or some such junk... you
> aren't worth the cash, just a good laugh.

Excellent
pull up AO optimiser
Above ground
800 Mhz;inches

Put in xyz for centerfed wasvelength for 800 Mhz
Put in different numbers for xyz for one wire
Source is at the centre

a=1
aa=any number say 8
b =2
bb=any number say 10
c=3
cc=any number say 12
dia = 0.1 inches

vary aa bb and cc only this gives the program free reign to produce a
vertical or a tipped antenna without being
guided one way or the other.ie all numbers are different change entry
numbers if you like as long as there are no repeats
and let the optimizer run where it wants to for resistive impedance ,
max gain or both.
a,b,c are low numbers so the radiator does not drift in terms of
height

20 segments per half wave length should be enough. Impedance will come
out close to 200 ohms as a guess
AND MAXIMUM GAIN OR JUST GAIN OR JUST RESISTIVE IMPEDANCE....YOUR
CHOICE.

LET EVERYBODY KNOW WHAT YOU GET
Now you are on the hot plate at last.
Put up or shut up

Regards
Art KB9MZ......xg

2176. Re: I bought the ferrite snap on filters

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 01:18:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaf4dj$jh8$1@news.albasani.net>
Source record: 22399

ml wrote:

> ...
> this might sound silly but it's still illegal to use bad language
> and alot of the other stuff the cb'er is doing, if he is also a ham
> that puts his ham license at risk as well
>
> given how bad cb is, ie un policed, and how lax the fcc often is
> in general it might be moot
>
> but if all elese fails if for no other reason than to document it,
> you can file a formal complaignt to the fcc

I have found people using 27Mhz to have NO patent on "illegal/bad-language" (actually, I think you mean poor taste and uncouth behavior(s) ... something the ham community has NOT been vaccinated for yet, as proven by some members rabid behavior.)

I have no horse in the race. With the CHP out in full force to fleece bucks out of motorists, truckers come in handy in locating speed traps, "CHP Cameros", "bears in the air" (CHP helicopters/planes), etc. I doubt I am the only one "chatting 'em up" on 27Mhz ... I hear others.

Let's face it, the FCC and amateurs running down the freeway taking license plates, etc. are about as effective as the "homeland security scare tactics" used against citizens ... some are smart enough to figure it out, a few are not ...

Regards,
JS

--
loudobbs.com -- you do have the power to be informed; but, first you have to use it.

2177. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 01:23:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2a90b67e-adf4-4812-8827-ac5818389c38@x41g2000hsb.googlegroups.com>
Source record: 22400

On Sep 12, 7:08 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:f20675f8-1b0c-4b1f-b796-9747cb79980b@j22g2000hsf.googlegroups.com...
> On Sep 12, 11:39 am, "Dave" <no...@nowhere.com> wrote:
>
> >Oh David I extended it to make it dynamic by adding a time varying
> >current where it duplicates Maxwells law
>
> so you had to extend a set of equations that you say is giving proper
> results as they were written oh so long ago and have been implemented in all
> sorts of antenna modeling software that you say works just fine... so what
> did your extension do? if the software works as is without your changes to
> the equations then how are your changes necessary? what does your change to
> them predict that isn't already in there?? since you didn't write your own
> software, but are fond of quoting results of whatever you use, then
> obviously your change wasn't necessary and yet you rely on it... very
> strange... and no, its still raining and should be raining all weekend... so
> keep ranting... i still want to know about the neutrinos and how they settle
> on plasmas that are decidedly not diamagnetic and cause them to radiate.

IF YOU DO NOT PRE GUIDE IT TO A PLANAR DESIGN WHICH DOES NOT INCLUDE
THE WEAK FORCE
IT WILL SUPPLY A BETTER RADIATOR BY ADDING THE WEAK FORCE TO SUPPLY
REQUIREMENTS ASKED OF IT
PER MAXWELLS LAWS AND NOT BY YAGI APPROACH. I.E ASK FOR MAX GAIN AND
THE PROGRAM CHOOSES.
ART

2178. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 01:27:53 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7ce5bd71-d583-433d-88f0-62430a1466cd@25g2000hsx.googlegroups.com>
Source record: 22401

On Sep 12, 7:55 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > Simulation results:
>
> > EL. angle Sloping dipole Horizontal dipole
> > (deg.) Gain (dbi) Gain (dbi)
> > 10 -1.5 +1.2
> > 20 +1.4 +6
> > 30 +2.4 +7
> > 40 +2.7 +6.4
> > 50 +2.7 +4.7
> > 70 +2 -0.6
> > 90 +1.5 -3.5
>
> > 73, Frank
>
> PS. Finite ground (Sommerfeld/Norton method).

FINE FRANK DAVE WILL SUPPLY THE ARRANGEMENT THAT GIVES MAXIMUM GAIN
as well as being resonant. Yours are not resonant as I assume you
would have supplied the info
The navy would not change to a antenna that was not resonant.
Art

2179. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 01:41:39 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <nTEyk.2148$1x6.889@edtnps82>
Source record: 22402

FINE FRANK DAVE WILL SUPPLY THE ARRANGEMENT THAT GIVES MAXIMUM GAIN
as well as being resonant. Yours are not resonant as I assume you
would have supplied the info
The navy would not change to a antenna that was not resonant.
Art

The antenna is resonant.

Input impedance: 84.8 + j 1.3 at 7.25 MHz.

Not that I regard resonance as having any significance other than
the input impedance is resistive.

Frank

2180. FA: AT-271 Fishing Pole Antenna. ..Miltary Collapsible Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 01:52:31 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <A1Fyk.29693$Wm.4522@read2.cgocable.net>
Source record: 22403
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=STRK:MESELX:IT&item=320298865452

Tnx for looking....Norm

2181. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 02:33:27 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ad89d522-e4ef-47e9-8c5b-c2dfb8ab7041@2g2000hsn.googlegroups.com>
Source record: 22404

On Sep 12, 8:41 pm, "Frank" <frank...@nospam.telus.net> wrote:
> FINE FRANK DAVE WILL SUPPLY THE ARRANGEMENT THAT GIVES MAXIMUM GAIN
> as well as being resonant. Yours are not resonant as I assume you
> would have supplied the info
> The navy would not change to a antenna that was not resonant.
> Art
>
> The antenna is resonant.
>
> Input impedance: 84.8 + j 1.3 at 7.25 MHz.
>
> Not that I regard resonance as having any significance other than
> the input impedance is resistive.
>
> Frank

Correct, as long as it is resistive. So what angle did the Navy tip
their antennas to achieve maximum gain?
They were not satisfied with the vertical antennas performance and
wanted something better.
So the question is what needs to be done to provide better performance
ie gain?
Yup they experimented in each and every way and fell upon.....what?
Even tho they cannot explain it.
David can tell you in less than 5 minuits which is the time the
program requires to provide the answer.
Art Unwin KB9MZ......xg

2182. Re: 20 and meter yagi question...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 02:55:08 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <4oamc41kisnill3dtqo9ohhovoqicdjm8q@4ax.com>
Source record: 22405

On Mon, 8 Sep 2008 08:37:27 -0700 (PDT), ltdoc@yahoo.com wrote:

>Can a 20 or 40 meter antenna be used to transmit on different bands?
>Yes. It depends on how you mean that, though. Either can be 'cut
>down' for use on higher frequencies, or 'trapped' and used on lower
>ones (so some ridiculous point). If you mean used as a directional
>antenna as they work on their design bands, then no, they won't work
>that way without that physical modification. There may be some
>'directionality' to it, but not like they are supposed to be (that
>make sense?). It can work, but not 'well'.
> - 'Doc

I guess the old Mosely tribanders were before your time. They worked
well and on 40, 20 and 10 and other antennas on 80, 40, and 20.

2183. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 03:30:23 UTC
From: dfinn1@nc.rr.com
Message-ID: <c6818c03-2315-4a7a-ab98-467331a6d5a0@a70g2000hsh.googlegroups.com>
Source record: 22406

On Sep 12, 12:59 am, Mark Cudworth <use...@markc.users.panix.com>
wrote:
> dfi...@nc.rr.com wrote:
> > That is interesting. I thought the PR dish was parabolic. As a
> > parabola, the reflected waves (or particles if you will) of a
> > transmitter at focal point can only traverse in one direction, that
> > is, in a direction parallel to the tangent of a line drawn at the
> > lowest point of the parabola. If the parabolic reflector is
> > stationary, how can transmitted waves/particles go in any direction
> > but straight up in that perpendiculr direction? If you move the focal
> > point as you say they do, then the antenna does not finction as
> > parabola anymore and gain should drop drastically, agree? I am afraid
> > I must be missing something and request your technical advice. Thanks.
>
> The Arecibo radio telescope has a spherical reflector, not parabolic.
> This is mentioned on the official web page:
>
>   http://www.naic.edu/public/the_telescope.htm
>
> It also gives details on how the telescope operates.
>
> --
> Mark Cudworth

Thank you Mark. It truly is spherical.

2184. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 03:52:31 UTC
From: Industrial One <industrial_one@hotmail.com>
Message-ID: <80db1bfb-a0cb-4198-acf8-0313dfa22516@b2g2000prf.googlegroups.com>
Source record: 22407
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

On Sep 12, 4:22 pm, "Green Xenon [Radium]" <glucege...@gmail.com>
wrote:
> Hi:
>
> What would be heard on a 40 Hz AM DX receiver that uses the most
> sensitive type of magnetic loop antenna? I doubt there would be any
> hissing since that artifact would involve high-frequency sounds and a
> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
> [violation of Nyquist theorem].
>
> I also don't think power lines would have any perceptible affect on a
> 40 Hz receiver. In USA, the electric power has a frequency of 60 Hz --
> in Europe, its 50 Hz. Since 40 Hz is below these power frequencies, I
> doubt they would cause interference on 40 Hz. If I was receiving at or
> above the power frequencies, I do think there would be disturbance but
> not if below.
>
> Would any interferences from outer space be perceptible on a 40 Hz AM
> receiver? Galactic noise?
>
> Thanks,
>
> Radium

Heya ass-spelunker, I see you didn't take my advice to commit suicide
last year. But if you're gonna hang around here, I have to warn you
that a couple here got a real boner for you, especially Clowney. He
unveiled a secret to me -- told me that asspie's asses taste like
honey (hey, why do you think they call 'em "asspies.") Now, take my
advice and reject any advances these predators make on you. We don't
wanna turn you into a butt-hurt serial killer now. Avoid Clowney at
all costs -- notice how excited he is to have you back.

2185. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 03:59:48 UTC
From: dfinn1@nc.rr.com
Message-ID: <a8595b40-57b5-46c0-b82a-21870ee0fe2a@c58g2000hsc.googlegroups.com>
Source record: 22408

On Sep 12, 10:35 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 12, 6:18 am, "Dave" <no...@nowhere.com> wrote:> "Art Unwin"
<ArthurUn...@gmail.com> wrote in message
>
> David, what I have stated is based on known laws and phenomina and
> started with the recognision
> that applying a time varying field and radiators to a Gaussian field
> equates to Maxwell's laws.
> Right from the start you could not concentrate on proving or
> disproving that statement !
> Until you can determine whether that is correct or not you cannot
> move forward.
> As yet, nobody has disproved that statement with counter facts. If you
> cannot explain that simple fact
> you surely cannot understand Newtons laws and how the use of such laws
> provide the presence
> of eddy current which provides a skin depth of mechanical resistance.
> I use the term mechanic
> because I recognise the importance of the four forces in the standard
> model and the Grand Universal Theory.
> So until you are able to concentrate and tackle the Gauss and Maxwell
> connection that I started with
> there is no hope for you to procede in a scientific matter, and that
> goes for every body, not just you.
> Best regards
> Art

To it would be nice if physics was so tidy that there could be shown a neat relationship of the 4 forces, thus the birth of a new Grand Unification Theory. Einstein would have liked to find the unifying factor but he dies before he could accomplish that. He never claimed that there had to be a iuifier, only that physics was of such an orderly nature that it would seem consistent that there should be a unification.

Art is acting on the assumption that there MUST be a unifier. The CERN scientists postulate that some particle such as a theoretical higgs boson could be discovered and observed as the "God particle" that imparts matter to other particles which creates mass, matter being pervasive in the universe but mostly in its invisible dark form. From that they say that we could begin to study the relationship of this higgs boson to the other seeminly unrelated forces and find a grand unifier.

To me, the concept of a unifier is NOT something that necessarily has to exist. Maybe there is no unifier and in fact, the student of quantum physics does not see physics as being completely orderly as a student of astrophysics sees it. At the quantum level, the universe is highly random and probabilistic. Any forces we have identified at that level, and future forces we discover, do not have to be unified by any theory; that is not the way I see things either. I see no reason for scientisits to chase after this holy grail (other than by doing so at low cost and in their spare time so as not to waster resources) and I see the likelihood of anyone finding it at 10% at best. There is no observation or calculation that states a unifier must exist,

For all the good that will result in the future from the CERN accelerator, looking for a unfier based on new studies of a "higgs boson" (God) particle is a Hail Mary pass that in all likelihood will not succeed. Let's not be dissapointed when it doesn't. For HF antennas, most is already known which needs to be known by application of known EM principles, the study of which has infinitely less likelihood of pointing to a grand unifier as Art repeatedly attempts in these postings. However, he is doing it in his spare time and at no cost to society thus fulfilling what I think is the amount of resources should be expended in finding the grand unifier.

2186. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 04:12:12 UTC
From: dfinn1@nc.rr.com
Message-ID: <be725d52-65eb-4299-8d7b-b5d68ae96111@26g2000hsk.googlegroups.com>
Source record: 22409

On Sep 12, 7:05 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 12, 5:20 pm, "Dave" <no...@nowhere.com> wrote:
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >news:81b5e9bd-c73a-4d28-b9bb-00df84daa5a8@59g2000hsb.googlegroups.com...>Becausethey
are
> > >including the "weak" force present in Maxwells calculations.
>
> > you think the 'weak' force is in maxwell's equations? please state the
> > equation and term that describes the weak force. do that and i will
> > personally nominate you for an emmy award.... i would say a nobel prize, but
> > i really expect to see more handwaving and backpedeling that is more suited
> > to a bad actor than a physicist.
>
> Oh my! It is in Maxwells laws, without the weak force you cannot have
> equilibrium.
> You are getting a bit silly now. There was a guy in this group who
> stated that the weak force was ficticious.
> He must be a submariner to. All computer programs based around
> Maxwells laws have it to if one wants to
> account for all radiation but most just want to design a Yagi because
> it is easy to build.
> Art

You would make a good politician: When you don't know the answer,
change the question.

He challenged you as follows: "please state the
equation and term that describes the weak force."

You answered: " without the weak force you cannot have
equilibrium."

I too am waiting for the answer to his question. Which of Maxwell's
equation(s) contains the weak force and show us specifically which
term defines the force. We already know that you took the position
that weak force is included in one or more of the Maxwell equations.

2187. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 04:51:39 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <vFHyk.2229$1x6.1149@edtnps82>
Source record: 22410

>..... There was a guy in this group who
>stated that the weak force was ficticious.
>He must be a submariner to. All computer programs based around
>Maxwells laws have it to if one wants to
>account for all radiation but most just want to design a Yagi because
>it is easy to build.
>Art

In fact no one has said that the "Weak force" is fictitious. The comment
was in relation to the usage of the term "Electro-weak force".

Frank

2188. Re: Modeling Hygain element clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 05:46:01 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <vnlyk.33431$De7.5144@bignews7.bellsouth.net>
Source record: 22411

<tclay@qmc.ph.msstate.edu> wrote >
> When I built my OWA's I used DX engineering insulated element mounts. With
> these, the SWR curve of the real antenna matched the tapered NEC2 model
> perfectly. I didn't even need to adjust the length of the driven element.
>

Tor:
Thanks for the reply. I've used home-brew plates and u-bolts for a
couple of
3 and 4 element 10M antennas, but all were grounded. The gamma match that
was
spit out by the YA program worked as calculated, and within the limits of
the equipment,
the measured VSWR curves matched the model.
While the subject line said "Hygain element clamps", I also have a box
full of Wilson
element clamps, both are close in appearance, but the Wilson clamps are
about
15-20% larger than the Hygain of the same element size.
First runs on an OWA for 10M used 3/4, 5/8, and 1/2 in. tubing, with a
bushing in the
element clamp to bring it down to 3/4 size. I was looking for flat gain and
F/B curves,
close to 50 Ohm feed, and use on-hand parts. I came up with a couple of
models that
looked promising, but I'm now looking at using 1-1/4 to 7/8 taper elements
for the driven
and first director. Since my optimizer is me, I haven't run enough samples
to tell if that will
show any improvement. What I have seen is that if a design is poor, a small
change in
taper schedule, element length or element spacing will make a noticeable
change in the
model characteristics, usually bad.
Plans are for a single 10M OWA here in Memphis, to be followed by a
3-high stack
at the retirement Ponderosa. I have also looked at scaling up to 20M, where
a 3 inch
boom prevents using the clamp style mounts. Sooo, thanks for the post, and
I'll
see you on the bands.

Mike W5CHR
Memphis Tenn

2189. Re: Food for thought

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 06:29:38 UTC
From: Peter <colleenpeter@westnet.com.au>
Message-ID: <KYqdnfrEB-ZOwFbVnZ2dnUVZ8sPinZ2d@westnet.com.au>
Source record: 22412

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:3420610a-5fd3-40b8-8fdd-bbdc51320f58@79g2000hsk.googlegroups.com...
> Centuries past there was a cold spell on Earth where it is stated
> radiation propagation did not occur because of the lack of sun spot
> observations. This period lasted about 30 years if my memory is
> correct.
> Now we appear to be in a state of global warming presumably because of
> the actions of the Suns vibrancy which would suggest the present
> increase in sunspot activity of the past century will continue to
> increase and the next Sun spot cycle will be a good one. So don't give
> up on antenna experiments just yet as the particulates will be a
> coming
> Art KB9MZ...xg

See

http://members.optushome.com.au/vk6ysf/vk6ysf/solarcycles.htm

2190. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 06:40:36 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <r8nmc4haoardthsa856s4n1nihh9b6djbb@4ax.com>
Source record: 22413
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

On Fri, 12 Sep 2008 15:22:43 -0700 (PDT), "Green Xenon [Radium]"
<glucegen1x@gmail.com> wrote:

>What would be heard on a 40 Hz AM DX receiver

Very slow morse code. That's about the only form of AM modulation
that will work with such a low carrier frequency.

>that uses the most
>sensitive type of magnetic loop antenna?

>I doubt there would be any
>hissing since that artifact would involve high-frequency sounds and a
>40 Hz carrier cannot transport modulation-signals higher than 40 Hz
>[violation of Nyquist theorem].

Well, if your carrier frequency is 40 Hz, the highest AM modulation
frequency that will work will be 20Hz. That's also approximately the
modulation bandwidth. There are a few young individuals that can hear
down to 10-30Hz, but most people can't. It's a form of hiss, but at a
much lower fequency.

>I also don't think power lines would have any perceptible affect on a
>40 Hz receiver. In USA, the electric power has a frequency of 60 Hz --
>in Europe, its 50 Hz. Since 40 Hz is below these power frequencies, I
>doubt they would cause interference on 40 Hz. If I was receiving at or
>above the power frequencies, I do think there would be disturbance but
>not if below.

Think again. It really depends on your receiver bandwidth. For AM,
it's going to have a fairly wide IF bandwidth in order to work at a
40Hz carrier. Although power line 60Hz will not be directly coupled
into the receiver, there's probably enough gain after the filter to
cause some problems. It's difficult to tell without clues about the
rx gain distribution and antenna configuration.

>Would any interferences from outer space be perceptible on a 40 Hz AM
>receiver? Galactic noise?

Not outer space. However, there is a substantial amount of
atomospheric noise at low frequencies, mostly from lightning and
atmospheric electricity discharges.
<http://en.wikipedia.org/wiki/Atmospheric_noise>
That's one reason why it's not useful to build an extremely sensitive
VLF receiver. Whatever you're trying to hear, it literally buried in
atmospheric noise.

>Thanks,
>Radium

Give up.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2191. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 07:42:53 UTC
From: Ian Thompson-Bell <ruffrecords@yahoo.co.uk>
Message-ID: <gafqr7$30l1$1@energise.enta.net>
Source record: 22414
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Green Xenon [Radium] wrote:
> Hi:
>
> What would be heard on a 40 Hz AM DX receiver that uses the most
> sensitive type of magnetic loop antenna? I doubt there would be any
> hissing since that artifact would involve high-frequency sounds and a
> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
> [violation of Nyquist theorem].

Not strictly true I think - depends on the modulation scheme - how else
do you think we manage to get 56K bps down a 3KHz phone line.

Cheers

IAn

2192. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 08:22:33 UTC
From: Soundhaspriority <nowhere@nowhere.com>
Message-ID: <JqCdnURj7IvU5VbVnZ2dnUVZ_rrinZ2d@giganews.com>
Source record: 22415
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

"Green Xenon [Radium]" <glucegen1x@gmail.com> wrote in message
news:fa12c21d-d60b-43a5-9dc2-bb9b485bea88@s1g2000pra.googlegroups.com...
> Hi:
>
> What would be heard on a 40 Hz AM DX receiver that uses the most
> sensitive type of magnetic loop antenna? I doubt there would be any
> hissing since that artifact would involve high-frequency sounds and a
> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
> [violation of Nyquist theorem].
>
> I also don't think power lines would have any perceptible affect on a
> 40 Hz receiver. In USA, the electric power has a frequency of 60 Hz --
> in Europe, its 50 Hz. Since 40 Hz is below these power frequencies, I
> doubt they would cause interference on 40 Hz. If I was receiving at or
> above the power frequencies, I do think there would be disturbance but
> not if below.
>
> Would any interferences from outer space be perceptible on a 40 Hz AM
> receiver? Galactic noise?
>
>
> Thanks,
>
> Radium

See http://www.fas.org/nuke/guide/usa/c3i/elf.htm

Bob Morein
(310) 237-6511

2193. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 09:41:13 UTC
From: ml <m@di.net>
Message-ID: <m-9C9591.05411313092008@news.optonline.net>
Source record: 22416

hi Paul

see responces below, and thanks very much

In article
<26ee0c60-dd0f-4c9a-adc3-46a669d5cf9f@a18g2000pra.googlegroups.com>,
"pdrahn@coinet.com" <co_farmer@yahoo.com> wrote:

> >
> > so assuming , they let me do that, and my test reveils noise
> > along the wires , what types of snap on chokes /material would
> > be recomened?
> >
> > i wonder if they conduit is a 'poor' shield i could easily wrap that
> > w/rf tape
>
> Hi.
> I am coming into ths discussion kind of late, but see no mention as to
> changes in the noise level as the elevator is operating or not. Is the
> motor and control circuit live all the time or just when the elevator
> is occupied or in motion.
<<from being inside my house i can't really tell elevator
movement, i can say the noise is constantly intermittant, that is
on a few min off a few min, it 'seems' not to correspond to
elevator movement but i'd need a second guy to prove that

However being in the elevator room, as previously mentioned w/my
ft817 i can tell you the motor and magnatek is always slightly
energized however with no elevator movement the noise is
extreemly small soo as the motor kicks in the magnatek makes a
ton of noise same test standing ontop of the motor shows little
noise i didn't test the conduit

>
> As far as snap-on ferrite chokes, they must allow the largest wire to
> pass and should be fairly large for the low frequency involved.
>
> Perhaps this has been mentioned before, but conduit will certainly
> radiate if it is not connected to a common ground point at each end.
> Otherwise, it is an antenna. No amount of tape will stop that. If
> connected to two "ground" points, the conduit could still radiate as a
> loop antenna. The building framework may make an electrical ground,
> but not an RF ground.
<<yea that got me thinking i noticed the manual for the magnatek
actually talked about how to keep one end only 'grounded' and the

book was very good at explaning it, i have to go back up and see if
they did that i bet they sure didn't my guess is they didn't use
shielded wire to the motor sensor i'd guess iether plain wire or if
i am luckey

they have really only an electrical ground up their they did make a
single buss on the bottom and everything terminates at least to a
single point the conduit is 'grounded' by connecting with the metal
cabinet which is connected to that elec ground my building water,
heat, Ibeams and elec ground seem to all be at same potential and do
connect with earth soil, naturally the elevator room on the roof is
14stories high

i disagree with you however that 'no ammount' of tape would help if
the conduit was radiating copper or mu-metal, or lead or RFpaint
wrapped around the conduit and possibly grounded i think would have
an effect but i could be wrong my guess is it could work why do you
think it's not possible?
>
> Do you have a portable am shortwave radio with an external antenna?
> Use it to explore (safely!) the wiring with the external antenna. I
> did this at home and discovered lots of HF noise coming from a VCR,
> DVD player and TV that were always on, but on standby. I think this
> exercise will let you track the noise a lot easier than your expensive
> ham rig.
Yes the ft817 also has am but i've been testing ssb easier on
the ears and just a strong interference hihi

yeah it's funny how sometimes you find a vcr or a cable modem
that puts out so much noise on even standbuy a lot of companies these
days really are rf poluters and seem to get away with murder

I wonder if that magnetek is legal , just say the unit by itself
is it fcc approved to radiate such a strong signal so broad ??
second to that since it is interfering with a licensed ham station
per rules and regs would it be in violation? i wonder how i
confirm that ultimately i might hve to file a complaignt

>
> Good luck!
>
> Paul, KD7HB

2194. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 10:57:21 UTC
From: Dave <noone@nowhere.com>
Message-ID: <l0Nyk.47$MN3.1@nwrddc01.gnilink.net>
Source record: 22417

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:4925f851-be7a-4cd1-b90b-608e6fde636e@k37g2000hsf.googlegroups.com...
On Sep 12, 7:04 pm, "Dave" <no...@nowhere.com> wrote:
>Now you are on the hot plate at last.
>Put up or shut up

not even worth opening the program. for I know that any time you let the optimizer run without realistic bounds and go for maximum gain you are going to get either and unrealizable design or something that no one would want to use anyway. that is what has been fooling you all along, you don't know the limitations of the programs you are using and taking their results as gospel.

2195. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 11:04:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <d7Nyk.48$MN3.41@nwrddc01.gnilink.net>
Source record: 22418

<dfinn1@nc.rr.com> wrote in message
news:be725d52-65eb-4299-8d7b-b5d68ae96111@26g2000hsk.googlegroups.com...
On Sep 12, 7:05 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>I too am waiting for the answer to his question. Which of Maxwell's
>equation(s) contains the weak force and show us specifically which
>*term* defines the force. We already know that you took the position
>that weak force is included in one or more of the Maxwell equations.

you'll never get the answer. his only response last night was for me to try to duplicate one of his rediculous optimizations to get a tilted dipole. he doesn't know even the most basic math behind the equations, he has latched onto the gauss equation drawing (not the equation, just the drawing mind you) that shows the surface integration around a charged object and is doing everythign from that... the rest of it is made up from misreading, or just plain not understanding, other news articles that have some kind of percieved relation to em fields... for instance his latest fasination with the weak force is from the use of the term 'electro-weak' force, while this is well known to be confined to the nucleons in an atom he has extended it to his fantasy world to explain the tipping of dipoles over ground to get gain... my recommendation is to keep prodding him for fun, but ignore anything he says.

2196. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 11:08:42 UTC
From: Dave <noone@nowhere.com>
Message-ID: <_aNyk.49$MN3.39@nwrddc01.gnilink.net>
Source record: 22419

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:7ce5bd71-d583-433d-88f0-62430a1466cd@25g2000hsx.googlegroups.com...
On Sep 12, 7:55 pm, "Frank" <frank...@nospam.telus.net> wrote:
>The navy would not change to a antenna that was not resonant.

sure they would, there is no reason to have a resonant antenna... a
non-resonant one radiates just fine when you have the power to get the
current into it. its all in the driving and matching networks.

2197. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 11:17:06 UTC
From: "Myron A. Calhoun" <mcalhoun@ksu.edu>
Message-ID: <7d76da02-534e-4d2c-9741-eb7d90950598@l42g2000hsc.googlegroups.com>
Source record: 22420

On Sep 12, 7:47 pm, "Frank" <frank...@nospam.telus.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:acd85469-dfbb-4b2a-8c84-0afaca9c6bdb@l43g2000hsh.googlegroups.com...
>
> >A sloper antenna when resonant produces more gain
> > than a vertical dipole resonant at the same frequency.
> > True or false? prove it
>
> Model parameters for sloping dipole: 60 ft at one end
> 13.3 ft at the other (45 deg slope). Horizontal dipole
> at 60 ft. Length of both antennas 66 ft. Sloping dipole
> resonant at 7.225 MHz, same length horizontal 7.3 MHz.
> Average ground parameters: conductivity 5 mS/m, and
> relative permittivity 13. Horizontal dipole maximum
> gain off the sides (As expected). Sloping antenna
> double lobed pattern with maximum gain at 80 degrees
> either side of lowest end. Software: Nittany's GNEC.
>
> Simulation results:
.... snip ....

The original question said VERTICAL dipole , but you modeled a
HORIZONTAL dipole? Or was one of these just a typo?

FWIW, I modeled your horizontal dipole in EZNEC and came up with
slightly DIFFERENT results:
Resonant frequency about 7.335 Mhz
Resistance about 81 ohms
Max gain about 6.54 dBi at 30 degrees
I am INexperienced in using EZNEC and wonder if I'm doing something
wrong?

--Myron, W0PBV.

2198. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 11:20:20 UTC
From: Dave <noone@nowhere.com>
Message-ID: <UlNyk.51$MN3.6@nwrddc01.gnilink.net>
Source record: 22421

"Dave" <noone@nowhere.com> wrote in message
news:_aNyk.49$MN3.39@nwrddc01.gnilink.net...
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:7ce5bd71-d583-433d-88f0-62430a1466cd@25g2000hsx.googlegroups.com...
> On Sep 12, 7:55 pm, "Frank" <frank...@nospam.telus.net> wrote:
>>The navy would not change to a antenna that was not resonant.
>
> sure they would, there is no reason to have a resonant antenna... a
> non-resonant one radiates just fine when you have the power to get the
> current into it. its all in the driving and matching networks.
>

the other one that art has never answered is that if it takes his magical mystery particles settling on diamagnetic materials and then hopping around against gravity because of the weak force, why do my ferromagnetic antennas radiate so well? according to him they shouldn't have the magical mystery particles so shouldn't be able to radiate because all the current would be stuck on the inside of the conductors going back to the source instead of hopping up and down in joy with all those particles... come on art, explain that one in terms of your neutrino based weak force optimizer that you pulled off the shelf that was written by someone who ignored the weak force and neutrinos.

2199. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 11:45:39 UTC
From: Dave <noone@nowhere.com>
Message-ID: <DJNyk.53$Jw.23@nwrddc02.gnilink.net>
Source record: 22422
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

"Ian Thompson-Bell" <ruffrecords@yahoo.co.uk> wrote in message
news:gafqr7$30l1$1@energise.enta.net...
> Green Xenon [Radium] wrote:
>> Hi:
>>
>> What would be heard on a 40 Hz AM DX receiver that uses the most
>> sensitive type of magnetic loop antenna? I doubt there would be any
>> hissing since that artifact would involve high-frequency sounds and a
>> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
>> [violation of Nyquist theorem].
>
> Not strictly true I think - depends on the modulation scheme - how else do
> you think we manage to get 56K bps down a 3KHz phone line.
>
> Cheers
>
> IAn

if you really want to have fun try plugging in a 40hz carrier with a 100hz
modulation and do the sum and difference frequencies to find the
sidebands... how do you explain negative frequencies?? are they going back
in time? taking information to before it was sent? or do they appear
before the signal starts?

2200. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 12:01:12 UTC
From: Jorden Verwer <J.Verwer@inter.NL.net>
Message-ID: <48cbab8b$0$718$7ade8c0d@textreader.nntp.internl.net>
Source record: 22423
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Dave wrote:
> how do you explain negative frequencies??

> are they going back in time?
No.

> taking information to before it was sent?
No.

> or do they appear before the signal starts?
No.

A phase inversion is all there is to it.

2201. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 12:12:13 UTC
From: Dave <noone@nowhere.com>
Message-ID: <x6Oyk.54$Jw.53@nwrddc02.gnilink.net>
Source record: 22424
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

"Jorden Verwer" <J.Verwer@inter.NL.net> wrote in message
news:48cbab8b$0$718$7ade8c0d@textreader.nntp.internl.net...
> Dave wrote:
>> how do you explain negative frequencies??
>
>
>> are they going back in time?
> No.
>
>> taking information to before it was sent?
> No.
>
>> or do they appear before the signal starts?
> No.
>
>
> A phase inversion is all there is to it.
>
>
oh, you're no fun! i was looking for a lively debate of the possibilities
of sending the winning lottery numbers back in time with the negative
frequencies... that would keep radium busy for days!

2202. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 12:39:10 UTC
From: ltdoc@yahoo.com
Message-ID: <a4f341ee-8172-4d88-815c-979f0cc0b25b@l64g2000hse.googlegroups.com>
Source record: 22425
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Legality depends on how and where something is used, and by whom.
If you try hard enough, an Ice cube can be illegal.
- 'Doc

2203. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 13:59:55 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e4c39c67-211a-4a79-9b9b-9e6f918a1072@j22g2000hsf.googlegroups.com>
Source record: 22426

On Sep 13, 6:04 am, "Dave" <no...@nowhere.com> wrote:
> <dfi...@nc.rr.com> wrote in message
>
> news:be725d52-65eb-4299-8d7b-b5d68ae96111@26g2000hsk.googlegroups.com...
> On Sep 12, 7:05 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> >I too am waiting for the answer to his question. Which of Maxwell's
> >equation(s) contains the weak force and show us specifically which
> >*term* defines the force. We already know that you took the position
> >that weak force is included in one or more of the Maxwell equations.
>
> you'll never get the answer. his only response last night was for me to try
> to duplicate one of his rediculous optimizations to get a tilted dipole. he
> doesn't know even the most basic math behind the equations, he has latched
> onto the gauss equation drawing (not the equation, just the drawing mind
> you) that shows the surface integration around a charged object and is doing
> everythign from that... the rest of it is made up from misreading, or just
> plain not understanding, other news articles that have some kind of
> percieved relation to em fields... for instance his latest fasination with
> the weak force is from the use of the term 'electro-weak' force, while this
> is well known to be confined to the nucleons in an atom he has extended it
> to his fantasy world to explain the tipping of dipoles over ground to get
> gain... my recommendation is to keep prodding him for fun, but ignore
> anything he says.

Tell them what AO showed you

2204. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 14:12:50 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6220bcd8-18f0-4073-b15f-2312cc6c0146@x35g2000hsb.googlegroups.com>
Source record: 22427

On Sep 12, 11:51 pm, "Frank" <frank...@nospam.telus.net> wrote:
> >..... There was a guy in this group who
> >stated that the weak force was ficticious.
> >He must be a submariner to. All computer programs based around
> >Maxwells laws have it to if one wants to
> >account for all radiation but most just want to design a Yagi because
> >it is easy to build.
> >Art
>
> In fact no one has said that the "Weak force" is fictitious. The comment
> was in relation to the usage of the term "Electro-weak force".
>
> Frank

Frank
Electro weak is what some continue to say for the weak force.
Assumption being that it is electrical nature and part and parcel of
another force.
When David does his thing with AO for himself he will inform you of
the angle of the weak force
and may even provide its magnitude. His series of questions and
statements stop here.
If I supply answers and he rejects implementation then we cannot move
on.
He is just baiting or he wwould tell you what AO provided. All have a
chane to resolve the question for themselves
thus relieving me of challenges as to my integrity. I cannot satisfy
anybody and they cannot satisfy themselves
We now enter the stone throwing stage and the thread comes to an end
Have a good day
Art Unwin KB9MZ.......xg

2205. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 14:31:09 UTC
From: Dave <noone@nowhere.com>
Message-ID: <N8Qyk.60$Jw.56@nwrddc02.gnilink.net>
Source record: 22428

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:6220bcd8-18f0-4073-b15f-2312cc6c0146@x35g2000hsb.googlegroups.com...
On Sep 12, 11:51 pm, "Frank" <frank...@nospam.telus.net> wrote:

>He is just baiting or he wwould tell you what AO provided. All have a
>chane to resolve the question for themselves

of course i'm just baiting the troll... you have said nothing that makes
enough sense to even bother trying to verify it. i know that if i run the
optimizer long enough it will even give gain out of your shoebox full of
wire... that is just the way it works... and AO was really bad for that if
you didn't watch it and constrain it to realizable antennas.

>thus relieving me of challenges as to my integrity. I cannot satisfy
>anybody and they cannot satisfy themselves
>We now enter the stone throwing stage and the thread comes to an end

that started long ago.

>Have a good day

maybe i will, the sun is trying to come out so maybe i don't need to bait
you into any more lunacy for our entertainment on here.

2206. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 15:42:00 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <cbRyk.2306$1x6.1192@edtnps82>
Source record: 22429

The original question said VERTICAL dipole , but you modeled a
HORIZONTAL dipole? Or was one of these just a typo?

FWIW, I modeled your horizontal dipole in EZNEC and came up with
slightly DIFFERENT results:
Resonant frequency about 7.335 Mhz
Resistance about 81 ohms
Max gain about 6.54 dBi at 30 degrees
I am INexperienced in using EZNEC and wonder if I'm doing something
wrong?

--Myron, W0PBV.

No, you are correct. I must have been asleep. Funny that nobody
else noticed my error. The difference in your results are probably
due to the fact that EZNEC does not use the Sommerfeld/Norton
ground model which produces more accurate results when the
radiator is near to the ground.

Frank VE6CB

2207. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 15:49:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <42b789e5-3425-46ac-88f3-060a222d8fea@i76g2000hsf.googlegroups.com>
Source record: 22430

On Sep 13, 10:42 am, "Frank" <frank...@nospam.telus.net> wrote:
> The original question said VERTICAL dipole , but you modeled a
> HORIZONTAL dipole? Or was one of these just a typo?
>
> FWIW, I modeled your horizontal dipole in EZNEC and came up with
> slightly DIFFERENT results:
>   Resonant frequency about 7.335 Mhz
>   Resistance about 81 ohms
>   Max gain about 6.54 dBi at 30 degrees
> I am INexperienced in using EZNEC and wonder if I'm doing something
> wrong?
>
> --Myron, W0PBV.
>
> No, you are correct. I must have been asleep. Funny that nobody
> else noticed my error. The difference in your results are probably
> due to the fact that EZNEC does not use the Sommerfeld/Norton
> ground model which produces more accurate results when the
> radiator is near to the ground.
>
> Frank VE6CB

well done

2208. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 16:17:45 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ajpnc4tio2nfcdb6hj4091g24pd0995o23@4ax.com>
Source record: 22431
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

On Sat, 13 Sep 2008 08:42:53 +0100, Ian Thompson-Bell
<ruffrecords@yahoo.co.uk> wrote:

>Green Xenon [Radium] wrote:
>> Hi:
>>
>> What would be heard on a 40 Hz AM DX receiver that uses the most
>> sensitive type of magnetic loop antenna? I doubt there would be any
>> hissing since that artifact would involve high-frequency sounds and a
>> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
>> [violation of Nyquist theorem].
>
>Not strictly true I think - depends on the modulation scheme - how else
>do you think we manage to get 56K bps down a 3KHz phone line.

Ummm... Mr Radium clearly specified that he's using AM as in amplitude
modulation. If there were a different method of modulation employed,
methinks he would have specified it. You can get more bits per baud
out of relatively narrow bandwidths. The various HDRadio schemes:
<http://en.wikipedia.org/wiki/HD_Radio>
are good examples with about 40Kbits/sec in a 9KHz bandwidth. However,
they don't use AM.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2209. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 16:24:07 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <1QRyk.196$x%.24@nlpi070.nbdc.sbc.com>
Source record: 22432
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Ian Thompson-Bell wrote:
> Green Xenon [Radium] wrote:
>> Hi:
>>
>> What would be heard on a 40 Hz AM DX receiver that uses the most
>> sensitive type of magnetic loop antenna? I doubt there would be any
>> hissing since that artifact would involve high-frequency sounds and a
>> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
>> [violation of Nyquist theorem].
>
> Not strictly true I think - depends on the modulation scheme - how else
> do you think we manage to get 56K bps down a 3KHz phone line.
>
> Cheers
>
> IAn

Ian;

If it were possible to utilize 40hz at a high data rate it wouldn't take 15 minutes for the US Navy to send a 3 character message to it's submerged submarines. As for the phone companies sending 56kbps down a 3khz phone line. They use something like 4 descrete tones and phase shifts to do that and not at the rated speed either but something less as a practical matter.

Dave WD9BDZ

2210. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 16:47:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l2rnc4hurh85de2ekla64uj39dl4ni90ij@4ax.com>
Source record: 22433

On Sat, 13 Sep 2008 15:42:00 GMT, "Frank" <frank599@nospam.telus.net>
wrote:

>No, you are correct. I must have been asleep. Funny that nobody
>else noticed my error. The difference in your results are probably
>due to the fact that EZNEC does not use the Sommerfeld/Norton
>ground model which produces more accurate results when the
>radiator is near to the ground.

Hi Frank,

It was noticed, but certainly not by Authur. I don't hold out any
hope of ever seeing him do half the work to show numbers to prove his
concept.

However, you are still asleep. EZNEC does offer you the choice of
Sommerfeld/Norton grounds, and you even get to define the
characteristics of that ground. This, too, is something that Authur
has no competence with, or let's just say he has refused to share
actual data there too.

As for the Navy using tilted antennas (suggested by an unnamed
admiral, Authur's usual anonymous authorities).... Well, I have been
invited aboard fighting ships in the last year. I have inspected
their AEGIS radars systems. I have taken pictures of their antennas.
If any one is interested, I could post some at my web site that are
absolutely beyond many correspondent's experience. They are not
tilted (an absurdity) unless a hurricane force wave slapped them into
the hull (not obviously evident by any evidence however).

73's
Richard Clark, KB7QHC

2211. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 16:56:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gagrcl$l6o$1@news.albasani.net>
Source record: 22434
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

ltdoc@yahoo.com wrote:
> Legality depends on how and where something is used, and by whom.
> If you try hard enough, an Ice cube can be illegal.
> - 'Doc

Exactly, if I would strike my neighbor with a shovel, it would become an
"illegal weapon"; I would guess.

Regards,
JS

2212. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 17:22:20 UTC
From: Mike Y <joe@user.com>
Message-ID: <gJSyk.3376$rV4.1589@newsfe03.iad>
Source record: 22435
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

I've heard variants of this story for years, but have yet to see one shred of real
evidence that it actually occurred.

The closest I've seen that could be regarded as 'real' evidence was a memo that
circulated around PP&L (Pennsylvania Power and Light) back in the summer of
1972 or 73 that mentioned a farmer that ALLEGEDLY got shocks off a coil of
fence wire he was installing. (The power right of way went over his pasture and
the indication was that he was stringing a fence under one of the then new
extremely high voltage lines. 750KV if I remember, but maybe only 500KV.)

Even then, I thought the right of ways were 'clear' under the big lines, which
makes even this story suspect.

Mike

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:3j9ac4tffqccda2at3r1076fqhonsrjd95@4ax.com...
> On Sat, 9 Aug 2008 14:35:25 +0100, "Alec" <alec@e-hopley.fsnet.co.uk>
> wrote:
>
> >Back at about the same time the BBC had (and still has) a powerful
> >transmitter on 200khz (now198) a local farmer who lived close to the
station
> >built a large tuning coil in the loft and lit his house using fluorescent
> >tubes.
> >
> >He was successfully prosecuted for stealing electricity or something
> >similar.
>
> If this is true (and I have no reason to doubt it), did it make the
> signal weaker for everybody else?
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

2213. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 18:11:12 UTC
From: Dave <noone@nowhere.com>
Message-ID: <4nTyk.91$8v5.29@trnddc01>
Source record: 22436
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

the electric field under ehv lines can be high enough to give shocks, especially if it were a long piece of wire insulated from the ground running along or across the right of way. There can also be other factors, magnetic induction is possible if the wire is long enough and he was closing a loop of it, like the top wire of an electric fence would be. There can also be ground currents due to imbalance in the 3 phases between substations, the currents induced on the static wire that is attached to the towers, leaky insulator strings, leaky lightning arresters, etc. the fields at ground level are supposed to be calculated into the design by the utility to be below the specified safe levels, but changes in ground moisture, air humidity, temperature, sag in the line caused by resistive or solar heating, can cause unexpected shocking experiences on the ground. where i used to work we would demonstrate that for utility engineers by setting up a worst case test line, having them measure the fields, and then do things like hold up a metal ribbed umbrella or touch a key to a car door lock.

note though that these are 60hz currents, the human body is relatively sensitive to that frequency and it is easily detected by most people. lf or mf radio frequencies are less likely to be directly felt unless they get high enough of a voltage/current to burn.

"Mike Y" <joe@user.com> wrote in message
news:gJSyk.3376$rV4.1589@newsfe03.iad...
> I've heard variants of this story for years, but have yet to see one shred
> of real
> evidence that it actually occurred.
>
> The closest I've seen that could be regarded as 'real' evidence was a memo
> that
> circulated around PP&L (Pennsylvania Power and Light) back in the summer
> of
> 1972 or 73 that mentioned a farmer that ALLEGEDLY got shocks off a coil of
> fence wire he was installing. (The power right of way went over his
> pasture
> and
> the indication was that he was stringing a fence under one of the then new
> extremely high voltage lines. 750KV if I remember, but maybe only 500KV.)
>
> Even then, I thought the right of ways were 'clear' under the big lines,
> which
> makes even this story suspect.
>
> Mike

>
>
>
> "Walt Davidson" <g3nyy@despammed.com> wrote in message
> news:3j9ac4tffqccda2at3r1076fqhonsrjd95@4ax.com...
>> On Sat, 9 Aug 2008 14:35:25 +0100, "Alec" <alec@e-hopley.fsnet.co.uk>
>> wrote:
>>
>> >Back at about the same time the BBC had (and still has) a powerful
>> >transmitter on 200khz (now198) a local farmer who lived close to the
> station
>> >built a large tuning coil in the loft and lit his house using
>> >fluorescent
>> >tubes.
>> >
>> >He was successfully prosecuted for stealing electricity or something
>> >similar.
>>
>> If this is true (and I have no reason to doubt it), did it make the
>> signal weaker for everybody else?
>>
>> 73 de G3NYY
>>
>> --
>> Walt Davidson Email: g3nyy @despammed.com
>
>
>

2214. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 18:30:31 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <bFTyk.2516$yS5.1580@edtnps83>
Source record: 22437

> Hi Frank,
>
> It was noticed, but certainly not by Authur. I don't hold out any
> hope of ever seeing him do half the work to show numbers to prove his
> concept.
>
> However, you are still asleep. EZNEC does offer you the choice of
> Sommerfeld/Norton grounds, and you even get to define the
> characteristics of that ground. This, too, is something that Authur
> has no competence with, or let's just say he has refused to share
> actual data there too.
>
> As for the Navy using tilted antennas (suggested by an unnamed
> admiral, Authur's usual anonymous authorities).... Well, I have been
> invited aboard fighting ships in the last year. I have inspected
> their AEGIS radars systems. I have taken pictures of their antennas.
> If any one is interested, I could post some at my web site that are
> absolutely beyond many correspondent's experience. They are not
> tilted (an absurdity) unless a hurricane force wave slapped them into
> the hull (not obviously evident by any evidence however).
>
> 73's
> Richard Clark, KB7QHC

Thanks for the info Richard. Obviously any NEC based program
will have the Sommerfeld/Norton option. As for Navy antennas;
I have seen that they can be tilted, but only so they do not
get shot to pieces by the ships weapons. I too wondered "What
admiral, and in which port".

73, Frank, VE6CB

2215. Re: baluns n chokes n stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 19:12:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gah3bqdq1@news.albasani.net>
Source record: 22438

ml wrote:
[balun stuff]

Seen this page:

http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=7840

author, page owner, claims it was first designed by the collins co. A
few more turns and you could use it on the AM Broadcast band of your
general coverage receiver ...

Regards,
JS

2216. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 19:18:01 UTC
From: Billy Burpelson <billy@burpelsonafb.net>
Message-ID: <JlUyk.299$YU2.86@nlpi066.nbdc.sbc.com>
Source record: 22439
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

Mike Y wrote:
> I've heard variants of this story for years, but have yet to see one
> shred of real evidence that it actually occurred.
>
> The closest I've seen that could be regarded as 'real' evidence was a
> memo that circulated around PP&L (Pennsylvania Power and Light) back
> in the summer of 1972 or 73 that mentioned a farmer that ALLEGEDLY
> got shocks off a coil of fence wire he was installing. (The power
> right of way went over his pasture and the indication was that he was
> stringing a fence under one of the then new extremely high voltage
> lines. 750KV if I remember, but maybe only 500KV.)

Yes, this can easily happen. A few years ago, I was doing some consulting work for a major power company at one of their very high voltage substations. EVERYTHING was hot, from the fence surrounding the property to the doorknobs on the buildings to the employee cars parked on the property. Even though this site was usually unattended, to a man, all the power company employees disliked pulling maintenance duty there.

> Even then, I thought the right of ways were 'clear' under the big
> lines, which makes even this story suspect.

What do you mean by "clear"? Yes, they clear the brush under their right of way (which can pass over private property) , but I don't think anyone has repealed the laws of induction and electrostatic fields. So, your story above doesn't surprise me in the least.

P.S.

When I worked for CBS TV, they also owned a 50 kW AM station connected to (at the time) a 12(!) tower directional array. At homes in the main lobe of the pattern, I can relate many stories of shocks off of aluminum siding, TV rabbit ear antennas, lights staying on, detected audio being rectified and coming through the forced air heating ducts, etc, etc. However, I never heard of anyone stealing power as related by the OP.

2217. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 21:30:34 UTC
From: Dave <noone@nowhere.com>
Message-ID: <_hWyk.80$MN3.26@nwrddc01.gnilink.net>
Source record: 22440

"Dave" <noone@nowhere.com> wrote in message
news:UlNyk.51$MN3.6@nwrddc01.gnilink.net...
>
> "Dave" <noone@nowhere.com> wrote in message
> news:_aNyk.49$MN3.39@nwrddc01.gnilink.net...
>>
>> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
>> news:7ce5bd71-d583-433d-88f0-62430a1466cd@25g2000hsx.googlegroups.com...
>> On Sep 12, 7:55 pm, "Frank" <frank...@nospam.telus.net> wrote:
>>>The navy would not change to a antenna that was not resonant.
>>
>> sure they would, there is no reason to have a resonant antenna... a
>> non-resonant one radiates just fine when you have the power to get the
>> current into it. its all in the driving and matching networks.
>>
>
> the other one that art has never answered is that if it takes his magical
> mystery particles settling on diamagnetic materials and then hopping
> around against gravity because of the weak force, why do my ferromagnetic
> antennas radiate so well? according to him they shouldn't have the
> magical mystery particles so shouldn't be able to radiate because all the
> current would be stuck on the inside of the conductors going back to the
> source instead of hopping up and down in joy with all those particles...
> come on art, explain that one in terms of your neutrino based weak force
> optimizer that you pulled off the shelf that was written by someone who
> ignored the weak force and neutrinos.
>

come on art! wx was nice today, but expecting more rain tomorrow, come up
with something good to keep us amused!

2218. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 21:34:44 UTC
From: Jim-NN7K
Message-ID: <gmWyk.312$YU2.57@nlpi066.nbdc.sbc.com>
Source record: 22441
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

Mike- Tho this NOT about R.F., it is about induction- Many years ago,
we had a working telephone line, from K.Falls, Or to Tule Lake, Ca.
About 1/4 mile away a power line (1/2 Megavolt) was installed, running
next to our line for some 5 miles ! When power company fired it up,
instantly the line was unusable-- Measured over 400 VOLTS of escape
in telegraph office- worse- at a detector, a maintainer (these were
Fiberglass houses) grabbed on to the door handle, and was knocked to
the ground ! Power company supplied us with 60 cycle filters, but the
line still had too much noise to be usable! And, another incident- in
Portland, had a Phone line to Eugene, passed KXL (1190KHz?) radio
station- Had enough leakage, that it got into the baseband of our
microwave system!
we wern't using baseband that high, but when FCC inspected our El Paso,
Texas facility, cited us for re-transmitting that signal, on our
microwave system! Take it to the bank-- dumb things happen! Jim NN7K

Mike Y wrote:
> I've heard variants of this story for years, but have yet to see one shred
> of real
> evidence that it actually occurred.
>
> The closest I've seen that could be regarded as 'real' evidence was a memo
> that
> circulated around PP&L (Pennsylvania Power and Light) back in the summer of
> 1972 or 73 that mentioned a farmer that ALLEGEDLY got shocks off a coil of
> fence wire he was installing. (The power right of way went over his pasture
> and
> the indication was that he was stringing a fence under one of the then new
> extremely high voltage lines. 750KV if I remember, but maybe only 500KV.)
>
> Even then, I thought the right of ways were 'clear' under the big lines,
> which
> makes even this story suspect.
>
> Mike
>
>

2219. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 22:03:08 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <spCdnS9RCNEKpVHVnZ2dnUVZ_jGdnZ2d@giganews.com>
Source record: 22442
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

"Jim-NN7K" <nn7kexk7zfg@noway.net.> wrote in message
news:gmWyk.312$YU2.57@nlpi066.nbdc.sbc.com...
> And, another incident- in
> Portland, had a Phone line to Eugene, passed KXL (1190KHz?) radio station-
> Had enough leakage, that it got into the baseband of our microwave system!
> we wern't using baseband that high, but when FCC inspected our El Paso,
> Texas facility, cited us for re-transmitting that signal, on our microwave
> system! Take it to the bank-- dumb things happen! Jim NN7K

KXL (5000 watts) is at 750 KHz. KEX (50,000 watts) is at 1190 KHz. If your system was anywhere near I-205 at Clackamas, then it would not surprise me that KEX would get into it. Once I was driving by their tower site and decided to be funny. It was in my 1969 Pontiac wagon. I commented to my passengers that "I bet I can really get a good signal from KEX right now.." and punched the button for KEX on my car radio.. which greeted me with total silence! I just happened to punch that button while in the strongest part of their pattern, and it took out the RF amp and local oscillator in the radio (damn, that was a good radio, too...)

2220. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 22:34:58 UTC
From: Ian Thompson-Bell <ruffrecords@yahoo.co.uk>
Message-ID: <gahf3o$2sls$1@energise.enta.net>
Source record: 22443
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Jeff Liebermann wrote:
> On Sat, 13 Sep 2008 08:42:53 +0100, Ian Thompson-Bell
> <ruffrecords@yahoo.co.uk> wrote:
>
>> Green Xenon [Radium] wrote:
>>> Hi:
>>>
>>> What would be heard on a 40 Hz AM DX receiver that uses the most
>>> sensitive type of magnetic loop antenna? I doubt there would be any
>>> hissing since that artifact would involve high-frequency sounds and a
>>> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
>>> [violation of Nyquist theorem].
>> Not strictly true I think - depends on the modulation scheme - how else
>> do you think we manage to get 56K bps down a 3KHz phone line.
>
> Ummm... Mr Radium clearly specified that he's using AM as in amplitude
> modulation. If there were a different method of modulation employed,
> methinks he would have specified it. You can get more bits per baud
> out of relatively narrow bandwidths. The various HDRadio schemes:
> <http://en.wikipedia.org/wiki/HD_Radio>
> are good examples with about 40Kbits/sec in a 9KHz bandwidth. However,
> they don't use AM.
>
>

Depends on your definition of AM. There are many types of amplitude
modulation, ask any radio amateur - and then of course there's VPAM.

Cheers

Ian

2221. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 22:38:31 UTC
From: Ian Thompson-Bell <ruffrecords@yahoo.co.uk>
Message-ID: <gahfad$2sls$2@energise.enta.net>
Source record: 22444
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

David G. Nagel wrote:
> Ian Thompson-Bell wrote:
>> Green Xenon [Radium] wrote:
>>> Hi:
>>>
>>> What would be heard on a 40 Hz AM DX receiver that uses the most
>>> sensitive type of magnetic loop antenna? I doubt there would be any
>>> hissing since that artifact would involve high-frequency sounds and a
>>> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
>>> [violation of Nyquist theorem].
>>
>> Not strictly true I think - depends on the modulation scheme - how
>> else do you think we manage to get 56K bps down a 3KHz phone line.
>>
>> Cheers
>>
>> IAn
>
> Ian;
>
> If it were possible to utilize 40hz at a high data rate it wouldn't take
> 15 minutes for the US Navy to send a 3 character message to it's
> submerged submarines.

That's becuase the technology was developed ages ago.

As for the phone companies sending 56kbps down a
> 3khz phone line. They use something like 4 descrete tones and phase
> shifts to do that and not at the rated speed either but something less
> as a practical matter.
> .

Multiphase AM schemes are common place; they are used in mobile phones
for instance. It's the old trade off between bandwidth and S/N just like
in FM but in reverse. Check out VPAM.

Cheers

Ian

2222. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 22:46:08 UTC
From: dfinn1@nc.rr.com
Message-ID: <265bacb0-2b20-4d1f-b058-afc7e3fb5b38@2g2000hsn.googlegroups.com>
Source record: 22445

On Sep 13, 7:04 am, "Dave" <no...@nowhere.com> wrote:
> <dfi...@nc.rr.com> wrote in message
>
> news:be725d52-65eb-4299-8d7b-b5d68ae96111@26g2000hsk.googlegroups.com...
> On Sep 12, 7:05 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> >I too am waiting for the answer to his question. Which of Maxwell's
> >equation(s) contains the weak force and show us specifically which
> >*term* defines the force. We already know that you took the position
> >that weak force is included in one or more of the Maxwell equations.
>
> you'll never get the answer. his only response last night was for me to try
> to duplicate one of his rediculous optimizations to get a tilted dipole. he
> doesn't know even the most basic math behind the equations, he has latched
> onto the gauss equation drawing (not the equation, just the drawing mind
> you) that shows the surface integration around a charged object and is doing
> everythign from that... the rest of it is made up from misreading, or just
> plain not understanding, other news articles that have some kind of
> percieved relation to em fields... for instance his latest fasination with
> the weak force is from the use of the term 'electro-weak' force, while this
> is well known to be confined to the nucleons in an atom he has extended it
> to his fantasy world to explain the tipping of dipoles over ground to get
> gain... my recommendation is to keep prodding him for fun, but ignore
> anything he says.

In the past his "big discovery" was that, if you put the static charge
in motion, then at any instant in time the Guassian STATIC law still
applies. Then to make things worse, some scientist at MIT posted here
and agreed with that and that he took that as validation for his
entire theory. After he saw where the thread was going, the MIT guy
quickly departed the discussion and left the rest of us here to deal
with the Frankenstein he created. I think it was a type of academic
hazing of the group. From that came the pronoucement, validated by
MIT, that he was able to validate that the 'Maxwell's static equation
(the surface integral) also held true under dynamic conditions'! The
gravitational analog would be something like saying a ball maintains
the same mass at the top of the hill, as it does while rolling, as it
does at the bottom of the hill. Watch out that he doesn't counter with
relativistic velocities; the motion of charge on the antenna is
actually quite slow and in no way relativistic. Of course it is true
that the Maxwell static law would hold true for a moving charged
particle at any instant frozen in time and of course the MIT scientist
would agree with that (the MIT guy even said he had a computer
printout that simulated a moving charge and, arithmetically the

surface integral charge measured at an instant of time was equal to the charge of the electron...that made me suspicious of his sense of humor), but so what? We already know that motion does not deplete the charge on the particle. The charge on the particle is conserved. Static charge is not the source of the energy that is used (depleted) to keep the particle in motion. Maxwell already showed that in the rest of his equations. The fact that an electron maintains the same charge regardless of its state of motion and therefore does nothing to change the state of charge equilibrium has nothing to do with how an antenna works other than the antenna simply obeys Maxwells laws like everything else.

2223. 50 KW AM stations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 22:48:06 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <9020eebb-a972-4432-b462-252e041b169c@l42g2000hsc.googlegroups.com>
Source record: 22446

I heard that the 50kW AM clear channel stations were set up to send/
receive ultra slow RTTY for gov or mil purposes. Does anyone know
anything about this?

Jimmie

2224. Re: 50 KW AM stations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 22:54:04 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gahgae$5rl$1@aioe.org>
Source record: 22447

"JIMMIE" wrote:.
> I heard that the 50kW AM clear channel stations were set up to send/
> receive ultra slow RTTY for gov or mil purposes. Does anyone know
> anything about this?

Research "BROFICON."

2225. Re: Light,Lazers and HF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 23:09:07 UTC
From: Dave <noone@nowhere.com>
Message-ID: <nKXyk.97$pp3.45@trnddc06>
Source record: 22448

<dfinn1@nc.rr.com> wrote in message
news:265bacb0-2b20-4d1f-b058-afc7e3fb5b38@2g2000hsn.googlegroups.com...
On Sep 13, 7:04 am, "Dave" <no...@nowhere.com> wrote:
>does at the bottom of the hill. Watch out that he doesn't counter with
>relativistic velocities; the motion of charge on the antenna is
>actually quite slow and in no way relativistic. Of course it is true

i have no worry about this, relativity is way beyond art. and making the
relation between charge in motion, relativistic effects, and the magnetic
field are WAY beyond art.... i just hope he comes up with something else
stupid to say, its supposed to rain here all day tomorrow!

2226. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 23:10:58 UTC
From: Richard Crowley <rcrowley@xp7rt.net>
Message-ID: <ScKdnXE2NKsf1VHVnZ2dnUVZ_gSdnZ2d@posted.pcez>
Source record: 22449
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

You guys are all dupes who have fallen for "Radium"s
old tricks of asking insane questions and then sitting back
and laughing at people trying to make sense of them.

"Radium" is a notorious, long-time Usenet Troll. There
is absolutely no future in trying to reply to any of his/
her/it's questions.

2227. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 23:46:27 UTC
From: Jim-NN7K
Message-ID: <LhYyk.193$Rx.63@flpi144.ffdc.sbc.com>
Source record: 22450
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

Brenda Ann wrote:
> "Jim-NN7K" <nn7kexk7zfg@noway.net.> wrote in message
> news:gmWyk.312$YU2.57@nlpi066.nbdc.sbc.com...
>> And, another incident- in
>> Portland, had a Phone line to Eugene, passed KXL (1190KHz?) radio station-
>> Had enough leakage, that it got into the baseband of our microwave system!
>> we wern't using baseband that high, but when FCC inspected our El Paso,
>> Texas facility, cited us for re-transmitting that signal, on our microwave
>> system! Take it to the bank-- dumb things happen! Jim NN7K
>
> KXL (5000 watts) is at 750 KHz. KEX (50,000 watts) is at 1190 KHz. If your
> system was anywhere near I-205 at Clackamas, then it would not surprise me
> that KEX would get into it. Once I was driving by their tower site and
> decided to be funny. It was in my 1969 Pontiac wagon. I commented to my
> passengers that "I bet I can really get a good signal from KEX right now.."
> and punched the button for KEX on my car radio.. which greeted me with total
> silence! I just happened to punch that button while in the strongest part of
> their pattern, and it took out the RF amp and local oscillator in the radio
> (damn, that was a good radio, too...)
>
>
>
Correct-- this from memory of around 35 years ago (Comm Tech for
Southern Pacific (Now Union Pacific)-- Main Line ran real close to their
towers! Signal came from a microwave carrier, installed as should be (
Balances wires, shield on one end grounded- had to ground BOTH ends,
to get rid of signal! Also had to string Grounds from the clock tower
at Union Station, a pretty good trick, as high as it is! Jim

2228. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 23:51:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gahjn1$j5c$1@news.albasani.net>
Source record: 22301
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Richard Crowley wrote:
> You guys are all dupes who have fallen for "Radium"s
> old tricks of asking insane questions and then sitting back
> and laughing at people trying to make sense of them.
>
> "Radium" is a notorious, long-time Usenet Troll. There
> is absolutely no future in trying to reply to any of his/
> her/it's questions.
>

Actually, I think each and every poster should be given all the respect
which his/hers/its'/??? question deserves ... which I did! :-P

Regards,
JS

2229. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-13 23:58:45 UTC
From: Dave <noone@nowhere.com>
Message-ID: <VsYyk.98$MN3.26@nwrddc01.gnilink.net>
Source record: 22302
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

"Richard Crowley" <rcrowley@xp7rt.net> wrote in message
news:ScKdnXE2NKsf1VHVnZ2dnUVZ_gSdnZ2d@posted.pcez...
> You guys are all dupes who have fallen for "Radium"s
> old tricks of asking insane questions and then sitting back
> and laughing at people trying to make sense of them.
>
> "Radium" is a notorious, long-time Usenet Troll. There
> is absolutely no future in trying to reply to any of his/
> her/it's questions.
>
who is trying to make sense?? its better, and more fun, to add to the
stupidness of it... much like answering art. a troll is a troll is a
troll... bait them and have fun.

2230. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 00:02:14 UTC
From: Richard Crowley <rcrowley@xp7rt.net>
Message-ID: <pNqdnYNMF-AVyVHVnZ2dnUVZ_s_inZ2d@posted.pcez>
Source record: 22303
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

```
"Dave" wrote ...
> "Richard Crowley" wrote ...
>> You guys are all dupes who have fallen for "Radium"s
>> old tricks of asking insane questions and then sitting back
>> and laughing at people trying to make sense of them.
>>
>> "Radium" is a notorious, long-time Usenet Troll. There
>> is absolutely no future in trying to reply to any of his/
>> her/it's questions.
>>
> who is trying to make sense?? its better, and more fun, to add to the
> stupidness of it... much like answering art. a troll is a troll is a
> troll... bait them and have fun.

Yeah, I like having nonsense fun as much as the next guy.
But "Radium" seems incapable of distinguishing between
nonsense and actual technical discussion. It just encourages him.
```

2231. Re: 50 KW AM stations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 01:04:48 UTC
From: "John, N9JG" <john@Xremove.MeYgotwals.com>
Message-ID: <QqZyk.45689$G23.21124@newsreading01.news.tds.net>
Source record: 22304

If you believe that, then you should buy some land in Florida. Check out the
following two links:

http://www.oldradio.com/archives/stations/ccs.htm

http://en.wikipedia.org/wiki/Clear_channel

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:9020eebb-a972-4432-b462-252e041b169c@l42g2000hsc.googlegroups.com...
> I heard that the 50kW AM clear channel stations were set up to send/
> receive ultra slow RTTY for gov or mil purposes. Does anyone know
> anything about this?
>
> Jimmie

2232. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 01:47:32 UTC
From: David Eduardo <david@davideduardo.com>
Message-ID: <Z2_yk.176$as4.115@nlpi069.nbdc.sbc.com>
Source record: 22305
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:spCdnS9RCNEKpVHVnZ2dnUVZ_jGdnZ2d@giganews.com...
>
> "Jim-NN7K" <nn7kexk7zfg@noway.net.> wrote in message
> news:gmWyk.312$YU2.57@nlpi066.nbdc.sbc.com...
>> And, another incident- in
>> Portland, had a Phone line to Eugene, passed KXL (1190KHz?) radio
>> station- Had enough leakage, that it got into the baseband of our
>> microwave system!
>> we wern't using baseband that high, but when FCC inspected our El Paso,
>> Texas facility, cited us for re-transmitting that signal, on our
>> microwave system! Take it to the bank-- dumb things happen! Jim NN7K
>
> KXL (5000 watts) is at 750 KHz.

KXL has been 50 kw days at least back to 1972... that is as far as I wanted
to check it in the Jones Log and Broadcasting Yearbook.

http://www.davidgleason.com/Archive-Broadcasting-Yearbooks/1972%20Broadcasting%20Yearbook%20Radio%20Ohio%20to%20Tennessee.pdf

2233. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 02:03:35 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <0e_yk.31992$bx1.21078@bignews1.bellsouth.net>
Source record: 22306

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:acd85469-dfbb-4b2a-8c84-0afaca9c6bdb@l43g2000hsh.googlegroups.com...
>A sloper antenna when resonant produces more gain
> than a vertical dipole resonant at the same frequency.
> True or false? prove it

Gain in which direction? True AND False - Prove otherwise.

2234. Re: 50 KW AM stations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 02:08:56 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <1j_yk.31994$bx1.3483@bignews1.bellsouth.net>
Source record: 22307

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:9020eebb-a972-4432-b462-252e041b169c@l42g2000hsc.googlegroups.com...
> I heard that the 50kW AM clear channel stations were set up to send/
> receive ultra slow RTTY for gov or mil purposes. Does anyone know
> anything about this?
>
> Jimmie
Interesting.
Record the signal, then play it back at different speeds (frequencies) using
different demodulator setups.
(Don't play it backwards - it says something about one of the Beatles that
way.)

2235. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 04:07:07 UTC
From: isw <isw@witzend.com>
Message-ID: <isw-9AED42.21070713092008@newsgroups.comcast.net>
Source record: 22308
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

In article <gafqr7$30l1$1@energise.enta.net>,
Ian Thompson-Bell <ruffrecords@yahoo.co.uk> wrote:

> Green Xenon [Radium] wrote:
> > Hi:
> >
> > What would be heard on a 40 Hz AM DX receiver that uses the most
> > sensitive type of magnetic loop antenna? I doubt there would be any
> > hissing since that artifact would involve high-frequency sounds and a
> > 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
> > [violation of Nyquist theorem].
>
> Not strictly true I think - depends on the modulation scheme - how else
> do you think we manage to get 56K bps down a 3KHz phone line.

Because it's not the *line* that limits the rate; it's gear at the
central office. Even so, 56k modems need to cleverly bypass some of the
CO stuff.

By using clever modulation techniques and error correction, a nominal
3600 Hz analog telco channel can manage about 32 kbps, but in that case,
the symbol rate (baud rate) is 2400 baud per second, well within the
passband of the channel.

Isaac

2236. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 04:10:12 UTC
From: isw <isw@witzend.com>
Message-ID: <isw-960778.21101213092008@newsgroups.comcast.net>
Source record: 22309
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

In article <gahfad$2sls$2@energise.enta.net>,
Ian Thompson-Bell <ruffrecords@yahoo.co.uk> wrote:

> David G. Nagel wrote:
> > Ian Thompson-Bell wrote:
> >> Green Xenon [Radium] wrote:
> >>> Hi:
> >>>
> >>> What would be heard on a 40 Hz AM DX receiver that uses the most
> >>> sensitive type of magnetic loop antenna? I doubt there would be any
> >>> hissing since that artifact would involve high-frequency sounds and a
> >>> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
> >>> [violation of Nyquist theorem].
> >>
> >> Not strictly true I think - depends on the modulation scheme - how
> >> else do you think we manage to get 56K bps down a 3KHz phone line.
> >>
> >> Cheers
> >>
> >> IAn
> >
> > Ian;
> >
> > If it were possible to utilize 40hz at a high data rate it wouldn't take
> > 15 minutes for the US Navy to send a 3 character message to it's
> > submerged submarines.
>
> That's becuase the technology was developed ages ago.

Actually, the primary thing controlling VLF radio data rates is the
bandwidth of the antenna -- the signal just can't build up and decay
fast enough for a higher rate.

Isaac

2237. Re: Welfare babies, greasy diners and other tidbits

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 04:51:32 UTC
From: Snarky <popesnarky@caballista.organ>
Message-ID: <pan.2008.09.14.04.51.27.128238@jm.ck.poee.kothask.dsocpl.eothidiautp.hcnb.ggghd.bcb.cem.fi>
Source record: 22310
Cross-posted to: rec.aquaria.marine.reefs,rec.radio.amateur.antenna,alt.usenet.kooks,alt.callahans,rec.ponds

On Fri, 12 Sep 2008 07:27:49 -0700, John Smith wrote these lies, denials,
arrogant assertions, erroneous presuppositions, and/or obfuscations:
> On Sep 12, 7:54 am, Synthetic Networked Android Responsible for Killing
> and Yardwork wrote:
>> Hail Eris! On Mon, 08 Sep 2008 09:50:48 -0700, Eris Kallisti Discordia
>> was laughing at the antics of expat, when they suddenly burst out in
>> tears:
>> > On Sep 8, 9:33 am, John Smith wrote:
>> >> James Nasium wrote:
>> >> > ...
>> >> > Go play with your fishies, boy. You must be a faggot. Do you like
>> >> > to lather the barber pole, do the tube steak boogie, lay a little
>> >> > pipe on the hershey highway?
>>
>> >> Oh no, now we get to hear from expats' spouse?
>>
>> > These trashy posts brought to this group coutesy of John Smith aka
>> > assembly wizard. Give John a chance and he will lay some pipe on that
>> > old hershey highway fo yours, that is if you can get him off his
>> > momma.
>>
>> What fun, gay lames and mommy lames. Do you do IKYABWAI, projection, and
>> PKB, as well?
>
> Keep this shit out of our group or I will be forced to kick your hairy
> ass!

Ahhhh, I see. A he-man! Do you lift weights? BTW, you forgot to mention
your group.

--

____
Hail Eris! mhm 29x21; TM#5; Anonymous Psycho Criminal #18
TEH USENETS BULLIE
http://www.runescape.com/
Join my RuneScape clan!
http://z11.invisionfree.com/Holy_Pretzel_Cabal/index.php
Full name of clan: Cabal of the Holy International Discordian Internet
And Usenet Terrorist Pretzel

Barbara Woodhouse Memorial Dog Whistle
Trainer of PorchMonkey4Life
http://www.screedbomb.info/porchie/

Pierre Salinger Memorial Hook, Line & Sinker, June 2008
Hammer of Thor, July 2008

"Not supporting me is equivalent to forfeiting your own rights." --
John D. Wentzky: Warrior For Your Freedumb! Message-ID:
<33km2419sg6fnq3shtbatqa602eagfbskl@4ax.com>

"You cognatatively challenged fool!" -- According to Agamemnon, Stephen
Wilson is, apparently, highly ignorant about cognates, and so is anyone
who dares to disagree with him, in Message-ID:
<Jvidnfyewe883sjVnZ2dnUVZ8rOdnZ2d@eclipse.net.uk>

"Is it still necrophilia if I'm conscious?" -- Owen Harper, "Dead Man
Walking", Torchwood (20/207)

2238. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 04:53:53 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <qJ0zk.32049$bx1.16667@bignews1.bellsouth.net>
Source record: 22311
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

"Richard Crowley" wrote:
> You guys are all dupes who have fallen for "Radium"s
> old tricks of asking insane questions and then sitting back
> and laughing at people trying to make sense of them.
>
> "Radium" is a notorious, long-time Usenet Troll. There
> is absolutely no future in trying to reply to any of his/
> her/it's questions.
Imagine this: Radium, Art, and Fractenna in the same room,
having a discussion about antennas. And of course you would
need someone to moderate,,, maybe Cecil.

Mike W5CHR
Memphis Tenn

2239. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 05:06:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gai641$l8e$1@news.albasani.net>
Source record: 22312
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Mike Lucas wrote:

>> ...
> need someone to moderate,,, maybe Cecil.
>
> Mike W5CHR
> Memphis Tenn
>
>

Naaa. You'd want the Dipole Dummy, complete with his full works of
articles/texts from the late 1800's clear into the early 1930's! ROFLOL

Regards,
JS

2240. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 05:23:41 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <yd1zk.6292$wr1.5061@newsfe02.iad>
Source record: 22313

NOTE: This is a repost from my sent file. It didn't appear
20 hours or so after I sent it. Sorry if it's a dupe to anybody.

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:7ce5bd71-d583-433d-88f0-

< snip >

> The navy would not change to a antenna that was not resonant.

Perhaps you are speaking of another country's Navy with which you are
well-acquainted.

Having been intimately involved with US Navy electronics for over 45 years
(active duty 1962 -1982; civilian support in multiple capacities 1982 -
2007) I can tell you that our Navy has numerous shipboard and
shore-establishment antennas that are not resonant. Since flexibility in
frequency selection confers a tactical advantage, broadbanding is far more
important. Tuners and couplers of several designs allow non-resonant
antennas to work well.

The closest the Navy gets to resonant antennas is in some special
fixed-frequency applications, like IFF. Of course, antennas are sized for
the application and will probably exhibit resonance within their band of
operation, but that's not the design goal.

2241. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 06:21:14 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <G42zk.188$as4.100@nlpi069.nbdc.sbc.com>
Source record: 22314
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Mike Lucas wrote:
> "Richard Crowley" wrote:
>> You guys are all dupes who have fallen for "Radium"s
>> old tricks of asking insane questions and then sitting back
>> and laughing at people trying to make sense of them.
>>
>> "Radium" is a notorious, long-time Usenet Troll. There
>> is absolutely no future in trying to reply to any of his/
>> her/it's questions.
> Imagine this: Radium, Art, and Fractenna in the same room,
> having a discussion about antennas. And of course you would
> need someone to moderate,,, maybe Cecil.
>
> Mike W5CHR
> Memphis Tenn
>
>
What are you trying to do, kill us with laughter? ;^)

Dave WD9BDZ

2242. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 06:53:32 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Vx2zk.6302$wr1.5510@newsfe02.iad>
Source record: 22315

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:l2rnc4hurh85de2ekla64uj39dl4ni90ij@4ax.com...

> As for the Navy using tilted antennas (suggested by an unnamed
> admiral, Authur's usual anonymous authorities).... Well, I have been
> invited aboard fighting ships in the last year. I have inspected
> their AEGIS radars systems. I have taken pictures of their antennas.
> If any one is interested, I could post some at my web site that are
> absolutely beyond many correspondent's experience. They are not
> tilted (an absurdity) unless a hurricane force wave slapped them into
> the hull (not obviously evident by any evidence however).

Absurdity or no, a "stealthing" technique for the Arleigh Burke class
of destroyers involves sharply limiting the radar cross-section by not
installing vertical structures, including most, if not all, the antennas.

See this picture, which is typical.

http://en.wikipedia.org/wiki/Image:USS_Arleigh_Burke_Mediterranean.jpg

You can clearly see two pairs of tilted HF whips, one pair amidships and
another pair on the stern. This same stealthing technique is being
employed on the new LPD-17 class.

Some Navy antennas are mounted on tilting mechanisms which allow
them to pivot all the way horizontal, so as not to be a hazard to aircraft.
That's different.

2243. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 10:56:02 UTC
From: Dave <noone@nowhere.com>
Message-ID: <656zk.205$1a2.111@trnddc04>
Source record: 22316
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

```
"Richard Crowley" <rcrowley@xp7rt.net> wrote in message
news:pNqdnYNMF-AVyVHVnZ2dnUVZ_s_inZ2d@posted.pcez...
> "Dave" wrote ...
>> "Richard Crowley" wrote ...
>>> You guys are all dupes who have fallen for "Radium"s
>>> old tricks of asking insane questions and then sitting back
>>> and laughing at people trying to make sense of them.
>>>
>>> "Radium" is a notorious, long-time Usenet Troll. There
>>> is absolutely no future in trying to reply to any of his/
>>> her/it's questions.
>>>
>> who is trying to make sense?? its better, and more fun, to add to the
>> stupidness of it... much like answering art. a troll is a troll is a
>> troll... bait them and have fun.
>
> Yeah, I like having nonsense fun as much as the next guy.
> But "Radium" seems incapable of distinguishing between
> nonsense and actual technical discussion. It just encourages him.
thats the whole idea!
```

2244. Re: Welfare babies, greasy diners and other tidbits <<<SNARKYS family reunion pics and lifestyle blurb attached!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 14:11:14 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <03357a8b-29e8-4793-8219-de9c4001e694@r66g2000hsg.googlegroups.com>
Source record: 22317
Cross-posted to: rec.aquaria.marine.reefs,rec.radio.amateur.antenna,alt.usenet.kooks,rec.ponds

On Sep 13, 11:51 pm, Snarky <popesna...@caballista.organ> wrote:
> On Fri, 12 Sep 2008 07:27:49 -0700, John Smith wrote these lies, denials,
> arrogant assertions, erroneous presuppositions, and/or obfuscations:
>
>
>
>
>
> > On Sep 12, 7:54 am, Synthetic Networked Android Responsible for Killing
> > and Yardwork wrote:
> >> Hail Eris! On Mon, 08 Sep 2008 09:50:48 -0700, Eris Kallisti Discordia
> >> was laughing at the antics of expat, when they suddenly burst out in
> >> tears:
> >> > On Sep 8, 9:33 am, John Smith wrote:
> >> >> James Nasium wrote:
> >> >> > ...
> >> >> > Go play with your fishies, boy. You must be a faggot. Do you like
> >> >> > to lather the barber pole, do the tube steak boogie, lay a little
> >> >> > pipe on the hershey highway?
>
> >> >> Oh no, now we get to hear from expats' spouse?
>
> >> > These trashy posts brought to this group coutesy of John Smith aka
> >> > assembly wizard. Give John a chance and he will lay some pipe on that
> >> > old hershey highway fo yours, that is if you can get him off his
> >> > momma.
>
> >> What fun, gay lames and mommy lames. Do you do IKYABWAI, projection, and
> >> PKB, as well?
>
> > Keep this shit out of our group or I will be forced to kick your hairy
> > ass!
>
> Ahhhh, I see. A he-man! Do you lift weights? BTW, you forgot to mention
> your group.
>
> --
> ____
> Hail Eris! mhm 29x21; TM#5; Anonymous Psycho Criminal #18
> TEH USENETS BULLIEhttp://www.runescape.com/
> Join my RuneScape clan!http://z11.invisionfree.com/Holy_Pretzel_Cabal/index.php
> Full name of clan: Cabal of the Holy International Discordian Internet

> And Usenet Terrorist Pretzel
>
> Barbara Woodhouse Memorial Dog Whistle
> Trainer of PorchMonkey4Lifehttp://www.screedbomb.info/porchie/
>
> Pierre Salinger Memorial Hook, Line & Sinker, June 2008
> Hammer of Thor, July 2008
>
> "Not supporting me is equivalent to forfeiting your own rights." --
> John D. Wentzky: Warrior For Your Freedumb! Message-ID:
> <33km2419sg6fnq3shtbatqa602eagfb...@4ax.com>
>
> "You cognatatively challenged fool!" -- According to Agamemnon, Stephen
> Wilson is, apparently, highly ignorant about cognates, and so is anyone
> who dares to disagree with him, in Message-ID:
> <Jvidnfyewe883sjVnZ2dnUVZ8rOdn...@eclipse.net.uk>
>
> "Is it still necrophilia if I'm conscious?" -- Owen Harper, "Dead Man
> Walking", Torchwood (20/207)- Hide quoted text -
>
> - Show quoted text -

So how does it feelto be a product of the projects? Section 8 has been
good to you since you have an internet connection huh.....fucktard!
Too bad your momma has to work on her back in the gutters to pay for
it.

2245. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 14:35:52 UTC
From: Mike Y <joe@user.com>
Message-ID: <en9zk.7875$PK.6822@newsfe04.iad>
Source record: 22318
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

"Jim-NN7K" <nn7kexk7zfg@noway.net.> wrote in message
news:gmWyk.312$YU2.57@nlpi066.nbdc.sbc.com...
> Mike- Tho this NOT about R.F., it is about induction-

I agree. And while I realizeit's quite possible to get 'shocks' off an induction
coupling that essentially goes to a high impedance, it's a far cry from being
able to 'power a house' with a broadcast transmitter that wasn't designed
for the purpose. Yes, Tesla lit up bulbs, in one case a reported 50 miles
from his transmitter site, but that was with a setup specifically geared to
transmit power with brute force, with fairly huge receiving antennas
specifically designed to pull the power from the broadcast wave.

And before someone brings up RFID tags... Tags are DESIGNED to work in
the RF field. They actually couple magnetically like a transformer to the readers
antenna. But realize how fast the field falls off and what limited range
they have.

But actually, in reference to the original comment, I believe IF someone did
pull power from the air, it WOULD degrade the broadcast signal.

Mike

2246. Re: 50 KW AM stations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 15:39:19 UTC
From: "H. Adam Stevens" <mayatwo@earthlink.net>
Message-ID: <z9OdndvDaqeKrVDVnZ2dnUVZ_tudnZ2d@earthlink.com>
Source record: 22319

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:1j_yk.31994$bx1.3483@bignews1.bellsouth.net...
>
> "JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
> news:9020eebb-a972-4432-b462-252e041b169c@l42g2000hsc.googlegroups.com...
>> I heard that the 50kW AM clear channel stations were set up to send/
>> receive ultra slow RTTY for gov or mil purposes. Does anyone know
>> anything about this?
>>
>> Jimmie
> Interesting.
> Record the signal, then play it back at different speeds (frequencies)
> using different demodulator setups.
> (Don't play it backwards - it says something about one of the Beatles that
> way.)
>

Paul is a queer!
(honest)

2247. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 15:57:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <256d83f5-4dcc-41ef-9bc1-13fbad87e7f6@a70g2000hsh.googlegroups.com>
Source record: 22320

On Sep 14, 12:23 am, "Sal M. Onella" <salmone...@food.poisoning.org>
wrote:
> NOTE: This is a repost from my sent file. It didn't appear
> 20 hours or so after I sent it. Sorry if it's a dupe to anybody.
> --"Art Unwin"
<ArthurUn...@gmail.com> wrote in message
>
> news:7ce5bd71-d583-433d-88f0-
>
> < snip >
>
> > The navy would not change to a antenna that was not resonant.
>
> Perhaps you are speaking of another country's Navy with which you are
> well-acquainted.
>
> Having been intimately involved with US Navy electronics for over 45 years
> (active duty 1962 -1982; civilian support in multiple capacities 1982 -
> 2007) I can tell you that our Navy has numerous shipboard and
> shore-establishment antennas that are not resonant. Since flexibility in
> frequency selection confers a tactical advantage, broadbanding is far more
> important. Tuners and couplers of several designs allow non-resonant
> antennas to work well.
>
> The closest the Navy gets to resonant antennas is in some special
> fixed-frequency applications, like IFF. Of course, antennas are sized for
> the application and will probably exhibit resonance within their band of
> operation, but that's not the design goal.

These were shore based installations probably in Hawaii or some
island.
With respect to resonance, moving away from such as well as changing
from 15 degrees
(Frank's 30 degrees divided by two)
would provide a pattern of distinct advantage which the navy is
constantly looking for
For a whip tipped at an angle of 15 degrees can provide a forward
pattern of gain which can be a big deal
I anticipate that the navy will gyrate towards helical design where
the addition of a magnetic field will give a pattern of choice
together with resonance the size of a shoebox to reduce the number of
antennas on board.
Thanks for the info, it certainly was not silly As an aside the 15
degrees is the same as found empirically by Kraus

in the pitch angle of a helical, another example of the inclusion of
the weak force in a system in equilibrium !

2248. Re: baluns n chokes n stuff <<< How not to choke when doing the deed by John Smith

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 15:58:36 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <bd046e2f-8e9c-4484-bb9a-a0f9e9d64866@y21g2000hsf.googlegroups.com>
Source record: 22321
Cross-posted to: rec.radio.amateur.antenna,alt.usenet.kooks,rec.ponds,alt.callahans,alt.support.boy-lovers

On Sep 13, 2:12 pm, John Smith <assemblywiz...@gmail.com> wrote:
> ml wrote:
>
> Like it or not, your going to hear about my sex life with the wife and I and the neighbors dog!
>
> I do not choke, I have too many years of experience deepthroating to choke. I taught my wife all there is to know about deepthroating and not choking.
>

>
> I can deep throat with the best of them
> I can handle anyones meat, bring it on
> I do it all, and what I can;t my wife will take care of...
>
> Regards,
> JS

2249. Re: baluns n chokes n stuff <<< How not to choke when doing the deed by John Smith

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 16:25:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gajduk$137$1@news.albasani.net>
Source record: 22322
Cross-posted to: rec.radio.amateur.antenna,rec.ponds

John Smith wrote:
> On Sep 13, 2:12 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> ml wrote:
>>
>> Like it or not, your going to hear about my sex life with the wife and I and the neighbors dog!
>>
>> I do not choke, I have too many years of experience deepthroating to choke. I taught my wife all there is to know about deepthroating and not choking.
>>
>
>> I can deep throat with the best of them
>> I can handle anyones meat, bring it on
>> I do it all, and what I can;t my wife will take care of...
>>
>> Regards,
>> JS
>

The above is a post from a particularly sick/mentally-ill individual,
information on his IP follows:

dialup-4.255.240.79.Dial1.Atlanta1.Level3.net

Whois information on 4.255.240.79:

OrgName: Level 3 Communications, Inc.
OrgID: LVLT
Address: 1025 Eldorado Blvd.
City: Broomfield
StateProv: CO
PostalCode: 80021
Country: US

NetRange: 4.0.0.0 - 4.255.255.255
CIDR: 4.0.0.0/8
NetName: LVLT-ORG-4-8
NetHandle: NET-4-0-0-0-1
Parent:
NetType: Direct Allocation
NameServer: NS1.LEVEL3.NET
NameServer: NS2.LEVEL3.NET
Comment:

RegDate:
Updated: 2004-06-04

OrgAbuseHandle: APL8-ARIN
OrgAbuseName: Abuse POC LVLT
OrgAbusePhone: +1-877-453-8353
OrgAbuseEmail: security@level3.com

OrgTechHandle: ARINC4-ARIN
OrgTechName: ARIN Contact
OrgTechPhone: +1-800-436-8489
OrgTechEmail: arin-contact@genuity.net

OrgTechHandle: TPL1-ARIN
OrgTechName: Tech POC LVLT
OrgTechPhone: +1-877-453-8353
OrgTechEmail: ipaddressing@level3.com

ARIN WHOIS database, last updated 2008-09-13 19:10
Enter ? for additional hints on searching ARIN's WHOIS database.

There is an email for reporting abuse in the above data. An email to
them, with the date, time and nature of the abusive text (indeed, a
quote of his text should make the point clear) should certainly gain the
attention of the ISP. As, I don't think they would like their system
involved in such insane behaviors of psychotic individual ...

Just in case you tire of this fool and think the administrators of his
ISP may feel likewise ...

Regards,
JS

2250. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 16:30:25 UTC
From: Dave <noone@nowhere.com>
Message-ID: <B_azk.129$MN3.2@nwrddc01.gnilink.net>
Source record: 22323

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:256d83f5-4dcc-41ef-9bc1-13fbad87e7f6@a70g2000hsh.googlegroups.com...
>Thanks for the info, it certainly was not silly As an aside the 15
>degrees is the same as found empirically by Kraus
>in the pitch angle of a helical, another example of the inclusion of
>the weak force in a system in equilibrium !

where is that weak force in maxwell's equations????? the world is waiting
to know!

2251. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 17:05:19 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <55c6c31c-6605-4efe-95e8-47a5d1fee492@b1g2000hsg.googlegroups.com>
Source record: 22324

On Sep 14, 11:30 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:256d83f5-4dcc-41ef-9bc1-13fbad87e7f6@a70g2000hsh.googlegroups.com...
>
> >Thanks for the info, it certainly was not silly As an aside the 15
> >degrees is the same as found empirically by Kraus
> >in the pitch angle of a helical, another example of the inclusion of
> >the weak force in a system in equilibrium !
>
> where is that weak force in maxwell's equations????? the world is waiting
> to know!

You will never get it from me. You have done nothing for yourself or
anybody else on this group
so why should I do it for you? Why haven't you done the AO program for
the benefit of the group?
I know it will be embarassing to you but no more than your other posts
have done.
Carry on your fight against change and be among friends. Don't do the
AO program which
acknowledges the weak force that way there can be no change, Just
continue to be a talking head !

2252. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 17:07:57 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <589ddb74-c7cd-4fd7-8d6e-95ba79f834b7@t54g2000hsg.googlegroups.com>
Source record: 22325

On Sep 13, 9:03 pm, "Hal Rosser" <hmros...@bellsouth.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:acd85469-dfbb-4b2a-8c84-0afaca9c6bdb@l43g2000hsh.googlegroups.com...
>
> >A sloper antenna when resonant produces more gain
> > than a vertical dipole resonant at the same frequency.
> > True or false? prove it
>
> Gain in which direction? True AND False - Prove otherwise.

Sometimes you just have to do it for yourself instead of the use of
free speech
where there is no accountability

2253. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 17:22:37 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <xLbzk.2599$1x6.1640@edtnps82>
Source record: 22326

>These were shore based installations probably in Hawaii or some
>island.
>With respect to resonance, moving away from such as well as changing
>from 15 degrees
>(Frank's 30 degrees divided by two)
>would provide a pattern of distinct advantage which the navy is
>constantly looking for
>For a whip tipped at an angle of 15 degrees can provide a forward
>pattern of gain which can be a big deal
>I anticipate that the navy will gyrate towards helical design where
>the addition of a magnetic field will give a pattern of choice
>together with resonance the size of a shoebox to reduce the number of
>antennas on board.
>Thanks for the info, it certainly was not silly As an aside the 15
>degrees is the same as found empirically by Kraus
>in the pitch angle of a helical, another example of the inclusion of
>the weak force in a system in equilibrium !

My original model was for a dipole tilted 45 degrees. The following
analysis is for a 35 ft ground mounted monopole with thirty-six 40 ft
radials buried 1" below an average ground of: conductivity 5 mS/m,
and relative permittivity 13. It is noted that the tilted monopole has
a slight gain opposite to the direction of tilt. The following comparison
is made in the direction of maximum gain. The F/B ratio is nominally
0.2 db, and the gain 0.2 db at lower angles. The measurement was
made on 7.2 MHz, and the input impedance 45 + j 47 ohms.

Take off Angle Vertical 15 deg tilt
(degrees) Gain (dbi) Gain (dbi)
10 -2.5 -2.3
20 -0.2 0
30 0 +0.3
40 -0.8 -0.3
50 -2.3 -1.5
60 -4.6 -3.3
70 -8.0 -5.9
80 -14.0 -9.3
90 Deep null -13.4

```
CM Monopole with buried radial system.
CE
GW 1 1 0 0 0 0 1 -0.083 0.0026708
GW 37 39 0 1 -0.083 0 40 -0.083 0.0026708
GR 1 36
GS 0 0 0.304800
```

```
GE -1 -1 0
GN 2 0 0 0 13.0000 0.0050
FR 0 1 0 0 7.2 0.01
LD 5 0 0 0 5.8001E7
WG monopole_36.NGF
EN

CM 36 Radial Read NGF
CE
GF 0 monopole_36.NGF
GW 73 35 0 9.0587 33.807 0 0 0 0.002671
GS 0 0 0.304800
GE 0 0 0
EX 0 73 35 0 6349.474358 0.00000
LD 5 0 0 0 5.8001E7
RP 0 181 1 1000 -90 270 1.00000 1.00000
EN

73, Frank
```

2254. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 17:29:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3a22a3cb-604c-4e68-86d1-196265fa6c73@z66g2000hsc.googlegroups.com>
Source record: 22327

On Sep 14, 12:22 pm, "Frank" <frank...@nospam.telus.net> wrote:
> >These were shore based installations probably in Hawaii or some
> >island.
> >With respect to resonance, moving away from such as well as changing
> >from 15 degrees
> >(Frank's 30 degrees divided by two)
> >would provide a pattern of distinct advantage which the navy is
> >constantly looking for
> >For a whip tipped at an angle of 15 degrees can provide a forward
> >pattern of gain which can be a big deal
> >I anticipate that the navy will gyrate towards helical design where
> >the addition of a magnetic field will give a pattern of choice
> >together with resonance the size of a shoebox to reduce the number of
> >antennas on board.
> >Thanks for the info, it certainly was not silly As an aside the 15
> >degrees is the same as found empirically by Kraus
> >in the pitch angle of a helical, another example of the inclusion of
> >the weak force in a system in equilibrium !
>
> My original model was for a dipole tilted 45 degrees. The following
> analysis is for a 35 ft ground mounted monopole with thirty-six 40 ft
> radials buried 1" below an average ground of: conductivity 5 mS/m,
> and relative permittivity 13. It is noted that the tilted monopole has
> a slight gain opposite to the direction of tilt. The following comparison
> is made in the direction of maximum gain. The F/B ratio is nominally
> 0.2 db, and the gain 0.2 db at lower angles. The measurement was
> made on 7.2 MHz, and the input impedance 45 + j 47 ohms.
>
> Take off Angle   Vertical   15 deg tilt
> (degrees)   Gain (dbi)   Gain (dbi)
> 10   -2.5   -2.3
> 20   -0.2   0
> 30   0   +0.3
> 40   -0.8   -0.3
> 50   -2.3   -1.5
> 60   -4.6   -3.3
> 70   -8.0   -5.9
> 80   -14.0   -9.3
> 90   Deep null   -13.4
>
> CM Monopole with buried radial system.
> CE
> GW 1 1 0 0 0 0 1 -0.083 0.0026708
> GW 37 39 0 1 -0.083 0 40 -0.083 0.0026708

```
> GR 1 36
> GS 0 0 0.304800
> GE -1 -1 0
> GN 2 0 0 0 13.0000 0.0050
> FR 0 1 0 0 7.2 0.01
> LD 5 0 0 0 5.8001E7
> WG monopole_36.NGF
> EN
>
> CM 36 Radial Read NGF
> CE
> GF 0 monopole_36.NGF
> GW 73 35 0 9.0587 33.807 0 0 0 0.002671
> GS 0 0 0.304800
> GE 0 0 0
> EX 0 73 35 0 6349.474358 0.00000
> LD 5 0 0 0 5.8001E7
> RP 0 181 1 1000 -90 270 1.00000 1.00000
> EN
>
> 73,  Frank
```

Frank I am not familiar with your programming but the weak force is just that....weak
It is for that reason the Yagi coupling of elements provides a good estimate with easy structure.
For long distance accurracy is not a big deal but for measuring and for medical applications it is.
Art

2255. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 17:33:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mu2qc4tsu6m2kdrmklo73hbf3ii4kvkbma@4ax.com>
Source record: 22328

On Sat, 13 Sep 2008 23:53:32 -0700, "Sal M. Onella"
<salmonella@food.poisoning.org> wrote:

>Absurdity or no, a "stealthing" technique for the Arleigh Burke class
>of destroyers involves sharply limiting the radar cross-section by not
>installing vertical structures, including most, if not all, the antennas.
>
>See this picture, which is typical.
>
>http://en.wikipedia.org/wiki/Image:USS_Arleigh_Burke_Mediterranean.jpg
>
>You can clearly see two pairs of tilted HF whips, one pair amidships and
>another pair on the stern. This same stealthing technique is being
>employed on the new LPD-17 class.

I would say that they are in the typical sea-swept configuration, not
found on the Fletcher Class Destroyers of my duty, but mixed in with
the designs of, say, the later Barry:
http://en.wikipedia.org/wiki/Image:USS_Barry.jpg
Where you can nearly see two tilted HF whips, one amidships and
another behind the aft stack (actually both are behind their
respective stacks, as are the stacks sea-swept). The design of
reduced right angles is a staple in the "tripod masts." Obviously,
these 50 year old features were in place for reasons of their own that
were separate from radar silhouette considerations. Further, the
largest silhouette would be broadsides where the whips in ALL these
pictures are at 90 degrees to the beam.

I would also note that the Zumwalt Destroyer Class (as represented in
graphics) lacks any vertical whip antennas at any angle.

However, returning to my own recent shipboard experience and antennas
there, I will later today post a link to a dozen or so pictures. It
will include shots of Guss' Loops. I dare say several of these
pictures will provoke much head scratching (but only to those few
actually interested in antennas here in this forum).

73's
Richard Clark, KB7QHC

2256. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 17:40:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hviqc4p9sscnbtc9e7qdgh6itrab2dcpst@4ax.com>
Source record: 22329

On Sun, 14 Sep 2008 17:22:37 GMT, "Frank" <frank599@nospam.telus.net>
wrote:

>It is noted that the tilted monopole has
>a slight gain opposite to the direction of tilt.

Hi Frank,

The numbers hint of mixed polarization results which would come as no surprise from tilting which tosses in a horizontal component that was effectively suppressed by a true vertical.

The hint is the collapse of the overhead null, and the marginal differences close to the horizon.

73's
Richard Clark, KB7QHC

2257. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 17:44:10 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <_0czk.235$fD.114@flpi145.ffdc.sbc.com>
Source record: 22330
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

Mike Y wrote:
> And while I realizeit's quite possible to get 'shocks' off an
> induction
> coupling that essentially goes to a high impedance, it's a far cry from
> being
> able to 'power a house' with a broadcast transmitter that wasn't designed
> for the purpose.

The original story that I heard about 40 years ago is
that it involved 60 Hz high-voltage power lines. A
farmer is supposed to have built an induction coil
in a shed directly beneath the power lines and picked
up free energy.
--
73, Cecil http://www.w5dxp.com

2258. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 18:05:40 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <Unczk.2606$1x6.1635@edtnps82>
Source record: 22331

>>It is noted that the tilted monopole has
>>a slight gain opposite to the direction of tilt.
>
> Hi Frank,
>
> The numbers hint of mixed polarization results which would come as no
> surprise from tilting which tosses in a horizontal component that was
> effectively suppressed by a true vertical.
>
> The hint is the collapse of the overhead null, and the marginal
> differences close to the horizon.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,

There is some horizontal polarization. The peak
level is about 20 db below the vertically polarized signal.
Certainly sufficient to effect the overhead null.

Hi Art,

The program is Nittany Scientific's implementation of
NEC 4.1. I must confess I do not understand your
response. The weak nuclear force about 10^(-9) less
than the strong nuclear force, and its range is limited
to distances smaller than an atomic nucleus, so I
cannot see how it can effect the radiation characteristics
of an antenna. Are you saying you do not think my model
is valid? The results certainly indicate that tilting a
monopole by 15 degrees is pointless -- other than a
marginal improvement in high-angle performance in
one direction.

73,

Frank

2259. New Yahoo forum on TV antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 18:30:44 UTC
From: will7370 <will7370@gmail.com>
Message-ID: <672a1343-1a51-4d71-84cb-46e2c69e1193@25g2000prz.googlegroups.com>
Source record: 22332

There's a new discussion forum on Yahoo Groups specifically for UHF /
VHF TV antenna issues. You can find it here:

http://groups.yahoo.com/group/TV_Antennas/

Rob

2260. Re: baluns n chokes n stuff <<< How not to choke when doing the deed by John Smith

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 18:55:25 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <11523912-197e-4a0b-9fff-dec12b407560@y21g2000hsf.googlegroups.com>
Source record: 22333
Cross-posted to: rec.radio.amateur.antenna,rec.ponds

```
On Sep 14, 11:25 am, John Smith <assemblywiz...@gmail.com> wrote:
> John Smith wrote:
> > On Sep 13, 2:12 pm, John Smith <assemblywiz...@gmail.com> wrote:
> >> ml wrote:
>
> >> Like it or not, your going to hear about my sex life with the wife and I and the
neighbors dog!
>
> >> I do not choke, I have too many years of experience deepthroating to choke. I taught
my wife all there is to know about deepthroating and not choking.
>
> >> I can deep throat with the best of them
> >> I can handle anyones meat, bring it on
> >> I do it all, and what I can;t my wife will take care of...
>
> >> Regards,
> >> JS
>
> The above is a post from a particularly sick/mentally-ill individual,
> information on his IP follows:
>
> dialup-4.255.240.79.Dial1.Atlanta1.Level3.net
>
> Whois information on 4.255.240.79:
>
> OrgName:    Level 3 Communications, Inc.
> OrgID:      LVLT
> Address:    1025 Eldorado Blvd.
> City:       Broomfield
> StateProv:  CO
> PostalCode: 80021
> Country:    US
>
> NetRange:   4.0.0.0 - 4.255.255.255
> CIDR:       4.0.0.0/8
> NetName:    LVLT-ORG-4-8
> NetHandle:  NET-4-0-0-0-1
> Parent:
> NetType:    Direct Allocation
> NameServer: NS1.LEVEL3.NET
> NameServer: NS2.LEVEL3.NET
> Comment:
```

> RegDate:
> Updated: 2004-06-04
>
> OrgAbuseHandle: APL8-ARIN
> OrgAbuseName: Abuse POC LVLT
> OrgAbusePhone: +1-877-453-8353
> OrgAbuseEmail: secur...@level3.com
>
> OrgTechHandle: ARINC4-ARIN
> OrgTechName: ARIN Contact
> OrgTechPhone: +1-800-436-8489
> OrgTechEmail: arin-cont...@genuity.net
>
> OrgTechHandle: TPL1-ARIN
> OrgTechName: Tech POC LVLT
> OrgTechPhone: +1-877-453-8353
> OrgTechEmail: ipaddress...@level3.com
>
> # ARIN WHOIS database, last updated 2008-09-13 19:10
> # Enter ? for additional hints on searching ARIN's WHOIS database.
>
> There is an email for reporting abuse in the above data. An email to
> them, with the date, time and nature of the abusive text (indeed, a
> quote of his text should make the point clear) should certainly gain the
> attention of the ISP. As, I don't think they would like their system
> involved in such insane behaviors of psychotic individual ...
>
> Just in case you tire of this fool and think the administrators of his
> ISP may feel likewise ...
>
> Regards,
> JS- Hide quoted text -
>
> - Show quoted text -

baaaaaaaaaaaaaaaahahhhhhhhhhhaaaaaaaaaaaaaaa you twit!

2261. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 18:55:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <5aa01c0f-406d-47ce-9e6d-1ca52cab2fb8@a1g2000hsb.googlegroups.com>
Source record: 22334

On Sep 14, 1:05 pm, "Frank" <frank...@nospam.telus.net> wrote:
> >>It is noted that the tilted monopole has
> >>a slight gain opposite to the direction of tilt.
>
> > Hi Frank,
>
> > The numbers hint of mixed polarization results which would come as no
> > surprise from tilting which tosses in a horizontal component that was
> > effectively suppressed by a true vertical.
>
> > The hint is the collapse of the overhead null, and the marginal
> > differences close to the horizon.
>
> > 73's
> > Richard Clark, KB7QHC
>
> Hi Richard,
>
> There is some horizontal polarization. The peak
> level is about 20 db below the vertically polarized signal.
> Certainly sufficient to effect the overhead null.
>
> Hi Art,
>
> The program is Nittany Scientific's implementation of
> NEC 4.1. I must confess I do not understand your
> response. The weak nuclear force about 10^(-9) less
> than the strong nuclear force, and its range is limited
> to distances smaller than an atomic nucleus, so I
> cannot see how it can effect the radiation characteristics
> of an antenna. Are you saying you do not think my model
> is valid? The results certainly indicate that tilting a
> monopole by 15 degrees is pointless -- other than a
> marginal improvement in high-angle performance in
> one direction.
>
> 73,
>
> Frank

No Frank I do not deal in baiting. Marginal improvement is not
meaningles in any stretch of the word
I have always kept equilibrium at the center of my discussions
which is exactly what all the masters did. It was the concentration

on equilibrium that provided me with the path and mathematics of the
weak force
a vector put in place by all the masters such that the addition of all
forces finished at zero.
Thus the masters knew all about it, included it in their calculations
as Maxwell did.
You can do the same thing by measuring the tilt vector.
For myself I was looking for a way to make small antennas that was
efficient
thus accurracy is important in my work which means inclusion of all
forces
such that my work was not built on sand. My work revealed the design
of SMALL
efficient antennas where there is a need for today. The weak force is
a side product that supplies
the missing partr for the Universal law theory which was not my
primary project.
I then used a computor program designed around Maxwell to examine the
new antennas
which it does in great style according to my expectations as well as
testing a
configuration for zero radiation which I found quite convincing All
this work represented
a lot of work, study and effort over the years so flippant remarks
from loose tongues has
no effect on me unless accompanied byknown statictics. If you are
beginning a path of baiting
it would be a surprise to me so I am delaying such thoughts.
Have a happy day
Regards
Art
in mind and a full wavelength is in equilibrium where as a half wave
is not

2262. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 19:20:40 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7488c3d8-0103-4064-9172-7e0485d314f4@k13g2000hse.googlegroups.com>
Source record: 22335

On Sep 14, 1:55 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 14, 1:05 pm, "Frank" <frank...@nospam.telus.net> wrote:
>
>
>
> > >>It is noted that the tilted monopole has
> > >>a slight gain opposite to the direction of tilt.
>
> > > Hi Frank,
>
> > > The numbers hint of mixed polarization results which would come as no
> > > surprise from tilting which tosses in a horizontal component that was
> > > effectively suppressed by a true vertical.
>
> > > The hint is the collapse of the overhead null, and the marginal
> > > differences close to the horizon.
>
> > > 73's
> > > Richard Clark, KB7QHC
>
> > Hi Richard,
>
> > There is some horizontal polarization. The peak
> > level is about 20 db below the vertically polarized signal.
> > Certainly sufficient to effect the overhead null.
>
> > Hi Art,
>
> > The program is Nittany Scientific's implementation of
> > NEC 4.1. I must confess I do not understand your
> > response. The weak nuclear force about 10^(-9) less
> > than the strong nuclear force, and its range is limited
> > to distances smaller than an atomic nucleus, so I
> > cannot see how it can effect the radiation characteristics
> > of an antenna. Are you saying you do not think my model
> > is valid? The results certainly indicate that tilting a
> > monopole by 15 degrees is pointless -- other than a
> > marginal improvement in high-angle performance in
> > one direction.
>
> > 73,
>
> > Frank
>

> No Frank I do not deal in baiting. Marginal improvement is not
> meaningles in any stretch of the word
> I have always kept equilibrium at the center of my discussions
> which is exactly what all the masters did. It was the concentration
> on equilibrium that provided me with the path and mathematics of the
> weak force
> a vector put in place by all the masters such that the addition of all
> forces finished at zero.
> Thus the masters knew all about it, included it in their calculations
> as Maxwell did.
> You can do the same thing by measuring the tilt vector.
> For myself I was looking for a way to make small antennas that was
> efficient
> thus accurracy is important in my work which means inclusion of all
> forces
> such that my work was not built on sand. My work revealed the design
> of SMALL
> efficient antennas where there is a need for today. The weak force is
> a side product that supplies
> the missing partr for the Universal law theory which was not my
> primary project.
> I then used a computor program designed around Maxwell to examine the
> new antennas
> which it does in great style according to my expectations as well as
> testing a
> configuration for zero radiation which I found quite convincing All
> this work represented
> a lot of work, study and effort over the years so flippant remarks
> from loose tongues has
> no effect on me unless accompanied byknown statictics. If you are
> beginning a path of baiting
> it would be a surprise to me so I am delaying such thoughts.
> Have a happy day
> Regards
> Art
> in mind and a full wavelength is in equilibrium where as a half wave
> is not

OOps I did not answer your nuclear question.
A static particle is just that a nearly depleted container of energy
with mass.
The arbitrary border around the sun is there as a line of equilibrium
where the inner forces are balanced
by the external forces. The sun burns so it produces by-products where
the energy that the burning removes
leaves only a half life of neuclear energy the accumulation of which
expands the arbritary bounday where physics demand
that an equalization of force must be established and allows the bye
products to escape. These particles have little direction in their
future travels

because of lack of spin needed for straight line trajectory. They can how ever receive energy by the entrance to a magnetic field but again without spin
it is determined to be static and thus come to rest on a material that will not absorb it into its own atomic structure. Earth is a structure where > than 95 %
of the structure will not absorbe the static particle. Now you mentioned full life of a nuclear particle and that to is released by the Sun in the same manner as other particles in what is known as a solar flare. Because of the considerable retained energy they can be very destructive when landing on a electrical network to release their energy prior to taking on a static form. There are many other particles emitted by the sun which collect in bunches where some of the particles have color which is a very strong binding force where its binding force is let loose by the impact of the Earths magnetic fieldn where the energy emmissions are readily vissible many miles south of the poles where the released particles fasten on to the minute droplets of moisture ever present in out atmosphere. Long answer some of which is at yet unproved and that is where CERN comes in. What fascinates me there is the ease that particles are "lost" to moisture droplets and the thinking that a vacuum and a low kelvin temperature will allow a continued trajectory but they have a lot of clever people working on that.
Regards.....It has stopped raining
Art

2263. Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 19:21:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gajo85dju1@news.albasani.net>
Source record: 22336

Anyone have a URL of a chart of what the final HDTV freqs will finally be?

After viewing a dozen web pages from searches, I have more questions
than answers ... be nice to be able to plot a few different antennas.

Regards,
JS

2264. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 19:24:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gajodgdju2@news.albasani.net>
Source record: 22337

Art Unwin wrote:

> ...
> Sometimes you just have to do it for yourself instead of the use of
> free speech
> where there is no accountability

We have a few words to describe such, here in America (well, real
Americans do anyway):

"Sticks and stones may break my bones but words will never hurt me." --
source unknown.

It dates back to about the time of our forefathers drafting of the
constitution, if not well before ...

IMHO, it could not be said better.

Regards,
JS

2265. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 20:07:35 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <2uqqc412qbi7kqkgsfgue7npf54ve02tp4@4ax.com>
Source record: 22338

On Sun, 14 Sep 2008 12:21:37 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Anyone have a URL of a chart of what the final HDTV freqs will finally be?
>
>After viewing a dozen web pages from searches, I have more questions
>than answers ... be nice to be able to plot a few different antennas.

I found this chart:
<http://www.dtvprimer.com/DTVchannels.pdf>
It looks correct for the few local HDTV stations, but is certainly
preliminary. No clue on the minor-channel layout as that's the
stations business, not the FCC's.

However, the actual channel number and the displayed channel number
might be different. See:
<http://www.dtvprimer.com/freetv.html>
in the section on PSIP (program and system info protocol) near the
bottom. If you understand what's happening, please let me know.

Incidentally, another wonderful feature of PSIP DCC (direct channel
change) is the ability to pre-record a collection of commericals in
the DVR, and later shove them in your face when you least want to see
them. Since many commercials are played over and over and over and
over again, why use valueable bandwidth sending them more than once?

Isn't technology wonderful?

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2266. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 20:18:40 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gajrj3$ln0$1@aioe.org>
Source record: 22339

"Art Unwin" wrote
>These were shore based installations probably in Hawaii or some island.
>With respect to resonance, moving away from such as well as changing
from 15 degrees (Frank's 30 degrees divided by two) would provide a pattern
of distinct advantage which the navy is constantly looking for. For a whip
tipped at an angle of 15 degrees can provide a forward pattern of gain which
can be a big deal

Art -

The graphic linked below is the work of George H. Brown of RCA Labs, from a 1936 paper published in the Proceedings of the IRE.

It is a plot of surface wave field intensity vs.monopole height, including the distance to the "fade zone" where nighttime skywave radiation returns to earth to via reflection from the ionosphere to interfere with the surface, or ground wave.

In it please note:

1. Maximum field strength does not occur at electrically resonant heights of the monopole (that is, where its feed point terminal reactance is zero).

2. The characteristics plotted are not related to azimuth, therefore the performance of a broadcast monopole will not be enhanced by "tipping." If it was, AM broadcast stations would have been doing so starting 70 years ago.

http://i62.photobucket.com/albums/h85/rfry-100/FIvsHgtofVerticalMonopole.gif

RF

2267. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 20:24:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <51e75051-e2bb-4007-901f-683024d4ab93@s50g2000hsb.googlegroups.com>
Source record: 22340

On Sep 14, 2:24 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > Sometimes you just have to do it for yourself instead of the use of
> > free speech
> > where there is no accountability
>
> We have a few words to describe such, here in America (well, real
> Americans do anyway):
>
> "Sticks and stones may break my bones but words will never hurt me." --
> source unknown.
>
> It dates back to about the time of our forefathers drafting of the
> constitution, if not well before ...
>
> IMHO, it could not be said better.
>
> Regards,
> JS

JS I am just trying to explain physics and radiation is simple terms
for the layman
this does lead to mis characterizations in favor of clarity.
There is an example of garbled language submitted earlier today to
give the impression
of greatness in stature. A three dimension field was explained where
it provided gain.
The person went into uneadded information to decribe something like it
was a new revalation of science
where in fact it is totally meaningless with respect to related
context. Sure I am not the best guy in explaining things as with my
spelling
but I see no pleasure of infering the silliness of another person by
inflating my own significance by the use of a loose mouth,
Apparently others do !
When the new patent comes out I expect the same comments that I have
heard in the past
I knew that! everybody knows that. What use is it etc
Look to the past and you will see the outlines of the future
It would thrill me to bits if I was given an example where mathematics
proved me wrong as it would give me a reason to re evaluate things
a process I enjoy but that is not to be
Best regards

I have a old mercedes in storage and my daughter has a need for a car
and has asked for it so I have to replaces the deisel lines as they
have probably swelled and some other things. I think it is a bit of
cheek but then it will be nice to see it on the road again
My present deisel that I drive of the same manufacturer she says she
doesn't like.......Women come from Venus no less
Art Unwin KB9MZ.......xg

2268. Re: Welfare babies, greasy diners and other tidbits <<<SNARKYS family reunion pics and lifestyle blurb attached!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 20:59:45 UTC
From: "The God of Odd Statements, Henry Schmidt" <popesnarky.godofodd@statements.like.yours.caballista.org>
Message-ID: <pan.2008.09.14.20.59.43.278713@kooks.worship.me.with.their.every.post>
Source record: 22341
Cross-posted to: rec.aquaria.marine.reefs,rec.radio.amateur.antenna,alt.usenet.kooks,rec.ponds

```
On Sun, 14 Sep 2008 07:11:14 -0700, John Smith did most oddly state:
> On Sep 13, 11:51ï¿½pm, Snarky wrote:
>> On Fri, 12 Sep 2008 07:27:49 -0700, John Smith wrote these lies,
>> denials, arrogant assertions, erroneous presuppositions, and/or
>> obfuscations:
>> > On Sep 12, 7:54ï¿½am, Synthetic Networked Android Responsible for
>> > Killing and Yardwork wrote:
>> >> Hail Eris! On Mon, 08 Sep 2008 09:50:48 -0700, Eris Kallisti
>> >> Discordia was laughing at the antics of expat, when they suddenly
>> >> burst out in tears:
>> >> > On Sep 8, 9:33ï¿½am, John Smith wrote:
>> >> >> James Nasium wrote:
>> >> >> > ...
>> >> >> > Go play with your fishies, boy. You must be a faggot. ï¿½Do you
>> >> >> > like to lather the barber pole, do the tube steak boogie, lay a
>> >> >> > little pipe on the hershey highway?
>>
>> >> >> Oh no, now we get to hear from expats' spouse?
>>
>> >> > These trashy posts brought to this group coutesy of John Smith aka
>> >> > assembly wizard. Give John a chance and he will lay some pipe on
>> >> > that old hershey highway fo yours, that is if you can get him off
>> >> > his momma.
>>
>> >> What fun, gay lames and mommy lames. Do you do IKYABWAI, projection,
>> >> and PKB, as well?
>>
>> > Keep this shit out of our group or I will be forced to kick your hairy
>> > ass!
>>
>> Ahhhh, I see. A he-man! Do you lift weights? BTW, you forgot to mention
>> your group.
>
> So how does it feelto be a product of the projects? Section 8 has been
> good to you since you have an internet connection huh.....fucktard! Too
> bad your momma has to work on her back in the gutters to pay for it.

Ahhh, so now I see why expat was making free with teh mommei lames. You
are kind of addicted to projection, aren't you?

--

_____________________________________________________________________
Hail Eris! mhm 29x21; TM#5; Chung Convict #28; Usenet Ruiner #5
```

Demon Lord of Confusion; Official Chung Demon; Top Asshole #3
Superfaggot; Wingnut's #1 World Class Coward (next to the French)
COOSN-029-06-71069; Most Hated Usenetizen of All Time #13; Lits Slut #16
Gutter Chix0r #17; BowTie's Spuriously Accused Pedo Photographer #4
AUK Psycho & Felon #21; Parrot & Zombie #2; AUK Hate Machine Cog #19
Anonymous Psycho Criminal #18
The posting nym is best removed from my posting address if your goal is
to speak with me in private.
Supreme High Overlord of rec.radio.*
"Atheists are people who have no invisible means of support"
Join my RuneScape clan!
http://z11.invisionfree.com/Holy_Pretzel_Cabal/index.php
Full name of clan: Cabal of the Holy International Discordian Internet
And Usenet Terrorist Pretzel

"A dog in the video I watched fucked a human woman. The dog consented to
it and the woman consented to it. That is like one gay man consenting to
having sex with another. Do you approve of it?" -- Agamemnon watches
bestiality porn and compares it to gay sex. Message-ID:
<A7adnV1ksaSyY_LbnZ2dnUVZ8q-rnZ2d@eclipse.net.uk>

"I know how you special busboys are.
You're crazy." -- John "special busboy" Wentzky, in Message-ID:
<HMb3k.2413$bh5.2204@bignews4.bellsouth.net>

"Roe V Wade has zero bearing on my existence other than it affects it
adversely."
-- Johnny Wentzky never had much truck with "logic". Message-ID:
<V6xNe.27650$XM3.20042@bignews5.bellsouth.net>

"F!ck moderation, free speech is a masculinist proverb and that's what
feminist manvagina's like yourself." -- connor_a@hotmail.com posted
before finishing a thought, in MID:
<1158480805.528028.220320@e3g2000cwe.googlegroups.com>

"Fredbot == SameAsB4 == TGOOS

"You are stalking me, even after I thrashed ya." -- PorchMonkey4Life,
a veritable combination of Sherlock Holmes and Doc Savage for the 21st
Century. No, really. Would I lie? MID: <zaUqh.2972$E35.415@trnddc02>

"He unleashes a fecal explosion he time he posts. He uses so many nyms
because he gets beaten so easily and so convincingly in flame wars and
tries to hide behind nyms in the hopes of getting a fresh start. To bad
for him that his lameness keep shining through like a beacon for all
tards (e.g., SameAs$B4, Demon Spawn, Barbara's Pus$y, FredBot,
TGOOS, ..., etc)" -- Monkey-man identifies <jitter> as me, among
others, in broken English, in MID: <Z_Xqh.3167$E35.215@trnddc02>

Barbara Woodhouse Memorial Dog Whistle
Trainer of the above k00k
http://www.screedbomb.info/porchie/

Pierre Salinger Memorial Hook, Line & Sinker, June 2008
Hammer of Thor, July 2008

"Q: What do you call someone in the White House who is honest, caring, and well-read?
A: A tourist." -- Anonymous

"It would be offly hard for any of you to abuse me on usenet. Really. I have the advantage. I could easily turn alt.usenet.kooks into a cesspool of encoded posts. Bringing the noise ratio up so high as to make the group worthless. Anybody who can code could do this, why nobody has bothered before now is beyond me. The ultimate spamming engine.. 'BAWAHAHA'" -- Dustbin "Outer Filth" K00k's delusions of grandeur reached new heights, in Message-ID: <Xns98355D29419B9HHI2948AJD832@69.28.186.121>
"Immorality: The morality of those who are having a better time." -- H. L. Mencken

"Consider that language a moment. 'Purposefully and materially supported hostilities against the United States' is in the eye of the beholder, and this administration has proven itself to be astonishingly impatient with criticism of any kind. The broad powers given to Bush by this legislation allow him to capture, indefinitely detain, and refuse a hearing to any American citizen who speaks out against Iraq or any other part of the so-called 'War on Terror.'

"If you write a letter to the editor attacking Bush, you could be deemed as purposefully and materially supporting hostilities against the United States. If you organize or join a public demonstration against Iraq, or against the administration, the same designation could befall you. One dark-comedy aspect of the legislation is that senators or House members who publicly disagree with Bush, criticize him, or organize investigations into his dealings could be placed under the same designation. In effect, Congress just gave Bush the power to lock them up." -- William Rivers Pitt

"It has become clear in recent months that a critical mass of the American people have seen through the lies of the Bush administration; with the president's polls at an historic low, growing resistance to the war Iraq, and the Democrats likely to take back the Congress in mid-term elections, the Bush administration is on the ropes. And so it is particularly worrying that President Bush has seen fit, at this juncture to, in effect, declare himself dictator." -- Frank Morales
http://www.uruknet.biz/?p=m27769&hd=0&size=1&l=e&fark

"Right you are correct. Someone hooked me. I do believe in building relationships. That is what Christians are required to do. I am amoral. I am sure you know what that means. So are Scorpios. I am being 'protected' by the Formosa Rule because of my 'mental illness'. I am not targeting 'teh Mop Jockey'. You are and you are using me as a bait. Please stop. I have my own fish to reel in. Leave me alone. It is my hope that I will be able to catch a fish and reel it in for you. Once my retired bishop thought I was fishing for him and he took the bait, alas

it wasn't me and that spelled the demise of our relationship. Have a little bit more faith in me. An Eastern Orthodox bishop thought I was fishing for him and willingly, proudly and defiantly took the bait on public record, and it wasn't even me. Give me a break." -- Atlanta Olympiada "Erica" Kane yammered in
Message-ID: <ochc3.ag0.17.1@news.alt.net>

"It does to a certain extant physically and theoretically it holds even into the quantum but there observational confirmation is limited or non existent. That's the problem and the major stumbling block to field unification. For Dr. Einstein held out that a physical based field theory should be sought out and not left to quantum uncertainty of how the universe primly base works. Man made coordinate systems are fine without knowing from where or what is the base essence of what the space as deduced field is composed of, but not totally satisfactory. Anomalies keep space cropping up and scientists have to keep adjusting for these unexpected events. It's like a blind man that has memorized his physical surroundings to a point he feels very comfortable until that one new or unexpected event pops up and he's lost and fumbling." -- nightbat, in one of his more lucid moments.
Message-ID: <b27b0$45ed14a7$46e3a646$6618@COMTECK.COM>

2269. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 22:18:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a7a8dc7b-e1ba-4680-856b-5a2fcca014fd@z72g2000hsb.googlegroups.com>
Source record: 22342

On Sep 14, 3:18 pm, "Richard Fry" <r...@adams.net> wrote:
> "Art Unwin" wrote>These were shore based installations probably in Hawaii or some island.
> >With respect to resonance, moving away from such as well as changing
>
> from 15 degrees (Frank's 30 degrees divided by two) would provide a pattern
> of distinct advantage which the navy is constantly looking for. For a whip
> tipped at an angle of 15 degrees can provide a forward pattern of gain which
> can be a big deal
> ----------
>
> Art -
>
> The graphic linked below is the work of George H. Brown of RCA Labs, from a
> 1936 paper published in the Proceedings of the IRE.
>
> It is a plot of surface wave field intensity vs.monopole height, including
> the distance to the "fade zone" where nighttime skywave radiation returns to
> earth to via reflection from the ionosphere to interfere with the surface,
> or ground wave.
>
> In it please note:
>
> 1. Maximum field strength does not occur at electrically resonant heights of
> the monopole (that is, where its feed point terminal reactance is zero).
I will look at the URL later Now I put the resonance as second to
equilibrium
as with equilibrium the need for a ground plane is negated In general
terms broadcast stations want equal radiation
around the point of installation knowing that the decibel is not
discernable in their audiance ears

>
> 2. The characteristics plotted are not related to azimuth, therefore the
> performance of a broadcast monopole will not be enhanced by "tipping." If
> it was, AM broadcast stations would have been doing so starting 70 years
> ago.
That is what Harrison said. He also said we have one method of
radiation so why do we need another?
Brown had no reason to isolate horizontal propagation from vertical
propagation and because construction
is way more simple relative to Earth there is no reason to reinvent
the wheel. The Yagi method of radiation
is a very good approximation even tho it disregards the weak force as
it deals more with total gain versus the polarity

of the field. Present day science have more demands on radiation than
Brown would realize. My wife nearly died last year because of a slight
misdirection
at the hospital when a needle nicked the liver when the medical people
placed to much reliance on provided measurements that were beyond the
capabilities of the equipment. As science grows so does understanding
and so does use of radiation which has requirements
way beyond a radio station
>

Regards
Art

> http://i62.photobucket.com/albums/h85/rfry-100/FIvsHgtofVerticalMonop...
>
> RF

2270. Re: Xforce-Amp 1000 watt Mobile Linear Amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 23:04:59 UTC
From: an_old_friend <kb9rqz@gmail.com>
Message-ID: <0b2d9944-e916-418c-8cde-9056ba2b8c72@r66g2000hsg.googlegroups.com>
Source record: 22343
Cross-posted to: rec.radio.amateur.policy,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sep 13, 12:56 pm, John Smith <assemblywiz...@gmail.com> wrote:
> lt...@yahoo.com wrote:
> > Legality depends on how and where something is used, and by whom.
> > If you try hard enough, an Ice cube can be illegal.
> > - 'Doc
>
> Exactly, if I would strike my neighbor with a shovel, it would become an
> "illegal weapon"; I would guess.
>
> Regards,
> JS

depends on where you are in CA maybe uin michigan where I live nope

2271. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-14 23:44:08 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gak7kb$4vv$1@aioe.org>
Source record: 22344

"Art Unwin" wrote
>I will look at the URL later.

We all know that already you have looked at it, Art.

>Now I put the resonance as second to equilibrium as with
>equilibrium the need for a ground plane is negated.

"Now" that possibly you might understand that resonance of antennas is unimportant? (Let us hope so.)

Also note that none of the Masters which you continually reference has written anything whatsoever about any "equilibrium" needed for the efficient radiation of antenna systems, with or without a "ground plane."

>> 2. The characteristics plotted are not related to azimuth, therefore
>> the performance of a broadcast monopole will not be enhanced by
>>"tipping." If it was, AM broadcast stations would have been doing
>>so starting 70 years ago.

>Brown had no reason to isolate horizontal propagation from vertical
>propagation and because construction is way more simple relative
>to Earth there is no reason to reinvent the wheel.

Arthur -- please note that a vertical monopole generates only vertically-polarized EM waves in the far field. Brown had no need / reason to investigate or comment on h-pol fields from such radiators, as for the conditions of his investigations they did not exist.

>The Yagi method of radiation is a very good approximation even tho
>it disregards the weak force as it deals more with total gain versus
>the polarity of the field.

"Polarity" is not synonymous with polarization, Arthur. Please learn and respect the difference, if you wish your posts to be (somewhat) more credible.

RF

2272. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 00:27:43 UTC
From: Ed_G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B19B1A44B5F5Huckleberrybigvalley@198.186.192.196>
Source record: 22345

Jeff Liebermann <jeffl@cruzio.com> wrote in
news:2uqqc412qbi7kqkgsfgue7npf54ve02tp4@4ax.com:

> On Sun, 14 Sep 2008 12:21:37 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>Anyone have a URL of a chart of what the final HDTV freqs will finally
>>be?
>>
>>After viewing a dozen web pages from searches, I have more questions
>>than answers ... be nice to be able to plot a few different antennas.
>
> I found this chart:
> <http://www.dtvprimer.com/DTVchannels.pdf>
> It looks correct for the few local HDTV stations, but is certainly
> preliminary. No clue on the minor-channel layout as that's the
> stations business, not the FCC's.
>
> However, the actual channel number and the displayed channel number
> might be different. See:
> <http://www.dtvprimer.com/freetv.html>
> in the section on PSIP (program and system info protocol) near the
> bottom. If you understand what's happening, please let me know.

What is happening is that many TV stations have been assigned a
channel on which to broadcast their new DTV signal prior to Feb. 17,
2009 while at the same time remain broadcasting their NTSC video on
their original channel. The chart shows these two channel designations
in the first two channel columns, and in the last column it shows what
channel the TV station will end up on when Feb. 17 comes around. As
indicated, some stations will be moving their DTV broadcast from the
temporary channel assignment back to their original NTSC channel
assignment, and some stations will remain broadcasting the DTV signal
on the temporary channel, which becomes their new permanent channel.

Ed K7AAT

2273. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 00:39:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ab144336-45b1-495f-9a7b-5ddfafb47a49@j22g2000hsf.googlegroups.com>
Source record: 22346

On Sep 14, 6:44 pm, "Richard Fry" <r...@adams.net> wrote:
> "Art Unwin" wrote
>
> >I will look at the URL later.
>
> We all know that already you have looked at it, Art.
>
> >Now I put the resonance as second to equilibrium as with
> >equilibrium the need for a ground plane is negated.
>
> "Now" that possibly you might understand that resonance of antennas is
> unimportant? (Let us hope so.)
I will not be the focus of a contrived auguement but I will respond
I never said that resonance was uninportant only that it is second to
equilibrium

>
> Also note that none of the Masters which you continually reference has
> written anything whatsoever about any "equilibrium" needed for the efficient
> radiation of antenna systems, with or without a "ground plane."
The masters addressed thge Universal sciences of which equilibrium was
a staple
They were on the opposing side of capatalism where diminishing returns
and politics govern everything.
>
> >> 2. The characteristics plotted are not related to azimuth, therefore
> >> the performance of a broadcast monopole will not be enhanced by
> >>"tipping." If it was, AM broadcast stations would have been doing
> >>so starting 70 years ago.
> >Brown had no reason to isolate horizontal propagation from vertical
> >propagation and because construction is way more simple relative
> >to Earth there is no reason to reinvent the wheel.
>
> Arthur -- please note that a vertical monopole generates only
> vertically-polarized EM waves in the far field. Brown had no need / reason
> to investigate or comment on h-pol fields from such radiators, as for the
> conditions of his investigations they did not exist.

Exactly, a case of diminishing returns thus no funds for unknown
visits into science
A brordcaster accepts the drop out of listeners at the periphary of
their signals despite
the huge area of desired customers
Now radiation has expanded enormously into wireless operations where
diminishing returns rules the industry

since that industry cannot survive with a multitude of dropped
signals. Now "value" determines the feeding of science in an area that
the masters or George could not possibly have contemplated which
raises such statements of yours where your past is rapidly being
overcome by the desires of the future such that you would question the
need. Nothing personal as you are following solely the path of your
experience which has been satisfactory for you to thus the denial for
change. But again you are welcome to your own opinions as long as they
do not interfere with mine and contempt becomes active.
>
> >The Yagi method of radiation is a very good approximation even tho
> >it disregards the weak force as it deals more with total gain versus
> >the polarity of the field.
>
> "Polarity" is not synonymous with polarization, Arthur. Please learn and
> respect the difference, if you wish your posts to be (somewhat) more
> credible.

Yes that is true and is a fault of mine Those knoweledgable in the
field understand
that error because they are looking for the positives and not the
negatives.
But it does not diminish the value of the intent !. For example Wind
shear has come into prominence
because of tragic air accidents. Present day science relies on the
transmission of a polarised signal
where the reflected signal is analysed for distortion. Problem is that
the initial signal is contaminated
with other polarities such that the returns signal is doubly
distorted thus preventing accurate analysis
of wind shear. A small problem or observation of science for which
there is a immediate need which
can be helped by the observations that some would question the need
or veracity of. Credability is built on the memory
of prior stated positions usually put to memory of print. Credability
is always in question by those resistant to change primarily guided
by what is known with the credability of printed matter since they
take comfort in numbers.
Another point Nasa is very interested in the removal of moon dust or
particles from entering space craft. I read that they had partial
success supplied from the emmission from a capacitor. What they were
really seeing was an example of equilibrium of which I talk about
where they were only using half of the cycle provided by a tank
circuit which is one of equilibrium as with a full wave radiator and
the use of the weak field. So sometimes regardless of the perceived
need of the new or change it is knoweledge that is the real measure of
wealth on this earth since its true value never diminishes.
End of my input hopefully I have responded in a way that you expected
or hoped for.
Art

>
> RF

2274. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 00:55:37 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gakbqckcn1@aioe.org>
Source record: 22347

"Art Unwin" wrote

>End of my input hopefully I have responded
>in a way that you expected or hoped for.
>Art

"Hoped for" = No.

"Expected" = Yes.

RF

2275. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 01:26:28 UTC
From: Dave <dave@dave.dave>
Message-ID: <48cdb9c4$0$29126$bd467cd0@news.dslextreme.com>
Source record: 22348

Ed_G wrote:
> Jeff Liebermann <jeffl@cruzio.com> wrote in
> news:2uqqc412qbi7kqkgsfgue7npf54ve02tp4@4ax.com:
>
>> On Sun, 14 Sep 2008 12:21:37 -0700, John Smith
>> <assemblywizard@gmail.com> wrote:
>>
>>> Anyone have a URL of a chart of what the final HDTV freqs will finally
>>> be?
>>>
>>> After viewing a dozen web pages from searches, I have more questions
>>> than answers ... be nice to be able to plot a few different antennas.
>> I found this chart:
>> <http://www.dtvprimer.com/DTVchannels.pdf>
>> It looks correct for the few local HDTV stations, but is certainly
>> preliminary. No clue on the minor-channel layout as that's the
>> stations business, not the FCC's.
>>
>> However, the actual channel number and the displayed channel number
>> might be different. See:
>> <http://www.dtvprimer.com/freetv.html>
>> in the section on PSIP (program and system info protocol) near the
>> bottom. If you understand what's happening, please let me know.
>
> What is happening is that many TV stations have been assigned a
> channel on which to broadcast their new DTV signal prior to Feb. 17,
> 2009 while at the same time remain broadcasting their NTSC video on
> their original channel. The chart shows these two channel designations
> in the first two channel columns, and in the last column it shows what
> channel the TV station will end up on when Feb. 17 comes around. As
> indicated, some stations will be moving their DTV broadcast from the
> temporary channel assignment back to their original NTSC channel
> assignment, and some stations will remain broadcasting the DTV signal
> on the temporary channel, which becomes their new permanent channel.
>
>
>
> Ed K7AAT
>
Here is the official ruling. There are 2 tables. The first is as of
now, the 2nd is effective 17 February 2009.

http://sujan.hallikainen.org/FCC/FccRules/2008/73/622/

2276. Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 02:10:28 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <18384bb9-5c02-4ea4-afe1-3acb499d47c4@r66g2000hsg.googlegroups.com>
Source record: 22349

I want to share with you one problem that I have on the above subject
When placing a yagi in free space the computor programs supply a gain
figure
where according to my thinking the root cause for ejection is the
intersection of two magnetic field.How this happens with a yagi is a
matter of conjecture. Any pointers?
Performing the same with an arrangement in equilibhrium there is no
gravity and yet gain is shown. This leads to four posabilities
! in the absence of levitation ejection is provided by the sliding of
the charges at the radiator ends as with corona in a vacuum. Problem
no spin applied
2 With a coupled antenna, yagi there exists two magnetic fields that
intersect where the charges again because of the absence of
equilibrium the charge again slides off the end Problem again no spin
applied
3 The programs have been modified from inception where the only rules
involved were Maxwell's laws which was then modified to correllate
with pre conceived known facts
4 The concept of initial reliance on equilibrium as preached by the
masters is incorrect and my reasoning is in error
I do not know the answer as I am not skilled with respect to the
algerythms used but the unknown can supply ammunition for loose mouths
until it is resolved
One thing is certain, Gauss states that static particles cannot
radiate in free space as there is no exchange of flux
and Maxwell includes the vector associated with the weak force where
gravity is non existent or zero !.
Best regards
Art

2277. eBay: 1939 ARRL Antenna Handbook etc

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 02:14:18 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <1yjzk.260$Rx.145@flpi144.ffdc.sbc.com>
Source record: 22350

http://shop.ebay.com/merchant/wd5jfr

2278. Re: eBay: 1939 ARRL Antenna Handbook etc

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 02:25:32 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1872bc92-c8ba-491b-a3ff-fb93429455ec@m36g2000hse.googlegroups.com>
Source record: 22251

On Sep 14, 9:14 pm, "Henry Kolesnik" <koles...@nojunksbcglobal.net>
wrote:
> http://shop.ebay.com/merchant/wd5jfr

I do believe that the Radio handbook was in existance before the ARRL
was formed
probably by a notable radio builder in the early days. I posses one of
these earlier radio handbooks
where the paper cover referred to the Lindenburg flight.
Very interesting to read
Art

2279. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 02:45:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <pdu0q5-jtq.ln1@mail.specsol.com>
Source record: 22252

Art Unwin <ArthurUnwin@gmail.com> wrote:

> One thing is certain, Gauss states that static particles cannot
> radiate in free space as there is no exchange of flux
> and Maxwell includes the vector associated with the weak force where
> gravity is non existent or zero !.
> Best regards
> Art

You've just unvailed the dirty secret that antennas don't work in
space and that all the so called communications with Appolo, Pioneer,
Mir, ISS, the shuttle and all telecommunications satellites is faked.

Now you had better be on the watch for the black helicopters for reveling
this.

--
Jim Pennino

Remove .spam.sux to reply.

2280. Re: eBay: 1939 ARRL Antenna Handbook etc

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 03:16:29 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <QWuzk.7614$rV4.375@newsfe03.iad>
Source record: 22276

The ARRL was founded in 1914. Radio Handbook before that? Seems doubtful.

But 'Lindenburg'? Who he? You must mean Lindbergh, whose flight was May 1927.

Walt, W2DU

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:1872bc92-c8ba-491b-a3ff-fb93429455ec@m36g2000hse.googlegroups.com...
On Sep 14, 9:14 pm, "Henry Kolesnik" <koles...@nojunksbcglobal.net>
wrote:
> http://shop.ebay.com/merchant/wd5jfr

I do believe that the Radio handbook was in existance before the ARRL
was formed
probably by a notable radio builder in the early days. I posses one of
these earlier radio handbooks
where the paper cover referred to the Lindenburg flight.
Very interesting to read
Art

2281. Re: eBay: 1939 ARRL Antenna Handbook etc

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 03:21:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gakkbr$8ed$1@news.albasani.net>
Source record: 22253

Henry Kolesnik wrote:
> http://shop.ebay.com/merchant/wd5jfr

Now that is something which is going to be hard to get a decent price for! :-| As, I'd imagine even book collectors avoid the arrl to a larger extent than myself! :-(

Regards,
JS

2282. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 03:26:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gakkld$8vp$1@news.albasani.net>
Source record: 22254

jimp@specsol.spam.sux.com wrote:

> ...
> You've just unvailed the dirty secret that antennas don't work in
> space and that all the so called communications with Appolo, Pioneer,
> Mir, ISS, the shuttle and all telecommunications satellites is faked.
>
> Now you had better be on the watch for the black helicopters for reveling
> this.

No. But the new pictures of light-waves do suggest they travel a medium
which exists, EVEN, in space, and yet, unseen to-date, and end up
"striking" the antenna(s) in question ... but then, most have always
accepted waves need a "medium" to propagate on/in ... but then--assign
it the name "either" and grown men cower in the shadows, in fear! ROFLOL

Regards,
JS

2283. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 03:37:10 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <rjlrc4h2b9d2fh90a4o6knarglsjfe4f99@4ax.com>
Source record: 22255

On Sun, 14 Sep 2008 19:10:28 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I want to share with you one problem that I have on the above subject
>When placing a yagi in free space the computor programs supply a gain
>figure
>where according to my thinking the root cause for ejection is the
>intersection of two magnetic field (...)

Not bad, but still a pile of garbage. Your word salad reminds me of
papers submitted by student who didn't have a clue what they were
doing and simply threw every buzzword they could remember into the
report.

Did you use an online technobabble generator, rant-o-matic, or created
it by hand? If online, I would be interesting in the URL as I have a
business plan to re-write.

Incidentally, if you're trying to regain your equalibrium, I suggest
that lay off the booze. Also, if your antenna is performing
self-ejections, you might want to tighten the mounting clamps.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2284. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 03:39:20 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d08f2a2d-9708-4aa5-9a65-0b01ee9e5fb9@f63g2000hsf.googlegroups.com>
Source record: 22256

On Sep 14, 9:45 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > One thing is certain, Gauss states that static particles cannot
> > radiate in free space as there is no exchange of flux
> > and Maxwell includes the vector associated with the weak force where
> > gravity is non existent or zero !.
> > Best regards
> > Art
>
> You've just unvailed the dirty secret that antennas don't work in
> space and that all the so called communications with Appolo, Pioneer,
> Mir, ISS, the shuttle and all telecommunications satellites is faked.
>
> Now you had better be on the watch for the black helicopters for reveling
> this.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

No I have not invalidated the concept of radiation in space since I
cannot rule out the root cause of the phenomia of
two insecting magnetic fields At the same time I have little belief in
the total veracity of antenna programs because of assumptions made on
preparation
I also suspect that the expansion to rediation in free space was
concluded without due consideration as the programs depict the only
change as zero reflection with the absence of earth with out
consideration to other factors. I am not denying radiation in out
space cannot exist only that I do not know how it is created without
influence from outside or added forces. At the same time there are
more indications of correctness in my analysis via well known
phenomina than the puzzle that I have present. I rely only on the
logic presented by other people which I have no reason to discredit
most of which have stood the test of time. The computer programs were
based on the laws of Maxwell so assumptions should not have been
necessary nor the revisions made over the years One assumption is
clearly in error is based on sino soidal current flow where a full
wave radiator is considered to be a tank circuit
where energy is moved via pulses, obviously I am missing something
here as well as the mathematical constant of subtraction for free
space.
There is a problem but the root cause is obviously unknown thus my

theorem should not be discounted Formulas formed by Einstein on relativity have included the same laws of Maxwell who includes the weak force which is nothing but a vector at the present time such that all forces equal zero. The latter was chosen as a fact thus there was no option to conclude that the gap created via vectors was a unidentifiable force often stated as an anti gravitational force thus without gravity all forces must change to conform to equilibrium, something I cannot accept per Gauss.
Jim, I am just being honest about my findings and at the same time pointing to areas of disagreement by the unknowns that are presented. Only the test of time is of value as more knoweledge is accumulated
Regards
Art

2285. Re: Tilted radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 03:53:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9tmrc4pv0m23snvid150muqskk3sdbs1sm@4ax.com>
Source record: 22258

On Sun, 14 Sep 2008 17:39:51 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>They were on the opposing side of capatalism where diminishing returns
>and politics govern everything.

Is this a plagiarism of Marx?

Which one? Groucho, or Harpo?

73's
Richard Clark, KB7QHC

2286. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 03:54:40 UTC
From: Grumpy The Mule <s_foonly@foo.bar>
Message-ID: <Xns9B19E9114D15D2MDWN@194.177.96.78>
Source record: 22257
Cross-posted to: alt.ham-radio,rec.radio.shortwave,rec.radio.amateur.antenna

Cecil Moore <nospam@w5dxp.com> wrote in
news:_0czk.235$fD.114@flpi145.ffdc.sbc.com:

> Mike Y wrote:
>> And while I realizeit's quite possible to get 'shocks' off an
>> induction
>> coupling that essentially goes to a high impedance, it's a far cry
>> from being
>> able to 'power a house' with a broadcast transmitter that wasn't
>> designed for the purpose.
>
> The original story that I heard about 40 years ago is
> that it involved 60 Hz high-voltage power lines. A
> farmer is supposed to have built an induction coil
> in a shed directly beneath the power lines and picked
> up free energy.

I've read that typically 1/3 of the current in a multiple ground
wye connected transmission system returns though the earth.
Seems a shame not to pass it though a few lightbulbs as it
passes by!

There was a story just a few years ago about a farmer that was
obtaining power from a fence running parallel to a transmission
line. He went to court and eventually won his case since this
power was already lost in the return resistance of the earth
and the power company failed to contain the current within their
transmission line. I can't recall what he was doing with it.

There was a room in the building of my last employer where no VDT
would function properly. We had a survey instrument in the EMI lab
so we gave it a try. The 60Hz magentic field in that room was intense.
We pulled down some ceiling tiles and found a large steel beam that
spanned the length of the building went to ground there. The beam
was parallel to the transmission line about 50ft just beyond the
outside wall. There was a substation was about 250ft away. I'm
sure the beam was grounded at both ends. Seems like the orientation
wasn't best for inductive coupling. Could have been carrying some
of the return current. A rough estimate of the current had it in the
hundreds of amperes. I can't account for it. Strange but true.

Later I heard from a former coworker who got a job with Super
Computers Inc then spent his first year mapping the "stray voltage"

at a site before they built their facility there. They found it can cause problems with their process instrumentation.

2287. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 04:16:58 UTC
From: dfinn1@nc.rr.com
Message-ID: <8dd7395e-dcac-49a1-88f2-7c13d4b2665d@m73g2000hsh.googlegroups.com>
Source record: 22259

On Sep 14, 11:26 pm, John Smith <assemblywiz...@gmail.com> wrote:

> No. But the new pictures of light-waves do suggest they travel a medium
> which exists, EVEN, in space, and yet, unseen to-date, and end up
> "striking" the antenna(s) in question ... but then, most have always
> accepted waves need a "medium" to propagate on/in ... but then--assign
> it the name "either" and grown men cower in the shadows, in fear! ROFLOL
>
> Regards,
> JS

Egad, another senility eruption.

2288. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 04:30:35 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c5495827-eef8-4ee7-bde5-e6cb2910b4b6@c65g2000hsa.googlegroups.com>
Source record: 22260

On Sep 14, 10:26 pm, John Smith <assemblywiz...@gmail.com> wrote:
> j...@specsol.spam.sux.com wrote:
> > ...
> > You've just unvailed the dirty secret that antennas don't work in
> > space and that all the so called communications with Appolo, Pioneer,
> > Mir, ISS, the shuttle and all telecommunications satellites is faked.
>
> > Now you had better be on the watch for the black helicopters for reveling
> > this.
>
> No. But the new pictures of light-waves do suggest they travel a medium
> which exists, EVEN, in space, and yet, unseen to-date, and end up
> "striking" the antenna(s) in question ... but then, most have always
> accepted waves need a "medium" to propagate on/in ... but then--assign
> it the name "either" and grown men cower in the shadows, in fear! ROFLOL
>
> Regards,
> JS

John the problem as I see it is how the magnetic field is bestowed on
a unbound particle
that is not rejected by the Earth"s magnetic field but allowed to
ecape from the Sun's magnetic field
. It is this I have no explanation for
and despite all reference to garbage nobody can supply the true
creation of radiation.
More light needs to be shed on the subject of space. to determine what
one calls garbage
because of a compressed field of knoweledge where another without
those constraints see it as a treasure.
I have a strong suspicion that scientists have assigned diiferent
names based on the theory assigned to one
many of which there is no evidence of their existance
Best regards
Art

2289. Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 04:36:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8dprc4p9n9e1f40pphafu0tg7qol8q0rsg@4ax.com>
Source record: 22261

On Sun, 14 Sep 2008 10:33:28 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>However, returning to my own recent shipboard experience and antennas
>there, I will later today post a link to a dozen or so pictures. It
>will include shots of Guss' Loops. I dare say several of these
>pictures will provoke much head scratching (but only to those few
>actually interested in antennas here in this forum).

http://home.comcast.net/~kb7qhc/antennas/navy/

73's
Richard Clark, KB7QHC

2290. Ham Radio License Exam Preparation Software

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 04:59:34 UTC
From: Webmaster <webmaster@hamradiolicense.net>
Message-ID: <KYlzk.8857$PK.494@newsfe04.iad>
Source record: 22262
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital

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2291. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 07:35:02 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Keozk.8663$wr1.5290@newsfe02.iad>
Source record: 22263

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:8dprc4p9n9e1f40pphafu0tg7qol8q0rsg@4ax.com...
> On Sun, 14 Sep 2008 10:33:28 -0700, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
> >However, returning to my own recent shipboard experience and antennas
> >there, I will later today post a link to a dozen or so pictures. It
> >will include shots of Guss' Loops. I dare say several of these
> >pictures will provoke much head scratching (but only to those few
> >actually interested in antennas here in this forum).
>
> http://home.comcast.net/~kb7qhc/antennas/navy/

I used to have the nomenclatures of all those antennas memorized, but, alas,
having gotten away from EMI inspections in 2003 and having fully retired
last year, all I can call to mind is the AS-2815/SSR-1 (your "Drooped Cross
Horizontal")

You zeroed in on some cryppie antennas. I rocognize the biconical dipole,
an HFDF antenna and a Rubicon antenna. They're often found together on an
Aegis cruiser. (Makes me want to put on my coveralls and get back out
there -- or maybe not.)

2292. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 11:33:01 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <LJrzk.496$yr3.316@nlpi068.nbdc.sbc.com>
Source record: 22264

John Smith wrote:
> But the new pictures of light-waves do suggest they travel a medium
> which exists, ...

One of my books on the subject calls it the "quantum soup".
--
73, Cecil http://www.w5dxp.com

2293. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 12:01:10 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <a8szk.142$Jw.0@nwrddc02.gnilink.net>
Source record: 22265

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:Keozk.8663$wr1.5290@newsfe02.iad...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:8dprc4p9n9e1f40pphafu0tg7qol8q0rsg@4ax.com...
>> On Sun, 14 Sep 2008 10:33:28 -0700, Richard Clark <kb7qhc@comcast.net>
>> wrote:
>>
>> >However, returning to my own recent shipboard experience and antennas
>> >there, I will later today post a link to a dozen or so pictures. It
>> >will include shots of Guss' Loops. I dare say several of these
>> >pictures will provoke much head scratching (but only to those few
>> >actually interested in antennas here in this forum).
>>
>> http://home.comcast.net/~kb7qhc/antennas/navy/
>
> I used to have the nomenclatures of all those antennas memorized, but,
> alas,
> having gotten away from EMI inspections in 2003 and having fully retired
> last year, all I can call to mind is the AS-2815/SSR-1 (your "Drooped
> Cross
> Horizontal")
>
> You zeroed in on some cryppie antennas. I rocognize the biconical dipole,
> an HFDF antenna and a Rubicon antenna. They're often found together on an
> Aegis cruiser. (Makes me want to put on my coveralls and get back out
> there -- or maybe not.)

Hi "Sal"

I'd like to know more about the Drooped Cross
> Horizontal"). Do you know the frequency it is designed for?

Jerry KD6JDJ

2294. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 12:01:21 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <_6szk.230$Ei5.179@flpi143.ffdc.sbc.com>
Source record: 22266

dfinn1@nc.rr.com wrote:
> Egad, another senility eruption.

Quoting "Alpha and Omega", by Charles Seife:

"Empty space is an incredibly complex substance,
... Quantum physicists are forced to conclude
that the vacuum isn't truly empty. It is seething
with particles and energy."

"Casimir effect: The ability of the ZERO-POINT
ENERGY, the particles constantly winking in and
out of existence, to exert a force. Predicted
by Dutch physicist Hendrik Casimir, the Casimir
effect has been measured."

Reckon all quantum physicists are senile?
--
73, Cecil http://www.w5dxp.com

2295. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 12:45:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <galldpbaa1@news.albasani.net>
Source record: 22267

Art Unwin wrote:

> ...
> John the problem as I see it is how the magnetic field is bestowed on
> a unbound particle
> that is not rejected by the Earth"s magnetic field but allowed to
> ecape from the Sun's magnetic field
> . It is this I have no explanation for
> and despite all reference to garbage nobody can supply the true
> creation of radiation.
> More light needs to be shed on the subject of space. to determine what
> one calls garbage
> because of a compressed field of knoweledge where another without
> those constraints see it as a treasure.
> I have a strong suspicion that scientists have assigned diiferent
> names based on the theory assigned to one
> many of which there is no evidence of their existance
> Best regards
> Art

There is actually a LOT in the few words above, it is deceptively stated--although, perhaps, without intention; had to really think about it a bit:

I quite agree with the fact that what you refer to as "have assigned different names [to] ..." is/are at the center of what you speak, what the "either is" and what the Hadron project is about to attempt to look at, in greater detail ... indeed, it is where the "new knowledge/discoveries" are about to emerge from (if there is any chance that will happen--at all.)

Hopefully, this all will end up pointing at new ways to design antennas to take advantage of "its'" (the eithers') properties. And, is an area adjacent to, in the very least, the one you are in the process of contemplating/imagining ...

The earths magnetic field (indeed, any static/changing magnetic field for that matter), gravity, suns particles/emissions/etc. all depend on the "either" you place in question; when you sprinkle iron filings on a sheet of paper and position a magnet below--this is what you look at; I believe it is also what is referred to as "the weak force" (or, is intrinsically related), but talk about a misnomer!

We just spin our wheels with little progress ahead ... but then Einstein even referred to it as, and I paraphrase, "un-comprehend-able!"

But then, perhaps some of "these things" are just shooting bullets (particles) as some picture the "particles." One must acknowledge this, although I have come NOT to "believe it", at this point.

We can't know until we really "know", and even then we may have yet to "prove" it; and, therein lies the real problem(s). For now, we must face the goons who poke fun at men and women who wonder, and dream, yet are certain "they" know SOMETHING EXISTS THERE.

You are correct to focus your vision(s) towards the Hadron project ... it is at least one hope of vindication! :-(

And, even if you still do not see the either as I do -- you will "come 'round!" <grin>

Regards,
JS

2296. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 12:58:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <galm60btp1@news.albasani.net>
Source record: 22268

Cecil Moore wrote:
> dfinn1@nc.rr.com wrote:
>> Egad, another senility eruption.
>
> Quoting "Alpha and Omega", by Charles Seife:
>
> "Empty space is an incredibly complex substance,
> ... Quantum physicists are forced to conclude
> that the vacuum isn't truly empty. It is seething
> with particles and energy."
>
> "Casimir effect: The ability of the ZERO-POINT
> ENERGY, the particles constantly winking in and
> out of existence, to exert a force. Predicted
> by Dutch physicist Hendrik Casimir, the Casimir
> effect has been measured."
>
> Reckon all quantum physicists are senile?

Aye Captain.

Those words move evermore towards undeniable, each and everyday ... the question? A very valid one ...

Warm regards,
JS

2297. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 13:11:20 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <W9tzk.457$YU2.229@nlpi066.nbdc.sbc.com>
Source record: 22269

John Smith wrote:
> I believe it is also what is referred to as "the weak force"

Magnetism is one aspect of the electromagnetic force.
The "weak force" is associated with atomic nuclei.

http://en.wikipedia.org/wiki/Weak_force
--
73, Cecil http://www.w5dxp.com

2298. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 13:29:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <galo04dtc1@news.albasani.net>
Source record: 22271

Cecil Moore wrote:
> John Smith wrote:
>> But the new pictures of light-waves do suggest they travel a medium
>> which exists, ...
>
> One of my books on the subject calls it the "quantum soup".

And, again, very much in few words ...

And, what a strange "soup", indeed ...

Even a simple observer can change what "soup" finally emerges from the quantum-soup-can! Be it, chicken? Beef? Vegetable? <chuckle>

Regards,
JS

2299. Any Toledo hot spots?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 13:40:33 UTC
From: N8WWM mrbindwell <mrbindwell@n8wwm.com>
Message-ID: <galot2$c3h$1@news.tornevall.net>
Source record: 22273
Cross-posted to: soc.subculture.bondage-bdsm,alt.bdsm-personals,alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

Hi everyone!

Anyone know of a nice club or hangout in the Toledo area that caters to cross dressing radio operators? I'm a guy from Toledo who enjoys showing a submissive man a good time in every way. I have so many interests that there probably is some broad common ground between myself and about anyone. I love to talk about BDSM issues and interests, and have been generally regarded as a funny guy to hang out with who has a good head on his shoulders. Send me a message for anything else you'd like to know!

I've attatched a link to my picture below, I consider myself a BBW trapped in a mans body and will be dominant to the right gentleman. (ham radio operators move to the front of the line)

N8WWM mrbindwell
http://img293.imageshack.us/img293/1972/dougthecrossdresserpb7.jpg

2300. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 13:40:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <galokueso1@news.albasani.net>
Source record: 22272

Cecil Moore wrote:
> John Smith wrote:
>> I believe it is also what is referred to as "the weak force"
>
> Magnetism is one aspect of the electromagnetic force.
> The "weak force" is associated with atomic nuclei.
>
> http://en.wikipedia.org/wiki/Weak_force

Cecil:

You have a real talent for those "simple statements" of yours; you know?; the ones which end up provoking arguments/discussions which are never-ending ... you must excuse me, I have a prior appointment ... <wink>

However, in the end <yawn>, just another elephant with three different blind-men "taking a look" at it ... <straight-faced-look and a chuckle>

However, as "correct" as possible, seen from the "perspective" we presently stand upon ... ;-)

Warmest regards,
JS

2301. Re: Gay BDSM Site John Smith certainly can give you the link to the gay ham sites.....assemblywizard@gmail.com << Send to for details!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 13:55:59 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <31328e18-fe32-4f2c-91cb-1f3831c12553@l64g2000hse.googlegroups.com>
Source record: 22274
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Sep 12, 10:47 am, "n8wwm mrbindwell \(fatboy\)" <dou...@nospam.com>
wrote:
> "badyoungmaster" <badyoungmas...@yahoo.ca> wrote in message
>
> news:9074480e-8e81-4884-8534-36758662a2d0@27g2000hsf.googlegroups.com...> There is a
free gay bdsm site atwww.men4bdsm.com
>
> Do you have one for gay BDSM ham radio operators? I'm ready load up my long
> wire. (wink wink)
>
> --
> n8wwm mrbindwellhttp://img137.imageshack.us/my.php?image=n8wwmpetroad2ie4.jpg

John Smith can also give you more than the links if your interested.

2302. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 14:50:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b163afa7-015a-48f2-834a-f29bb9867539@s50g2000hsb.googlegroups.com>
Source record: 22275

On Sep 15, 8:11 am, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith wrote:
> > I believe it is also what is referred to as "the weak force"
>
> Magnetism is one aspect of the electromagnetic force.
> The "weak force" is associated with atomic nuclei.
>
> http://en.wikipedia.org/wiki/Weak_force
> --
> 73, Cecil http://www.w5dxp.com

Cecil, if one follows the above url to electroweak interaction it
states the connection between electromagnetic
and the weak force interactionas emminating from a single force ie
weak force is part and parel of the
primary force. In radiation a time varying magnetic field also creats
the circulating field (parity of forces).
such that eddy currents matches the description inferred by the above
electroweak interaction .
Personally I see both interactions as being one and the same thing. In
the path to this segment it infers the weak force
is also in free space and it is that I do not understand, as the root
cause of action is the intersection of two separate
magnetic fields and the amalgamation of two forces producing a
triangle of forces summation
in three dimensional form (three movements of freedom required for
stabalization).Thus the mystery is how two magnetic fields are created
and more important WHEN !
Art

2303. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 15:29:25 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <tpadnarm5tnJ4IPVnZ2dnUVZ_tudnZ2d@bright.net>
Source record: 22277

... and some stations will be transmitting DTV on a third channel (not the present analog nor the present DTV channel)

I have also found that a number of stations have applied for changes (so far they seem to be ERP changes) to what is contained in the eighth FCC report of March 2008. One needs to go to the FCC site and enter call sign of each station to find the present information.

A surprise to me is that the coverage contour for analog TV is 64 dBu and for DTV is 41 dBu - a difference of 23 db. However, the reductions of ERP do not seem to be that large. Stations that are now a bit weak may be unusable after Feb. 2009.

73, Mac N8TT

J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
----- Original Message -----
From: "Ed_G" <Huckleberry_REMOVE_@bigvalley.net>
Newsgroups: rec.radio.amateur.antenna
Sent: Sunday, September 14, 2008 8:27 PM
Subject: Re: Chart of HDTV freqs?

> Jeff Liebermann <jeffl@cruzio.com> wrote in
> news:2uqqc412qbi7kqkgsfgue7npf54ve02tp4@4ax.com:
>
<snip>
>
> What is happening is that many TV stations have been assigned a
> channel on which to broadcast their new DTV signal prior to Feb. 17,
> 2009 while at the same time remain broadcasting their NTSC video on
> their original channel. The chart shows these two channel designations
> in the first two channel columns, and in the last column it shows what
> channel the TV station will end up on when Feb. 17 comes around. As
> indicated, some stations will be moving their DTV broadcast from the
> temporary channel assignment back to their original NTSC channel
> assignment, and some stations will remain broadcasting the DTV signal
> on the temporary channel, which becomes their new permanent channel.
>
>
>
> Ed K7AAT
>

2304. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 15:29:32 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <galv13ppu1@news.netins.net>
Source record: 22278
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Amateur Radio Study Guides say radio (carrier) waves start at approx. 20,000 hertz.....

"Green Xenon [Radium]" <glucegen1x@gmail.com> wrote in message news:fa12c21d-d60b-43a5-9dc2-bb9b485bea88@s1g2000pra.googlegroups.com...
> Hi:
>
> What would be heard on a 40 Hz AM DX receiver that uses the most
> sensitive type of magnetic loop antenna? I doubt there would be any
> hissing since that artifact would involve high-frequency sounds and a
> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
> [violation of Nyquist theorem].
>
> I also don't think power lines would have any perceptible affect on a
> 40 Hz receiver. In USA, the electric power has a frequency of 60 Hz --
> in Europe, its 50 Hz. Since 40 Hz is below these power frequencies, I
> doubt they would cause interference on 40 Hz. If I was receiving at or
> above the power frequencies, I do think there would be disturbance but
> not if below.
>
> Would any interferences from outer space be perceptible on a 40 Hz AM
> receiver? Galactic noise?
>
>
> Thanks,
>
> Radium

2305. Re: eBay: 1939 ARRL Antenna Handbook etc

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 15:37:18 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <ifCdnX2HMPOzHFPVnZ2dnUVZ8qfinZ2d@pipex.net>
Source record: 22279

Art Unwin wrote:
> On Sep 14, 9:14 pm, "Henry Kolesnik" <koles...@nojunksbcglobal.net>
> wrote:
>> http://shop.ebay.com/merchant/wd5jfr
>
> I do believe that the Radio handbook was in existance before the ARRL
> was formed
> probably by a notable radio builder in the early days. I posses one of
> these earlier radio handbooks
> where the paper cover referred to the Lindenburg flight.
> Very interesting to read
> Art
==========
Probably Hindenburg flight (the zeppelin that perished)

Frank GM0CSZ / KN6WH

2306. Re: eBay: 1939 ARRL Antenna Handbook etc

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 15:50:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gam07enre1@news.albasani.net>
Source record: 22280

Henry Kolesnik wrote:
> http://shop.ebay.com/merchant/wd5jfr

I have to admit, some of those old books held data on coaxial tank
circuits which you just can't find in any new material/books ... :-(

Regards,
JS

2307. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 15:50:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5s0tc496f7919rcuh3ik19ktv0m8vp12cf@4ax.com>
Source record: 22281

On Mon, 15 Sep 2008 12:01:10 GMT, "Jerry" <jerrymartes@verizon.net>
wrote:

>
>"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
>news:Keozk.8663$wr1.5290@newsfe02.iad...
>>
>> "Richard Clark" <kb7qhc@comcast.net> wrote in message
>> news:8dprc4p9n9e1f40pphafu0tg7qol8q0rsg@4ax.com...
>>> On Sun, 14 Sep 2008 10:33:28 -0700, Richard Clark <kb7qhc@comcast.net>
>>> wrote:
>>>
>>> >However, returning to my own recent shipboard experience and antennas
>>> >there, I will later today post a link to a dozen or so pictures. It
>>> >will include shots of Guss' Loops. I dare say several of these
>>> >pictures will provoke much head scratching (but only to those few
>>> >actually interested in antennas here in this forum).
>>>
>>> http://home.comcast.net/~kb7qhc/antennas/navy/
>>
>> I used to have the nomenclatures of all those antennas memorized, but,
>> alas,
>> having gotten away from EMI inspections in 2003 and having fully retired
>> last year, all I can call to mind is the AS-2815/SSR-1 (your "Drooped
>> Cross
>> Horizontal")
>>
>> You zeroed in on some cryppie antennas. I rocognize the biconical dipole,
>> an HFDF antenna and a Rubicon antenna. They're often found together on an
>> Aegis cruiser. (Makes me want to put on my coveralls and get back out
>> there -- or maybe not.)
>
> Hi "Sal"
>
> I'd like to know more about the Drooped Cross
>> Horizontal"). Do you know the frequency it is designed for?
>
> Jerry KD6JDJ
>

Hi Jerry,

I built a model of it, and from by guess and by golly, I presumed it
would be somewhere in the middle of the VHF/UHF Shipboard Band
(225-400 MHz) and made it resonant at 300 MHz (arbitrary selection,

mind you).

Let me know if you want a copy of that file.

73's
Richard Clark, KB7QHC

2308. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 16:02:19 UTC
From: Serge Auckland <sergeauckland@btinternet.com>
Message-ID: <oO2dnQvVGL6QGlPVnZ2dnUVZ8sednZ2d@bt.com>
Source record: 22282
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

"Rollie" <rollie@iowatelecom.net> wrote in message
news:galv13ppu1@news.netins.net...
> Amateur Radio Study Guides say radio (carrier) waves start at approx.
> 20,000 hertz.............
>
>
> "Green Xenon [Radium]" <glucegen1x@gmail.com> wrote in message
> news:fa12c21d-d60b-43a5-9dc2-bb9b485bea88@s1g2000pra.googlegroups.com...
>> Hi:
>>
>> What would be heard on a 40 Hz AM DX receiver that uses the most
>> sensitive type of magnetic loop antenna? I doubt there would be any
>> hissing since that artifact would involve high-frequency sounds and a
>> 40 Hz carrier cannot transport modulation-signals higher than 40 Hz
>> [violation of Nyquist theorem].
>>
>> I also don't think power lines would have any perceptible affect on a
>> 40 Hz receiver. In USA, the electric power has a frequency of 60 Hz --
>> in Europe, its 50 Hz. Since 40 Hz is below these power frequencies, I
>> doubt they would cause interference on 40 Hz. If I was receiving at or
>> above the power frequencies, I do think there would be disturbance but
>> not if below.
>>
>> Would any interferences from outer space be perceptible on a 40 Hz AM
>> receiver? Galactic noise?
>>
>>
>> Thanks,
>>
>> Radium
>
>
What about VLF communications from submerged submarines? They work at, would
you believe, Very Low Frequencies, a lot lower than 20kHz.

S.
--
http://audiopages.googlepages.com

2309. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 16:12:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bq1tc4tb8iae9h2cpfkc34efei9keisd6d@4ax.com>
Source record: 22283

On Mon, 15 Sep 2008 00:35:02 -0700, "Sal M. Onella"
<salmonella@food.poisoning.org> wrote:

>You zeroed in on some cryppie antennas. I rocognize the biconical dipole,
>an HFDF antenna and a Rubicon antenna. They're often found together on an
>Aegis cruiser. (Makes me want to put on my coveralls and get back out
>there -- or maybe not.)

There were more antennas to select from for posting, but they
inhabited higher frequencies and had less obvious structural elements
- like one I stood next to while the crew manned the rails. Not
crypto, per sï¿½, but one of those spook traffic sniffers that was the
size of an industrial washing machine, sitting on the weather deck of
the forward superstructure. The CT Chief standing next to me pointed
it out.

The shipboard shots were either the USS Bunker Hill, or the USS
Princeton, AEGIS cruisers as you have already said.

73's
Richard Clark, KB7QHC

2310. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 16:17:54 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <tXvzk.323$pr6.160@flpi149.ffdc.sbc.com>
Source record: 22284

Art Unwin wrote:
> Personally I see both interactions as being one and the same thing.

If you mean that they have been unified, that is correct.

> In the path to this segment it infers the weak force
> is also in free space and it is that I do not understand, ...

Understand that free space is not empty. There
exists a quantum structure about which not much
is yet understood. Google "dark mass" and
"dark energy". Everything that we can see and
measure appears to be about 5% of what exists.
--
73, Cecil http://www.w5dxp.com

2311. Re: eBay: 1939 ARRL Antenna Handbook etc

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 16:24:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3i2tc4d4rpju9pi6sns2djivscb7e17g50@4ax.com>
Source record: 22285

On Mon, 15 Sep 2008 16:37:18 +0100, Highland Ham
<rfburns@allbands.net> wrote:

>> where the paper cover referred to the Lindenburg flight.
>> Very interesting to read
>> Art
>==============================
>Probably Hindenburg flight (the zeppelin that perished)

And probably the Zep(plin) antenna on the cover. Authur has since
submitted claims to the PTO for diamagnetic Zep untennas and
trademarked them "Lead Zeps."

I can almost hear the "Immigrant Song" cranking up now.
...So now you'd better stop and rebuild all your ruins....

73's
Richard Clark, KB7QHC

2312. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 16:34:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rk3tc4tnk43veejncc8qsbj99iohmq206e@4ax.com>
Source record: 22286

On Mon, 15 Sep 2008 00:35:02 -0700, "Sal M. Onella"
<salmonella@food.poisoning.org> wrote:

>all I can call to mind is the AS-2815/SSR-1 (your "Drooped Cross
>Horizontal")

For those who want to see the specifics, use the nomenclature offered
and select at page:
http://www.combatindex.com/hardware/hardware_sensor_main.html

73's
Richard Clark, KB7QHC

2313. Re: Gay BDSM Site John Smith certainly can give you the link to the gay ham sites.....assemblywizard@gmail.com << Send to for details!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 17:03:38 UTC
From: old freind <kb9rqz-4@hotmail.com>
Message-ID: <48e16179-5e02-48f4-aa5b-34b192841747@p25g2000hsf.googlegroups.com>
Source record: 22287
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Sep 15, 9:55 am, John Smith <assemblywizz...@gmail.com> wrote:
>
fake

2314. zzzz

2315. Re: Gay BDSM Site John Smith certainly can give you the link to the gay ham sites.....assemblywizard@gmail.com << Send to for details!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 17:05:52 UTC
From: old freind <kb9rqz-4@hotmail.com>
Message-ID: <9683f63a-6cb9-4a44-9a7b-bf591fb482a9@c65g2000hsa.googlegroups.com>
Source record: 22289
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Sep 15, 9:55 am, John Smith <assemblywizz...@gmail.com> wrote:
>
fake

2316. zzzz

2317. Re: Any audible signals on a 40 Hz AM radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 17:09:18 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gam4ru$1kro$1@f04n12.cac.psu.edu>
Source record: 22291
Cross-posted to: rec.audio.tech,rec.radio.amateur.antenna

Green Xenon [Radium] wrote:
> Hi:
>
> What would be heard on a 40 Hz AM DX receiver that uses the most
> sensitive type of magnetic loop antenna?

Around 40 Hertz, tops.

- 73 de Mike N3LI -

2318. Re: Gay BDSM Site John Smith certainly can give you the link to the gay ham sites.....assemblywizard@gmail.com << Send to for details!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 17:46:10 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <89f753df-ea9f-4ab0-870f-4432042f9cfc@i76g2000hsf.googlegroups.com>
Source record: 22292
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Sep 15, 8:55 am, John Smith <assemblywizz...@gmail.com> wrote:
> On Sep 12, 10:47 am, "n8wwm mrbindwell \(fatboy\)" <dou...@nospam.com>
> wrote:
>
> > "badyoungmaster" <badyoungmas...@yahoo.ca> wrote in message
>
> >news:9074480e-8e81-4884-8534-36758662a2d0@27g2000hsf.googlegroups.com...> There is a
free gay bdsm site atwww.men4bdsm.com
>
> > Do you have one for gay BDSM ham radio operators? I'm ready load up my long
> > wire. (wink wink)
>
> > --
> > n8wwm mrbindwellhttp://img137.imageshack.us/my.php?image=n8wwmpetroad2ie4.jpg
>
> John Smith can also give you more than the links if your interested. I bet Old Freind
can as well!

2319. Re: Any Toledo hot spots? <<<< No but when in California look ... John Smith up..... he knows where all those gay hot spots are....or write him at ....assemblywizard@gmail.com

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 17:53:57 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <26b8e8a4-77fa-41ff-8e2b-d9841b996822@8g2000hse.googlegroups.com>
Source record: 22293
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sep 15, 8:40 am, "N8WWM mrbindwell" <mrbindw...@n8wwm.com> wrote:
> Hi everyone!
>
> Anyone know of a nice club or hangout in the Toledo area that caters to
> cross dressing radio operators? I'm a guy from Toledo who enjoys showing a
> submissive man a good time in every way. I have so many interests that there
> probably is some broad common ground between myself and about anyone. I love
> to talk about BDSM issues and interests, and have been generally regarded as
> a funny guy to hang out with who has a good head on his shoulders. Send me a
> message for anything else you'd like to know!
>
> I've attatched a link to my picture below, I consider myself a BBW trapped
> in a mans body and will be dominant to the right gentleman. (ham radio
> operators move to the front of the line)
>
> N8WWM mrbindwellhttp://img293.imageshack.us/img293/1972/dougthecrossdresserpb7.jpg

2320. Re: The Strange True Story of a Radio Station's Transmitter in New York State

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 18:35:28 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gam9tf$b8f$1@news.jpl.nasa.gov>
Source record: 22294

Grumpy The Mule wrote:
> Cecil Moore <nospam@w5dxp.com> wrote in
> news:_0czk.235$fD.114@flpi145.ffdc.sbc.com:
>
>> Mike Y wrote:
>>> And while I realizeit's quite possible to get 'shocks' off an
>>> induction
>>> coupling that essentially goes to a high impedance, it's a far cry
>>> from being
>>> able to 'power a house' with a broadcast transmitter that wasn't
>>> designed for the purpose.
>> The original story that I heard about 40 years ago is
>> that it involved 60 Hz high-voltage power lines. A
>> farmer is supposed to have built an induction coil
>> in a shed directly beneath the power lines and picked
>> up free energy.

Hmm.. a bit of physics..

Induced voltage is Nturns*dPhi/dt
dPhi/dt -> change in flux (Webers) per second

Flux is area of coil * B field.

AC field under a HV power line is typically around 1-10 microTesla.

So, the peak flux through a 1 square meter coil is about 10 microWeber.
At 60Hz, the maximum slope is 2*pi*frequency, or 377, so now, we're up
to 377*10E-6, or 377E-5 or 3.77E-3.. about 4 millivolts..

Now, lets assume a coil that's 10x10 meters.. that's 100 square meters,
so we're up to 0.4 volts, open circuit voltage, for one turn.

Now, let's say our ambitious farmer winds 100 turns.. now we're up to 40
Volts. But, that coil is 4000 meters of wire (100 turns * 40
meters/turn), and will have non-zero resistance. Let's say our farmer
used AWG 10 wire. about 1 ohm/1000 ft, so call it 13 ohms all told
(4000 m is approximately 13000 ft).

So we have a source with 40V open circuit output voltage and 13 ohm
output Z. If we hook up a matched load (another 13 ohms), it will have
20 Volts across it, and dissipate about 30 watts in the load and 30
watts in the loop.

Now, at $0.10/kWh, and 0.03kW, that's about $26/year

Of course, there's the labor in building that coil.
And, the cost of the wire. (400lb of copper at $3/lb is $1200)

Sure, you'd use aluminum wire, so you could cut that down by a factor of 3 or so.. So, invest a lot of hours stringing up that coil, and a few hundred bucks in aluminum, and save $30/year...

Excellent economics there..

2321. small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 19:33:35 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <01d6dacf-a2c5-459b-b6e7-9be7450a80a6@a70g2000hsh.googlegroups.com>
Source record: 22295

I am begining to believe that there is really no interest in small
antennas
I see that many antenna labs use such things as their purpose in life
as well as more energy efficient antennas
but they are not producing anything. It also appears that they are
also not interested in spending any time on such research. If you go
to the Illinois University antenna lab they are all sitting with
computors expecting something of interest will pop out without them
putting any thing positive in in the first place. So is there really
somebody being hired to produce small antennas? Same situation with
hams as they fight at the very idea of the possibility of small
efficient antennas that like the Universities do not want to hear of
the possibilities
One doctorial student at Illinois University in Central illinois
stated that they have so many requests for review of antennas by the
populace it is not unusual to ignore the pleas of the local populace
presumably based on the premise that if it was possible they would
already have done it. They have teachers way more intelligent than
ordinary peopleand, where one spends most of her time working on
behalf of the IEEE that research or computer operation has to be put
to one side.
If there really was an interest in diverse antennas instead of
personal promotion maybe our tax dollars would be better spent. Yes,
I write off the University of Illinois as they have never produced
anything as pioneers in antennas especially with the departure of the
log periodic designer that they paid hansomly to hang out there
instead of there own Universities. So to sum up puting U of I to one
side, is there anybody in Industry who desires small antennas or
Universities investing time in such things ?.
When O when is anything going to happen in the small antenna areana or
is the need actually ficticious
because of diminishing returns with the use of such? What Universities
in the U.S. that are serious about small antennas and what have they
produced in the last couple of years? If they can't or deny the
possibilities then why fund them? It is your money. But then who
cares, we have antennas already so we don't need anymore
especiually when denial of the new suggests that all is known.

2322. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 20:00:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <dbeae43e-2758-4b1d-b23f-f7f8b925e422@d77g2000hsb.googlegroups.com>
Source record: 22296

On Sep 15, 2:33 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> I am begining to believe that there is really no interest in small
> antennas
> I see that many antenna labs use such things as their purpose in life
> as well as more energy efficient antennas
> but they are not producing anything. It also appears that they are
> also not interested in spending any time on such research. If you go
> to the Illinois University antenna lab they are all sitting with
> computors expecting something of interest will pop out without them
> putting any thing positive in in the first place. So is there really
> somebody being hired to produce small antennas? Same situation with
> hams as they fight at the very idea of the possibility of small
> efficient antennas that like the Universities do not want to hear of
> the possibilities
> One doctorial student at Illinois University in Central illinois
> stated that they have so many requests for review of antennas by the
> populace it is not unusual to ignore the pleas of the local populace
> presumably based on the premise that if it was possible they would
> already have done it. They have teachers way more intelligent than
> ordinary peopleand, where one spends most of her time working on
> behalf of the IEEE that research or computer operation has to be put
> to one side.
> If there really was an interest in diverse antennas instead of
> personal promotion maybe our tax dollars would be better spent. Yes,
> I write off the University of Illinois as they have never produced
> anything as pioneers in antennas especially with the departure of the
> log periodic designer that they paid hansomly to hang out there
> instead of there own Universities. So to sum up puting U of I to one
> side, is there anybody in Industry who desires small antennas or
> Universities investing time in such things ?.
> When O when is anything going to happen in the small antenna areana or
> is the need actually ficticious
> because of diminishing returns with the use of such? What Universities
> in the U.S. that are serious about small antennas and what have they
> produced in the last couple of years? If they can't or deny the
> possibilities then why fund them? It is your money. But then who
> cares, we have antennas already so we don't need anymore
> especiually when denial of the new suggests that all is known.

If you are looking for a University to compare with try Rhode Island
I don't believe any University can show antenna results in the past
few years that are better than those produced in any other state.
What has your State University done that is notable?

2323. Re: zzzz

2324. Re: zzzz

2325. Re: small antennas, a lament

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 20:23:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <96ftc4ducb2ktofpjb012n0nebnm66l5on@4ax.com>
Source record: 22299

On Mon, 15 Sep 2008 12:33:35 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>What Universities
>in the U.S. that are serious about small antennas and what have they
>produced in the last couple of years? If they can't or deny the
>possibilities then why fund them? It is your money.

Let's just cut to the chase, the U of Illinois gave you the bum's rush. When all your writings read like Marx's manifesto instead of science, who would blame them? If there were universities on every block, and caped dons wandered the streets, you would still have only an empty tin cup sitting on the corner waiting for the first plunk of a nickel.

>But then who
>cares, we have antennas already so we don't need anymore
>especiually when denial of the new suggests that all is known.

Put the cup to better use and go buy a latï¿½.

73's
Richard Clark, KB7QHC

2326. A True Story, maybe, of Harvesting Power Over the Air

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 20:40:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <27htc4liut2k6akff9f31tac61onhsv5nk@4ax.com>
Source record: 22300

>Grumpy The Mule wrote:
>> Cecil Moore <nospam@w5dxp.com> wrote in
>> news:_0czk.235$fD.114@flpi145.ffdc.sbc.com:
>>
>>> Mike Y wrote:
>>>> And while I realizeit's quite possible to get 'shocks' off an
>>>> induction
>>>> coupling that essentially goes to a high impedance, it's a far cry
>>>> from being
>>>> able to 'power a house' with a broadcast transmitter that wasn't
>>>> designed for the purpose.
>>> The original story that I heard about 40 years ago is
>>> that it involved 60 Hz high-voltage power lines. A
>>> farmer is supposed to have built an induction coil
>>> in a shed directly beneath the power lines and picked
>>> up free energy.
>
>Hmm.. a bit of physics..
>
>Induced voltage is Nturns*dPhi/dt
>dPhi/dt -> change in flux (Webers) per second
>
>Flux is area of coil * B field.
>
>AC field under a HV power line is typically around 1-10 microTesla.
>
>So, the peak flux through a 1 square meter coil is about 10 microWeber.
>At 60Hz, the maximum slope is 2*pi*frequency, or 377, so now, we're up
>to 377*10E-6, or 377E-5 or 3.77E-3.. about 4 millivolts..
>
>Now, lets assume a coil that's 10x10 meters.. that's 100 square meters,
>so we're up to 0.4 volts, open circuit voltage, for one turn.
>
>Now, let's say our ambitious farmer winds 100 turns.. now we're up to 40
>Volts. But, that coil is 4000 meters of wire (100 turns * 40
>meters/turn), and will have non-zero resistance. Let's say our farmer
>used AWG 10 wire. about 1 ohm/1000 ft, so call it 13 ohms all told
>(4000 m is approximately 13000 ft).
>
>So we have a source with 40V open circuit output voltage and 13 ohm
>output Z. If we hook up a matched load (another 13 ohms), it will have
>20 Volts across it, and dissipate about 30 watts in the load and 30
>watts in the loop.
>

>Now, at $0.10/kWh, and 0.03kW, that's about $26/year
>
>Of course, there's the labor in building that coil.
>And, the cost of the wire. (400lb of copper at $3/lb is $1200)
>
>Sure, you'd use aluminum wire, so you could cut that down by a factor of
>3 or so.. So, invest a lot of hours stringing up that coil, and a few
>hundred bucks in aluminum, and save $30/year...
>
>Excellent economics there..

Hi all,

This again falls under the presumption folks are actually interested in antennas.

Perhaps it is only one step removed from Art's lamentations of being shown the door, but hopefully it isn't such a weepy heartbreaker.

Anywho.

It has been reported for several years now that researchers have been designing antennas to harvest power from transmission antennas (power lines in the quote above) for the purposes of powering home gadgets. A report in the New York Times offered an article how Apple was looking into a way to recharge their iProducts through the air. I've even mentioned the coupling mechanism inferentially in the past.

Art's tear swollen eyes are too fatigued for such reading, Bart probably prefaces all his google searches with the keyword xfiles, and no one else has noticed this either. (Bart should have prefaced with the keyword Tesla, but to be fair, it would only dump 1,000,000 nutzo links.)

The term-du-jour is evanescent waves (we call them near fields) and lab reports offer up to 60% power transfer. I've modeled some that are more efficient (low ohmic computer bits were used to optimize the transfer); but to truly model what has been put on the bench (literally and figuratively) would consume too many segments, and violate too many NEC prohibitions. Still and all, I've replicated their results conceptually where I could jimmy the scales.

While Art whines about the lack of science (surprising complaint, or perhaps I should say an ironic complaint), these constitute SMALL antennas that would fit into a matchbox if they were modeled on his claims (again, that hint of irony).

Those so interested may, of course, wire me for files.

73's
Richard Clark, KB7QHC

2327. Re: A True Story, maybe, of Harvesting Power Over the Air

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 20:56:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gami5c$g8c$1@news.albasani.net>
Source record: 22201

Richard Clark wrote:

> ...
> Those so interested may, of course, wire me for files.
>
> 73's
> Richard Clark, KB7QHC

When I was a kid (about 11 and making the "change over"), I hooked a neon oscillator to an rf-step-xfrmr with a full wave bridge "detector", to a VERY long wire antenna (very well insulated by egg insulators) and it would pulse (flash) the neon bulb every so often ... gave me big kick at the time ...

However, I don't think it would have powered a "fly-power-anything!" ... well, other than a single transistor "radio" which got its' power from the same ... but then, you probably built one from the plans which were around back then ...

Regards,
JS

2328. Re: A True Story, maybe, of Harvesting Power Over the Air

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 20:59:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gamiba$g8c$2@news.albasani.net>
Source record: 22202

John Smith wrote:
> Richard Clark wrote:
>
>> ...
>> Those so interested may, of course, wire me for files.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> When I was a kid (about 11 and making the "change over"), I hooked a
> neon oscillator to an rf-step-xfrmr with a full wave bridge "detector",
> to a VERY long wire antenna (very well insulated by egg insulators) and
> it would pulse (flash) the neon bulb every so often ... gave me big kick
> at the time ...
>> ...
> Regards,
> JS

Hmmm, just in case any "youngsters" are around and wish to duplicate
"the experiment", change "detector" to voltage-multiplier-circuit ... if
you need, google it.

Regards,
JS

2329. Re:Small Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 20:59:40 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gamibu$2mq$1@news.netins.net>
Source record: 22203

In what area are you refering to when wanting a small antenna.

In the areas that I use antennas, that is, in, ham and cb, there are lots of big, medium and small antennas available.

If in the tv reception area there are also lots of choices, depending on the distance you are from a tv transmitter.

Where and what do you want and maybe someone will have an answer for you.

Lots of luck,

2330. Re: Small Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 21:07:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gamirj$h1k$1@news.albasani.net>
Source record: 22204

Rollie wrote:
> In what area are you refering to when wanting a small antenna.
>
> In the areas that I use antennas, that is, in, ham and cb, there are lots
> of big, medium and small antennas available.
>
> If in the tv reception area there are also lots of choices, depending on the
> distance you are from a tv transmitter.
>
> Where and what do you want and maybe someone will have an answer for you.
>
> Lots of luck,
>
>

Well, there has always been the "Texas Bugcatcher" (and, Cecil owned one
of these, I can tell, he still has the coil laying around ;-)
<chuckle>), but the "bugs" always left a bad taste in my mouth -- to
some extent the DLM (google "Robert Vincent" and "Distributed Load
Monopole" for more information) improves upon that, and to a larger
degree than I expected!

However, some claim that is only "in my imagination." <satisfying-grin>

Regards,
JS

2331. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 21:55:02 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <WQAzk.202$pp3.126@trnddc06>
Source record: 22205

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:5s0tc496f7919rcuh3ik19ktv0m8vp12cf@4ax.com...
> On Mon, 15 Sep 2008 12:01:10 GMT, "Jerry" <jerrymartes@verizon.net>
> wrote:
>
>>
>>"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
>>news:Keozk.8663$wr1.5290@newsfe02.iad...
>>>
>>> "Richard Clark" <kb7qhc@comcast.net> wrote in message
>>> news:8dprc4p9n9e1f40pphafu0tg7qol8q0rsg@4ax.com...
>>>> On Sun, 14 Sep 2008 10:33:28 -0700, Richard Clark <kb7qhc@comcast.net>
>>>> wrote:
>>>>
>>>> >However, returning to my own recent shipboard experience and antennas
>>>> >there, I will later today post a link to a dozen or so pictures. It
>>>> >will include shots of Guss' Loops. I dare say several of these
>>>> >pictures will provoke much head scratching (but only to those few
>>>> >actually interested in antennas here in this forum).
>>>>
>>>> http://home.comcast.net/~kb7qhc/antennas/navy/
>>>
>>> I used to have the nomenclatures of all those antennas memorized, but,
>>> alas,
>>> having gotten away from EMI inspections in 2003 and having fully retired
>>> last year, all I can call to mind is the AS-2815/SSR-1 (your "Drooped
>>> Cross
>>> Horizontal")
>>>
>>> You zeroed in on some cryppie antennas. I rocognize the biconical
>>> dipole,
>>> an HFDF antenna and a Rubicon antenna. They're often found together on
>>> an
>>> Aegis cruiser. (Makes me want to put on my coveralls and get back out
>>> there -- or maybe not.)
>>
>> Hi "Sal"
>>
>> I'd like to know more about the Drooped Cross
>>> Horizontal"). Do you know the frequency it is designed for?
>>
>> Jerry KD6JDJ
>>
>

> Hi Jerry,
>
> I built a model of it, and from by guess and by golly, I presumed it
> would be somewhere in the middle of the VHF/UHF Shipboard Band
> (225-400 MHz) and made it resonant at 300 MHz (arbitrary selection,
> mind you).
>
> Let me know if you want a copy of that file.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard

Yes, I sure would like to see your EZNEC file. I'd benefit from seeing
how you modeled it too.
The antenna looks like it iis designed for satellite reception.
It interests me to consider that the "DCA" that I developed would
(perhaps) be a design concept applicable to this operational requirement.

Jerry KD6JDJ

2332. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 22:39:28 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gamo74$2vv$1@aioe.org>
Source record: 22206

"Art Unwin" wrote
> When O when is anything going to happen in the small antenna areana or
> is the need actually ficticious because of diminishing returns with the
> use of such?

Art, O please note that even an infinitely small isotropic radiator has a peak (and r.m.s.) intrinsic gain of 0 dBi in free space. A linear, 1/2-wave dipole has only 2.15 dB more peak gain than that for those conditions, due to the shape of its radiation pattern.

If you can prove, and others can replicate your claims that the radiation performance and efficiency of your shoebox antenna with equilibrium/ particle theory/ tilt etc compares favorably to an isotropic radiator or some other known and proven reference antenna, then your critics will disappear.

Technobabble and hand-waving do not count. Neither does scoffing at decades of field-proven research and practice in antenna engineering, while at the same time claiming that the "masters" support your concepts (even though your concepts are unproven).

Otherwise your posts about this will continue to be viewed with high skepticism and scorn, and rightly so.

Probably you will duck behind your "patent claim" now, as you have done in the past when pressed for details.

And so it goes (and goes, and goes).

RF

2333. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 22:46:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gamojh$mu7$1@news.albasani.net>
Source record: 22207

Jerry wrote:

> ...
> Hi Richard
>
> Yes, I sure would like to see your EZNEC file. I'd benefit from seeing
> how you modeled it too.
> The antenna looks like it iis designed for satellite reception.
> It interests me to consider that the "DCA" that I developed would
> (perhaps) be a design concept applicable to this operational requirement.
>
> Jerry KD6JDJ

Uhh, those eznec files, they are kinda like a high-school\college friend recently explained to me in financial terms:

"If you have a sheet of paper claiming a "controlling interest in gold", all you REALLY have is a sheet of paper! If you are looking at the gold you are "invested" in, you REALLY HAVE the gold!" <wink>

But then, it is only when you realize there have been more "certificates in 'controlling' interests in gold" issued than the amount of gold which exists in the world, that, you suddenly awaken to a HARSH reality! (like some have "been had!")

Read about "The Great Depression", I tell 'ya, there are clues to be had there! I mean, really, it is the same old game, just new "marks!" <chuckle>

Regards,
JS

2334. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 22:46:42 UTC
From: JB <nospam@goofball.net>
Message-ID: <mBBzk.173$Jw.124@nwrddc02.gnilink.net>
Source record: 22208

Right now, the Analog channels that I get solid and noise free seem to be subject to fades on their UHF DTV counterpart. Makes me wonder how it will goof up the market when I won't be able to go back to analog as a back-up when the DTV goes down.

"J. Mc Laughlin" <jcm@power-net.net> wrote in message news:tpadnarm5tnJ4lPVnZ2dnUVZ_tudnZ2d@bright.net...

> ... and some stations will be transmitting DTV on a third channel (not the
> present analog nor the present DTV channel)
>
> I have also found that a number of stations have applied for changes (so far
> they seem to be ERP changes) to what is contained in the eighth FCC report
> of March 2008. One needs to go to the FCC site and enter call sign of each
> station to find the present information.
>
> A surprise to me is that the coverage contour for analog TV is 64 dBu and
> for DTV is 41 dBu - a difference of 23 db. However, the reductions of ERP
> do not seem to be that large. Stations that are now a bit weak may be
> unusable after Feb. 2009.
>
> 73, Mac N8TT
>
>
> J. McLaughlin; Michigan, USA
> Home: JCM@power-net.net
> ----- Original Message -----
> From: "Ed_G" <Huckleberry_REMOVE_@bigvalley.net>
> Newsgroups: rec.radio.amateur.antenna
> Sent: Sunday, September 14, 2008 8:27 PM
> Subject: Re: Chart of HDTV freqs?
>
>
> > Jeff Liebermann <jeffl@cruzio.com> wrote in
> > news:2uqqc412qbi7kqkgsfgue7npf54ve02tp4@4ax.com:
> > >
> <snip>
> > >
> > What is happening is that many TV stations have been assigned a
> > channel on which to broadcast their new DTV signal prior to Feb. 17,
> > 2009 while at the same time remain broadcasting their NTSC video on
> > their original channel. The chart shows these two channel designations
> > in the first two channel columns, and in the last column it shows what
> > channel the TV station will end up on when Feb. 17 comes around. As

> > indicated, some stations will be moving their DTV broadcast from the
> > temporary channel assignment back to their original NTSC channel
> > assignment, and some stations will remain broadcasting the DTV signal
> > on the temporary channel, which becomes their new permanent channel.
> >
> >
> >
> > Ed K7AAT
> >
>
>

2335. Re: Any Toledo hot spots? <<<< No but when in California look ... John Smith up..... he knows where all those gay hot spots are....or write him at ....assemblywizard@gmail.com

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 22:49:21 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <47731b04-91c9-4d62-9b98-27eb94cad1ba@25g2000hsx.googlegroups.com>
Source record: 22209
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sep 15, 12:53 pm, John Smith <assemblywizz...@gmail.com> wrote:
> On Sep 15, 8:40 am, "N8WWM mrbindwell" <mrbindw...@n8wwm.com> wrote:
>
>
>
> > Hi everyone!
>
> > Anyone know of a nice club or hangout in the Toledo area that caters to
> > cross dressing radio operators? I'm a guy from Toledo who enjoys showing a
> > submissive man a good time in every way. I have so many interests that there
> > probably is some broad common ground between myself and about anyone. I love
> > to talk about BDSM issues and interests, and have been generally regarded as
> > a funny guy to hang out with who has a good head on his shoulders. Send me a
> > message for anything else you'd like to know!
>
> > I've attatched a link to my picture below, I consider myself a BBW trapped
> > in a mans body and will be dominant to the right gentleman. (ham radio
> > operators move to the front of the line)
>
> > N8WWM mrbindwellhttp://img293.imageshack.us/img293/1972/dougthecrossdresserpb7.jpg-
Hide quoted text -
>
> - Show quoted text -

2336. Re: zzzz

2337. Re: Ham Radio License Exam Preparation Software

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 22:53:35 UTC
From: Richard Knoppow <dickburk@ix.netcom.com>
Message-ID: <n76dnTWmYpb4dFPVnZ2dnUVZ_tbinZ2d@earthlink.com>
Source record: 22219
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital

"Webmaster" <webmaster@hamradiolicense.net> wrote in message
news:KYlzk.8857$PK.494@newsfe04.iad...
> Test Preparation Software
>
> Pass your US FCC ham radio license test with ease. Our
> test preparation
> software serves as a training aid to help amateurs and
> prospective amateurs pass the
> VEC's administered test. When you can consistently pass
> the test given by our test
> preparation software, you will almost certainly pass an
> actual test.
>
> Our ham radio license test preparation software uses the
> latest officially
> released VEC's approved question pools. The program breaks
> the test into
> different sub-element. Integrated into the software are
> illustrations and
> Part 97 rules pertaining to the current question. The
> program tracks the
> progress of the tests taken. Once you have mastered each
> sub-element you are
> ready for the official test.
>
> Visit our web site at http://www.hamradiolicense.net for
> more information
>
Note that QRZ.com and http://www.kb0mga.net/exams/ has
tracking tests available on line for free as do a couple of
other sites. Probably the best of the license manuals are
those published by the ARRL. Not free but relatively
inexpensive. The ARRL books have good explanations of the
theory so that you don't have to rely on simple wrote
memory. Note that the questions on the above web sites are
the ACTUAL questions which are found on the tests although
the particular set you get is random.

--

--
Richard Knoppow
Los Angeles
WB6KBL

dickburk@ix.netcom.com

2338. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 22:54:48 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <4c60e534-1daa-4c9f-a7d0-04776ef68c97@l42g2000hsc.googlegroups.com>
Source record: 22211
Cross-posted to: rec.radio.amateur.antenna,alt.support.boy-lovers,alt.sex.homosexual,alt.callahans,rec.ponds

On Sep 15, 4:07 pm, John Smith <assemblywiz...@gmail.com> wrote: I
love little pee pees MY pee pee is little just loike my little brain.
Will you show me your pee pee if I show you mine?

2339. Re: Any Toledo hot spots? <<<< No but when in California look ... John Smith up..... he knows where all those gay hot spots are....or write him at ....assemblywizard@gmail.com

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 22:56:11 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <494bd7ec-6cfd-4cf1-8086-b0fbe73cc14b@8g2000hse.googlegroups.com>
Source record: 22212
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sep 15, 5:49 pm, John Smith <assemblywizz...@gmail.com> wrote:
> On Sep 15, 12:53 pm, John Smith <assemblywizz...@gmail.com> wrote:
>
>
>
> > On Sep 15, 8:40 am, "N8WWM mrbindwell" <mrbindw...@n8wwm.com> wrote:
>
> > > Hi everyone!
>
> > > Anyone know of a nice club or hangout in the Toledo area that caters to
> > > cross dressing radio operators? I'm a guy from Toledo who enjoys showing a
> > > submissive man a good time in every way. I have so many interests that there
> > > probably is some broad common ground between myself and about anyone. I love
> > > to talk about BDSM issues and interests, and have been generally regarded as
> > > a funny guy to hang out with who has a good head on his shoulders. Send me a
> > > message for anything else you'd like to know!
>
> > > I've attatched a link to my picture below, I consider myself a BBW trapped
> > > in a mans body and will be dominant to the right gentleman. (ham radio
> > > operators move to the front of the line)
>
> > > N8WWM
mrbindwellhttp://img293.imageshack.us/img293/1972/dougthecrossdresserpb7.jpg-Hide quoted
text -
>
> > - Show quoted text -- Hide quoted text -
>
> - Show quoted text -

2340. Re: Gay BDSM Site John Smith certainly can give you the link to the gay ham sites.....assemblywizard@gmail.com << Send to for details!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 22:57:28 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <d54ba4f4-f178-45d8-81d6-e8eb6f23e11a@i76g2000hsf.googlegroups.com>
Source record: 22213
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Sep 15, 12:46 pm, John Smith <assemblywizz...@gmail.com> wrote:
> On Sep 15, 8:55 am, John Smith <assemblywizz...@gmail.com> wrote:
>
>
>
> > On Sep 12, 10:47 am, "n8wwm mrbindwell \(fatboy\)" <dou...@nospam.com>
> > wrote:
>
> > > "badyoungmaster" <badyoungmas...@yahoo.ca> wrote in message
>
> > >news:9074480e-8e81-4884-8534-36758662a2d0@27g2000hsf.googlegroups.com...> There is a free gay bdsm site atwww.men4bdsm.com
>
> > > Do you have one for gay BDSM ham radio operators? I'm ready load up my long
> > > wire. (wink wink)
>
> > > --
> > > n8wwm mrbindwellhttp://img137.imageshack.us/my.php?image=n8wwmpetroad2ie4.jpg
>
> > John Smith can also give you more than the links if your interested. I bet Old Freind can as well!- Hide quoted text -
>
> - Show quoted text -

2341. zzzz

2342. Re: zzzz

2343. "zzzz

2344. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 22:59:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gampclnhh1@news.albasani.net>
Source record: 22217

JB wrote:
> Right now, the Analog channels that I get solid and noise free seem to be
> subject to fades on their UHF DTV counterpart. Makes me wonder how it will
>> ...
>>> Ed K7AAT

Really? Something is quite wrong there!

Digital signals should require much less power to deliver the same
"quality" signal.

Indeed, digital is an upgrade to all existing systems. Listen to an
analog signal, then a digital signal--whether over hardwire (remember
the phone adds with the "dropping of a pin") or AM/SSB over RF ... can
you just imagine attempting an analog signal over a dial-up modem or
broadband? We would still be in the "internet stone-age!"

All that really does not take any thought at all ...

Regards,
JS

2345. "zzzz

2346. zzzz

> the particular set you get is random.
>
> --
>
> --
> Richard Knoppow
> Los Angeles
> WB6KBL
> dickb...@ix.netcom.com- Hide quoted text -
>
> - Show quoted text -

2347. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 23:04:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gamplfnhh3@news.albasani.net>
Source record: 22221

Ed_G wrote:

> ...
> What is happening is that many TV stations have been assigned a
> channel on which to broadcast their new DTV signal prior to Feb. 17,
> 2009 while at the same time remain broadcasting their NTSC video on
> their original channel. The chart shows these two channel designations
> in the first two channel columns, and in the last column it shows what
> channel the TV station will end up on when Feb. 17 comes around. As
> indicated, some stations will be moving their DTV broadcast from the
> temporary channel assignment back to their original NTSC channel
> assignment, and some stations will remain broadcasting the DTV signal
> on the temporary channel, which becomes their new permanent channel.
>
>
>
> Ed K7AAT
>

Ed:

I am learning just what a "sticky wicket" this all is ... :-(

Thanks and,
regards,
JS

2348. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 23:05:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gampo0nhh4@news.albasani.net>
Source record: 22222

Dave wrote:

>> ...
> Here is the official ruling. There are 2 tables. The first is as of
> now, the 2nd is effective 17 February 2009.
>
> http://sujan.hallikainen.org/FCC/FccRules/2008/73/622/
>

Dave:

I had not viewed this before your post, thanks!

Regards,
JS

2349. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 23:06:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gamppsnhh5@news.albasani.net>
Source record: 22223

J. Mc Laughlin wrote:
> ... and some stations will be transmitting DTV on a third channel (not the
> present analog nor the present DTV channel)
>
> I have also found that a number of stations have applied for changes (so far
> they seem to be ERP changes) to what is contained in the eighth FCC report
> of March 2008. One needs to go to the FCC site and enter call sign of each
> station to find the present information.
>
> A surprise to me is that the coverage contour for analog TV is 64 dBu and
> for DTV is 41 dBu - a difference of 23 db. However, the reductions of ERP
> do not seem to be that large. Stations that are now a bit weak may be
> unusable after Feb. 2009.
>
> 73, Mac N8TT

J:

Very good advice ...

Warm regards,
JS

2350. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 23:16:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gamqcknhh7@news.albasani.net>
Source record: 22224
Cross-posted to: rec.radio.amateur.antenna,rec.ponds

John Smith wrote:
> On Sep 15, 4:07 pm, John Smith <assemblywiz...@gmail.com> wrote: I
> love little pee pees MY pee pee is little just loike my little brain.
> Will you show me your pee pee if I show you mine?
>
>

Yanno', I really hate plonking "John Smith" and not being able to review
my own posts -- but, I guess I can live with that ... ROFLOL

Oh yeah, PLONKERS!

JS

2351. Re: "zzzz

duplicate.

Jerry KD6JDJ

2352. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 23:31:31 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <nfCzk.204$3e1.140@trnddc02>
Source record: 22226

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:5s0tc496f7919rcuh3ik19ktv0m8vp12cf@4ax.com...
> On Mon, 15 Sep 2008 12:01:10 GMT, "Jerry" <jerrymartes@verizon.net>
> wrote:
>
>>
>>"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
>>news:Keozk.8663$wr1.5290@newsfe02.iad...
>>>
>>> "Richard Clark" <kb7qhc@comcast.net> wrote in message
>>> news:8dprc4p9n9e1f40pphafu0tg7qol8q0rsg@4ax.com...
>>>> On Sun, 14 Sep 2008 10:33:28 -0700, Richard Clark <kb7qhc@comcast.net>
>>>> wrote:
>>>>
>>>> >However, returning to my own recent shipboard experience and antennas
>>>> >there, I will later today post a link to a dozen or so pictures. It
>>>> >will include shots of Guss' Loops. I dare say several of these
>>>> >pictures will provoke much head scratching (but only to those few
>>>> >actually interested in antennas here in this forum).
>>>>
>>>> http://home.comcast.net/~kb7qhc/antennas/navy/
>>>
>>> I used to have the nomenclatures of all those antennas memorized, but,
>>> alas,
>>> having gotten away from EMI inspections in 2003 and having fully retired
>>> last year, all I can call to mind is the AS-2815/SSR-1 (your "Drooped
>>> Cross
>>> Horizontal")
>>>
>>> You zeroed in on some cryppie antennas. I rocognize the biconical
>>> dipole,
>>> an HFDF antenna and a Rubicon antenna. They're often found together on
>>> an
>>> Aegis cruiser. (Makes me want to put on my coveralls and get back out
>>> there -- or maybe not.)
>>
>> Hi "Sal"
>>
>> I'd like to know more about the Drooped Cross
>>> Horizontal"). Do you know the frequency it is designed for?
>>
>> Jerry KD6JDJ
>>
>

> Hi Jerry,
>
> I built a model of it, and from by guess and by golly, I presumed it
> would be somewhere in the middle of the VHF/UHF Shipboard Band
> (225-400 MHz) and made it resonant at 300 MHz (arbitrary selection,
> mind you).
>
> Let me know if you want a copy of that file.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard

That is an interesting antenna (AS-2815/SSR-1). I didnt know how to feed it, but I see how you did it.
If that *is* used to communicate with polar orbiting satellites, I'd expect the DCA to outperform it.
I have demonstrated fairly well that the DCA outperforms the Quad Helix for reception from NOAA polar orbiting satellites. I'd be curious to know what the Navy would think of the DCA for a replacement of that AS-2815/SSR-1.

Jerry KD6JDJ

2353. Re: "zzzz

2354. Re: "zzzz

2355. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 23:53:22 UTC
From: JB <nospam@goofball.net>
Message-ID: <SzCzk.305$1a2.132@trnddc04>
Source record: 22229

Just how do we get more metal up in the air by making them smaller? And how do we do that so that it can go in your pocket with the portable without poking a hole in our pants? Up till now, the answer has been to put up with poor performance and put a base station (cell site) everywhere you can. The physics says you either have to put the antenna where there is signal, or you will have to put the signal where the antenna is. Even if you could get 10db gain in your pocket, how do you get signal there?

Right now, I suspect the real gains to be made are with minimizing matching losses. When you are talking short, the primary concern is to somehow minimize the losses in a matching network that actually contributes to the useful radiation pattern. We need some advances in transmission lines for minimal losses and convenience of use.

You need to be able to think practically to start with, unless your primary concern is marketing hype.

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:01d6dacf-a2c5-459b-b6e7-9be7450a80a6@a70g2000hsh.googlegroups.com...
> I am begining to believe that there is really no interest in small
> antennas
> I see that many antenna labs use such things as their purpose in life
> as well as more energy efficient antennas
> but they are not producing anything. It also appears that they are
> also not interested in spending any time on such research. If you go
> to the Illinois University antenna lab they are all sitting with
> computors expecting something of interest will pop out without them
> putting any thing positive in in the first place. So is there really
> somebody being hired to produce small antennas? Same situation with
> hams as they fight at the very idea of the possibility of small
> efficient antennas that like the Universities do not want to hear of
> the possibilities
> One doctorial student at Illinois University in Central illinois
> stated that they have so many requests for review of antennas by the
> populace it is not unusual to ignore the pleas of the local populace
> presumably based on the premise that if it was possible they would
> already have done it. They have teachers way more intelligent than
> ordinary peopleand, where one spends most of her time working on
> behalf of the IEEE that research or computer operation has to be put
> to one side.
> If there really was an interest in diverse antennas instead of
> personal promotion maybe our tax dollars would be better spent. Yes,
> I write off the University of Illinois as they have never produced
> anything as pioneers in antennas especially with the departure of the
> log periodic designer that they paid hansomly to hang out there

> instead of there own Universities. So to sum up puting U of I to one
> side, is there anybody in Industry who desires small antennas or
> Universities investing time in such things ?.
> When O when is anything going to happen in the small antenna areana or
> is the need actually ficticious
> because of diminishing returns with the use of such? What Universities
> in the U.S. that are serious about small antennas and what have they
> produced in the last couple of years? If they can't or deny the
> possibilities then why fund them? It is your money. But then who
> cares, we have antennas already so we don't need anymore
> especiually when denial of the new suggests that all is known.

2356. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-15 23:55:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nustc418eklfn2utvum7uop8gdbd0n4n1k@4ax.com>
Source record: 22230

On Mon, 15 Sep 2008 23:31:31 GMT, "Jerry" <jerrymartes@verizon.net>
wrote:

> Hi Richard
>
> That is an interesting antenna (AS-2815/SSR-1). I didnt know how to feed
>it, but I see how you did it.
> If that *is* used to communicate with polar orbiting satellites, I'd
>expect the DCA to outperform it.
> I have demonstrated fairly well that the DCA outperforms the Quad Helix
>for reception from NOAA polar orbiting satellites. I'd be curious to know
>what the Navy would think of the DCA for a replacement of that
>AS-2815/SSR-1.
>
> Jerry KD6JDJ

Hi Jerry,

Well, I got most of the structural details down OK. However, the feed
is by guess and by golly. In the pictures you can catch a hint of it
(especially when you compare to my file), but this does not say if
there is a phasing harness hidden inside the stanchion tube.

As for the Navy being interested in your DCA, I've been on the vendor
list for years, and worked with their RFPs the same time. It is not
for someone who isn't ready to seriously commit a lot of time to
paperwork.

As for the others following this about crossed antennas, helical
antennas, there is one model the Navy uses that has interesting design
(Art will probably claim it proves what ever flavor theory he is
selling today) the AS-2227/SRN-9:
http://www.combatindex.com/hardware/detail/sensor/nav/as-2227.html
http://www.combatindex.com/hardware/images/sensor/as-2227_01.jpg

73's
Richard Clark, KB7QHC

2357. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 01:21:00 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-6A9C3C.21210015092008@nntp.aioe.org>
Source record: 22231

In article <gampclnhh1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> Really? Something is quite wrong there!
>
> Digital signals should require much less power to deliver the same
> "quality" signal.

JS-

Why do you say that?

You can't have a less-than perfect digital TV signal. There is no snow because a weak digital signal's picture freezes or goes away. Therefore there is no way to compare quality levels of less-than perfect pictures.

Most of the time my simple antenna picks up good HDTV. However there are times when reception is poor, and I have to switch to the Analog tuner. I'd rather have a little snow than no picture at all!

Fred

2358. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 01:23:47 UTC
From: dfinn1@nc.rr.com
Message-ID: <f635bc7c-9fb7-4116-905e-75ac2196fa7b@t54g2000hsg.googlegroups.com>
Source record: 22232

On Sep 15, 8:01 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > Egad, another senility eruption.
>
> Quoting "Alpha and Omega", by Charles Seife:
>
> "Empty space is an incredibly complex substance,
> ... Quantum physicists are forced to conclude
> that the vacuum isn't truly empty. It is seething
> with particles and energy."
>
> "Casimir effect: The ability of the ZERO-POINT
> ENERGY, the particles constantly winking in and
> out of existence, to exert a force. Predicted
> by Dutch physicist Hendrik Casimir, the Casimir
> effect has been measured."
>
> Reckon all quantum physicists are senile?
> --
> 73, Cecil http://www.w5dxp.com

I reckon most are not although some may be. However, Seif is currently
an associate professor in New York University's Journalism Department
with a Masters in Math. He is nowhere near the caliber of a quantum
physicist which would render your point moot, would it not?

2359. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 01:25:46 UTC
From: dfinn1@nc.rr.com
Message-ID: <99dc0e1c-10dc-4c15-ad90-fc9c58014be7@c58g2000hsc.googlegroups.com>
Source record: 22233

On Sep 15, 8:58 am, John Smith <assemblywiz...@gmail.com> wrote:
> Cecil Moore wrote:
> > dfi...@nc.rr.com wrote:
> >> Egad, another senility eruption.
>
> > Quoting "Alpha and Omega", by Charles Seife:
>
> > "Empty space is an incredibly complex substance,
> > ... Quantum physicists are forced to conclude
> > that the vacuum isn't truly empty. It is seething
> > with particles and energy."
>
> > "Casimir effect: The ability of the ZERO-POINT
> > ENERGY, the particles constantly winking in and
> > out of existence, to exert a force. Predicted
> > by Dutch physicist Hendrik Casimir, the Casimir
> > effect has been measured."
>
> > Reckon all quantum physicists are senile?
>
> Aye Captain.
>
> Those words move evermore towards undeniable, each and everyday ... the
> question? A very valid one ...
>
> Warm regards,
> JS- Hide quoted text -
>
> - Show quoted text -

What, the "amazing" revelation that particles exist in space, even
though for all practicle purposes it can be treated as a vacuum?

2360. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 01:44:01 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <BbEzk.217$pp3.214@trnddc06>
Source record: 22234

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:nustc418eklfn2utvum7uop8gdbd0n4n1k@4ax.com...
> On Mon, 15 Sep 2008 23:31:31 GMT, "Jerry" <jerrymartes@verizon.net>
> wrote:
>
>> Hi Richard
>>
>> That is an interesting antenna (AS-2815/SSR-1). I didnt know how to
>> feed
>>it, but I see how you did it.
>> If that *is* used to communicate with polar orbiting satellites, I'd
>>expect the DCA to outperform it.
>> I have demonstrated fairly well that the DCA outperforms the Quad Helix
>>for reception from NOAA polar orbiting satellites. I'd be curious to
>>know
>>what the Navy would think of the DCA for a replacement of that
>>AS-2815/SSR-1.
>>
>> Jerry KD6JDJ
>
> Hi Jerry,
>
> Well, I got most of the structural details down OK. However, the feed
> is by guess and by golly. In the pictures you can catch a hint of it
> (especially when you compare to my file), but this does not say if
> there is a phasing harness hidden inside the stanchion tube.
>
> As for the Navy being interested in your DCA, I've been on the vendor
> list for years, and worked with their RFPs the same time. It is not
> for someone who isn't ready to seriously commit a lot of time to
> paperwork.
>
> As for the others following this about crossed antennas, helical
> antennas, there is one model the Navy uses that has interesting design
> (Art will probably claim it proves what ever flavor theory he is
> selling today) the AS-2227/SRN-9:
> http://www.combatindex.com/hardware/detail/sensor/nav/as-2227.html
> http://www.combatindex.com/hardware/images/sensor/as-2227_01.jpg
>
> 73's
> Richard Clark, KB7QHC

Hi Richard

You got good results from your "guess" at how to feed that Droop Cross Navy antenna. I'm impressed. The fact is - I wouldnt advise the Navy to change that antenna if it is functioning properly. It is simple and it is rugged looking.
As you know, I am not on the selling end of anything, including antennas. I do like to state that the DCA antenna design concept performs better for horizon to horizon coverage of polar orbiting satellites than any other omni azimuth antenna.

Jerry KD6JDJ

2361. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 01:45:38 UTC
From: dfinn1@nc.rr.com
Message-ID: <70e08195-cb64-42ef-bcc5-24aa54b1c299@m73g2000hsh.googlegroups.com>
Source record: 22235

On Sep 15, 12:17 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Art Unwin wrote:
> > Personally I see both interactions as being one and the same thing.
>
> If you mean that they have been unified, that is correct.
>
> > In the path to this segment it infers the weak force
> > is also in free space and it is that I do not understand, ...
>
> Understand that free space is not empty. There
> exists a quantum structure about which not much
> is yet understood. Google "dark mass" and
> "dark energy". Everything that we can see and
> measure appears to be about 5% of what exists.
> --
> 73, Cecil http://www.w5dxp.com

That theory does seem to explain some recent observations. However, it is still theory, not absolute fact as you seem to proclaim above ("THERE EXISTS A QUANTUM STRUCTURE about which not much is yet understood"). The structure may or may not exist. I have no problem with it since nothing says that all matter must be in the form of nuclei, protons that can be combined in an orderly manner to form something large enough that we can "see". In fact, it likely does not exist physically as "matter"; rather, the theory is simply a concept that explains some observations. Given that matter is 'anything that occupies space AND has mass" dark "matter" could be any entity (like energy, that is a known entity) that can be shown to have a mass equivalent and behaves like mass under certain conditions as photons do. Certainly we are a long way from saying that this is an ether or medium that supports the transmission of TEM waves.

2362. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 01:58:16 UTC
From: dfinn1@nc.rr.com
Message-ID: <11c45f70-8776-4e97-b40e-17faac4e3cc9@59g2000hsb.googlegroups.com>
Source record: 22236

On Sep 15, 3:33 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> I am begining to believe that there is really no interest in small
> antennas

You are probably correct if you are speaking about "small" antennas as they relate to HF.

No longer is there that much demand for shortwave bands to communicate with, as you well know. This is the information age and the relative bandwidth of HF is so small is to render HF useless, even for simple email if widespread usage were desired. There's not much money in it.

No money, no research.

Even if you had a shoebox 160m antenna that worked, your market would quickly reach saturation point. You might get an enthusiastic reception by the readers of CQ magazine or be honored by the folks at ARRL but not much more. Is that why you are trying to link your antenna "discoveries" to finding the holy grail of the Grand Unification Theory?

2363. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 02:28:28 UTC
From: dfinn1@nc.rr.com
Message-ID: <fc0cc1c6-4af0-4983-897b-c58d54b291c5@r66g2000hsg.googlegroups.com>
Source record: 22237
Cross-posted to: rec.radio.amateur.antenna,rec.ponds

On Sep 15, 7:16 pm, John Smith <assemblywiz...@gmail.com> wrote:
> John Smith wrote:
> > On Sep 15, 4:07 pm, John Smith <assemblywiz...@gmail.com> wrote: I
> > love little pee pees MY pee pee is little just loike my little brain.
> > Will you show me your pee pee if I show you mine?
>
> Yanno', I really hate plonking "John Smith" and not being able to review
> my own posts -- but, I guess I can live with that ... ROFLOL
>
> Oh yeah, PLONKERS!
>
> JS

If you ever learn how I can plonk you from this Google web interface,
please let me know. Thanks.

2364. Re: "zzzz

2365. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 02:56:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <YfFzk.355$W06.223@flpi148.ffdc.sbc.com>
Source record: 22239

dfinn1@nc.rr.com wrote:
> I reckon most are not although some may be. However, Seif is currently
> an associate professor in New York University's Journalism Department
> with a Masters in Math. He is nowhere near the caliber of a quantum
> physicist which would render your point moot, would it not?

As a matter of fact, it would. From Webster's:
"moot - (1) open to discussion"

Here's what Charles Seife says under "Acknowledgments":
"A lot of people helped me write this book: it's not
possible for me to name them all. Over the past few
years I have interviewed dozens of physicists,
cosmologists, and astronomers who took the time to
explain the nuances of their work to a journalist.
I thank them for their enthusiasm and their patience.
They are the reason I wrote "Alpha and Omega" in the
first place." The Bibliography is pretty impressive.

But feel free to try to disprove the Casimir effect.
--
73, Cecil http://www.w5dxp.com

2366. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 03:01:12 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <WjFzk.659$yr3.419@nlpi068.nbdc.sbc.com>
Source record: 22240

dfinn1@nc.rr.com wrote:
> What, the "amazing" revelation that particles exist in space, even
> though for all practicle purposes it can be treated as a vacuum?

The amazing thing is that space cannot exist without
those particles which provide the very structure of
space itself. It seems that space is a property of
matter rather than vice versa.
--
73, Cecil http://www.w5dxp.com

2367. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 03:04:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <mnFzk.660$yr3.277@nlpi068.nbdc.sbc.com>
Source record: 22241

dfinn1@nc.rr.com wrote:
> The structure may or may not exist.

Think about it. If you were somewhere where the
structure of space didn't exist, you would be
outside of the boundaries of our universe.
--
73, Cecil http://www.w5dxp.com

2368. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 03:33:08 UTC
From: JB <nospam@goofball.net>
Message-ID: <UNFzk.226$Yw1.30@trnddc03>
Source record: 22242

Look at the spectra of the signals an compare the levels. More amplitude in the sync pulse and average video than the ATSC pilot across the board from what I'm seeing. Perhaps they are trying to get away with less. Perhaps fooling around with tower work and dropping the power. Hard to tell with the GUI meter and never had the service monitor up at the time. One is DTV VHF HI that is a new one with no Analog so I lose it completely and 2 are UHF that are fading on me from time to time where I have to punch to the Analog broadcast, one of which is VHF. Generally more power is needed on UHF to come up with comparable range.

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-6A9C3C.21210015092008@nntp.aioe.org...
> In article <gampclnhh1@news.albasani.net>,
> John Smith <assemblywizard@gmail.com> wrote:
>
> > Really? Something is quite wrong there!
> >
> > Digital signals should require much less power to deliver the same
> > "quality" signal.
>
> JS-
>
> Why do you say that?
>
> You can't have a less-than perfect digital TV signal. There is no snow
> because a weak digital signal's picture freezes or goes away. Therefore
> there is no way to compare quality levels of less-than perfect pictures.
>
> Most of the time my simple antenna picks up good HDTV. However there
> are times when reception is poor, and I have to switch to the Analog
> tuner. I'd rather have a little snow than no picture at all!
>
> Fred

2369. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 04:28:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gancls$8ak$1@news.albasani.net>
Source record: 22243

dfinn1@nc.rr.com wrote:

>> ...
> do. Certainly we are a long way from saying that this is an ether or
> medium that supports the transmission of TEM waves.

So, let's call it "whipped bananas" and let it go at that ...
traditionally, it has been called the ether or aether ... I just tend to
follow the tradition of the men who first defined it ...

Regards,
JS

2370. Re: "zzzz

2371. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 04:32:52 UTC
From: dfinn1@nc.rr.com
Message-ID: <c178607c-725d-41e6-b365-cc1b7275b071@j22g2000hsf.googlegroups.com>
Source record: 22245

On Sep 15, 10:56 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > I reckon most are not although some may be. However, Seif is currently
> > an associate professor in New York University's Journalism Department
> > with a Masters in Math. He is nowhere near the caliber of a quantum
> > physicist which would render your point moot, would it not?
>
> As a matter of fact, it would. From Webster's:
> "moot - (1) open to discussion"

Meaning it is arguable as to whether you point is in fact valid. I am merely trying to show, politely, that your one line assertion has little or no impact relative to the credibility of the preceding paragraphs in your post.

>
> Here's what Charles Seife says under "Acknowledgments":
> "A lot of people helped me write this book: it's not
> possible for me to name them all. Over the past few
> years I have interviewed dozens of physicists,
> cosmologists, and astronomers who took the time to
> explain the nuances of their work to a journalist.

Not exactly an impressive bibliography but typical of something a journalist, not something a scientific researcher would write. Would a Phd candidate use Wikipedia as the bibliography in his thesis? Seife makes a great sience writer but he is not a quantum physicist not did he reference one in his "bibliography".

> I thank them for their enthusiasm and their patience.
> They are the reason I wrote "Alpha and Omega" in the
> first place." The Bibliography is pretty impressive.

As per my assertion above, nope. Not impressive. For someone writing a junior high school term paper, yes for a "C" grade. For a scientific paper, no. It is not even a true bibliography.

>
> But feel free to try to disprove the Casimir effect.

Why would I want to do that? I already agree that the vacuum of space fluctuates slightly around a zero point because, for example, EM fields in a volume at vacuum may average zero but the fields themselves fluctuate around their zero point causing quantum changes that in turn result in small fluctuations of vacuum.

This does nothing to advance any theory that an ether or media exists
for transmission of TEM waves. It only says that there is no such
thing as a perfectly stable, absolute vacuum when fields of any kind
are present, which they always are. Also your cause and effect seem
reversed; the existence of TEM fields (and static fields as well) may
have been shown to cause Casimir effects but Casimir effects have not
been shown not make it possible for TEM fields (waves) to propagate.
> --
> 73, Cecil http://www.w5dxp.com

2372. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 04:41:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gandek$9cg$1@news.albasani.net>
Source record: 22246

Fred McKenzie wrote:

> ...
> Why do you say that?
>

Easy, with digital you are simply determining whether a signal is present--or on (a binary one), on not--and off (a binary zero) ... an analog signal contains much more data which can "screw up."

> You can't have a less-than perfect digital TV signal. There is no snow
> because a weak digital signal's picture freezes or goes away. Therefore
> there is no way to compare quality levels of less-than perfect pictures.
>

Oh, yes you can, indeed, ever hear of "lossy data compaction?" It is used for audio and video where not every bit/byte of data need to be perfect--attempt that with an executable file and it fails ... the program itself can "deduce" if the data is just "degraded" or is beyond use and pass it along to the video/audio device or toss it as decided ...

> Most of the time my simple antenna picks up good HDTV. However there
> are times when reception is poor, and I have to switch to the Analog
> tuner. I'd rather have a little snow than no picture at all!

As I say, something is wrong, and it may not be "all on your end", and broadcast HDTV may need some upgrades to the software handling the coding/decoding of the signals ... widespread usage, in the future, and "fixes" along the way should provide a much improved system.

I have not had a chance to "experience" broadcast HDTV yet ... however, the cable HDTV is much improved over old analog ...

>
> Fred

2373. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 04:48:25 UTC
From: dfinn1@nc.rr.com
Message-ID: <ff60ece5-4e81-4bdb-b8de-09b6bdf7a6d6@79g2000hsk.googlegroups.com>
Source record: 22247

On Sep 15, 11:04 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > The structure may or may not exist.
>
> Think about it. If you were somewhere where the
> structure of space didn't exist, you would be
> outside of the boundaries of our universe.
> --
> 73, Cecil http://www.w5dxp.com

You must be assuming that the structure of exotic matter has been proven to form part of the structure of conventional space. OK, but that is a great logical leap from theory to fact. Your assertion is only true if exotic matter truly exists in conventional space. Maybe it does, maybe it doesn't. Actually, nothing of the sort has been proven. Far from it. All we know is that in astronomical observations, extremly large amounts of conventional matter seem to be affected by gravitational effects, positive or negative depending on theory, by some invisible entity that behaves as positive or even negative matter. For convenience sake, some physicists invented the term exotic or dark matter which may be nothing but a placeholder for some other entity that behaves like matter which advances their concept but which we do not understand yet. The observations in no way have confirmed that it IS matter.

Now, IF it doesn't exist, and I don't believe it does except in perhaps a virtual sense, then I am still fully inside each of the boundaries of the 4 accepted dimensions of this Universe.

2374. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 04:49:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gandt9$9h3$1@news.albasani.net>
Source record: 22248

dfinn1@nc.rr.com wrote:
[a "million words" to take the place of ten]

I believe what he said demonstrated an "economy of verbiage."

A ton of verbiage on the point does not alter the point ...

Regards,
JS

2375. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 04:53:40 UTC
From: JB <nospam@goofball.net>
Message-ID: <oZGzk.296$8v5.286@trnddc01>
Source record: 22249

> > What, the "amazing" revelation that particles exist in space, even
> > though for all practicle purposes it can be treated as a vacuum?
>
> The amazing thing is that space cannot exist without
> those particles which provide the very structure of
> space itself. It seems that space is a property of
> matter rather than vice versa.
> --
> 73, Cecil http://www.w5dxp.com

Theoretical absolutes don't happen as often as in the space in the head. You can't convince me that gravity or magnetic fields really require a media to travel through. Assuming there is one would be a crutch. Didn't stop us from getting people to the moon and back.

2376. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 04:58:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ganee4$a0n$1@news.albasani.net>
Source record: 22250

dfinn1@nc.rr.com wrote:
> On Sep 15, 3:33 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>> I am begining to believe that there is really no interest in small
>> antennas
>
> You are probably correct if you are speaking about "small" antennas as
> they relate to HF.
>
> No longer is there that much demand for shortwave bands to communicate
> with, as you well know. This is the information age and the relative
> bandwidth of HF is so small is to render HF useless, even for simple
> email if widespread usage were desired. There's not much money in it.

Amateur Radio has been dying for decades ... just a fact. Only the
reasons are debatable.

>
> No money, no research.

I believe the AM Broadcast Band is very much alive and well ... they
would greatly appreciate a "small antenna."

>
> Even if you had a shoebox 160m antenna that worked, your market would
> quickly reach saturation point. You might get an enthusiastic
> reception by the readers of CQ magazine or be honored by the folks at
> ARRL but not much more. Is that why you are trying to link your
> antenna "discoveries" to finding the holy grail of the Grand
> Unification Theory?

Actually, I see no reason for HF to not be any-more-LESS usable than any
other RF Frequency. Digital voice has simply not been adopted because
of the expense in replacing all the analog equipment with digital
equipment ... something which is sure to be "fixed" in the future ...

Regards,
JS

2377. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 05:00:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ganegt$a0n$2@news.albasani.net>
Source record: 22101

dfinn1@nc.rr.com wrote:

> ...
> If you ever learn how I can plonk you from this Google web interface,
> please let me know. Thanks.

You could always go screw yourself ... you will be so busy you will not
have time to gripe! ROFLOL

Regards,
JS

2378. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 05:03:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ganenc$a0n$3@news.albasani.net>
Source record: 22102

JB wrote:

> ...
> Theoretical absolutes don't happen as often as in the space in the head.
> You can't convince me that gravity or magnetic fields really require a media
> to travel through. Assuming there is one would be a crutch. Didn't stop us
> from getting people to the moon and back.
>

Although not clearly stated for the "general public", isn't that exactly
what the Hadron project is all about?; splitting matter down to its'
smallest particle(s), and therefore, discovering the "matter" which
space itself is constructed from?

I mean, that is what I expect ...

Regards,
JS

2379. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 05:10:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ganf3falk1@news.albasani.net>
Source record: 22103

dfinn1@nc.rr.com wrote:

> ...
> Now, IF it doesn't exist, and I don't believe it does except in
> perhaps a virtual sense, then I am still fully inside each of the
> boundaries of the 4 accepted dimensions of this Universe.

Everything we see and hear are brought to us by waves.

If you have trouble with that, explain how polarizing light filters work with bullets (shooting photons), or how the different wavelengths of light can be "filtered" (or do you claim these filters are really "photon sorters? i.e. 'bullet sorters!'") LOL

Why in the h*ll would you bypass a theory which explained the frequencies of RF (the freqs BETWEEN audio and light) with a totally different theory?

I tell you, "Some minds BOGGLE the mind!" ROFLOL

Regards,
JS

2380. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 05:21:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ganfp1blo1@news.albasani.net>
Source record: 22104

dfinn1@nc.rr.com wrote:

> ...
> Now, IF it doesn't exist, and I don't believe it does except in
> perhaps a virtual sense, then I am still fully inside each of the
> boundaries of the 4 accepted dimensions of this Universe.

Somehow, you would have to first scrape all present knowledge/theories
and "go back to square one."

As, all theories, even the big bang, count on all matter being "ripped"
from the fabric of space/time itself ... somehow, someway ...

And, while there is the "string theory", this theory still depends on
some type of "particles vibrating." And, the thrust of the whole
argument becomes whether it is the construction of matter itself from
these particles which define "matters properties", or it is "vibrations"
of these particles which define the property matter holds ...

Either way, you begin with some type of particle ... a type of particle
we cannot prove the existence of--yet.

Regards,
JS

2381. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 05:33:16 UTC
From: AJ Lake <nomail@fakeaddress.com>
Message-ID: <o5huc4pu6hs6mnuhttpoah6n799f048utr@4ax.com>
Source record: 22105

John Smith <assemblywizard@gmail.com> wrote:

>Fred McKenzie wrote:

>> Most of the time my simple antenna picks up good HDTV. However there
>> are times when reception is poor, and I have to switch to the Analog
>> tuner. I'd rather have a little snow than no picture at all!

>As I say, something is wrong, and it may not be "all on your end", and
>broadcast HDTV may need some upgrades to the software handling the
>coding/decoding of the signals ... widespread usage, in the future, and
>"fixes" along the way should provide a much improved system.

I experience the same phenomenon. My antenna is a UHF indoor bow tie dipole. (All my HD channels are currently on UHF.) I am about 30 miles from the TV tower which is at 1200'. My HDTV set can show signal bars like a cell phone. Without moving the antenna or other surrounding objects, the signal will sometimes slowly vary by one or two bars. If it goes down too far the picture breaks up and quits. At other times the same station will give a solid 3 or 4 bars.This happens on all channels. Perhaps atmospheric movement? Lots of dust here in the desert. Any other ideas?

>I have not had a chance to "experience" broadcast HDTV yet ...
>however, the cable HDTV is much improved over old analog ...

I have cable HDTV on my other set in the family room. Surprisingly (to me) the broadcast HDTV picture is superior in quality to the cable HDTV picture. Perhaps Cox is using more compression to squeeze more channels in the line.

2382. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 05:50:59 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <aPHzk.14888$QF5.1859@newsfe08.iad>
Source record: 22106

"Jerry" <jerrymartes@verizon.net> wrote in message
news:a8szk.142$Jw.0@nwrddc02.gnilink.net...
.
>
> Hi "Sal"
>
> I'd like to know more about the Drooped Cross
> > Horizontal"). Do you know the frequency it is designed for?
>
> Jerry KD6JDJ

Yes. Its nomenclature is AS-2815/SSR-1A. It was designed for the UHF satellite "Fleet Broadcast," 240 - 315 MHz, but I have seen it used only in a narrower range, more like 248 - 262 MHz. The pattern is semi-omni, essentially taking in a view of the entire sky.

The system is receive-only and has been a mainstay of fleet comms for decades. The version I grew up with had a 1200 bps digital mux of fifteen 74 baud TTY signals (100 WPM). It may have advanced since then; I don't know the capabilities of the -A version. (I hope they made it more idiot-proof.)

Ships are usually fitted with three or four antennas, strategically placed so that at least one of them is clear of blockage. The system uses what is called "pre-detection integration," whereby the strongest signal is demodulated, on the presumption that it's the best quality. It's a form of diversity reception.

The original AN/SSR-1 system downconverted the received signal to a 19.95 MHz first-IF out on deck, a few feet from the antenna. I believe the AN/SSR-1A amplifies the received signal and it goes all the way to the radio room at the d/l frequency. Maybe somebody will know for sure whether that's right, but I think so.

"Sal"
(KD6VKW)

2383. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 05:54:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ganhnc$d71$1@news.albasani.net>
Source record: 22107

AJ Lake wrote:

> ...
> I experience the same phenomenon. My antenna is a UHF indoor bow tie dipole.
> (All my HD channels are currently on UHF.) I am about 30 miles from the TV
> tower which is at 1200'. My HDTV set can show signal bars like a cell phone.
> Without moving the antenna or other surrounding objects, the signal will
> sometimes slowly vary by one or two bars. If it goes down too far the
> picture breaks up and quits. At other times the same station will give a
> solid 3 or 4 bars.This happens on all channels. Perhaps atmospheric
> movement? Lots of dust here in the desert. Any other ideas?
>

Yes, ducting and "ghosting" of the signal(s) due to reflections, etc.--I
can see these as being a REAL problem. From your description(s), sounds
like "they" just took the exact-same
technology/encoding/decoding-schemes and implemented them onto broadcast
... what works well with cable (a relatively "stable" signal NOT prone
to the effects stated above ...) may not work all that well with
broadcast ... sounds like some "upgrades" are already in order.

I have just assumed, up to this point, that the digital HDTV signal is
"packeted" ... however, unlike our broadband modems and satelite
internet, you cannot request for a corrupt packet to be "resent" to your
TV ... however, I am wondering if corrupt packets (or, seriously
degraded ones) are just being "tossed" rather than passed along to the
video/audio circuitry? Perhaps the software should assume that no
matter how degraded (or, at least seriously degraded packets) should be
passed on and the viewer be allowed to determine if it is of enough
worth, or not? It almost sounds like this would be preferable to
no-signal-at-all. But then your description of "the bars" beginning to
degrade would soon reach a point of "un-viewable signal" anyway?; so,
at this point, perhaps no-signal-at-all is preferable ... hmmm, I wonder?

>> I have not had a chance to "experience" broadcast HDTV yet ...
>> however, the cable HDTV is much improved over old analog ...
>
> I have cable HDTV on my other set in the family room. Surprisingly (to me)
> the broadcast HDTV picture is superior in quality to the cable HDTV picture.
> Perhaps Cox is using more compression to squeeze more channels in the line.

Hmmmm, you have me all the more anxious to have HDTV implemented in my
area ... LOL!

Regards,
JS

2384. Re: Navy Antennas (was Tilted Pinball Antenna Theory)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 06:18:11 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Fclzk.5313$ll.2560@newsfe09.iad>
Source record: 22108

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:nustc418eklfn2utvum7uop8gdbd0n4n1k@4ax.com...

< snip >
> As for the others following this about crossed antennas, helical
> antennas, there is one model the Navy uses that has interesting design
> (Art will probably claim it proves what ever flavor theory he is
> selling today) the AS-2227/SRN-9:
> http://www.combatindex.com/hardware/detail/sensor/nav/as-2227.html
> http://www.combatindex.com/hardware/images/sensor/as-2227_01.jpg

Woo-hoo! I remember that beast! I had an interference study to do on it.

The SRN-9 and WRN-5 were used with the old Transit satnav system, a
precursor to GPS. It worked OK (usually) but the satellites were
sub-synchronous and you could only compute a fix during a pass, which
happened only a few times each day. Even then, you needed to get it during
rising Doppler, which really meant half a pass.

2385. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 06:35:20 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <LsIzk.11225$rV4.8861@newsfe03.iad>
Source record: 22109

"J. Mc Laughlin" <jcm@power-net.net> wrote in message
news:tpadnarm5tnJ4lPVnZ2dnUVZ_tudnZ2d@bright.net...
> ... and some stations will be transmitting DTV on a third channel (not the
> present analog nor the present DTV channel)
>
> I have also found that a number of stations have applied for changes (so
far
> they seem to be ERP changes) to what is contained in the eighth FCC report
> of March 2008. One needs to go to the FCC site and enter call sign of
each
> station to find the present information.
>
> A surprise to me is that the coverage contour for analog TV is 64 dBu and
> for DTV is 41 dBu - a difference of 23 db. However, the reductions of ERP
> do not seem to be that large. Stations that are now a bit weak may be
> unusable after Feb. 2009.
>
> 73, Mac N8TT

The DTV RF signal needs to be about 17 dB out of the noise to work and produce a nice, clean picture. Analog TV RF signal needs to be about 40 dB out of the noise for a snow-free picture on screen. Holy crap, that's 23 dB! Coincidence? I think not.

In my case, I get generally horrible analog performance from Los Angeles stations, 124 miles away. However, I usually have a half-dozen digital pictures from there and they are, of course, perfect whenever they come in.

By the way, the original question -- as if anybody really remembered it -- is answered here:

http://rabbitears.info/market.php

That site has a grunch of data. See the links at the top. This guy is working his butt off.

73,
"Sal" KD6VKW

2386. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 06:38:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gank9v$fl6$1@news.albasani.net>
Source record: 22110

John Smith wrote:
> dfinn1@nc.rr.com wrote:
>
>> ...
>> If you ever learn how I can plonk you from this Google web interface,
>> please let me know. Thanks.
>
> You could always go screw yourself ... you will be so busy you will not
> have time to gripe! ROFLOL
>
> Regards,
> JS

Actually, I should explain that, as my words just sound too callous. My mistake, just attempting to meet the discussion/post with all the considerations due them/it ...

It is hard to have respect for someone who uses google groups for longer than a couple/few weeks and then gripes about it ... there are still plenty of free news servers and a whole slew of news readers available to allow you freedom of choice in what and who you read.

If someone does not have the technical abilities to setup/use a decent news reader, how can you expect them capable of other technical abilities? At least, that question always pops up in my mind.

Regards,
JS

2387. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 06:42:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gankg5$fl6$2@news.albasani.net>
Source record: 22111

Sal M. Onella wrote:

>
> That site has a grunch [bunch] of data. See the links at the top. This guy is
> working his butt off.
>
> 73,
> "Sal" KD6VKW
>
>

Sal:

Excellent URL, well worth my looking over ... thanks, I will certainly
bookmark this one!

Regards,
JS

2388. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 06:50:44 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <bHIzk.14896$QF5.3042@newsfe08.iad>
Source record: 22112

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-6A9C3C.21210015092008@nntp.aioe.org...
> In article <gampclnhh1@news.albasani.net>,
> John Smith <assemblywizard@gmail.com> wrote:
>
> > Really? Something is quite wrong there!
> >
> > Digital signals should require much less power to deliver the same
> > "quality" signal.
>
> JS-
>
> Why do you say that?
>
> You can't have a less-than perfect digital TV signal. There is no snow
> because a weak digital signal's picture freezes or goes away. Therefore
> there is no way to compare quality levels of less-than perfect pictures.

Well, there is, sorta. You do need much more analog signal to get a noise free picture, compared to the level of digital signal you need for a good "lock."

By the old TASO standards, you need over 40 dB s/n to get a nice picture, which requires a lot more peak RF power. By comparison, the digital signal needs only about 17 dB s/n.

2389. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 07:29:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gann8uinu1@news.albasani.net>
Source record: 22113

Cecil Moore wrote:
> dfinn1@nc.rr.com wrote:
>> The structure may or may not exist.
>
> Think about it. If you were somewhere where the
> structure of space didn't exist, you would be
> outside of the boundaries of our universe.

I cannot call "that one" one way or another ... I cannot think of a model to even give me a clue ...

What is your take on that? Is there "a place of true nothing?" I mean, would the matter from our universe "go there?"; if by no other means, then by some "form of osmosis?" Or, is our expanding universe "going there?"

Regards,
JS

2390. Re: zzzz

2391. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 11:13:34 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <wxMzk.582$YU2.104@nlpi066.nbdc.sbc.com>
Source record: 22115

John Smith wrote:
> So, let's call it "whipped bananas" and let it go at that ...
> traditionally, it has been called the ether or aether ... I just tend to
> follow the tradition of the men who first defined it ...

Maybe "coined the word" rather than "defined it"
would be a better choice since they apparently
defined it wrongly.
--
73, Cecil http://www.w5dxp.com

2392. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 11:56:01 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <N6Nzk.395$D32.342@flpi146.ffdc.sbc.com>
Source record: 22116

dfinn1@nc.rr.com wrote:
> I am
> merely trying to show, politely, that your one line assertion has
> little or no impact relative to the credibility of the preceding
> paragraphs in your post.

I agree that your opinion about my opinion has equal impact.

> Seife
> makes a great sience writer but he is not a quantum physicist not did
> he reference one in his "bibliography".

Like your assertion that transmission line currents are
common-mode, your assertion that Richard P. Feynman is
not a quantum physicist is equally valid.

> ... Casimir effects have not
> been shown not make it possible for TEM fields (waves) to propagate.

Your double-negative makes interpreting your statement
tricky. Most modern physicists believe that fields and
waves are made up of quantum particles of matter/energy.

The Casimir effect has been shown to expose a structure
for universal space through which EM particles propagate.
IMO, it is only a matter of time until cause and effect
is established. In the meanwhile, you could disprove
that cause and effect by proving that "TEM fields (waves)
can propagate outside of the universe in the complete
absence of a space structure.
--
73, Cecil http://www.w5dxp.com

2393. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 12:05:33 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <viNzk.506$Ws1.413@nlpi064.nbdc.sbc.com>
Source record: 22117

John Smith wrote:
> Easy, with digital you are simply determining whether a signal is
> present--or on (a binary one), on not--and off (a binary zero) ... an
> analog signal contains much more data which can "screw up."

OTOH, when the digital signal is neither a one nor a zero,
or the CRC doesn't check, it fails completely while the
analog signal is slowly fading away.

During Hurricane Ike, all the digital signals here failed
while the analog signals were still (noisily) providing
useful information.

I hear digital voice used on HF amateur radio has the
same problem.
--
73, Cecil http://www.w5dxp.com

2394. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 12:07:12 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <1oydncYolMHsPFLVnZ2dnUVZ_jmdnZ2d@bright.net>
Source record: 22118

Dear Sal:
Thank you. I should have taken the trouble to think about the
difference.
Thinking back to the extensive tests of (analog) TV performance that
were performed in the 50s, makes the 64 dBu understandable. At that time,
the noise-figures of TV sets were, by modern standards, poor. It was also
found - without surprise - that people would tolerate a poor picture is the
sound was OK, thus followed the preferred ratio of video to sound carrier.

As noise figures fell, many of us became accustomed to satisfactory
performance using simple, indoor antennas. That is another way of saying
that the ERP standards of the 50s were overkill in the 21st century. With
the advent of DTV, outside antennas will once again become the norm.

What seems to be missing - at least until competitive pressure catches
up - is an effective way to compare NF of TV sets or converter boxes. One
needs a box that presents a small-signal DTV signal.

Again, thanks. 73, Mac N8TT
--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:LsIzk.11225$rV4.8861@newsfe03.iad...
>
> "J. Mc Laughlin" <jcm@power-net.net> wrote in message
> news:tpadnarm5tnJ4lPVnZ2dnUVZ_tudnZ2d@bright.net...
>> ... and some stations will be transmitting DTV on a third channel (not
>> the
>> present analog nor the present DTV channel)
>>
>> I have also found that a number of stations have applied for changes (so
> far
>> they seem to be ERP changes) to what is contained in the eighth FCC
>> report
>> of March 2008. One needs to go to the FCC site and enter call sign of
> each
>> station to find the present information.
>>
>> A surprise to me is that the coverage contour for analog TV is 64 dBu and
>> for DTV is 41 dBu - a difference of 23 db. However, the reductions of
>> ERP
>> do not seem to be that large. Stations that are now a bit weak may be
>> unusable after Feb. 2009.
>>

>> 73, Mac N8TT
>
> The DTV RF signal needs to be about 17 dB out of the noise to work and
> produce a nice, clean picture. Analog TV RF signal needs to be about 40
> dB
> out of the noise for a snow-free picture on screen. Holy crap, that's 23
> dB! Coincidence? I think not.
>
> In my case, I get generally horrible analog performance from Los Angeles
> stations, 124 miles away. However, I usually have a half-dozen digital
> pictures from there and they are, of course, perfect whenever they come
> in.
>
> By the way, the original question -- as if anybody really remembered it --
> is answered here:
>
> http://rabbitears.info/market.php
>
> That site has a grunch of data. See the links at the top. This guy is
> working his butt off.
>
> 73,
> "Sal" KD6VKW
>
>

2395. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 12:10:02 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ImNzk.508$Ws1.158@nlpi064.nbdc.sbc.com>
Source record: 22119

dfinn1@nc.rr.com wrote:
> Now, IF it doesn't exist, and I don't believe it does except in
> perhaps a virtual sense, then I am still fully inside each of the
> boundaries of the 4 accepted dimensions of this Universe.

Do you really think that your beliefs have an effect
on reality? Why are your unproved personal opinions
so much more valuable and valid than my unproved
personal opinions?
--
73, Cecil http://www.w5dxp.com

2396. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 12:17:33 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <LtNzk.509$Ws1.174@nlpi064.nbdc.sbc.com>
Source record: 22120

JB wrote:
> You can't convince me that gravity or magnetic fields really require a media
> to travel through. Assuming there is one would be a crutch. Didn't stop us
> from getting people to the moon and back.

We certainly traveled through the medium of space in
order to get to the moon. EM photons obviously travel
through the medium of space.

What you need to prove is that EM photons can travel
somewhere else besides the medium of space, i.e.
outside of the boundaries of the universe.

(P.S. Since "media" is the plural of "medium",
"a media" is improper.)
--
73, Cecil http://www.w5dxp.com

2397. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 12:26:04 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <8ENzk.385$pr6.99@flpi149.ffdc.sbc.com>
Source record: 22121

John Smith wrote:
> Although not clearly stated for the "general public", isn't that exactly
> what the Hadron project is all about?; splitting matter down to its'
> smallest particle(s), and therefore, discovering the "matter" which
> space itself is constructed from?

Stephen Hawking has predicted that CERN will not
find the Higgs bosom, the only particle in the
Standard Model that has not been detected.
--
73, Cecil http://www.w5dxp.com

2398. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 12:31:26 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <9JNzk.386$pr6.122@flpi149.ffdc.sbc.com>
Source record: 22122

Sal M. Onella wrote:
> By the old TASO standards, you need over 40 dB s/n to get a nice picture,
> which requires a lot more peak RF power. By comparison, the digital signal
> needs only about 17 dB s/n.

What happens at a 12 dB s/n for both? That's probably
what happened here during Hurricane Ike.
--
73, Cecil http://www.w5dxp.com

2399. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 12:54:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <H2Ozk.387$pr6.2@flpi149.ffdc.sbc.com>
Source record: 22123

John Smith wrote:
> What is your take on that? Is there "a place of true nothing?" I mean,
> would the matter from our universe "go there?"; if by no other means,
> then by some "form of osmosis?" Or, is our expanding universe "going
> there?"

This is covered by the "Bubble" or "Multiverse" theory.
Between the bubbles, outside of any worm holes, there
exists absolute nothing. An expanding universe "displaces"
the absolute nothing. A particle, like a photon, cannot
"go there" because there is no medium, i.e. no structure.

http://www.space-art.co.uk/pages-en/other/Bubble-Universes.htm
--
73, Cecil http://www.w5dxp.com

2400. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 13:03:48 UTC
From: JoeSch <joeschultz1@lycos.com>
Message-ID: <9dde9d68-10fb-424d-ae19-3b87464e1613@y38g2000hsy.googlegroups.com>
Source record: 22124

Thank you all for replying. Sorry to take so long to get back here. I momentarily put the project aside because, after missing the first game, (I posted the first message about an hour before game time, lol), the Jets will be carried on my cable stations for the next two weeks. Add the bye week into that and I had a couple of weeks to get this thing together-there was no super-immediate rush. But I am going to build this in the next week or so.

As far as Channel 2 going to UHF in February, the Jets regular season ends in December, so an antenna that is useful until February will take of this season nicely. Any post season playoff games by the Jets, (should they get into the playoffs), will be broadcast nationally, so I won't need the antenna for that. I'll worry about next season when it happens. However, don't be surprised if next September you see a thread about building a UHF antenna for the new Channel 2 New York.

I have high hopes for this project giving me some kind of watchable, albeit possibly snowy signal. Here's why. Several years ago I dangled a piece of twin lead from my second floor window to the ground and got both the sound and an extremely, extremely snowy picture of Channel 4 New York, (which carried the Jets at that time). The house I lived in was a few miles farther inland than the one I lived in now, and it was just a simple 12 foot piece of twin lead out the window, but I got SOMETHING. Ths project will be on a pole, on a roof, on a house closer to the water using an antenna scientifically optimized for Channel 2, so I think the chances of getting something watchable are very good. There must be something more at play here than just "line-of-sight" from here to the Empire State Building, at least at this frequency. Besides, friends driving down to New York tell me that they pick up FM stations on their car radios about 20 miles down the road from here. FM frequencies are a little bit higher, (therefore more straight line), than Channel 2. Though the requirements for FM reception and TV reception are not the same, it still indicates that I am not too far out of range for this frequency.

I have found an interesting project from the US Patent Office, so it is between that and Sal's Yagi. I am leaning toward the Yagi, so I will be back with more questions in the next day or two. Just a few questions:

A) What is the gain of Sal's Yagi compared to a single dipole?

B) In sound, there is a rule for Sound Pressure Level which says "double the distance, 6 dB down in decibels". In other words, If I

have a Sound Pressure Level of 100 dB at ten feet, if I move back to
twenty feet my SPL goes down to 94 decibels. Does a similar rule
apply to antenna reception, that if get good reception with a certain
antenna from 50 miles away, I need an antenna 6 dB more sensitive to
get similar reception from 100 miles away?

On Sep 9, 10:11 am, ml <m...@di.net> wrote:
> In article <lNSwk.747$1x6.137@edtnps82>,
>
>
>
>
>
> "Frank" <frank...@nospam.telus.net> wrote:
> > > The Jets' games are carried on channel 2 New York, which is 102 miles
> > > as the crow flies from my house. Football packages on satellite TV
> > > are beyond present financial condition. I only care about channel 2,
> > > New York.
>
> > I thought all VHF television transmission will be discontinued as of
> > February 2009. Building a VHF antenna would seem to be a
> > wasted effort. You need to think how you can receive the
> > same station on UHF digital. There are plenty of UHF antennas
> > available; you may also need a low noise, mast-head, pre-amplifier
> > to get a good signal.
>
> > Regards,
>
> > Frank
>
> hmm I thought   not all the channels will necessarily change meaning
> some of the vhf stations will still be there just switching from analog
> to digital?
>
> i have received   some   tv stations   from about 100m away from
> nyc in the catskill region, perhaps the natural elevation helped
>
> but   in that same area of ct   i have   also received ch 2   using
> regular antenna however   receving the ny ch wasn't the problem
> the   closer   local ch 2   was more of an issue   so pic wasn't
> perfect
>
> i used a regular but large radioshack antenna and coax

2401. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 13:39:02 UTC
From: gsm@mendelson.com
Message-ID: <slrngcvdkg.ffc.gsm@cable.mendelson.com>
Source record: 22125

JoeSch wrote:
> Thank you all for replying. Sorry to take so long to get back here.
> I momentarily put the project aside because, after missing the first
> game, (I posted the first message about an hour before game time,
> lol), the Jets will be carried on my cable stations for the next two
> weeks. Add the bye week into that and I had a couple of weeks to get
> this thing together-there was no super-immediate rush. But I am going
> to build this in the next week or so.

Since this is a ham radio antenna news group, I suggest that you look up
6 meter beam antennas. The 6 meter ham band is just below the US channel
2, so they would work fine for reception.

TV signals are horizontaly polarized, so make sure to orient
your antenna appropriately.

Since you are using it for recpetion only, no complicated matching
network is needed between the antenna and the feed line. 300 Ohm twinlead,
or a simple 300 Ohm to coax transformer will do nicely.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

2402. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 14:03:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaoecdbpd1@news.albasani.net>
Source record: 22126

Cecil Moore wrote:

> ...
> This is covered by the "Bubble" or "Multiverse" theory.
> Between the bubbles, outside of any worm holes, there
> exists absolute nothing. An expanding universe "displaces"
> the absolute nothing. A particle, like a photon, cannot
> "go there" because there is no medium, i.e. no structure.
>
> http://www.space-art.co.uk/pages-en/other/Bubble-Universes.htm

Hmmm, I have a hard time believing in this ... no harder than some have
believing in an ether ... LOL

Regards,
JS

2403. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 14:06:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaoehabnr1@news.albasani.net>
Source record: 22127

Cecil Moore wrote:

> ...
> Maybe "coined the word" rather than "defined it"
> would be a better choice since they apparently
> defined it wrongly.

Well, they did know it was a "medium" ... but you are correct, they
didn't get it exactly-correct on the first try.

However, even when Einstein reneged and allowed for an ether, he just
left the subject hanging ...

Regards,
JS

2404. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 14:08:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaoelcbnr2@news.albasani.net>
Source record: 22128

Cecil Moore wrote:

> ...
> Stephen Hawking has predicted that CERN will not
> find the Higgs bosom, the only particle in the
> Standard Model that has not been detected.

Yep, it is pretty-much, up-for-grabs. Even the CERN project may fall
short of energy levels required ... but then, you have to start somewhere.

Regards,
JS

2405. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 14:11:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaoerebnr3@news.albasani.net>
Source record: 22129

Cecil Moore wrote:

>> ... In the meanwhile, you could disprove
> that cause and effect by proving that "TEM fields (waves)
> can propagate outside of the universe in the complete
> absence of a space structure.

Excellent choice of words ...

Regards,
JS

2406. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 14:45:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaogqmeka1@news.albasani.net>
Source record: 22130

Cecil Moore wrote:

> ...
> I hear digital voice used on HF amateur radio has the
> same problem.

Amateur digital communications have one real and serious problem, they have not adopted Ogg Vorbis as their standard digital encryption/coding/decoding/error-checking "mode"--indeed, an actual "superset" of Ogg Vorbis is needed for radio duplex communications ... amateurs, in general, need be the "final designers"--that won't happen until larger numbers are involved.

Ogg Vorbis is open source, free to use/implement in your own software, it just doesn't get the blessing of the arrl and it can't be used as an excuse to inflate prices ... :-(

Until that is established as a standard, Ogg Vorbis, (or, a "mode" invented/designed/implemented with the same redundancy/efficiency/fool-proof-ness), these problems will be of a notable nature ... :-(How and when to request re-sending of error packets, how many times these requests can be allowed, how long to hold a packet in the buffers, how large of buffers to be used, size of the packets allowed, etc., etc., etc will all need to be agreed upon in that standard--so far NONE I HAVE SEEN ARE ADEQUATE--indeed, only one is on the right track at all ... and, the standard can be designed to be highly adaptable/upgradeable--with only firmware upgrades needed to bring old hardware completely up-to-date (manufacturers will surely attempt to get in control of this and be able to force the purchase of new equip/planned-obsolescence by the denial of new "flash firmwares" or designing new firmware upgrades in such a manner as make existing equip unable to accept them, example, just make it too large for the present memory(s) size(s) and disallow memory upgrades--you know, the "standard stuff" already being done. <grin>)

While you and a buddy can use it between yourselves, or, you can attempt to get your club interested ... it remains on the fringes ... I find "digital hams" on the HF bands to be as rare as "chickens teeth", at least ones working with decent digital transmission software/algorithms/etc. ... :-(

There was a group of hams which broke away from all this are were going to release open source code which would have to be accepted just because of its' sheer efficiency and performance ... internal bickering and outside pressures had/has brought its' progress to a crawl/halt at the present time ... such "tinker-ings" gets the attention of high powers in

high places ... :-(

(or, is this all just my paranoia--I will allow you and the future to decide ...) digital radio is coming ... it is just walking with a cane! LOL

Regards,
JS

2407. Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 15:06:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <5ea4517b-0ce6-4629-841e-51d92743be06@a1g2000hsb.googlegroups.com>
Source record: 22131

I consider it a real shame that equilibrium is not a part of
examinations since equilibrium
is a basic in the electrical circuit of all antennas No where do I see
antennas explained other than the showing of capacitive coupling to
ground of antennas as a perceived circuit of an antenna?. Until this
is corrected we will never have continium of discussion between hams
on antennas.It is not a mystery anymore so why do the ARRL avoid it
like a plague?
Art

2408. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 16:56:09 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <RvRzk.36695$De7.31920@bignews7.bellsouth.net>
Source record: 22132

"Art Unwin" wrote
>I consider it a real shame that equilibrium is not a part of
> examinations since equilibrium
> is a basic in the electrical circuit of all antennas No where do I see
> antennas explained other than the showing of capacitive coupling to
> ground of antennas as a perceived circuit of an antenna?. Until this
> is corrected we will never have continium of discussion between hams
> on antennas.It is not a mystery anymore so why do the ARRL avoid it
> like a plague?
> Art

Art:
You have written 2,947 posts to RRAA, and at least 2/3 of them
contain a reference to " equilibrium". Numerous people have asked
you to define or at least explain your usage of the term. So far, you
have not done so.Actually, you have either diverted the question, or
told questioners to do their own research. Your posts show that you
know nothing about how antennas work, and suspect very little.Why
would ARRL correct something that's perfectly fine as is???

Mike W5CHR
Memphis Tenn

2409. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 17:00:28 UTC
From: JB <nospam@goofball.net>
Message-ID: <MCRzk.248$3e1.129@trnddc02>
Source record: 22133

Line of sight is the conservative and baseline propagation mode. You can more or less rely on that when the terrain is flat. There are Mathematical models that are somewhat predictive. Variations in elevation play a great part and living closer to water usually means you are lower in elevation. When there are variations in elevation, things that reflect and things that block the signal add to the complexity and the calculations usually go out the window. Area knowledge of the various sites and their odd coverage areas might more resemble an inkblot test. You may find an online coverage map for Empire State Building as it is a major radio and TV site. This might give you an idea:
http://www.tvfool.com/

For the VHF channels, weather also plays a great part. Thermal inversions that result in a cold/warm layer of air can act as a reflector, often doubling the range. I routinely talk to people 100+ miles away this way in the Summer months, but by Winter, the path is gone and can't even hear them anymore. You may have an advantage if your path goes over the water, otherwise it will hurt to be lower in elevation.

2410. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 17:01:14 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <uDRzk.198$Jw.62@nwrddc02.gnilink.net>
Source record: 22134

"Mike Lucas" <w5chr@bellsouth.net> wrote in message
news:RvRzk.36695$De7.31920@bignews7.bellsouth.net...
>
> "Art Unwin" wrote
>>I consider it a real shame that equilibrium is not a part of
>> examinations since equilibrium
>> is a basic in the electrical circuit of all antennas No where do I see
>> antennas explained other than the showing of capacitive coupling to
>> ground of antennas as a perceived circuit of an antenna?. Until this
>> is corrected we will never have continium of discussion between hams
>> on antennas.It is not a mystery anymore so why do the ARRL avoid it
>> like a plague?
>> Art
>
> Art:
> You have written 2,947 posts to RRAA, and at least 2/3 of them
> contain a reference to " equilibrium". Numerous people have asked
> you to define or at least explain your usage of the term. So far, you
> have not done so.Actually, you have either diverted the question, or
> told questioners to do their own research. Your posts show that you
> know nothing about how antennas work, and suspect very little.Why
> would ARRL correct something that's perfectly fine as is???
>
> Mike W5CHR
> Memphis Tenn
Ahmen,
time to go back into hibernation Art.

W4OP

2411. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 17:10:43 UTC
From: JB <nospam@goofball.net>
Message-ID: <nMRzk.252$Yw1.138@trnddc03>
Source record: 22135

Here is a plot for WCBS-TV
http://www.tvfool.com/?option=com_wrapper&Itemid=80&q=call%3dWCBS-TV%26type%3dA

2412. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 17:18:25 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <4vpvc49c9s4vka08v5oi5gubj7urmj2u3u@4ax.com>
Source record: 22136

On Mon, 15 Sep 2008 12:33:35 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I am begining to believe that there is really no interest in small
>antennas

You might want to look at the IEEE Transactions on Antennas and Propagation. Most issues are full of articles on new ideas on how to design and model small antennas that can be effectively crammed into a cell phone or PDA. Same with antennas that fit in missiles, inside UAV's, and other tight locations. It's not a trivial exercise as smart phones may soon have many more radios inside (Cellular, Wi-fi, cellular data, Bluegoof, AM/FM/TV/Mobile-HDTV, 915MHz for TV remote control), and WiMax).

Unless I missed something, your rants seem to lack any specifics, URL's, references, examples, substantiation, and most obvious, are lacking in numbers. If you want to enhance your credibility, I suggest you do some reading and searching, before manufacturing yet another wasted rant and denunciation.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2413. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 17:41:49 UTC
From: JB <nospam@goofball.net>
Message-ID: <xdSzk.255$Yw1.232@trnddc03>
Source record: 22137

The neat thing about going full digital? You no longer have any idea why the signal breaks up. PERIOD. The Customer is no longer bothered by interference of any kind. Either it works or not. If your QSO, Phone Call, Mayday, Police call for backup, TV signal gets knocked off the air, you won't have a clue why.

I have experimented with Easy Pal Digi SSTV and DRM it is neat but I can rarely get the S/N high enough for a complete transfer. Text is more reliable, but it is hard for me to put my faith in a signal that sounds clean and strong to my ear but with no result. I could have passed several photos on MMSSTV with half the S/N and knew well what they were. Sometimes getting the information through is more important than waiting for conditions to get better to get it perfect.

I don't mind being a network admin. but being a radio op isn't quite dead yet.

> > picture breaks up and quits. At other times the same station will give a
> > solid 3 or 4 bars.This happens on all channels. Perhaps atmospheric
> > movement? Lots of dust here in the desert. Any other ideas?
> >
>
> Yes, ducting and "ghosting" of the signal(s) due to reflections, etc.--I
> can see these as being a REAL problem. From your description(s), sounds
> like "they" just took the exact-same
> technology/encoding/decoding-schemes and implemented them onto broadcast

2414. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 17:52:20 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <onSzk.3133$yS5.1272@edtnps83>
Source record: 22138

> Art:
> You have written 2,947 posts to RRAA, and at least 2/3 of them
> contain a reference to " equilibrium". Numerous people have asked
> you to define or at least explain your usage of the term. So far, you
> have not done so.Actually, you have either diverted the question, or
> told questioners to do their own research. Your posts show that you
> know nothing about how antennas work, and suspect very little.Why
> would ARRL correct something that's perfectly fine as is???
>
> Mike W5CHR
> Memphis Tenn

Also, I would be very interested in identifying where the "weak force"
is indicated in, for example, the following point form expression of
Ampere's Law:

DEL cross H = J+ dD/dt

Frank

2415. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 17:53:48 UTC
From: JB <nospam@goofball.net>
Message-ID: <MoSzk.257$Yw1.47@trnddc03>
Source record: 22139

Amplitude Modulation of NTSC requires a LOT of signal to be noise free since even a small amount of noise is visible.

We have no basis for comparison with ATSC other than by level, since we don't have a way to discern between multipath, power line noise, deliberate or any other kind of interference. How are we supposed to point the antenna? With a stupid meter that takes 10 seconds to average? All I can think of is to put it on a rotor and nudge it 2 degrees every 10 seconds until the picture pops in. It is amazing what gets left out in the rush to market.

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:9JNzk.386$pr6.122@flpi149.ffdc.sbc.com...
> Sal M. Onella wrote:
> > By the old TASO standards, you need over 40 dB s/n to get a nice
picture,
> > which requires a lot more peak RF power. By comparison, the digital
signal
> > needs only about 17 dB s/n.
>
> What happens at a 12 dB s/n for both? That's probably
> what happened here during Hurricane Ike.
> --
> 73, Cecil http://www.w5dxp.com

2416. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 18:36:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaoubgutf1@news.albasani.net>
Source record: 22140

JB wrote:
> The neat thing about going full digital? You no longer have any idea why
> the signal breaks up. PERIOD. The Customer is no longer bothered by
> interference of any kind. Either it works or not. If your QSO, Phone Call,
> Mayday, Police call for backup, TV signal gets knocked off the air, you
> won't have a clue why.
>

Actually, NOT. Even the simple bars on a cell phone tell you if communication is possible or not. The software running on an up-to-date rig can describe the exact reason to you, if your rig interfaces to your computer screen ... not to mention broadcast HDTV is in its' infancy, taking its' first baby-steps ... even if you give the avg. American TV viewer this information, do you think he would know what to do about it? For "those dummies" you will pretty much have to have the software handle the problems ... or make simple recommendations, perhaps "MOVE THE ANTENNA DUMMY", or "RAISE THE ANTENNA DUMMY", or "BUY A DECENT EXTERNAL ANTENNA DUMMY", or "POSSIBLE SIGNAL REFLECTIONS ARE OCCURING, MOVE/REPOSITION THE ANTENNA DUMMY", etc. ROFLOL!

> I have experimented with Easy Pal Digi SSTV and DRM it is neat but I can
> rarely get the S/N high enough for a complete transfer. Text is more
> reliable, but it is hard for me to put my faith in a signal that sounds
> clean and strong to my ear but with no result. I could have passed several
> photos on MMSSTV with half the S/N and knew well what they were. Sometimes
> getting the information through is more important than waiting for
> conditions to get better to get it perfect.
>

If the binary signal just clears the noise floor, and not by much mind you (I am hesitant to quote an exact figure here) a perfect signal is quite possible ... that is simply the nature of digital.

I just don't know why anyone would claim that digital signals are not MUCH superior to analog -- remember the old analog cell phones -- who would ever wish to "go-back-there???" ... the only software I have used with HF/VHF/UHF digital processing is open source ... I immediately made modifications to the decoding/coding scheme (Ogg Vorbis), "packet hold time" and size of the buffers and implemented my own CRC checking (faster algorithm) ... however, others must get a copy of it from me and we both share it or no communications are possible. I see amateur software in the same light I see amateur antennas -- build your own or have another amateur elmer/tutor/instruct/assist/share-with-you ... it is just traditional and the true spirit of amateur radio ...

> I don't mind being a network admin. but being a radio op isn't quite dead
> yet.
>

I actually worked at the college I attended in the 1990's when I
returned to go "full into computers" (my previous degree was as in
electronic engineering), and before I began an intern position in my
field of study. My last few months, before receiving my diploma, the
actually created a new position for me, "Student Programmer", I was
actually quite proud of it--even though the "big boys" seen it as a
joke! LOL Being both a programmer and a network admin. assistant made
the job seem like "money for nothing", what other sys admins seen as
major problems and were on the phone to Digital Equipment Corp. (DEC)
over, for the VAX, I usually had fixed by the time the techs got there
... made me rather "hated", really ... however, most finally came around
and asked for the perl-scripts and C programs I used to automate every
task I could find! ... common computer users worshiped us ... "some of
us" let this go to their heads ...

>>> picture breaks up and quits. At other times the same station will give a
>>> solid 3 or 4 bars.This happens on all channels. Perhaps atmospheric
>>> movement? Lots of dust here in the desert. Any other ideas?
>>>

As I have said, I am anxious for it to be deployed in my area ... I am
already looking into "digital to analog conversion boxes" which I can
download the firmware from to "reverse engineer" and then flash open
source firmware into ... either by hook or by crook. <grin>

Only God can control atmospheric conditions (but then, there is HARRP
and other such projects which do SEEM to alter them), and who can stop
that neighbor from erecting that steel storage shed, building that
wrought iron fence, installing those bars on his windows, operating that
ham rig from his stealth antenna <grin>, etc? :-(

>> Yes, ducting and "ghosting" of the signal(s) due to reflections, etc.--I
>> can see these as being a REAL problem. From your description(s), sounds
>> like "they" just took the exact-same
>> technology/encoding/decoding-schemes and implemented them onto broadcast
>

Regards,
JS

2417. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 18:43:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaouoe$v7n$1@news.albasani.net>
Source record: 22141

JB wrote:
>> ... All I can
> think of is to put it on a rotor and nudge it 2 degrees every 10 seconds
> until the picture pops in. It is amazing what gets left out in the rush to
> market.
>

Sounds to me you are approaching the real focus of the problem ...
especially that "rust to market" part ... ahhh, capitalism and its'
little annoyances. <chuckle>

Regards,
JS

2418. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 18:43:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <5f13ffe3-7b61-4e01-80f2-5e90b31d0c4a@s50g2000hsb.googlegroups.com>
Source record: 22142

On Sep 16, 11:56 am, "Mike Lucas" <w5...@bellsouth.net> wrote:
> "Art Unwin" wrote
>
> >I consider it a real shame that equilibrium is not a part of
> > examinations since equilibrium
> > is a basic in the electrical circuit of all antennas No where do I see
> > antennas explained other than the showing of capacitive coupling to
> > ground of antennas as a perceived circuit of an antenna?. Until this
> > is corrected we will never have continium of discussion between hams
> > on antennas.It is not a mystery anymore so why do the ARRL avoid it
> > like a plague?
> > Art
>
> Art:
>   You have written 2,947 posts to RRAA, and at least 2/3 of them
> contain a reference to " equilibrium". Numerous people have asked
> you to define or at least explain your usage of the term. So far, you
> have not done so.Actually, you have either diverted the question, or
> told questioners to do their own research. Your posts show that you
> know nothing about how antennas work, and suspect very little.Why
> would ARRL correct something that's perfectly fine as is???
>
> Mike W5CHR
> Memphis Tenn

Mike
I know more about antennas and radiation than you think !
For instance, equilibrium demands that charges do not move laterally
along an antenna when in equilibrium
Without equilibrium charges do move along the surface of a radiator
and Newtons law of parity demands
that charges are moving thru the CENTER of the radiator thus
encoundering just copper losses.
Thus for a radiator that is not in equilibrium has three resistance
1 Radiation resistance
2 outer resistance
3 Inner copper resistance.

Equilibrium is nothing more than the enforcement of Newtons law of
parity.
This is so simple to those who work from first principles for
themselves instead of being lemmings.
Correctness is not always determined from a poll
Regards
Art

2419. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 18:47:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaouv8$v7n$2@news.albasani.net>
Source record: 22143

John Smith wrote:

>> ...
> Sounds to me you are approaching the real focus of the problem ...
> especially that "rust to market" part ... ahhh, capitalism and its'
> little annoyances. <chuckle>
>
> Regards,
> JS

That "rust" thing, make it rush ...

Must have been a Freudian slip, and reflects the speed we can expect
improvements at ... LOL

Regards,
JS

2420. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 18:56:42 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ee618b1a-ed2f-43c8-bc77-99ace3c56205@73g2000hsx.googlegroups.com>
Source record: 22144

On Sep 16, 12:52 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > Art:
> > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > contain a reference to " equilibrium". Numerous people have asked
> > you to define or at least explain your usage of the term. So far, you
> > have not done so.Actually, you have either diverted the question, or
> > told questioners to do their own research. Your posts show that you
> > know nothing about how antennas work, and suspect very little.Why
> > would ARRL correct something that's perfectly fine as is???
>
> > Mike W5CHR
> > Memphis Tenn
>
> Also, I would be very interested in identifying where the "weak force"
> is indicated in, for example, the following point form expression of
> Ampere's Law:
>
> DEL cross H = J+ dD/dt
>
> Frank

Frank
I am not a servant of this newsgroup. All I am doing is trying to
educate those that are willing do be educated
with respect to antennas. You for your self can read the history of
the masters and Newton to determine how they were aware of the weak
force,
its angle and size and yet cannot describe it. Even so it is included
in all calculations involved in the Universe because equilibrium is a
staple.
The fact that members of this group need to be shown that the weak
force is not fictitious is pityful . I have in the prior posting
descibed the action of radiation where previously I have stated that
the weak force is the rotary current flow which as well as the rest of
the details given are preordained by Newtons law. Prove Newton is
wrong and you have my attention.
Nothing personal
Regards
Art Unwin KB9MZ.....xg

2421. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:06:11 UTC
From: dfinn1@nc.rr.com
Message-ID: <c3a69fc1-e1c2-4ae6-8c24-48b092b1092e@34g2000hsh.googlegroups.com>
Source record: 22145

On Sep 16, 1:00 am, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > If you ever learn how I can plonk you from this Google web interface,
> > please let me know. Thanks.
>
> You could always go screw yourself ... you will be so busy you will not
> have time to gripe! ROFLOL
>
> Regards,
> JS

John, I keep requesting that you keep those kinds of fantasies to
yourself. If you continue I will complain to gmail.

2422. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:08:23 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <kOSdnZha-tynmU3VnZ2dnUVZ_rXinZ2d@pghconnect.com>
Source record: 22146

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:ee618b1a-ed2f-43c8-bc77-99ace3c56205@73g2000hsx.googlegroups.com...
On Sep 16, 12:52 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > Art:
> > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > contain a reference to " equilibrium". Numerous people have asked
> > you to define or at least explain your usage of the term. So far, you
> > have not done so.Actually, you have either diverted the question, or
> > told questioners to do their own research. Your posts show that you
> > know nothing about how antennas work, and suspect very little.Why
> > would ARRL correct something that's perfectly fine as is???
>
> > Mike W5CHR
> > Memphis Tenn
>
> Also, I would be very interested in identifying where the "weak force"
> is indicated in, for example, the following point form expression of
> Ampere's Law:
>
> DEL cross H = J+ dD/dt
>
> Frank

Frank
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educate those that are willing do be educated
with respect to antennas. You for your self can read the history of
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its angle and size and yet cannot describe it. Even so it is included
in all calculations involved in the Universe because equilibrium is a
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force is not fictitious is pityful . I have in the prior posting
descibed the action of radiation where previously I have stated that
the weak force is the rotary current flow which as well as the rest of
the details given are preordained by Newtons law. Prove Newton is
wrong and you have my attention.
Nothing personal
Regards
Art Unwin KB9MZ.....xg

-

People used to think that matter can neither be created nor destroyed.
E=MC^2 took care of that. By equilibrium, are you referring to the law of
conservation of energy?

2423. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:10:06 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <sbednVCQgOk9mU3VnZ2dnUVZ_r_inZ2d@pghconnect.com>
Source record: 22147

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:ee618b1a-ed2f-43c8-bc77-99ace3c56205@73g2000hsx.googlegroups.com...
On Sep 16, 12:52 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > Art:
> > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > contain a reference to " equilibrium". Numerous people have asked
> > you to define or at least explain your usage of the term. So far, you
> > have not done so.Actually, you have either diverted the question, or
> > told questioners to do their own research. Your posts show that you
> > know nothing about how antennas work, and suspect very little.Why
> > would ARRL correct something that's perfectly fine as is???
>
> > Mike W5CHR
> > Memphis Tenn
>
> Also, I would be very interested in identifying where the "weak force"
> is indicated in, for example, the following point form expression of
> Ampere's Law:
>
> DEL cross H = J+ dD/dt
>
> Frank

Frank
I am not a servant of this newsgroup. All I am doing is trying to
educate those that are willing do be educated
with respect to antennas. You for your self can read the history of
the masters and Newton to determine how they were aware of the weak
force,
its angle and size and yet cannot describe it. Even so it is included
in all calculations involved in the Universe because equilibrium is a
staple.
The fact that members of this group need to be shown that the weak
force is not fictitious is pityful . I have in the prior posting
descibed the action of radiation where previously I have stated that
the weak force is the rotary current flow which as well as the rest of
the details given are preordained by Newtons law. Prove Newton is
wrong and you have my attention.
Nothing personal
Regards
Art Unwin KB9MZ.....xg

-

Oh yeah! Newton was also wrong that light needed a medium through which to travel (which he called, "aether").

2424. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:11:19 UTC
From: dfinn1@nc.rr.com
Message-ID: <0ec702e9-b4fe-4e9e-abe9-5c25b216a883@i76g2000hsf.googlegroups.com>
Source record: 22148

On Sep 16, 2:38 am, John Smith <assemblywiz...@gmail.com> wrote:
> John Smith wrote:
> > dfi...@nc.rr.com wrote:
>
> >> ...
> >> If you ever learn how I can plonk you from this Google web interface,
> >> please let me know. Thanks.
>
> > You could always go screw yourself ... you will be so busy you will not
> > have time to gripe! ROFLOL
>
> > Regards,
> > JS
>
> Actually, I should explain that, as my words just sound too callous. My
> mistake, just attempting to meet the discussion/post with all the
> considerations due them/it ...
>
> It is hard to have respect for someone who uses google groups for longer
> than a couple/few weeks and then gripes about it ... there are still
> plenty of free news servers and a whole slew of news readers available
> to allow you freedom of choice in what and who you read.
>
> If someone does not have the technical abilities to setup/use a decent
> news reader, how can you expect them capable of other technical
> abilities? At least, that question always pops up in my mind.
>
> Regards,
> JS

If I choose not to expend the time and effort, then it is a matter of posting or not posting when choosing the web interface. Sure there are plenty of free news servers and no need to use a free news reader since outlook express works fine, John. I will not go to throuble of locating a free news server just to plonk you. But I will do it from the web interface if at all possible.

2425. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:12:35 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <267dbc2c-3d16-4981-9a54-bf3ddca43673@p25g2000hsf.googlegroups.com>
Source record: 22149

On Sep 16, 12:52 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > Art:
> > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > contain a reference to " equilibrium".

I believe that! I keep on pushing the facts and as yet nobody has
shown that they are in error
So n ow count the number of posts that I have seen in return and
measure their content with
respect to the indicated facts.
My target is to over ride the reluctance to change on this subject
before I die
Why not start a revolution and analyse the postings of this thread and
show
where they differ from those of mine. Be the first person to do so
presuming
that you graduated from high school. I had to memorize and fully
understand Newtons laws
before I left high school and I am presuming the same happens here in
the U.S. of A

As far as whether I am truthfull or not I would remind you that a
$5000 bet was proferred that I could produce the antenna that I talk
about.
The person with that bet was willing to place the money in advance for
holding. Nobody took him up on that bet or mine as I wanted to be a
part of it.
Art

2426. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:18:48 UTC
From: dfinn1@nc.rr.com
Message-ID: <f731eced-b202-47e0-b52d-c09547ae1d70@k37g2000hsf.googlegroups.com>
Source record: 22150

On Sep 16, 12:58 am, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > On Sep 15, 3:33 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> >> I am begining to believe that there is really no interest in small
> >> antennas
>
> > You are probably correct if you are speaking about "small" antennas as
> > they relate to HF.
>
> > No longer is there that much demand for shortwave bands to communicate
> > with, as you well know. This is the information age and the relative
> > bandwidth of HF is so small is to render HF useless, even for simple
> > email if widespread usage were desired. There's not much money in it.
>
> Amateur Radio has been dying for decades ... just a fact. Only the
> reasons are debatable.
>
>
>
> > No money, no research.
>
> I believe the AM Broadcast Band is very much alive and well ... they
> would greatly appreciate a "small antenna."

No, they are declining if you are talking about anything over 200m.
They are also losing spectrum for example in 40m to amateurs.
>
>
>
> > Even if you had a shoebox 160m antenna that worked, your market would
> > quickly reach saturation point. You might get an enthusiastic
> > reception by the readers of CQ magazine or be honored by the folks at
> > ARRL but not much more. Is that why you are trying to link your
> > antenna "discoveries" to finding the holy grail of the Grand
> > Unification Theory?
>
> Actually, I see no reason for HF to not be any-more-LESS usable than any
> other RF Frequency. Digital voice has simply not been adopted because
> of the expense in replacing all the analog equipment with digital
> equipment ... something which is sure to be "fixed" in the future ...

John, Quiz Question: Suppose you tried to modulate a 14 Khz carrier
with a 50MHz digital signal. Would that be possible? (Y/N) Where would
you locate the side bands? (________ and ________)

2427. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:31:54 UTC
From: dfinn1@nc.rr.com
Message-ID: <d49faac4-568b-4570-9640-9cd2f5303cd7@k30g2000hse.googlegroups.com>
Source record: 22151

On Sep 15, 11:04 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > The structure may or may not exist.
>
> Think about it. If you were somewhere where the
> structure of space didn't exist, you would be
> outside of the boundaries of our universe.
> --
> 73, Cecil http://www.w5dxp.com

This is not relevant to the orginal discussion. The discussion was
about what you said was the structure of space and which I said may or
may not be the structure of space. You changed the topic to address
the question of one's existence inside or outside of said structure.
This of course is a bizzare notion since the existence of a locus in
which someone or some thing can exist outside the bounds of our
Universe has not been proven or even proposed in non-fiction science.

2428. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:33:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap1m8$394$1@news.albasani.net>
Source record: 22152

dfinn1@nc.rr.com wrote:

> ...
> No, they are declining if you are talking about anything over 200m.
> They are also losing spectrum for example in 40m to amateurs.

No, the AM Broadcast Band is the MW band, ~.5Mc to ~1.800Mc ... not related to happenings in the 40m amateur band at all ...

>
> John, Quiz Question: Suppose you tried to modulate a 14 Khz carrier
> with a 50MHz digital signal. Would that be possible? (Y/N) Where would
> you locate the side bands? (________ and ________)
>

A nut would attempt that ... others would modulate the 50Mhz signal ... and 49.993 to 50.007 ... in a perfect world.

Really, you need a beginners group ... :-(Won't your mom play with you today?

JS

2429. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:34:12 UTC
From: dfinn1@nc.rr.com
Message-ID: <420cfbd3-a132-4ef2-bcd8-fe926ecf82b3@c58g2000hsc.googlegroups.com>
Source record: 22153

On Sep 16, 12:28 am, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
>
> >> ...
>
> > > do. Certainly we are a long way from saying that this is an ether or
> > > medium that supports the transmission of TEM waves.
>
> So, let's call it "whipped bananas" and let it go at that ...
> traditionally, it has been called the ether or aether ... I just tend to
> follow the tradition of the men who first defined it ...
>
> Regards,
> JS

Why must there be an "it" through which TEM waves proagate? Why cannot
they propagate through nothingness? Not all volumes of space are
necessarily occupied by any form of matter.

2430. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:35:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap1p8$394$2@news.albasani.net>
Source record: 22154

dfinn1@nc.rr.com wrote:

> ...
> If I choose not to expend the time and effort, then it is a matter of
> posting or not posting when choosing the web interface. Sure there are
> plenty of free news servers and no need to use a free news reader
> since outlook express works fine, John. I will not go to throuble of
> locating a free news server just to plonk you. But I will do it from
> the web interface if at all possible.

Frankly, that all leaves me but one response, "Ignorant, lazy b*st*rd!"

But then, I wouldn't say it in public ... ;-)

JS

2431. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:36:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap1ra$394$3@news.albasani.net>
Source record: 22155

dfinn1@nc.rr.com wrote:

> ...
> John, I keep requesting that you keep those kinds of fantasies to
> yourself. If you continue I will complain to gmail.

After much consideration of your post, I have been able to construct a
proper response ...

ROFLOL!!!

Regards,
JS

2432. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:40:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap24d$3o4$1@news.albasani.net>
Source record: 22156

dfinn1@nc.rr.com wrote:

> ...
> Why must there be an "it" through which TEM waves proagate? Why cannot
> they propagate through nothingness? Not all volumes of space are
> necessarily occupied by any form of matter.

Really? I am afraid no one can possibly agree with that most-bizarre
statement ... unless space is occupied by the "matter of space", it
ain't space.

Remember these steps:

1) Engage brain.

2) Open mouth. (or, place fingers on keyboard)

3) Make intelligent sounds. (or, type meaningful sentences)

4) Repeat as necessary ...

ROFLOL!!! Brother, my wife and I just love your slap-stick-humor!
Makes me miss the Three Stooges ...

Regards,
JS

2433. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:41:12 UTC
From: dfinn1@nc.rr.com
Message-ID: <f6358dbe-f7bb-4941-8aed-2715cb698239@e53g2000hsa.googlegroups.com>
Source record: 22157

On Sep 16, 11:06 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> I consider it a real shame that equilibrium is not a part of
> examinations since equilibrium
> is a basic in the electrical circuit of all antennas No where do I see
> antennas explained other than the showing of capacitive coupling to
> ground of antennas as a perceived circuit of an antenna?. Until this
> is corrected we will never have continium of discussion between hams
> on antennas.It is not a mystery anymore so why do the ARRL avoid it
> like a plague?
> Art

I think your term for equilibrium is the term the exams use for
"resonant". An antenna with "equilibrium" is your name for an antenna
upon which a TEM standing wave is present with a standing wave ratio
of 1:1, correct? That would be your point of maximum effciency of
ejection of galactic particles from the end points of the antenna
which is optimized by sloping it relative to to the earth plane.

2434. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:44:21 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c7df9db0-a3d8-415a-8408-2a3a4250e3e2@x41g2000hsb.googlegroups.com>
Source record: 22158

On Sep 16, 2:10 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:ee618b1a-ed2f-43c8-bc77-99ace3c56205@73g2000hsx.googlegroups.com...
> On Sep 16, 12:52 pm, "Frank" <frank...@nospam.telus.net> wrote:
>
>
>
> > > Art:
> > > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > > contain a reference to " equilibrium". Numerous people have asked
> > > you to define or at least explain your usage of the term. So far, you
> > > have not done so.Actually, you have either diverted the question, or
> > > told questioners to do their own research. Your posts show that you
> > > know nothing about how antennas work, and suspect very little.Why
> > > would ARRL correct something that's perfectly fine as is???
>
> > > Mike W5CHR
> > > Memphis Tenn
>
> > Also, I would be very interested in identifying where the "weak force"
> > is indicated in, for example, the following point form expression of
> > Ampere's Law:
>
> > DEL cross H = J+ dD/dt
>
> > Frank
>
> Frank
> I am not a servant of this newsgroup. All I am doing is trying to
> educate those that are willing do be educated
> with respect to antennas. You for your self can read the history of
> the masters and Newton to determine how they were aware of the weak
> force,
> its angle and size and yet cannot describe it. Even so it is included
> in all calculations involved in the Universe because equilibrium is a
> staple.
> The fact that members of this group need to be shown that the weak
> force is not fictitious is pityful . I have in the prior posting
> descibed the action of radiation where previously I have stated that
> the weak force is the rotary current flow which as well as the rest of
> the details given are preordained by Newtons law. Prove Newton is
> wrong and you have my attention.
> Nothing personal

> Regards
> Art Unwin KB9MZ.....xg
>
> -
>
> Oh yeah! Newton was also wrong that light needed a medium through which to
> travel (which he called, "aether").

We are talking ab out radiation not the eather.

The law I am referring to is every action has an opposite reaction.
It is a very short law that has not been disproven.
Application of that law states that for a radiator not in equilibrium
a charge is moving on the outside of the radiator THEREFORE
there is a charge moving in the centre of the radiator in the opposite
direction.
So simple Why do hams reject it? No, the charge at the centre is not
and cannot radiate
You don't need a lot of posts, sneers insults e.t.c. to respond just
go to your nearest University
and provide the statement to the Dean and then bring his response back
to all of us
Art

2435. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:49:24 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <KtadndzKbehLkE3VnZ2dnUVZ_j2dnZ2d@pghconnect.com>
Source record: 22159

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:5f13ffe3-7b61-4e01-80f2-5e90b31d0c4a@s50g2000hsb.googlegroups.com...
On Sep 16, 11:56 am, "Mike Lucas" <w5...@bellsouth.net> wrote:
> "Art Unwin" wrote
>
> >I consider it a real shame that equilibrium is not a part of
> > examinations since equilibrium
> > is a basic in the electrical circuit of all antennas No where do I see
> > antennas explained other than the showing of capacitive coupling to
> > ground of antennas as a perceived circuit of an antenna?. Until this
> > is corrected we will never have continium of discussion between hams
> > on antennas.It is not a mystery anymore so why do the ARRL avoid it
> > like a plague?
> > Art
>
> Art:
> You have written 2,947 posts to RRAA, and at least 2/3 of them
> contain a reference to " equilibrium". Numerous people have asked
> you to define or at least explain your usage of the term. So far, you
> have not done so.Actually, you have either diverted the question, or
> told questioners to do their own research. Your posts show that you
> know nothing about how antennas work, and suspect very little.Why
> would ARRL correct something that's perfectly fine as is???
>
> Mike W5CHR
> Memphis Tenn

Mike
I know more about antennas and radiation than you think !
For instance, equilibrium demands that charges do not move laterally
along an antenna when in equilibrium
Without equilibrium charges do move along the surface of a radiator
and Newtons law of parity demands
that charges are moving thru the CENTER of the radiator thus
encoundering just copper losses.
Thus for a radiator that is not in equilibrium has three resistance
1 Radiation resistance
2 outer resistance
3 Inner copper resistance.

Equilibrium is nothing more than the enforcement of Newtons law of
parity.
This is so simple to those who work from first principles for
themselves instead of being lemmings.
Correctness is not always determined from a poll

Regards
Art

-

I've heard of Newton's laws of motion, but not Newton's law of parity.
Newton dealt primarily with motion, mass, and such. Electromagnetic
radiation hadn't even been discovered when Newton was alive.
Electromagnetic radiation does not behave the same way as matter, which is
described in terms such as momentum, inertia, accceleration and such.

2436. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 19:53:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap2so$4e6$1@news.albasani.net>
Source record: 22160

dfinn1@nc.rr.com wrote:

> ...
> I think your term for equilibrium is the term the exams use for
> "resonant". An antenna with "equilibrium" is your name for an antenna
> upon which a TEM standing wave is present with a standing wave ratio
> of 1:1, correct? That would be your point of maximum effciency of
> ejection of galactic particles from the end points of the antenna
> which is optimized by sloping it relative to to the earth plane.

Some months ago, I made this exact mistake, made, almost, that
exact-same statement.

Although I did not leave with a complete and clear understanding of
"Arts' Equilibrium", I did leave with an understanding it was NOT
resonance ... so ???

Regards,
JS

2437. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 20:08:38 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <MbqdnYnBLfTEj03VnZ2dnUVZ_q3inZ2d@pghconnect.com>
Source record: 22161

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c7df9db0-a3d8-415a-8408-2a3a4250e3e2@x41g2000hsb.googlegroups.com...
On Sep 16, 2:10 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:ee618b1a-ed2f-43c8-bc77-99ace3c56205@73g2000hsx.googlegroups.com...
> On Sep 16, 12:52 pm, "Frank" <frank...@nospam.telus.net> wrote:
>
>
>
> > > Art:
> > > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > > contain a reference to " equilibrium". Numerous people have asked
> > > you to define or at least explain your usage of the term. So far, you
> > > have not done so.Actually, you have either diverted the question, or
> > > told questioners to do their own research. Your posts show that you
> > > know nothing about how antennas work, and suspect very little.Why
> > > would ARRL correct something that's perfectly fine as is???
>
> > > Mike W5CHR
> > > Memphis Tenn
>
> > Also, I would be very interested in identifying where the "weak force"
> > is indicated in, for example, the following point form expression of
> > Ampere's Law:
>
> > DEL cross H = J+ dD/dt
>
> > Frank
>
> Frank
> I am not a servant of this newsgroup. All I am doing is trying to
> educate those that are willing do be educated
> with respect to antennas. You for your self can read the history of
> the masters and Newton to determine how they were aware of the weak
> force,
> its angle and size and yet cannot describe it. Even so it is included
> in all calculations involved in the Universe because equilibrium is a
> staple.
> The fact that members of this group need to be shown that the weak
> force is not fictitious is pityful . I have in the prior posting
> descibed the action of radiation where previously I have stated that
> the weak force is the rotary current flow which as well as the rest of
> the details given are preordained by Newtons law. Prove Newton is

> wrong and you have my attention.
> Nothing personal
> Regards
> Art Unwin KB9MZ.....xg
>
> -
>
> Oh yeah! Newton was also wrong that light needed a medium through which to
> travel (which he called, "aether").

We are talking ab out radiation not the eather.

The law I am referring to is every action has an opposite reaction.
It is a very short law that has not been disproven.
Application of that law states that for a radiator not in equilibrium
a charge is moving on the outside of the radiator THEREFORE
there is a charge moving in the centre of the radiator in the opposite
direction.
So simple Why do hams reject it? No, the charge at the centre is not
and cannot radiate
You don't need a lot of posts, sneers insults e.t.c. to respond just
go to your nearest University
and provide the statement to the Dean and then bring his response back
to all of us
Art

-

First off, I did not intend to have my post interpretd as a sneer. I'm
sorry if you took it that way. I said, "Oh yeah!" because I thought of the
point after I submitted a previous post.

The equal and opposite reaction law only applies when there is mass.
Electromagnetic radiation has no mass. Therefore, the law does not apply.

2438. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 20:09:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap3pv$5m8$1@news.albasani.net>
Source record: 22162

dfinn1@nc.rr.com wrote:

> ...
> No, they are declining if you are talking about anything over 200m.
> They are also losing spectrum for example in 40m to amateurs.

>
> John, Quiz Question: Suppose you tried to modulate a 14 Khz carrier
> with a 50MHz digital signal. Would that be possible? (Y/N) Where would
> you locate the side bands? (________ and ________)
>

Yanno'? This is all closely related to the "Personal Attack Ploy."
(also, known by other names)

However, this one goes, "I will think up an extremely complex trick question from my gorgeously, exquisitely, intellectual mind. I will then trip up the "mark" with my beautiful complex and deep plan, and use this error on "subject A" to prove his statement on past "subject B" is wrong, by sheer implication ... " I see this used on Cecil OFTEN, and by the same ignoramuses a LOT ... I often wonder, "Is anyone here aware enough to wonder if I see this or not? If others here notice, or not?" ROFLOL!

Most of us tried this in grade/high-school, did not find we got the results we expected, abandoned it, and moved on ...

You may wish to consider the same, or not ... however, I do see, with the "resources" available here, this childish ploy is VERY much alive and well! And, I have noticed it is accepted as being effective, by those ignorant to what it really reflects ... like the petty workings of their small minds!

Somehow, this all reminds of a gathering of old men at a botchiball court!, "elmering" a new "Botchiball Recruit." <scratches-head>

Regards,
JS

2439. 1.2 ghz ver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 20:19:25 UTC
From: ml <m@di.net>
Message-ID: <m-E66701.16192516092008@news.optonline.net>
Source record: 22163

hi

maybe i am having a bad google day, can't seem to locate any
amateur usa, verticle antennas for this band

anyone know of any places that might be selling them?

i need a omnidirectional plan ol' verticle antenna for around
local repeaters

thanks

2440. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 20:39:39 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <fQUzk.275$MN3.34@nwrddc01.gnilink.net>
Source record: 22164

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:5ea4517b-0ce6-4629-841e-51d92743be06@a1g2000hsb.googlegroups.com...
>I consider it a real shame that equilibrium is not a part of
> examinations since equilibrium
> is a basic in the electrical circuit of all antennas No where do I see
> antennas explained other than the showing of capacitive coupling to
> ground of antennas as a perceived circuit of an antenna?. Until this
> is corrected we will never have continium of discussion between hams
> on antennas.It is not a mystery anymore so why do the ARRL avoid it
> like a plague?
> Art
-
My engineering training is many years old now, but I haven't seen
equilibrium in the context of antennas discussed anywhere except by you, in
this newsgroup. Do you have any references to papers that have been peer
reviewed and published?

2441. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 20:56:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <36ed0e9f-89f7-49c2-b079-70e487afbcfd@d45g2000hsc.googlegroups.com>
Source record: 22165

On Sep 16, 2:53 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > I think your term for equilibrium is the term the exams use for
> > "resonant". An antenna with "equilibrium" is your name for an antenna
> > upon which a TEM standing wave is present with a standing wave ratio
> > of 1:1, correct? That would be your point of maximum effciency of
> > ejection of galactic particles from the end points of the antenna
> > which is optimized by sloping it relative to to the earth plane.
>
> Some months ago, I made this exact mistake, made, almost, that
> exact-same statement.
>
> Although I did not leave with a complete and clear understanding of
> "Arts' Equilibrium", I did leave with an understanding it was NOT
> resonance ... so ???
>
> Regards,
> JS

Thank you
I am very pleased that you adressed the subject directly and you are
quite correct

resonace can be but not necessarily equate to equilibrium.
Don't go away JS help these people out when you can. I they do not
stay on subject there is no need for me to respond
Art

2442. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 20:57:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c7dcc833-e5a0-4da3-8b34-2741ccd5c2c0@f36g2000hsa.googlegroups.com>
Source record: 22166

On Sep 16, 3:08 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:c7df9db0-a3d8-415a-8408-2a3a4250e3e2@x41g2000hsb.googlegroups.com...
> On Sep 16, 2:10 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
>
>
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >news:ee618b1a-ed2f-43c8-bc77-99ace3c56205@73g2000hsx.googlegroups.com...
> > On Sep 16, 12:52 pm, "Frank" <frank...@nospam.telus.net> wrote:
>
> > > > Art:
> > > > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > > > contain a reference to " equilibrium". Numerous people have asked
> > > > you to define or at least explain your usage of the term. So far, you
> > > > have not done so.Actually, you have either diverted the question, or
> > > > told questioners to do their own research. Your posts show that you
> > > > know nothing about how antennas work, and suspect very little.Why
> > > > would ARRL correct something that's perfectly fine as is???
>
> > > > Mike W5CHR
> > > > Memphis Tenn
>
> > > Also, I would be very interested in identifying where the "weak force"
> > > is indicated in, for example, the following point form expression of
> > > Ampere's Law:
>
> > > DEL cross H = J+ dD/dt
>
> > > Frank
>
> > Frank
> > I am not a servant of this newsgroup. All I am doing is trying to
> > educate those that are willing do be educated
> > with respect to antennas. You for your self can read the history of
> > the masters and Newton to determine how they were aware of the weak
> > force,
> > its angle and size and yet cannot describe it. Even so it is included
> > in all calculations involved in the Universe because equilibrium is a
> > staple.
> > The fact that members of this group need to be shown that the weak
> > force is not fictitious is pityful . I have in the prior posting

> > descibed the action of radiation where previously I have stated that
> > the weak force is the rotary current flow which as well as the rest of
> > the details given are preordained by Newtons law. Prove Newton is
> > wrong and you have my attention.
> > Nothing personal
> > Regards
> > Art Unwin KB9MZ.....xg
>
> > -
>
> > Oh yeah! Newton was also wrong that light needed a medium through which to
> > travel (which he called, "aether").
>
> We are talking ab out radiation not the eather.
>
> The law I am referring to is every action has an opposite reaction.
> It is a very short law that has not been disproven.
> Application of that law states that for a radiator not in equilibrium
> a charge is moving on the outside of the radiator THEREFORE
> there is a charge moving in the centre of the radiator in the opposite
> direction.
> So simple Why do hams reject it? No, the charge at the centre is not
> and cannot radiate
> You don't need a lot of posts, sneers insults e.t.c. to respond just
> go to your nearest University
> and provide the statement to the Dean and then bring his response back
> to all of us
> Art
>
> -
>
> First off, I did not intend to have my post interpretd as a sneer. I'm
> sorry if you took it that way. I said, "Oh yeah!" because I thought of the
> point after I submitted a previous post.
>
> The equal and opposite reaction law only applies when there is mass.
> Electromagnetic radiation has no mass. Therefore, the law does not apply.

Radiation has no mass? You just made that up

2443. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:04:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap712$95i$1@news.albasani.net>
Source record: 22167

Art Unwin wrote:

>> ...
> resonace can be but not necessarily equate to equilibrium.
> Don't go away JS help these people out when you can. I they do not
> stay on subject there is no need for me to respond
> Art

Well, I got that part "right" too (I think), as demonstrated by a 5/8 wave antenna, etc., they are NOT resonate but exist in the "confines" of your equilibrium ... but Art, they will have to take their lessons from "The Master", you! <wink>

Regards,
JS

2444. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:06:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap750$95i$2@news.albasani.net>
Source record: 22168

Art Unwin wrote:

> ...
> Radiation has no mass? You just made that up

Yes, that would seem to break the law of "'E' equals mc squared", and
its' opposite, counterpart ... I mean, if you really think about it ... ;-)

Regards,
JS

2445. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:07:08 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <KcedndW9KLySvU3VnZ2dnUVZ_uqdnZ2d@pghconnect.com>
Source record: 22169

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c7dcc833-e5a0-4da3-8b34-2741ccd5c2c0@f36g2000hsa.googlegroups.com...
On Sep 16, 3:08 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:c7df9db0-a3d8-415a-8408-2a3a4250e3e2@x41g2000hsb.googlegroups.com...
> On Sep 16, 2:10 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
>
>
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >news:ee618b1a-ed2f-43c8-bc77-99ace3c56205@73g2000hsx.googlegroups.com...
> > On Sep 16, 12:52 pm, "Frank" <frank...@nospam.telus.net> wrote:
>
> > > > Art:
> > > > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > > > contain a reference to " equilibrium". Numerous people have asked
> > > > you to define or at least explain your usage of the term. So far,
> > > > you
> > > > have not done so.Actually, you have either diverted the question, or
> > > > told questioners to do their own research. Your posts show that you
> > > > know nothing about how antennas work, and suspect very little.Why
> > > > would ARRL correct something that's perfectly fine as is???
>
> > > > Mike W5CHR
> > > > Memphis Tenn
>
> > > Also, I would be very interested in identifying where the "weak force"
> > > is indicated in, for example, the following point form expression of
> > > Ampere's Law:
>
> > > DEL cross H = J+ dD/dt
>
> > > Frank
>
> > Frank
> > I am not a servant of this newsgroup. All I am doing is trying to
> > educate those that are willing do be educated
> > with respect to antennas. You for your self can read the history of
> > the masters and Newton to determine how they were aware of the weak
> > force,
> > its angle and size and yet cannot describe it. Even so it is included
> > in all calculations involved in the Universe because equilibrium is a

> > staple.
> > The fact that members of this group need to be shown that the weak
> > force is not fictitious is pityful . I have in the prior posting
> > descibed the action of radiation where previously I have stated that
> > the weak force is the rotary current flow which as well as the rest of
> > the details given are preordained by Newtons law. Prove Newton is
> > wrong and you have my attention.
> > Nothing personal
> > Regards
> > Art Unwin KB9MZ.....xg
>
> > -
>
> > Oh yeah! Newton was also wrong that light needed a medium through which
> > to
> > travel (which he called, "aether").
>
> We are talking ab out radiation not the eather.
>
> The law I am referring to is every action has an opposite reaction.
> It is a very short law that has not been disproven.
> Application of that law states that for a radiator not in equilibrium
> a charge is moving on the outside of the radiator THEREFORE
> there is a charge moving in the centre of the radiator in the opposite
> direction.
> So simple Why do hams reject it? No, the charge at the centre is not
> and cannot radiate
> You don't need a lot of posts, sneers insults e.t.c. to respond just
> go to your nearest University
> and provide the statement to the Dean and then bring his response back
> to all of us
> Art
>
> -
>
> First off, I did not intend to have my post interpretd as a sneer. I'm
> sorry if you took it that way. I said, "Oh yeah!" because I thought of the
> point after I submitted a previous post.
>
> The equal and opposite reaction law only applies when there is mass.
> Electromagnetic radiation has no mass. Therefore, the law does not apply.

Radiation has no mass? You just made that up

-

No, actually, a little fella named Albert Einstein made it up. An electron
and a positron have mass. When they come together and annihilate, they turn
into pure energy (two 511 KeV photons travelling in opposite directions if I
remember right), which has no mass. That's what E=MC^2 predicted; and
that's what happens in certain radioactive decays all the time. Positrons

get produced by the deceleration of neutrons which come too close to the nucleus of an atom with large mass. They then annihilate when coming close to an electron. This is just one example.

Radiation has no mass and is, therefore, not subject to Newton's laws. A link to a simple explanation at a physics department of a university is:

http://www.uwsp.edu/geo/faculty/ritter/geog101/textbook/energy/nature_of_electromagnetic_radiation.html

From that site (and also what I learned in college physics) is: ". . . a bundle of energy called a "photon" is released. However, particles of light differ from particles of matter: they have no mass, occupy no space, and travel at the speed of light. . ."

2446. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:07:31 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b32fac3f-2cd3-4c05-bf8b-4b9cf7c2c9e4@a1g2000hsb.googlegroups.com>
Source record: 22170

On Sep 16, 3:39 pm, "Wayne" <mygarbage...@verizon.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:5ea4517b-0ce6-4629-841e-51d92743be06@a1g2000hsb.googlegroups.com...>I consider it a real shame that equilibrium is not a part of
> > examinations since equilibrium
> > is a basic in the electrical circuit of all antennas No where do I see
> > antennas explained other than the showing of capacitive coupling to
> > ground of antennas as a perceived circuit of an antenna?. Until this
> > is corrected we will never have continium of discussion between hams
> > on antennas.It is not a mystery anymore so why do the ARRL avoid it
> > like a plague?
> > Art
>
> -
> My engineering training is many years old now, but I haven't seen
> equilibrium in the context of antennas discussed anywhere except by you, in
> this newsgroup. Do you have any references to papers that have been peer
> reviewed and published?

Oh I suppose a search on google re antennas and equilibrium will get
you something to read
but difficult if you are starting from Zero. The point where you begin
is Newtons laws, if they are in error then so am I
I doubt if you will find anything that definitely proves that he is
wrong.If a professor does not know what I have stated he should be
nfired
which goes for some of the people at University of Illinois in the
electrical engineering area.
EVERYTHING in science revolves around equilibrium. If a posting denys
that or does not respond to that Law
i will not respond and that includes Richard whose sole aim in life if
to divert the crowd with off topic nothings as he does not ahve any
engineering degree from any accredited college and thus is a pretender
looking for a date with any poster.
Art

2447. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:14:07 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <bnVzk.403$pr6.155@flpi149.ffdc.sbc.com>
Source record: 22171

dfinn1@nc.rr.com wrote:
> This is not relevant to the orginal discussion.

On the contrary, this is the crux of the original
discussion - whether a wave can exist outside the
structure of the universe, whatever that may be.
--
73, Cecil http://www.w5dxp.com

2448. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:15:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <OoVzk.404$pr6.276@flpi149.ffdc.sbc.com>
Source record: 22173

dfinn1@nc.rr.com wrote:
> Why must there be an "it" through which TEM waves proagate? Why cannot
> they propagate through nothingness?

Because the only thing that can propagate through
nothingness is nothing. That should be clear to
the most casual observer.
--
73, Cecil http://www.w5dxp.com

2449. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:15:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1c648ee0-7f6f-4f9f-be77-72bc08ac9662@t54g2000hsg.googlegroups.com>
Source record: 22172

On Sep 16, 2:49 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:5f13ffe3-7b61-4e01-80f2-5e90b31d0c4a@s50g2000hsb.googlegroups.com...
> On Sep 16, 11:56 am, "Mike Lucas" <w5...@bellsouth.net> wrote:
>
>
>
> > "Art Unwin" wrote
>
> > >I consider it a real shame that equilibrium is not a part of
> > > examinations since equilibrium
> > > is a basic in the electrical circuit of all antennas No where do I see
> > > antennas explained other than the showing of capacitive coupling to
> > > ground of antennas as a perceived circuit of an antenna?. Until this
> > > is corrected we will never have continium of discussion between hams
> > > on antennas.It is not a mystery anymore so why do the ARRL avoid it
> > > like a plague?
> > > Art
>
> > Art:
> > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > contain a reference to " equilibrium". Numerous people have asked
> > you to define or at least explain your usage of the term. So far, you
> > have not done so.Actually, you have either diverted the question, or
> > told questioners to do their own research. Your posts show that you
> > know nothing about how antennas work, and suspect very little.Why
> > would ARRL correct something that's perfectly fine as is???
>
> > Mike W5CHR
> > Memphis Tenn
>
> Mike
> I know more about antennas and radiation than you think !
> For instance, equilibrium demands that charges do not move laterally
> along an antenna when in equilibrium
> Without equilibrium charges do move along the surface of a radiator
> and Newtons law of parity demands
> that charges are moving thru the CENTER of the radiator thus
> encoundering just copper losses.
> Thus for a radiator that is not in equilibrium has three resistance
> 1 Radiation resistance
> 2 outer resistance
> 3 Inner copper resistance.

>
> Equilibrium is nothing more than the enforcement of Newtons law of
> parity.
> This is so simple to those who work from first principles for
> themselves instead of being lemmings.
> Correctness is not always determined from a poll
> Regards
> Art
>
> -
>
> I've heard of Newton's laws of motion, but not Newton's law of parity.
> Newton dealt primarily with motion, mass, and such. Electromagnetic
> radiation hadn't even been discovered when Newton was alive.
> Electromagnetic radiation does not behave the same way as matter, which is
> described in terms such as momentum, inertia, accceleration and such.

Mike
Einstein changed course in study because he could not solve the
description of the weak force
which I see as foucalt current. Knowing this Einstein would be proud
to stand up as state his
thoughts on Universal law has now been proved forget. You cannot
parcel laws based on a particular subject.
Universl laws are just that. UNIVERSAL. What on earth does parity mean
in the U.S.?
Art

2450. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:19:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap7tpabl1@news.albasani.net>
Source record: 22174

Rectifier wrote:

> ...
> No, actually, a little fella named Albert Einstein made it up. An
> electron and a positron have mass. When they come together and
> annihilate, they turn into pure energy (two 511 KeV photons travelling
> in opposite directions if I remember right), which has no mass. That's
> what E=MC^2 predicted; and that's what happens in certain radioactive
> decays all the time. Positrons get produced by the deceleration of
> neutrons which come too close to the nucleus of an atom with large
> mass. They then annihilate when coming close to an electron. This is
> just one example.
> ...

Actually, we only wish things were/are that simplistic. There is then "the other story" (hey, did I just see Paul Harvey in here?)

http://en.wikipedia.org/wiki/Mass-energy_equivalence

Time and movement are very much in play, as are "kinetic energy factors" ... in a nutshell, mass to energy is much "easier" process than energy to mass -- and, certainly, much easier to compute/define/determine.

Regards,
JS

2451. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:21:35 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <Sc-dnTPwX87vvk3VnZ2dnUVZ_gSdnZ2d@pghconnect.com>
Source record: 22175

>but difficult if you are starting from Zero. The point where you begin
>is Newtons laws, if they are in error then so am I

Newtons laws are not in error. But your application of them is in error.
You are applying laws that apply to objects with mass to electromagnetic
radiation, which has no mass.

>engineering degree from any accredited college and thus is a pretender
>looking for a date with any poster.

I have an Engineering Physics degree from a university program that is an
ABET certified engineering program.

2452. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:23:33 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2wVzk.405$pr6.18@flpi149.ffdc.sbc.com>
Source record: 22177

Rectifier wrote:
> Radiation has no mass ...

On the contrary, radiation is photons which indeed
do have mass when traveling at the speed of light,
which radiation does. The pressure of photons from
the sun can actually be used to propel a sail boat
through space.

http://www.nasa.gov/mission_pages/smallsats/nanosail_feature.html
--
73, Cecil http://www.w5dxp.com

2453. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:23:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gap85haoq1@news.albasani.net>
Source record: 22176

Art Unwin wrote:
>> ... The point where you begin
> is Newtons laws, if they are in error then so am I
> I doubt if you will find anything that definitely proves that he is
> wrong.If a professor does not know what I have stated he should be
> nfired ...

> Art

Well, I certainly don't know about all that ...

But, if my understanding is correct, newtons laws begin to "fall apart"
with very small particles ... and indeed, the ether (eather, aether --
sometimes I make a typo and type it as "either") is composed of such ...

I am sure, I am least correct at the quantum level ... <wink>

Regards,
JS

2454. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:32:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <SBVzk.718$c45.42@nlpi065.nbdc.sbc.com>
Source record: 22178

Rectifier wrote:
> You are applying laws that apply to objects with mass to
> electromagnetic radiation, which has no mass.

Photons have zero rest mass. Otherwise, they couldn't travel
at the speed of light. But photons traveling at the speed
of light certainly have mass. Where in the world did you
get such irrational ideas?

> I have an Engineering Physics degree from a university program that is
> an ABET certified engineering program.

After your latest posting, they may de-certify your university's
program. Exactly what university was it that taught you that
photons traveling at the speed of light have zero mass?
--
73, Cecil http://www.w5dxp.com

2455. Re: 1.2 ghz ver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:34:39 UTC
From: Dave <noone@nowhere.com>
Message-ID: <PDVzk.209$Jw.34@nwrddc02.gnilink.net>
Source record: 22179

"ml" <m@di.net> wrote in message
news:m-E66701.16192516092008@news.optonline.net...
> hi
>
> maybe i am having a bad google day, can't seem to locate any
> amateur usa, verticle antennas for this band
>
> anyone know of any places that might be selling them?
>
>
> i need a omnidirectional plan ol' verticle antenna for around
> local repeaters
>
>
> thanks

got a couple paperclips??

2456. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:47:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ZPVzk.211$Jw.123@nwrddc02.gnilink.net>
Source record: 22180

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:18384bb9-5c02-4ea4-afe1-3acb499d47c4@r66g2000hsg.googlegroups.com...
>I want to share with you one problem that I have on the above subject
> When placing a yagi in free space the computor programs supply a gain
> figure
> where according to my thinking the root cause for ejection is the
> intersection of two magnetic field.How this happens with a yagi is a
> matter of conjecture. Any pointers?
> Performing the same with an arrangement in equilibhrium there is no
> gravity and yet gain is shown. This leads to four posabilities

> 4 The concept of initial reliance on equilibrium as preached by the
> masters is incorrect and my reasoning is in error

HOORAY! He finally got the right answer!!!

2457. Re: 1.2 ghz ver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 21:58:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapa76cmu1@news.albasani.net>
Source record: 22181

ml wrote:
> hi
>
> maybe i am having a bad google day, can't seem to locate any
> amateur usa, verticle antennas for this band
>
> anyone know of any places that might be selling them?
>
>
> i need a omnidirectional plan ol' verticle antenna for around
> local repeaters
>
>
> thanks

You don't have need of multi-band capabilities?

http://www.universal-radio.com/catalog/hamantm/2218.html

Regards,
JS

2458. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 23:25:53 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <80dab935-376c-4a45-afd8-74c7ea53a2f2@l43g2000hsh.googlegroups.com>
Source record: 22182

On Sep 16, 4:23 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> >> ... The point where you begin
> > > is Newtons laws, if they are in error then so am I
> > > I doubt if you will find anything that definitely proves that he is
> > > wrong.If a professor does not know what I have stated he should be
> > > nfired ...
> > > Art
>
> Well, I certainly don't know about all that ...
>
> But, if my understanding is correct, newtons laws begin to "fall apart"
> with very small particles ... and indeed, the ether (eather, aether --
> sometimes I make a typo and type it as "either") is composed of such ...
>
> I am sure, I am least correct at the quantum level ... <wink>
>
> Regards,
> JS

That was ruled out when it was determined that Neutrons were not
without mass !

2459. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 23:43:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapgb2iiu1@news.albasani.net>
Source record: 22183

Art Unwin wrote:

> ...
> That was ruled out when it was determined that Neutrons were not
> without mass !

Hmmm ... actually, how can anything "really" be without "mass", isn't energy just a "form of mass" and "vice versa?" I mean, the equations certainly imply this ...

I mean really, when we deal with particles the size of photons and below ... aren't they "melding" into the same "thingys" <grin> ... and, perhaps my data is old ... I don't think "newton does quantum", but he might have a brother by the same name ... ;-)

Regards,
JS

2460. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 23:47:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <60fa8c84-d5a4-4e00-b66b-b2999f961692@m36g2000hse.googlegroups.com>
Source record: 22184

On Sep 16, 4:32 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Rectifier wrote:
> > You are applying laws that apply to objects with mass to
> > electromagnetic radiation, which has no mass.
>
> Photons have zero rest mass. Otherwise, they couldn't travel
> at the speed of light. But photons traveling at the speed
> of light certainly have mass. Where in the world did you
> get such irrational ideas?
>
> > I have an Engineering Physics degree from a university program that is
> > an ABET certified engineering program.
>
> After your latest posting, they may de-certify your university's
> program. Exactly what university was it that taught you that
> photons traveling at the speed of light have zero mass?
> --
> 73, Cecil http://www.w5dxp.com

Cecil, this sounds like a regular poster David.Perhaps he is pulling
your leg with his nonsence
Art

2461. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 23:53:31 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <8ug0d45gge82kk7qitmhfu5jun7jejrb3t@4ax.com>
Source record: 22185

On Tue, 16 Sep 2008 11:43:56 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>... and Newtons law of parity demands
>that charges are moving thru the CENTER of the radiator thus
>encoundering just copper losses.

Google fails to find anything under Newton's Law of Parity.
Which one of these is what you're talking about?
<http://en.wikipedia.org/wiki/Parity>
<http://en.wikipedia.org/wiki/List_of_physics_topics_M-Q#P>
<http://neohumanism.org/p/pa/parity.html>

>Equilibrium is nothing more than the enforcement of Newtons law of
>parity.

It's hard to enforce a law that doesn't exist.

Drivel: I tried to write a spoof of your postings mimicking your
style of technical word salad. I built the necessary framework, and
added copious amounts of buzzwords and technobabble. However, the
result was unimpressive and not even close to the quality of your
pseudo technological rants. I'm truly impressed at your ability to
fabricate such rubbish and would greatly appreciate some clues as to
how it is done.

Hint: Numbers, formulas, references, URL's, and specifics. Lacking
those, you would be a philosopher.

Incidentally, equilibrium is implied in the various FCC exams. If you
lack sufficient equilibrium to take the exams due to intoxication, the
FCC (or VE) will refuse to administer the exam.

--
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http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

2462. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-16 23:56:16 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <jph0d491g3n7pmdi03in4fvr5us1uo3k2f@4ax.com>
Source record: 22186

On Tue, 16 Sep 2008 14:15:58 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>What on earth does parity mean in the U.S.?
>Art

<http://www.livinghistoryfarm.org/farminginthe30s/money_24.html>
It has evolved into the money that farmers get from the government to
NOT grow crops and keep prices high.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
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2463. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:05:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaphjm$jn9$1@news.albasani.net>
Source record: 22187

Jeff Liebermann wrote:
> On Tue, 16 Sep 2008 11:43:56 -0700 (PDT), Art Unwin
> <ArthurUnwin@gmail.com> wrote:
>
>
> Google fails to find anything under Newton's Law of Parity.
> Which one of these is what you're talking about?
> <http://en.wikipedia.org/wiki/Parity>
> <http://en.wikipedia.org/wiki/List_of_physics_topics_M-Q#P>
> <http://neohumanism.org/p/pa/parity.html>
>
parity.
>
> It's hard to enforce a law that doesn't exist.
>
> Drivel: I tried to write a spoof of your postings mimicking your
> style of technical word salad. I built the necessary framework, and
> added copious amounts of buzzwords and technobabble. However, the
> result was unimpressive and not even close to the quality of your
> pseudo technological rants. I'm truly impressed at your ability to
> fabricate such rubbish and would greatly appreciate some clues as to
> how it is done.
>
> Hint: Numbers, formulas, references, URL's, and specifics. Lacking
> those, you would be a philosopher.
>
> Incidentally, equilibrium is implied in the various FCC exams. If you
> lack sufficient equilibrium to take the exams due to intoxication, the
> FCC (or VE) will refuse to administer the exam.

So, look on the bright-side! Once you have proven Art wrong, you have
really done nothing at all!

We will still be stuck with the same mysteries, the same enigmas, the
same riddles! :-) Life would be NOT if not for the "unknowns" ... the
advances we can make, the riddles we can solve, etc. ...

Indeed, when I "run" a program to compute an area of a circle, the
volume of that sphere, the surface area of that sphere--it works! No
"error factor", no "pruning", no "adjustments", etc. Same with a
square, a rectangle, a cube, or for that matter, any polygon, be it 2d
or 3d ...

When I run "antenna equations/formulas", I get no joy. When our
"antenna formulas" approach to, around, 99.9999999999% of that

exactness, preciseness, we will be able to claim, "We are close!" ROFLOL

Until then, we will use the "Compute, then cut-and-prune-and-adjust method(s.) :-(

But hey, if there where not such questions, inaccuracies and "sloppy-ness", life would be boring -- now, wouldn't it? <another-straight-faced-look>

Regards,
JS

2464. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:12:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapi0s$k5d$1@news.albasani.net>
Source record: 22188

Art Unwin wrote:

> ...
> Cecil, this sounds like a regular poster David.Perhaps he is pulling
> your leg with his nonsence
> Art

What, this is not the "Pulling Your Leg Festival?"

Damn, it appears I have caught the wrong door again! Last time this happened, it was a womens restroom, at walmart, no less :-(-- at least this is less embarrassing ... <grin>

I have found this news group to be a usable answer to the question, "What would happen if you accidentally entered the door to an old-peoples/rest-home/psychiatric-institution instead of the forum for the college lecture you were supposed to be at and in attendance?

Hey, it works for me ... <another-straight-face-yet>

Regards,
JS

2465. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:13:59 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <bdi0d4h38h898attfmhqg742r0eni7egev@4ax.com>
Source record: 22189

On Tue, 16 Sep 2008 17:41:49 GMT, "JB" <nospam@goofball.net> wrote:

>The neat thing about going full digital? You no longer have any idea why
>the signal breaks up. PERIOD. The Customer is no longer bothered by
>interference of any kind. Either it works or not. If your QSO, Phone Call,
>Mayday, Police call for backup, TV signal gets knocked off the air, you
>won't have a clue why.

Unfortunately, you're correct. I have considerable experience dealing with various path impairment issues using various wireless technologies, especially Wi-Fi. User will complain that they loose connectivity, drop connections, suffer from erratic performance, and generally see performance well below what would normally be expected. The sources are many and varied. They're also very difficult to identify. Quite a bit can be deduced with simple diagnostics (i.e. ping stability, MAC layer packet loss, retransmissions) and from determining the pattern (does it always die during meal times), but in general, it's way beyond the capabilities of Joe Sixpack. I expect much of the same with digital TV.

However, I'm not worried much about the RF issues. It will either work or the customer can get cable or satellite TV. What I'm worried about are all the added cables and incompatible technologies found on the back of the HDTV sets and boxes. Another tangle of wires to deal with.

Anyway, radio is magic. Maybe I should get one of those Halloween pointed sorcerers hats with the stars and crescents.
<http://en.wikipedia.org/wiki/Image:MGM_sorcererhat.jpg>

--
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http://www.LearnByDestroying.com AE6KS

2466. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:14:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapi4i$k5d$2@news.albasani.net>
Source record: 22190

Jeff Liebermann wrote:

> ...
> <http://www.livinghistoryfarm.org/farminginthe30s/money_24.html>
> It has evolved into the money that farmers get from the government to
> NOT grow crops and keep prices high.

Jeff:

Every once and-a-while a poster deserves my undivided attention AND
respect; today, that poster is YOU! ROFLOL!!!!

Warmest regards,
JS

2467. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:15:37 UTC
From: JB <nospam@goofball.net>
Message-ID: <J_Xzk.266$3e1.229@trnddc02>
Source record: 22191

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gaoubgutf1@news.albasani.net...
> JB wrote:
> > The neat thing about going full digital? You no longer have any idea
why
> > the signal breaks up. PERIOD. The Customer is no longer bothered by
> > interference of any kind. Either it works or not. If your QSO, Phone
Call,
> > Mayday, Police call for backup, TV signal gets knocked off the air, you
> > won't have a clue why.
> >
>
> Actually, NOT. Even the simple bars on a cell phone tell you if
> communication is possible or not.

That is all it can tell you.

The software running on an up-to-date
> rig can describe the exact reason to you, if your rig interfaces to your
> computer screen ...

Maybe you know of a secret diagnostic menu for my DTX9900?
If I remember correctly, all they know is RSSI and data errors. Please,
tell me if there are other indications that discern multipath, interference,
or any other reception problem without either sophisticated test equipment
or an analog indication - perhaps a color coded bar graph or channel
spectra that can react faster than the stream filling the buffer. I don't
know how ATSC handles error correction, but being a broadcast stream, I
would suppose only forward error correction is possible.

> If the binary signal just clears the noise floor, and not by much mind
> you (I am hesitant to quote an exact figure here) a perfect signal is
> quite possible ... that is simply the nature of digital.

PACTOR yes, but I don't see that with DRM or ATSC at all. How is it that an
s9 signal isn't enough? I'm truly glad to have SSB so I can tell the other
station to resend the file again. The Universe isn't digital. Certainly
not radio. The signal, no matter what modulation scheme you use to improve
recovery of usable clipped and buffered data, is still in the realm of the
analog during transmission over the air. Ok, you might not understand that
if you are only the network guy and all your traffic worries start at the
protocol level as long as the Fiber box is energized.

don't know why anyone would claim that digital signals are not
> MUCH superior to analog -- remember the old analog cell phones -- who
> would ever wish to "go-back-there???"

Actually the best sounding mobile phone I ever had was my full-duplex 450 Motrac linked to a mountain top site with wide area direct dialing. No one ever suspected I was mobile. But that was because my Analog link was better than a voice grade phone line. Digital is great if you can find the bandwidth, but great sacrifices and compromises have often been made in audio quality for the sake of keeping the occupied bandwidth of the RF channel within limits. What I am seeing on DTV, are stations that are doing one 1080i or 720p stream on one RF channel with maybe 2 more streams of 480i (often annoyingly compressed) OR up to 6 - 480i streams not so heavily compressed. So I hate to disappoint you, that not all channels will be better than analog until they find a way to do better than MPEG compression and conversion from an NTSC source.

The move to digital cellular allowed channel re-use without having the customer hear interference from co-channel sites so that many sites could be used to communicate with many small handsets. Do you think that will be much of an issue on Ham radio? Ham radio's greatest protection is in the fact that it isn't supposed to compete with other services. No privacy is needed or allowed either. If you copy the consumer model, you have no amateur radio anymore. So I ask you sir, wouldn't you rather be using a digital cell phone and leave the ham bands alone? Experimentation will continue and things will be learned, people will contest and rag chew and chase DX, but when ham radio for free is simple enough to compete with cell phone services or a twisted pair, there will be a problem.

2468. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:19:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8ti0d4d1nsdmieo29n6b1akgctks3ip9mr@4ax.com>
Source record: 22192

On Tue, 16 Sep 2008 16:47:54 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Sep 16, 4:32ï¿½pm, Cecil Moore <nos...@w5dxp.com> wrote:
>> Photons have zero rest mass.
a photon at rest, how droll.
>Cecil, this sounds like a regular poster David.Perhaps he is pulling
>your leg with his nonsence

We know that we can accelerate an electron to 90% of the speed of
light - it happens every femtosecond in one of any 100 billion crt
displays still glowing in the world. Some of us know its mass at this
speed. A question for the Newtonian philosopherz:
"What is the mass of a photon traveling at 90% of the speed of
light?"

73's
Richard Clark, KB7QHC

2469. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:25:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapiq6$ks1$1@news.albasani.net>
Source record: 22193

Jeff Liebermann wrote:

> ...
> Unfortunately, you're correct. I have considerable experience dealing
> with various path impairment issues using various wireless
> technologies, especially Wi-Fi. User will complain that they loose
> connectivity, drop connections, suffer from erratic performance, and
> generally see performance well below what would normally be expected.
> The sources are many and varied. They're also very difficult to
> identify. Quite a bit can be deduced with simple diagnostics (i.e.
> ping stability, MAC layer packet loss, retransmissions) and from
> determining the pattern (does it always die during meal times), but in
> general, it's way beyond the capabilities of Joe Sixpack. I expect
> much of the same with digital TV.
>
> However, I'm not worried much about the RF issues. It will either
> work or the customer can get cable or satellite TV. What I'm worried
> about are all the added cables and incompatible technologies found on
> the back of the HDTV sets and boxes. Another tangle of wires to deal
> with.
>
> Anyway, radio is magic. Maybe I should get one of those Halloween
> pointed sorcerers hats with the stars and crescents.
> <http://en.wikipedia.org/wiki/Image:MGM_sorcererhat.jpg>
>

Yep, only buy wireless routers/switches here which allow connection to
"off board" antennas ... (i.e., external antennas)

IMHO, and humble experience, reflections only worsen with a raise in
frequency ... others mileage may vary ... and EVERYTHING you own, which
is metal/conductive, is a wavelength+ at Ghz!

Regards,
JS

2470. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:29:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <71a4a818-98bf-4cbd-8372-3d570fa2b6a6@a70g2000hsh.googlegroups.com>
Source record: 22194

On Sep 16, 6:56 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Tue, 16 Sep 2008 14:15:58 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >What on earth does parity mean in the U.S.?
> >Art
>
> <http://www.livinghistoryfarm.org/farminginthe30s/money_24.html>
> It has evolved into the money that farmers get from the government to
> NOT grow crops and keep prices high.
>
> --
> # Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
> # 831-336-2558 je...@comix.santa-cruz.ca.us
> #http://802.11junk.com je...@cruzio.com
> #http://www.LearnByDestroying.com AE6KS

Well you may have hit on it. I am an englishman still in the learning
of American.
I saw the term parity as being on a par,maybe that is where I am going
wrong.
The law I am refering to is that every action has an opposite
reaction, not quite the words Newtons
used but the reaction is on par with the initial action. If you are in
doubt look up Newtons actual words.
Parity is what I picked up on this newsgroup so when in Rome........
Parity means the maintainance of balance
still sounds O.K. but I will not use it any more!
Art

2471. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:38:03 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d05132$0$60064$8046368a@newsreader.iphouse.net>
Source record: 22195

Art Unwin wrote:
>
> Oh I suppose a search on google re antennas and equilibrium will get
> you something to read

Nope, unless you are interested in insects, the above statement is dead
wrong.

tom
K0TAR

2472. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:38:29 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4e1808f1-9809-455d-8c26-e82650b85ce5@z72g2000hsb.googlegroups.com>
Source record: 22196

On Sep 16, 6:53 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Tue, 16 Sep 2008 11:43:56 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >... and Newtons law of parity demands
> >that charges are moving thru the CENTER of the radiator thus
> >encoundering just copper losses.
>
> Google fails to find anything under Newton's Law of Parity.
> Which one of these is what you're talking about?
> <http://en.wikipedia.org/wiki/Parity>
> <http://en.wikipedia.org/wiki/List_of_physics_topics_M-Q#P>
> <http://neohumanism.org/p/pa/parity.html>
>
> >Equilibrium is nothing more than the enforcement of Newtons law of
> >parity.
>
> It's hard to enforce a law that doesn't exist.
>
> Drivel: I tried to write a spoof of your postings mimicking your
> style of technical word salad. I built the necessary framework, and
> added copious amounts of buzzwords and technobabble. However, the
> result was unimpressive and not even close to the quality of your
> pseudo technological rants. I'm truly impressed at your ability to
> fabricate such rubbish and would greatly appreciate some clues as to
> how it is done.
>
Truth is stranger than fiction and what I am saying is the truth or
factual.
In all the years that I have been on this group nobody has proved me
wrong
with respect to radiation. If they had I would have apologized for the
record.
For myself I can run all of these people out of town on antennas as
they are all self perceived experts
bestowing glory on them selves in retirement to supply the recognition
they feel they earned in the past.
Find an expert for yourself and ask him the same questions that you
ask of me.
My statements are nothing special and nor am I
Art

> Hint: Numbers, formulas, references, URL's, and specifics. Lacking
> those, you would be a philosopher.

>
> Incidentally, equilibrium is implied in the various FCC exams. If you
> lack sufficient equilibrium to take the exams due to intoxication, the
> FCC (or VE) will refuse to administer the exam.
>
> --
> # Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
> # 831-336-2558   je...@comix.santa-cruz.ca.us
> #http://802.11junk.com   je...@cruzio.com
> #http://www.LearnByDestroying.com   AE6KS

2473. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:48:10 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gapk4m$17u$1@news.service.uci.edu>
Source record: 22197

Cecil Moore wrote:
> Rectifier wrote:
>> Radiation has no mass ...
>
> On the contrary, radiation is photons which indeed
> do have mass when traveling at the speed of light,
> which radiation does.

According to Einstein, anything with energy has mass equivalence -
especially photons. But other than that, nothing with mass can travel
at the speed of light. You can have one, or the other, not both.

73, ac6xg

2474. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 00:58:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fsk0d4h63f6d0e7chppqv5m0h8vd6rfc0j@4ax.com>
Source record: 22198

On Tue, 16 Sep 2008 17:19:14 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 16 Sep 2008 16:47:54 -0700 (PDT), Art Unwin
><ArthurUnwin@gmail.com> wrote:
>
>>On Sep 16, 4:32ï¿½pm, Cecil Moore <nos...@w5dxp.com> wrote:
>>> Photons have zero rest mass.
>a photon at rest, how droll.
>>Cecil, this sounds like a regular poster David.Perhaps he is pulling
>>your leg with his nonsence
>
>We know that we can accelerate an electron to 90% of the speed of
>light - it happens every femtosecond in one of any 100 billion crt
>displays still glowing in the world. Some of us know its mass at this
>speed. A question for the Newtonian philosopherz:
> "What is the mass of a photon traveling at 90% of the speed of
> light?"

Ah, yes!

No Newtonians in this crowd. Perhaps it was the relativistic term
"speed of light" that confused this group so much. Let's restate it
in units that Newton could have appreciated.

We know that we can accelerate an electron to 167,770 miles/s - it
happens every femtosecond in one of any 100 billion crt
displays still glowing in the world. Some of us know its mass at this
speed. A question for the Newtonian philosopherz:
"What is the mass of a photon traveling at 167,770 miles/s?"

73's
Richard Clark, KB7QHC

2475. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:07:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapl99onn1@news.albasani.net>
Source record: 22199

JB wrote:

>
> That is all it can tell you.
>

Think about it man! What more do you need ... I mean, I really can not
elaborate here, do you have children? Have them explain "it" to you ...

> Maybe you know of a secret diagnostic menu for my DTX9900?
> If I remember correctly, all they know is RSSI and data errors. Please,
> tell me if there are other indications that discern multipath, interference,
> or any other reception problem without either sophisticated test equipment
> or an analog indication - perhaps a color coded bar graph or channel
> spectra that can react faster than the stream filling the buffer. I don't
> know how ATSC handles error correction, but being a broadcast stream, I
> would suppose only forward error correction is possible.

Most, if not all, you have stated is really quite unnecessary, or
certainly should be, to a REAL amateur ... think about it, what error
correction have you ever had with your analog equipment. What error
messages did your Drake ever give you, your Hallicrafters, your Gonset,
your Johnson (no pun intended on your "natural gear", lol!), etc., etc.
... however, count on MUCH MORE from digital equipment!

> PACTOR yes, but I don't see that with DRM or ATSC at all. How is it that an
> s9 signal isn't enough? I'm truly glad to have SSB so I can tell the other
> station to resend the file again. The Universe isn't digital. Certainly
> not radio. The signal, no matter what modulation scheme you use to improve
> recovery of usable clipped and buffered data, is still in the realm of the
> analog during transmission over the air. Ok, you might not understand that
> if you are only the network guy and all your traffic worries start at the
> protocol level as long as the Fiber box is energized.

Yanno', this "all" is getting too long, I feel like I am replying to an
idiot--now that isn't happening, is it?

Yanno', it sounds as if you have problems alright, I am beginning
digital equipment will neither make them better or worse--however, your
perception(s) may deceive you--think about a psychiatrist!

>
> Actually the best sounding mobile phone I ever had was my full-duplex 450
> Motrac linked to a mountain top site with wide area direct dialing. No one
> ever suspected I was mobile. But that was because my Analog link was better
> than a voice grade phone line. Digital is great if you can find the
> bandwidth, but great sacrifices and compromises have often been made in

> audio quality for the sake of keeping the occupied bandwidth of the RF
> channel within limits. What I am seeing on DTV, are stations that are doing
> one 1080i or 720p stream on one RF channel with maybe 2 more streams of 480i
> (often annoyingly compressed) OR up to 6 - 480i streams not so heavily
> compressed. So I hate to disappoint you, that not all channels will be
> better than analog until they find a way to do better than MPEG compression
> and conversion from an NTSC source.
>

Wow, the brass pounders would just love you ... let me see, you remind
me of "Art Bell -- Stuck In Times" ... hmmm, that is the title of that
book, isn't it? ROFLOL

Your arguments suck ... you jam technical details into matters where
your eyes would serve as proof enough ... are you taking your meds? Are
you doing so on schedule?

MP3, MPEG, etc., etc. provides a MINOR increase in preformance (well,
not really, but it is a not a point worth arguing, consider this a "bone
tossing") at the cost of paying patent holders -- believe me,
audio/video is SO SLOW Ogg Vorbis is much more than "TOO QUICK" for
available systems/processors ... <sad-sad-pitiful-look>

Yanno', as a teenager, I would only wear Levis, it is called "Brand Name
Addiction" ... I am a recovered addict ... I can't claim a twelve-step
program for my recovery, but hey ... LOL

> The move to digital cellular allowed channel re-use without having the
> customer hear interference from co-channel sites so that many sites could be
> used to communicate with many small handsets. Do you think that will be
> much of an issue on Ham radio? Ham radio's greatest protection is in the
> fact that it isn't supposed to compete with other services. No privacy is
> needed or allowed either. If you copy the consumer model, you have no
> amateur radio anymore. So I ask you sir, wouldn't you rather be using a
> digital cell phone and leave the ham bands alone? Experimentation will
> continue and things will be learned, people will contest and rag chew and
> chase DX, but when ham radio for free is simple enough to compete with cell
> phone services or a twisted pair, there will be a problem.
>

Comparing analog to digital is almost an exact example to some idiot
attempting the comparison of a stone knife (obsidian actually) to a
LASER Scalpel ... I just don't know how to state that with more force
and certainty ... perhaps someone will get through to you at some future
date ... all you look like to me is an ignoramus with little knowledge
... and living in "yesterday" -- sad really, very sad ...

If you ever awaken from that "tomb of stupidness" you are entombed in, I
bet you will be one embarrassed guy!

I'd say, you are just a "Stupid Brass Pounder" and an "arrl wannabe" ...
but then, I am guessing--I have no real psychic abilities ... ROFLOL, AGAIN!

Thanks for the laughs ...

Regards,
JS

2476. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:11:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c760b4b7-9c62-44d1-84ab-9aced0a0287f@25g2000hsx.googlegroups.com>
Source record: 22200

On Sep 16, 7:38 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 16, 6:53 pm, Jeff Liebermann <je...@cruzio.com> wrote:
>
> > On Tue, 16 Sep 2008 11:43:56 -0700 (PDT), Art Unwin
>
> > <ArthurUn...@gmail.com> wrote:
> > >... and Newtons law of parity demands
> > >that charges are moving thru the CENTER of the radiator thus
> > >encoundering just copper losses.
>
> > Google fails to find anything under Newton's Law of Parity.
> > Which one of these is what you're talking about?
> > <http://en.wikipedia.org/wiki/Parity>
> > <http://en.wikipedia.org/wiki/List_of_physics_topics_M-Q#P>
> > <http://neohumanism.org/p/pa/parity.html>
>
> > >Equilibrium is nothing more than the enforcement of Newtons law of
> > >parity.
>
> > It's hard to enforce a law that doesn't exist.
>
> > Drivel: I tried to write a spoof of your postings mimicking your
> > style of technical word salad. I built the necessary framework, and
> > added copious amounts of buzzwords and technobabble. However, the
> > result was unimpressive and not even close to the quality of your
> > pseudo technological rants. I'm truly impressed at your ability to
> > fabricate such rubbish and would greatly appreciate some clues as to
> > how it is done.
>
> Truth is stranger than fiction and what I am saying is the truth or
> factual.
> In all the years that I have been on this group nobody has proved me
> wrong
> with respect to radiation. If they had I would have apologized for the
> record.
> For myself I can run all of these people out of town on antennas as
> they are all self perceived experts
> bestowing glory on them selves in retirement to supply the recognition
> they feel they earned in the past.
> Find an expert for yourself and ask him the same questions that you
> ask of me.
> My statements are nothing special and nor am I
> Art
>

> > Hint: Numbers, formulas, references, URL's, and specifics. Lacking
> > those, you would be a philosopher.
>
> > Incidentally, equilibrium is implied in the various FCC exams. If you
> > lack sufficient equilibrium to take the exams due to intoxication, the
> > FCC (or VE) will refuse to administer the exam.
>
> > --
> > # Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
> > # 831-336-2558   je...@comix.santa-cruz.ca.us
> > #http://802.11junk.com   je...@cruzio.com
> > #http://www.LearnByDestroying.com   AE6KS

I think I have to take a bash at the term equilibrium since it apears
to be latin this side of the pond.
Equilibrium means balance using a minimumn of words. If there was not
balance then there would be movement.
Scientists revert to an arbitrary field where the outside forces equal
the inside forces as in Gauss's law of statics.
If movement is to be considered then the field will be termed dynamic.
Adding a time varying field and radiators to the static field
it is then the same format as Maxwells laws ie. derivative mathematics
of one is exactly the same as the other i.e. they are the same thing

If you look at a sinosoidal curve you have balance between the stating
point and another point that is repeatable.
With a pendulum it is two swings ,forward and backwards which is then
repeatable. In the case of a radiator the length of one point to a
similar point
that is repeatable is a point of equilibrium. True the curve crosses
zero at the half way point but the areas enclosed either side of the
half way point
are not in repeatable terms unless the curve does not cross the zero
point that is resonant but not in equilibrium. When it gets to the
point of repeatebility
or at the end of a period a term used in frequency then that point is
both in equilibrium and resonant.
As an aside when changing from a static field to a dynamic field the
term equilibrium still holds which leads to the term
A radiator can be any shape, form or elevation as long as it is in
equilibrium. This rules out the idea that a radiator must be straight
and planar.
I think I have said to much Nuf said class dismissed.
Art Unwin KB9MZ....xg
So guys look at the intent of what I am saying without crusifying the
terminology.

2477. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:15:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d88cb282-daed-4d7f-8a74-6c6c590d3c9c@z72g2000hsb.googlegroups.com>
Source record: 22051

On Sep 16, 7:58 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Tue, 16 Sep 2008 17:19:14 -0700, Richard Clark <kb7...@comcast.net>
> wrote:
>
> >On Tue, 16 Sep 2008 16:47:54 -0700 (PDT), Art Unwin
> ><ArthurUn...@gmail.com> wrote:
>
> >>On Sep 16, 4:32 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> >>> Photons have zero rest mass.
> >a photon at rest, how droll.
> >>Cecil, this sounds like a regular poster David.Perhaps he is pulling
> >>your leg with his nonsence
>
> >We know that we can accelerate an electron to 90% of the speed of
> >light - it happens every femtosecond in one of any 100 billion crt
> >displays still glowing in the world. Some of us know its mass at this
> >speed. A question for the Newtonian philosopherz:
> >   "What is the mass of a photon traveling at 90% of the speed of
> >   light?"
>
> Ah, yes!
>
> No Newtonians in this crowd. Perhaps it was the relativistic term
> "speed of light" that confused this group so much. Let's restate it
> in units that Newton could have appreciated.
>
> We know that we can accelerate an electron to 167,770 miles/s - it
> happens every femtosecond in one of any 100 billion crt
> displays still glowing in the world. Some of us know its mass at this
> speed. A question for the Newtonian philosopherz:
>   "What is the mass of a photon traveling at 167,770 miles/s?"
>
> 73's
> Richard Clark, KB7QHC

Irrelavent.. No respionse

2478. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:16:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaplp5$ov9$1@news.albasani.net>
Source record: 22052

Jim Kelley wrote:
>> ... You can have one, or the other, not both.
>
> 73, ac6xg
>

Yanno', when I run that "equation" backwards, and then again forwards, I have a real hard time telling the difference ... you suppose it is just our "perceptions" which create the difference(s)? LOL

Indeed, this may be a plausible avenue to explore ... in that, our radio signals are neither photons nor waves ... well, at least during their "complete journey." Perhaps they "wink into mass" and then "wink into energy", we are just too slow to notice the changes! LOL

Remember, there are/is those exceptions where the, final, truth may be stranger than fiction ...

Regards,
JS

2479. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:18:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaplss$ov9$2@news.albasani.net>
Source record: 22053

Art Unwin wrote:
>> >> ...
>> 73's
>> Richard Clark, KB7QHC
>
> Irrelavent.. No respionse

Ahh, you noticed! Finally! ROFLOL!

Regards,
JS

2480. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:21:22 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <pYYzk.12289$rV4.6405@newsfe03.iad>
Source record: 22054

"JoeSch" <joeschultz1@lycos.com> wrote in message
news:9dde9d68-10fb-424d-ae19-3b87464e1613@y38g2000hsy.googlegroups.com...
Thank you all for replying. Sorry to take so long to get back here.
I momentarily put the project aside because, after missing the first
game, (I posted the first message about an hour before game time,
lol), the Jets will be carried on my cable stations for the next two
weeks. Add the bye week into that and I had a couple of weeks to get
this thing together-there was no super-immediate rush. But I am going
to build this in the next week or so.

As far as Channel 2 going to UHF in February, the Jets regular season
ends in December, so an antenna that is useful until February will
take of this season nicely. Any post season playoff games by the
Jets, (should they get into the playoffs), will be broadcast
nationally, so I won't need the antenna for that. I'll worry about
next season when it happens. However, don't be surprised if next
September you see a thread about building a UHF antenna for the new
Channel 2 New York.

I have high hopes for this project giving me some kind of watchable,
albeit possibly snowy signal. Here's why. Several years ago I
dangled a piece of twin lead from my second floor window to the ground
and got both the sound and an extremely, extremely snowy picture of
Channel 4 New York, (which carried the Jets at that time). The house
I lived in was a few miles farther inland than the one I lived in now,
and it was just a simple 12 foot piece of twin lead out the window,
but I got SOMETHING. Ths project will be on a pole, on a roof, on a
house closer to the water using an antenna scientifically optimized
for Channel 2, so I think the chances of getting something watchable
are very good. There must be something more at play here than just
"line-of-sight" from here to the Empire State Building, at least at
this frequency. Besides, friends driving down to New York tell me
that they pick up FM stations on their car radios about 20 miles down
the road from here. FM frequencies are a little bit higher,
(therefore more straight line), than Channel 2. Though the
requirements for FM reception and TV reception are not the same, it
still indicates that I am not too far out of range for this
frequency.

I have found an interesting project from the US Patent Office, so it
is between that and Sal's Yagi. I am leaning toward the Yagi, so I
will be back with more questions in the next day or two. Just a few
questions:

A) What is the gain of Sal's Yagi compared to a single dipole?

SAL ADDS: YOU'LL GET GAIN OF SIX TO EIGHT DB (NOT SHOUTING. USING CAPS TO OFFSET, SINCE THE STUPID PROGRAM DIDN'T MAKE THE RIGHT MARKS.)

B) In sound, there is a rule for Sound Pressure Level which says "double the distance, 6 dB down in decibels". In other words, If I have a Sound Pressure Level of 100 dB at ten feet, if I move back to twenty feet my SPL goes down to 94 decibels. Does a similar rule apply to antenna reception, that if get good reception with a certain antenna from 50 miles away, I need an antenna 6 dB more sensitive to get similar reception from 100 miles away?

IT'S WORSE THAN THAT, UNFORTUNATELY, SINCE THE SIGNAL DOESN'T BEND MUCH AROUND THE EARTH'S CURVATURE. IT WOULD BE TRUE FOR DISTANCES OF 5 AND 10 MILES, RESPECTIVELY, SINCE THE EARTH'S CURVATURE DOESN'T COME INTO PLAY AT THOSE DISTANCES. (YOUR SOURCE IS ABOUT 1200 FT UP IN THE AIR.)

A PHENOMENON CALLED "DUCTING" WILL SOMETIMES TRUMP THE EARTH'S CURVATURE. TV SIGNALS CAN GET TRAPPED IN ATMOSPHERIC LAYERS AND BE RETURNED TO EARTH MUCH STRONGER THAN THE THEORY PREDICTS. DUCTS ARE MORE COMMON IN WARM AIR, SO FOOTBALL SEASON IN THE NORTHEAST IS NOT THE TIME TO BE HOPING FOR DUCTING.

FOR WHAT IT'S WORTH, WCBS-2 IS ALREADY SENDING OUT ITS DIGITAL SIGNAL IN ADVANCE OF NEXT FEBRUARY -- MOST STATIONS ARE DOING SO. WCBS IS ON CHANNEL 56 NOW AND WILL DROP TO 33 ON TRANSITION DAY. SEE http://rabbitears.info/market.php

IT IS CONCEIVABLE THAT A BIG UHF ANTENNA WOULD WORK FOR YOU. IT WORKS FOR ME, HERE IN SOUTHERN CALIFORNIA, BUT MY DISTANT TRANSMITTERS ARE ON A 6,000 FT MOUNTAINTOP, WHICH IS A SIGNIFICANT ADVANTAGE FOR ME.

"SAL"

2481. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:32:42 UTC
From: JB <nospam@goofball.net>
Message-ID: <_6Zzk.353$8v5.211@trnddc01>
Source record: 22055

> What, this is not the "Pulling Your Leg Festival?"
>
> Damn, it appears I have caught the wrong door again! Last time this
> happened, it was a womens restroom, at walmart, no less :-(-- at least
> this is less embarrassing ... <grin>
>
ROFLOL
I did that at a technical seminar in a hotel once. I was pondering the ramifications of the training and didn't even look at the door. It wasn't until the only woman there rushed in (probably preoccupied as well) and plopped down and peed that it dawned on me that there was something very very wrong!

In any case, Art seems to have trouble articulating and I have completely lost touch with any sense he might have made somewhere in the great pile of this thread.

I get that even though a resonant dipole can be treated as if it were a lumped constant at times, it really isn't that. Do electrons fly back and forth down the pole and induce a magnetic field? Without flying off the ends? Yes but that is hard to make sense of because there should be no current flow in an open wire. A loop element maybe, but the resonant loop has the same current as the center fed dipole. Perhaps looking at the re-entrant cavity makes more sense.

2482. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:39:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0d33d0ae-9631-4cbe-818f-3551b284e218@e39g2000hsf.googlegroups.com>
Source record: 22056

On Sep 16, 4:06 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > Radiation has no mass? You just made that up
>
> Yes, that would seem to break the law of "'E' equals mc squared", and
> its' opposite, counterpart ... I mean, if you really think about it ... ;-)
>
> Regards,
> JS

John, the danger in using mc squared is that it has not stood the test
of time. I have difficulty with it as the motion of an observer
acheiving the speed of light seems like standing on a sand spar
waiting for the tide to come in. Same goes with Feynman diagrams
as it just replaces an unknown with another unknown! Are these both
emporers with no clothes surrounded by Lemmings?
Art

2483. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:40:10 UTC
From: dfinn1@nc.rr.com
Message-ID: <0a7c752c-d64e-4a7d-83d1-9dd8be586b51@59g2000hsb.googlegroups.com>
Source record: 22057

On Sep 16, 5:07 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:c7dcc833-e5a0-4da3-8b34-2741ccd5c2c0@f36g2000hsa.googlegroups.com...
> On Sep 16, 3:08 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
>
>
>
>
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >news:c7df9db0-a3d8-415a-8408-2a3a4250e3e2@x41g2000hsb.googlegroups.com...
> > On Sep 16, 2:10 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
>
> > > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> > >news:ee618b1a-ed2f-43c8-bc77-99ace3c56205@73g2000hsx.googlegroups.com...
> > > On Sep 16, 12:52 pm, "Frank" <frank...@nospam.telus.net> wrote:
>
> > > > > Art:
> > > > > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > > > > contain a reference to " equilibrium". Numerous people have asked
> > > > > you to define or at least explain your usage of the term. So far,
> > > > > you
> > > > > have not done so.Actually, you have either diverted the question, or
> > > > > told questioners to do their own research. Your posts show that you
> > > > > know nothing about how antennas work, and suspect very little.Why
> > > > > would ARRL correct something that's perfectly fine as is???
>
> > > > > Mike W5CHR
> > > > > Memphis Tenn
>
> > > > Also, I would be very interested in identifying where the "weak force"
> > > > is indicated in, for example, the following point form expression of
> > > > Ampere's Law:
>
> > > > DEL cross H = J+ dD/dt
>
> > > > Frank
>
> > > Frank
> > > I am not a servant of this newsgroup. All I am doing is trying to
> > > educate those that are willing do be educated

> > > with respect to antennas. You for your self can read the history of
> > > the masters and Newton to determine how they were aware of the weak
> > > force,
> > > its angle and size and yet cannot describe it. Even so it is included
> > > in all calculations involved in the Universe because equilibrium is a
> > > staple.
> > > The fact that members of this group need to be shown that the weak
> > > force is not fictitious is pityful . I have in the prior posting
> > > descibed the action of radiation where previously I have stated that
> > > the weak force is the rotary current flow which as well as the rest of
> > > the details given are preordained by Newtons law. Prove Newton is
> > > wrong and you have my attention.
> > > Nothing personal
> > > Regards
> > > Art Unwin KB9MZ.....xg
>
> > > -
>
> > > Oh yeah! Newton was also wrong that light needed a medium through which
> > > to
> > > travel (which he called, "aether").
>
> > We are talking ab out radiation not the eather.
>
> > The law I am referring to is every action has an opposite reaction.
> > It is a very short law that has not been disproven.
> > Application of that law states that for a radiator not in equilibrium
> > a charge is moving on the outside of the radiator THEREFORE
> > there is a charge moving in the centre of the radiator in the opposite
> > direction.
> > So simple Why do hams reject it? No, the charge at the centre is not
> > and cannot radiate
> > You don't need a lot of posts, sneers insults e.t.c. to respond just
> > go to your nearest University
> > and provide the statement to the Dean and then bring his response back
> > to all of us
> > Art
>
> > -
>
> > First off, I did not intend to have my post interpretd as a sneer. I'm
> > sorry if you took it that way. I said, "Oh yeah!" because I thought of the
> > point after I submitted a previous post.
>
> > The equal and opposite reaction law only applies when there is mass.
> > Electromagnetic radiation has no mass. Therefore, the law does not apply.
>
> Radiation has no mass? You just made that up
>
> -

>
> No, actually, a little fella named Albert Einstein made it up. An electron
> and a positron have mass. When they come together and annihilate, they turn
> into pure energy (two 511 KeV photons travelling in opposite directions if I
> remember right), which has no mass. That's what E=MC^2 predicted; and
> that's what happens in certain radioactive decays all the time. Positrons
> get produced by the deceleration of neutrons which come too close to the
> nucleus of an atom with large mass. They then annihilate when coming close
> to an electron. This is just one example.
>
> Radiation has no mass and is, therefore, not subject to Newton's laws. A
> link to a simple explanation at a physics department of a university is:
>
> http://www.uwsp.edu/geo/faculty/ritter/geog101/textbook/energy/nature...
>
> From that site (and also what I learned in college physics) is: ". . . a
> bundle of energy called a "photon" is released. However, particles of light
> differ from particles of matter: they have no mass, occupy no space, and
> travel at the speed of light. . ."- Hide quoted text -
>
> - Show quoted text -

Correction: Photons have no rest mass. "radiated" photons have the
properties of mass because they are affected by gravitation. Light can
be bent by large bodies of mass.

2484. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:40:15 UTC
From: JB <nospam@goofball.net>
Message-ID: <3eZzk.356$8v5.125@trnddc01>
Source record: 22058

dittos

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:pYYzk.12289$rV4.6405@newsfe03.iad...
>
> "JoeSch" <joeschultz1@lycos.com> wrote in message
> news:9dde9d68-10fb-424d-ae19-3b87464e1613@y38g2000hsy.googlegroups.com...
> Thank you all for replying. Sorry to take so long to get back here.
> I momentarily put the project aside because, after missing the first
> game, (I posted the first message about an hour before game time,
> lol), the Jets will be carried on my cable stations for the next two
> weeks. Add the bye week into that and I had a couple of weeks to get
> this thing together-there was no super-immediate rush. But I am going
> to build this in the next week or so.
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> As far as Channel 2 going to UHF in February, the Jets regular season
> ends in December, so an antenna that is useful until February will
> take of this season nicely. Any post season playoff games by the
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> September you see a thread about building a UHF antenna for the new
> Channel 2 New York.
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> dangled a piece of twin lead from my second floor window to the ground
> and got both the sound and an extremely, extremely snowy picture of
> Channel 4 New York, (which carried the Jets at that time). The house
> I lived in was a few miles farther inland than the one I lived in now,
> and it was just a simple 12 foot piece of twin lead out the window,
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> SAL ADDS: YOU'LL GET GAIN OF SIX TO EIGHT DB (NOT SHOUTING. USING CAPS
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> antenna from 50 miles away, I need an antenna 6 dB more sensitive to
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> MUCH STRONGER THAN THE THEORY PREDICTS. DUCTS ARE MORE COMMON IN WARM
AIR,
> SO FOOTBALL SEASON IN THE NORTHEAST IS NOT THE TIME TO BE HOPING FOR
> DUCTING.
>
> FOR WHAT IT'S WORTH, WCBS-2 IS ALREADY SENDING OUT ITS DIGITAL SIGNAL IN
> ADVANCE OF NEXT FEBRUARY -- MOST STATIONS ARE DOING SO. WCBS IS ON
CHANNEL
> 56 NOW AND WILL DROP TO 33 ON TRANSITION DAY. SEE
> http://rabbitears.info/market.php
>
> IT IS CONCEIVABLE THAT A BIG UHF ANTENNA WOULD WORK FOR YOU. IT WORKS FOR
> ME, HERE IN SOUTHERN CALIFORNIA, BUT MY DISTANT TRANSMITTERS ARE ON A
6,000
> FT MOUNTAINTOP, WHICH IS A SIGNIFICANT ADVANTAGE FOR ME.
>
> "SAL"
>
>
>

2485. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:42:34 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d06052$0$60070$8046368a@newsreader.iphouse.net>
Source record: 22059

Art Unwin wrote:
> I think I have to take a bash at the term equilibrium since it apears
> to be latin this side of the pond.
> Equilibrium means balance using a minimumn of words. If there was not
> balance then there would be movement.
> Scientists revert to an arbitrary field where the outside forces equal
> the inside forces as in Gauss's law of statics.
> If movement is to be considered then the field will be termed dynamic.
> Adding a time varying field and radiators to the static field
> it is then the same format as Maxwells laws ie. derivative mathematics
> of one is exactly the same as the other i.e. they are the same thing
>
> If you look at a sinosoidal curve you have balance between the stating
> point and another point that is repeatable.
> With a pendulum it is two swings ,forward and backwards which is then
> repeatable. In the case of a radiator the length of one point to a
> similar point
> that is repeatable is a point of equilibrium. True the curve crosses
> zero at the half way point but the areas enclosed either side of the
> half way point
> are not in repeatable terms unless the curve does not cross the zero
> point that is resonant but not in equilibrium. When it gets to the
> point of repeatebility
> or at the end of a period a term used in frequency then that point is
> both in equilibrium and resonant.
> As an aside when changing from a static field to a dynamic field the
> term equilibrium still holds which leads to the term
> A radiator can be any shape, form or elevation as long as it is in
> equilibrium. This rules out the idea that a radiator must be straight
> and planar.
> I think I have said to much Nuf said class dismissed.
> Art Unwin KB9MZ....xg
> So guys look at the intent of what I am saying without crusifying the
> terminology.

Amazing. So many words, so little information pertaining to the
subject. And meanwhile smoothly changing the focus while still saying
nothing. He really is awesome.

tom
K0TAR

2486. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:42:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapnal$pn0$1@news.albasani.net>
Source record: 22060

JB wrote:

>> ...
> ROFLOL
> I did that at a technical seminar in a hotel once. I was pondering the
> ramifications of the training and didn't even look at the door. It wasn't
> until the only woman there rushed in (probably preoccupied as well) and
> plopped down and peed that it dawned on me that there was something very
> very wrong!
>

Thanks, I needed that ... always wondered if I was "the only one?" LOL

> In any case, Art seems to have trouble articulating and I have completely
> lost touch with any sense he might have made somewhere in the great pile of
> this thread.
>

Ahhh, Art is Art, he does provide good exercise in thinking ... IMHO ...

> I get that even though a resonant dipole can be treated as if it were a
> lumped constant at times, it really isn't that. Do electrons fly back and
> forth down the pole and induce a magnetic field? Without flying off the
> ends? Yes but that is hard to make sense of because there should be no
> current flow in an open wire. A loop element maybe, but the resonant loop
> has the same current as the center fed dipole. Perhaps looking at the
> re-entrant cavity makes more sense.
>

Now see, there ya' go, ya' got me wonderin' again ... <yet-another
straight-face :-| >

Warm regards,
JS

2487. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:43:19 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <ZgZzk.12307$rV4.7974@newsfe03.iad>
Source record: 22061

"JB" <nospam@goofball.net> wrote in message
news:nMRzk.252$Yw1.138@trnddc03...
Here is a plot for WCBS-TV
http://www.tvfool.com/?option=com_wrapper&Itemid=80&q=call%3dWCBS-TV%26type%
3dA

Be optimistic. That plot is conservative and here's why:

I grew up on Long Island and we often got Philly stations on a simple attic
antenna. However, the plots for Philly stations do not show that can
happen.

"Sal"

2488. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:44:45 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d060d4$0$60070$8046368a@newsreader.iphouse.net>
Source record: 22062

Art Unwin wrote:
>
> John, the danger in using mc squared is that it has not stood the test
> of time.

Next thing he'll claim is that nuclear fission doesn't release energy.

tom
K0TAR

2489. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:47:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapnkhpsc1@news.albasani.net>
Source record: 22063

Art Unwin wrote:

> ...
> John, the danger in using mc squared is that it has not stood the test
> of time. I have difficulty with it as the motion of an observer
> acheiving the speed of light seems like standing on a sand spar
> waiting for the tide to come in. Same goes with Feynman diagrams
> as it just replaces an unknown with another unknown! Are these both
> emporers with no clothes surrounded by Lemmings?
> Art

Well, darn Art, those nuclear explosions, yanno', like the ones "we"
used to do in Nevada ... those flying particles, the heat, the light,
the radiation, the sand blast, the wind!, etc., it is hard enough to
keep track of all that c*rp flying about, at those speeds (not to
mention the amount of sun screen a guy needs just to be in vicinity!),
it is hard to arrive at an exact tally when, it is all over--yanno' what
I mean, Vern? ;-)

Regards,
JS

2490. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:57:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapo5r$q4c$1@news.albasani.net>
Source record: 22065

dfinn1@nc.rr.com wrote:

> ...
> Correction: Photons have no rest mass. "radiated" photons have the
> properties of mass because they are affected by gravitation. Light can
> be bent by large bodies of mass.

Oh sure, they have a "perceived mass", don't they?; I mean, we seem to be able to measure it, don't we? How do you know it "exists ALL ITS TRAVEL TIME", what makes you think it is not constantly oscillating for energy to mass ... and it is ONLY the average of that which we are REALLY measuring ... can you prove that, well, CAN YOU? Can you provide any relevant data here to prove it? Any URLs? Any quotes from famous physicists? Any psychics? Have you consulted Art? <again-innocent-smile>

But then, you ever try to run along side of one of those photons and measure it? I mean, this is how you really gain a critics respect (heck, you'd even gain acknowledgment from the arrl, well, most-likely--well, I think you would--IMHO anyway, etc.) -- now, the question to separate the men from the boys -- now, have you? <pleasant-innocent-smile>

Geesh! <looks-out-window>

Regards,
JS

2491. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:57:17 UTC
From: dfinn1@nc.rr.com
Message-ID: <bda795a0-8b1c-4468-85f4-58ff6e53e50e@m36g2000hse.googlegroups.com>
Source record: 22064

On Sep 16, 8:05 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
> So, look on the bright-side! Once you have proven Art wrong, you have
> really done nothing at all!

Now how about that? WISDOM! I have to give credit where credit is due.

2492. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 01:57:44 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <vuZzk.12311$rV4.1079@newsfe03.iad>
Source record: 22066

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:9JNzk.386$pr6.122@flpi149.ffdc.sbc.com...
> Sal M. Onella wrote:
> > By the old TASO standards, you need over 40 dB s/n to get a nice
picture,
> > which requires a lot more peak RF power. By comparison, the digital
signal
> > needs only about 17 dB s/n.
>
> What happens at a 12 dB s/n for both? That's probably
> what happened here during Hurricane Ike.
> --
> 73, Cecil http://www.w5dxp.com

Digital: No lock and no indication of trying to lock (which is provided on
some receivers)

Analog: Recognizable signal, possibly with sound, probably with no color
and so much snow as to be unwatchable.

For the analog experiance, I am relying on bench tests I did with a TV
servicing generator. For baseline, I advanced the RF amplitude just to the
point where I had a snow-free picture. Next, I added 10 dB attenuators and
noted the results with each addition.

One: observable snow, no big deal
Two: Objectionable snow, this ain't good
Three: horrible snow, I can't watch this.
Four: Is there even a picture?

2493. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:12:04 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ce3adaac-9e3e-4aba-9878-396771c8343a@c58g2000hsc.googlegroups.com>
Source record: 22067

On Sep 16, 7:48 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Cecil Moore wrote:
> > Rectifier wrote:
> >> Radiation has no mass ...
>
> > On the contrary, radiation is photons which indeed
> > do have mass when traveling at the speed of light,
> > which radiation does.
>
> According to Einstein, anything with energy has mass equivalence -
> especially photons. But other than that, nothing with mass can travel
> at the speed of light. You can have one, or the other, not both.
>
> 73, ac6xg

True, travel is something less than the speed of light
Art

2494. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:17:30 UTC
From: dfinn1@nc.rr.com
Message-ID: <b007bd53-f1f8-42b8-8bc9-4bc1631ffa55@79g2000hsk.googlegroups.com>
Source record: 22068

On Sep 16, 9:57 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > Correction: Photons have no rest mass. "radiated" photons have the
> > properties of mass because they are affected by gravitation. Light can
> > be bent by large bodies of mass.
>
> Oh sure, they have a "perceived mass", don't they?; I mean, we seem to
> be able to measure it, don't we? How do you know it "exists ALL ITS
> TRAVEL TIME", what makes you think it is not constantly oscillating for
> energy to mass ... and it is ONLY the average of that which we are
> REALLY measuring ... can you prove that, well, CAN YOU? Can you provide
> any relevant data here to prove it? Any URLs? Any quotes from famous
> physicists? Any psychics? Have you consulted Art? <again-innocent-smile>
>
> But then, you ever try to run along side of one of those photons and
> measure it? I mean, this is how you really gain a critics respect
> (heck, you'd even gain acknowledgment from the arrl, well,
> most-likely--well, I think you would--IMHO anyway, etc.) -- now, the
> question to separate the men from the boys -- now, have you?
> <pleasant-innocent-smile>
>
> Geesh! <looks-out-window>
>
> Regards,
> JS

I should have used black holes as my example. One only needs to accept
that black holes exist in order to believe that gravity affects the
property of mass inerent in light ;-)

2495. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:18:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gappe5$r06$1@news.albasani.net>
Source record: 22069

Sal M. Onella wrote:

> ...
> Digital: No lock and no indication of trying to lock (which is provided on
> some receivers)
>
> Analog: Recognizable signal, possibly with sound, probably with no color
> and so much snow as to be unwatchable.
>
> For the analog experiance, I am relying on bench tests I did with a TV
> servicing generator. For baseline, I advanced the RF amplitude just to the
> point where I had a snow-free picture. Next, I added 10 dB attenuators and
> noted the results with each addition.
>
> One: observable snow, no big deal
> Two: Objectionable snow, this ain't good
> Three: horrible snow, I can't watch this.
> Four: Is there even a picture?

Sal:

Forgive me, please; but, for a minute there, your words provided me with
a psychic vision ... <grin>

All these "youngsters" growing up around the internet and DVDs and MP3s,
expect perfect communications. Perhaps their homes did not even possess
a broadcast capable TV!

And, to them, the "quality of TV signal" we grew up with is horrifying,
indeed, too scary and mentally damaging to view!

Maybe it will just take them a bit of time to go through their denial
and be able to look upon such "ugly-ness" as a snowy picture with,
really, only usable audio as being "OK", and finally allow us to view
it? (I know, they will probably see us as being able to view childporn
in allowing such visual images to ACTUALLY enter our eyes! <DEEP-FROWN>
) <HUGE-chuckle, and a grin>

Perhaps then, they will finally allow such a digital signal though to
the circuitry? Ya' never know, ya' just never know ... <blank-stare>

Anyway ... this is a much more valid argument than that of an analog
signal EVER being more desirable to a digital one ...

Regards,
JS

2496. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:23:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gappmm$r06$2@news.albasani.net>
Source record: 22070

dfinn1@nc.rr.com wrote:

> ...
> I should have used black holes as my example. One only needs to accept
> that black holes exist in order to believe that gravity affects the
> property of mass inerent in light ;-)

Really?

Then your mind is so limited it doesn't realize that a black hole would warp the very fabric of space/time itself, and therefore the wave propagating though it, and therefore the wave would have to choice but purse a course towards it? ... yanno', I suspected just that thing!

Regards,
JS

2497. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:27:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <44ee607f-3e2b-4c97-81c9-5f82377d6553@x35g2000hsb.googlegroups.com>
Source record: 22071

On Sep 16, 8:32 pm, "JB" <nos...@goofball.net> wrote:
> > What, this is not the "Pulling Your Leg Festival?"
>
> > Damn, it appears I have caught the wrong door again! Last time this
> > happened, it was a womens restroom, at walmart, no less :-(-- at least
> > this is less embarrassing ... <grin>
>
> ROFLOL
> I did that at a technical seminar in a hotel once. I was pondering the
> ramifications of the training and didn't even look at the door. It wasn't
> until the only woman there rushed in (probably preoccupied as well) and
> plopped down and peed that it dawned on me that there was something very
> very wrong!
>
> In any case, Art seems to have trouble articulating and I have completely
> lost touch with any sense he might have made somewhere in the great pile of
> this thread.
>
> I get that even though a resonant dipole can be treated as if it were a
> lumped constant at times, it really isn't that. Do electrons fly back and
> forth down the pole and induce a magnetic field?
No, they are generating a magnetic field when the current is at the
surface
which means eddy currents are also there. neither of these appear when
the current is enclosed

Without flying off the
> ends? Yes but that is hard to make sense of because there should be no
> current flow in an open wire.
The wire may be open but the current flow IS closed

 A loop element maybe, but the resonant loop
> has the same current as the center fed dipole. Perhaps looking at the
> re-entrant cavity makes more sense.

John you are equating resonance with equilibrium, a dipole in antenna
terms is a half wavelength
resonant but not in a state of equilibrium. Equilibrium is a staple in
this Universe. First comes equilibrium
after which you may consider resonance.......but not the reverse. Both
of the samples are of a half wave length thus it is not in
equilibrium.
Equilibrium comes first in the satisfaction analysis, if it fails all
falls apart.
Best regards

Art

2498. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:35:27 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1bc7034c-aa76-4e65-a425-09c99ad78366@i76g2000hsf.googlegroups.com>
Source record: 22072

On Sep 16, 8:44 pm, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
>
> > John, the danger in using mc squared is that it has not stood the test
> > of time.
>
> Next thing he'll claim is that nuclear fission doesn't release energy.
>
> tom
> K0TAR

Oh Tom! bound particles means a LARGE force binding particles
together.
Break them apart and you release a large amount of energy which you
cannot destroy.
With heavy water you have two bound particles, the particles
themselves are weak in energy.
But then you are trying to get away from the subject at hand in this
thread.
Want to start atomic stuff then start a thread and attract those who
are interested in that.
Think antennas and radiation
Art

2499. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:37:14 UTC
From: dfinn1@nc.rr.com
Message-ID: <fc3c052f-af17-4df0-887a-f1ff3ffd16d8@e53g2000hsa.googlegroups.com>
Source record: 22073

On Sep 16, 3:33 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > No, they are declining if you are talking about anything over 200m.
> > They are also losing spectrum for example in 40m to amateurs.
>
> No, the AM Broadcast Band is the MW band, ~.5Mc to ~1.800Mc ... not
> related to happenings in the 40m amateur band at all ...

But I qualified the statement by saying anything above 200m (in
wavelegth) which you faithfully quoted above. Minus 2 points for
John.
>
>
> > John, Quiz Question: Suppose you tried to modulate a 14 Khz carrier
> > with a 50MHz digital signal. Would that be possible? (Y/N) Where would
> > you locate the side bands? (________ and ________)
>
> A nut would attempt that ... others would modulate the 50Mhz signal ...
> and 49.993 to 50.007 ... in a perfect world.

OK, now, since 50MHz is being modulated, how much bandwidth will each
sideband occupy? Cannot be done, John. HF frequencies can only handle
insignificant amounts of data information making them useless in
today's digital age.

THAT is why (to answer the original question) nobody gives a damn
about small antennas on HF frequencies. The data we are transferring
today goes far beyond a simple 10KHz voice communication on a small
section of spectrum. Even a single analog TV channel occupies 5MHz
which I think would cover the entire HF spectrum if it were tried.
There are some exceptional HF digital applications which society can
find useful in extremely limited applications such as sail mail but
even that is quite disruptive due to the wide chunk of HF it occupies
for a single email transmission.
>
> Really, you need a beginners group ... :-(Won't your mom play with you
> today?

RRAP IS a beginners group John.

2500. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:37:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <49r0d4l7qncqluu5g6u8c9q3maj8kmnvaf@4ax.com>
Source record: 22075

On Tue, 16 Sep 2008 18:15:07 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>No respionse

Well that comes as no surprise that you can't do a Newtonian
calculation. OK, that is one down.

73's
Richard Clark, KB7QHC

2501. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:38:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f6f1625b-cc43-4828-b26b-ab122b9a163a@y38g2000hsy.googlegroups.com>
Source record: 22074

On Sep 16, 9:17 pm, dfi...@nc.rr.com wrote:
> On Sep 16, 9:57 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
>
>
> > dfi...@nc.rr.com wrote:
> > > ...
> > > Correction: Photons have no rest mass. "radiated" photons have the
> > > properties of mass because they are affected by gravitation. Light can
> > > be bent by large bodies of mass.
>
> > Oh sure, they have a "perceived mass", don't they?; I mean, we seem to
> > be able to measure it, don't we? How do you know it "exists ALL ITS
> > TRAVEL TIME", what makes you think it is not constantly oscillating for
> > energy to mass ... and it is ONLY the average of that which we are
> > REALLY measuring ... can you prove that, well, CAN YOU? Can you provide
> > any relevant data here to prove it? Any URLs? Any quotes from famous
> > physicists? Any psychics? Have you consulted Art? <again-innocent-smile>
>
> > But then, you ever try to run along side of one of those photons and
> > measure it? I mean, this is how you really gain a critics respect
> > (heck, you'd even gain acknowledgment from the arrl, well,
> > most-likely--well, I think you would--IMHO anyway, etc.) -- now, the
> > question to separate the men from the boys -- now, have you?
> > <pleasant-innocent-smile>
>
> > Geesh! <looks-out-window>
>
> > Regards,
> > JS
>
> I should have used black holes as my example. One only needs to accept
> that black holes exist in order to believe that gravity affects the
> property of mass inerent in light ;-) Partly correct The big bang was an explosion
thus Newton states there must be an implosion. The law is Universal

2502. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:39:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jbr0d4d0gdapa87pfb2v0nlkftvmsbjddr@4ax.com>
Source record: 22077

On Tue, 16 Sep 2008 18:18:15 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>> Irrelavent.. No respionse
>
>Ahh, you noticed! Finally! ROFLOL!

And now we have Brett rolling on the floor with Art as two down.

That pretty much closes down the mutual admiration society of
Newtonian Philosopherz.

73's
Richard Clark, KB7QHC

2503. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:40:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapqncruo1@news.albasani.net>
Source record: 22076

Art Unwin wrote:

>> ...
> John you are equating resonance with equilibrium, a dipole in antenna
> terms is a half wavelength
> resonant but not in a state of equilibrium. Equilibrium is a staple in
> this Universe. First comes equilibrium
> after which you may consider resonance.......but not the reverse. Both
> of the samples are of a half wave length thus it is not in
> equilibrium.
> Equilibrium comes first in the satisfaction analysis, if it fails all
> falls apart.
> Best regards
> Art

Uhhh Art, you "were" actually responding to "JB", you are lucky I read your posts, and that this one prompted me to respond (or, unlucky, I guess it depends on how "you view it" <grin>) ...

I realize "something IS wrong" with the basic platform all "antenna theory/equations/formulas/maths/truths/etc." is/are built upon ... but what that "something" is? ... all I can say, I am looking and wondering ... but then, so are many -- and, if you are one of that "many", you already have foot on the right path ... need I include, IMHO?

Regards,
JS

2504. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:42:52 UTC
From: dfinn1@nc.rr.com
Message-ID: <af3a0b5f-8215-4511-a719-9a83765a76d9@d1g2000hsg.googlegroups.com>
Source record: 22078

On Sep 16, 4:09 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > No, they are declining if you are talking about anything over 200m.
> > They are also losing spectrum for example in 40m to amateurs.
>
> > John, Quiz Question: Suppose you tried to modulate a 14 Khz carrier
> > with a 50MHz digital signal. Would that be possible? (Y/N) Where would
> > you locate the side bands? (________ and ________)
>
> Yanno'? This is all closely related to the "Personal Attack Ploy."
> (also, known by other names)
>
> However, this one goes, "I will think up an extremely complex trick
> question from my gorgeously, exquisitely, intellectual mind. I will
> then trip up the "mark" with my beautiful complex and deep plan, and use
> this error on "subject A" to prove his statement on past "subject B" is
> wrong, by sheer implication ... " I see this used on Cecil OFTEN, and
> by the same ignoramuses a LOT ... I often wonder, "Is anyone here aware
> enough to wonder if I see this or not? If others here notice, or not?"
>   ROFLOL!
>
> Most of us tried this in grade/high-school, did not find we got the
> results we expected, abandoned it, and moved on ...
>
> You may wish to consider the same, or not ... however, I do see, with
> the "resources" available here, this childish ploy is VERY much alive
> and well! And, I have noticed it is accepted as being effective, by
> those ignorant to what it really reflects ... like the petty workings of
> their small minds!
>
> Somehow, this all reminds of a gathering of old men at a botchiball
> court!, "elmering" a new "Botchiball Recruit." <scratches-head>
>
> Regards,
> JS

heh heh...but we have it documented in this thread. You fell for it
the first time and after your posted your answer you saw what you call
the "trick" after thinking about it. Actually, I was only trying to
cut through the BS to let you see for yourself why HF is not so
valuable in today's information age in which only GHz level
frequencies and above are useful for practical quantities of
information transfer. But you did catch it, albeit your were a little

slow on the pick up.

2505. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:43:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gapqsrruo2@news.albasani.net>
Source record: 22079

Richard Clark wrote:

> ...
> And now we have Brett rolling on the floor with Art as two down.
>
> That pretty much closes down the mutual admiration society of
> Newtonian Philosopherz.
>
> 73's
> Richard Clark, KB7QHC

Richard:

Thanks!

I really thought you forgot about me, yanno'? <frown>

Regards,
JS

2506. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 02:58:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaprpcsnl1@news.albasani.net>
Source record: 22080

dfinn1@nc.rr.com wrote:

> ...
> But I qualified the statement by saying anything above 200m (in
> wavelegth) which you faithfully quoted above. Minus 2 points for
> John.

Yeah, your "beautiful intellect" strikes again, my gawd, how inspiring ... when you say "above", I think "cycles", if you say length, I think "meters" ... but, if you hang around idiots--I can see how you'd expect different ... <yawn>

>
> OK, now, since 50MHz is being modulated, how much bandwidth will each
> sideband occupy? Cannot be done, John. HF frequencies can only handle
> insignificant amounts of data information making them useless in
> today's digital age.
>

OK. Now my turn. If I have an idiot in my right hand, you show up, and I place you in my right hand, how many idiots do I have in my right hand? (ahhh, I'll give you the answer ... I KNOW you won't get it--ONE! You WERE the idiot!) ROFLOL -- (don't apologize for NOT getting the joke ... I understand. <grin>)

> THAT is why (to answer the original question) nobody gives a damn
> about small antennas on HF frequencies. The data we are transferring
> today goes far beyond a simple 10KHz voice communication on a small
> section of spectrum. Even a single analog TV channel occupies 5MHz
> which I think would cover the entire HF spectrum if it were tried.
> There are some exceptional HF digital applications which society can
> find useful in extremely limited applications such as sail mail but
> even that is quite disruptive due to the wide chunk of HF it occupies
> for a single email transmission.
>> Really, you need a beginners group ... :-(Won't your mom play with you
>> today?
>
> RRAP IS a beginners group John.

Frankly, I care greatly, immensely about small antennas -- I could not run a rig without a small/stealth antenna. Of course, your statement becomes quite true if you ignore all like me, the MW band, cell phones, personal computers, wifi, remote tire gauges, bluetooth, remote devices, gps, etc., etc., etc. (consider this an endless list, really!)

And, indeed the lengths you are prepared to go--the insane arguments you are prepared to argue, the insane stands you are prepared to defend ... well, you will excuse me from my responsibilities there ... I have prior appointments ... ROFLOL--AGAIN!

Brother, you are a joke, you will fit in well with some here ... I already got your name on that list ... even "the slow witted" will eventually deduce you--take care ... but then, you are fun to toy with.

Regards,
JS

2507. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 03:01:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b2s0d4l7j2c8k5qr989cjkbq747gl26ode@4ax.com>
Source record: 22082

On Tue, 16 Sep 2008 18:21:22 -0700, "Sal M. Onella"
<salmonella@food.poisoning.org> wrote:

>MY DISTANT TRANSMITTERS ARE ON A 6,000
>FT MOUNTAINTOP, WHICH IS A SIGNIFICANT ADVANTAGE FOR ME.

Hi Joe,

The impact of this statement is that with the transmitter antenna that high, it can see to an horizon (edge of the viewable earth) that is 109 miles away. This is just the situation you need if your receive antenna was sitting on the ground. Unfortunately, the Empire State Building is not that tall (1200 feet or so), and it is effectively (from your point of view, literally) underground by that needed additional 4800 feet.

To make up the difference, you would lift that antenna off the ground, and try to raise it that same 4800 feet. Unlikely. A gain antenna will not make up for looking through 100 miles of mud and water.

On the flip side, if ducting is working (don't make a schedule based on this coinciding with your calendar), rabbit ears on your roof will do nicely. Myself, during the summer months in Colorado, I could get Edmonton and Calgary Canada - more than 1000 miles away. Getting them on separate occasions was more a surprise than a plan, however. But I did manage to get to see an entire movie before the duct collapsed.

A simple question that hasn't been addressed:
What do you see when you tune NYC stations?

73's
Richard Clark, KB7QHC

2508. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 03:02:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaps0asnl2@news.albasani.net>
Source record: 22081

dfinn1@nc.rr.com wrote:

> ...
> heh heh...but we have it documented in this thread. You fell for it
> the first time and after your posted your answer you saw what you call
> the "trick" after thinking about it. Actually, I was only trying to
> cut through the BS to let you see for yourself why HF is not so
> valuable in today's information age in which only GHz level
> frequencies and above are useful for practical quantities of
> information transfer. But you did catch it, albeit your were a little
> slow on the pick up.

No, it was all done to show your small mind ... gawd I'd hate to be you
when you finally realize how "fish-bowlish" your world appears to some
... <DEEP-FROWN>

Regards,
best-of-luck,
JS

2509. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 03:06:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0us0d4da67i1vb1n5u620jnpj9s1hv4ngk@4ax.com>
Source record: 22083

On Tue, 16 Sep 2008 19:43:35 -0700, John Smith
<assemblywizard@gmail.com> wrote:
>> And now we have Brett rolling on the floor with Art as two down.
>>
>> That pretty much closes down the mutual admiration society of
>> Newtonian Philosopherz.
>I really thought you forgot about me, yanno'? <frown>

Just waiting for Cecileo to sign in for the last of the Three Stoogz.

73's
Richard Clark, KB7QHC

2510. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 03:10:05 UTC
From: dfinn1@nc.rr.com
Message-ID: <83d26eca-0e63-4ef4-93c9-57c11aff8abc@j22g2000hsf.googlegroups.com>
Source record: 22084

On Sep 16, 5:15 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > Why must there be an "it" through which TEM waves proagate? Why cannot
> > they propagate through nothingness?
>
> Because the only thing that can propagate through
> nothingness is nothing. That should be clear to
> the most casual observer.
> --
> 73, Cecil http://www.w5dxp.com

That would be true if the casual observer did not consider truly empty space to be nothingness. I do. I do not believe that truly empty space is "something" because to believe otherwise would be to assume that nothingness only exists outside of our Universe... nothingness would not "be" but we define it, so it "is". We know that TEMs can propagate through truly empty space because TEM waves propagate through space, some of which must be "empty" space and some of which is "occupied". I agree that some locii of space, but not all, are characterized by a wide variety of quantum particles, perhaps only some of which actually occupy the space associated with them. Bottom line is that such particles are not required for TEM waves to propagate and they are not the aether.

2511. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 03:10:31 UTC
From: dfinn1@nc.rr.com
Message-ID: <c9f42889-d6e4-4015-a0f1-7f63aea6abfa@a70g2000hsh.googlegroups.com>
Source record: 22085

```
On Sep 16, 5:14 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > This is not relevant to the orginal discussion.
>
> On the contrary, this is the crux of the original
> discussion - whether a wave can exist outside the
> structure of the universe, whatever that may be.
> --
> 73, Cecil  http://www.w5dxp.com
```

The crux of the question concerned the physical makeup of the structure of the universe. Then you addressed the issues regarding entities which can or cannot exist inside ot outside the structure. The discussion on the makeup of the structure was never closed. You put the cart in front of the horse.

2512. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 03:20:50 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <c2t0d4pjhsn22uhnc5t9q2986qs6vjgcd7@4ax.com>
Source record: 22086

On Tue, 16 Sep 2008 17:25:35 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>IMHO, and humble experience, reflections only worsen with a raise in
>frequency ... others mileage may vary ... and EVERYTHING you own, which
>is metal/conductive, is a wavelength+ at Ghz!

If the US had gone with the DVB-T COFDM standard, instead of the ATSC
8VSB standard, we would have much better immunity to reflections.

OFDM is fairly immune to reflections, which appears as frequency
selective fading. If a few carriers end up cancelling with a
reflection, then COFDM still has 1700 or more carriers that continue
to pass data. With FEC, most of the data gets through. Something
like this:
<http://www.navtechsystems.co.uk/services/micro_links/cofdm_dig_theory.html>

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

2513. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 03:32:47 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <30u0d4d515sn03p6t8h8i45faj4gk2itc8@4ax.com>
Source record: 22087

On Tue, 16 Sep 2008 19:18:39 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>All these "youngsters" growing up around the internet and DVDs and MP3s,
>expect perfect communications. Perhaps their homes did not even possess
>a broadcast capable TV!

Yep, it's a problem. I have two working record players and some vinyl
left over from my mis-spent youth. When the kids complain about
assorted digital audio oddities, I play a 78 rpm record for them. The
usual reaction is "What that hiss" or maybe "did you really listen to
that"? A few of the older kids have seen VCR quality, which they seem
to tolerate. However, the same kids will go ballistic if there are
any artifacts on their shinny new HDTV screen, their MP3 player
trashes a tune, or their streaming audio/video skips a beat. We have
raise a generation of connoisseurs.

--
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2514. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 03:33:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <09u0d456ktrdtmt1g9l108vlsk5usvbqal@4ax.com>
Source record: 22088

On Tue, 16 Sep 2008 08:06:15 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I consider it a real shame that equilibrium is not a part of
>examinations since equilibrium
>is a basic in the electrical circuit of all antennas

A very simple observation:

Give us one question you would expect to see.

Give us the answer that would be marked as passing.

Without both, this sappy sentiment of yours is nothing more than a
late night exercise of crying bitter tears into the pillow - and
leaving the window open so the neighbors can hear the sobs of regret.

73's
Richard Clark, KB7QHC

2515. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 04:18:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ebe5ddd1-22bd-4740-85e8-ab909d30e2e0@a8g2000prf.googlegroups.com>
Source record: 22089

On Sep 16, 9:40 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> > John you are equating resonance with equilibrium, a dipole in antenna
> > terms is a half wavelength
> > resonant but not in a state of equilibrium. Equilibrium is a staple in
> > this Universe. First comes equilibrium
> > after which you may consider resonance.......but not the reverse. Both
> > of the samples are of a half wave length thus it is not in
> > equilibrium.
> > Equilibrium comes first in the satisfaction analysis, if it fails all
> > falls apart.
> > Best regards
> > Art
>
> Uhhh Art, you "were" actually responding to "JB", you are lucky I read
> your posts, and that this one prompted me to respond (or, unlucky, I
> guess it depends on how "you view it" <grin>) ...
>
> I realize "something IS wrong" with the basic platform all "antenna
> theory/equations/formulas/maths/truths/etc." is/are built upon ... but
> what that "something" is? ... all I can say, I am looking and wondering
> ... but then, so are many -- and, if you are one of that "many", you
> already have foot on the right path ... need I include, IMHO?
>
> Regards,
> JS

Sorry about that. Don't you think it is odd that all computer programs
based on Maxwells laws reflect every thing I have stated? I am not a
computer freak
How I could make all this up and several computer programs made by
different
people both sides of the pond can reproduce without conivance a
computer program
that provides the details of every thing that I have stated?
None of this is in the antenna books or relavent books on science and
do you know why?
My generation has been taken over by computers where prior generations
resorted to origanal thought from first principles.
They accept that the computer will spill out a lot of inaplicable
information but feel the sorting problem

is so much easier for the lazy. Problem is that books on the sciences have not had critical analysis by the following generation which always call for revisions. The books used for supplying questions to the computer are those taken from the books that never received the normal generational
revisions. Sorting computer answers requires common sense but with the absence of required revisions what one calls common sense is one that needs revision ala garbage in garbage out. Now we get statements that if more gain came from tipping antennas the world would have tipped the towers
years ago. To me that is totally absent of common sence but for people who rely on unrevised books it is perfectly understandable. If people have discarded Universal laws then the computers will not reflect same based on input. We have to many academics churning out physics papers which reflects direction of past papers as a way of getting them accepted and published and a path to a higher station. What we need is design by first principles which other countries still have by not yet smitten by computers and who are capable of original thought.
Universities in the industrial world state the books that must be followedand the student realizes that the answer in the books are the datum used by professors so..... follow the same path formed by those that proceded you as the primary for getting a job is that piece of paper without original thought. There are many of past generations that have
generalized about point radiation alas this generations belittles it and successfully resist change. Sad Sad Sad
Art Unwin KB9MZ.....xg

2516. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 05:00:41 UTC
From: DB <debesh.bhatta@gmail.com>
Message-ID: <40b8fa37-9520-4a10-a75e-2776c1fa914b@n33g2000pri.googlegroups.com>
Source record: 22090

On Sep 17, 12:18 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 16, 9:40 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
>
>
> > Art Unwin wrote:
>
> > >> ...
>
> > > John you are equating resonance with equilibrium, a dipole in antenna
> > > terms is a half wavelength
> > > resonant but not in a state of equilibrium. Equilibrium is a staple in
> > > this Universe. First comes equilibrium
> > > after which you may consider resonance.......but not the reverse. Both
> > > of the samples are of a half wave length thus it is not in
> > > equilibrium.
> > > Equilibrium comes first in the satisfaction analysis, if it fails all
> > > falls apart.
> > > Best regards
> > > Art
>
> > Uhhh Art, you "were" actually responding to "JB", you are lucky I read
> > your posts, and that this one prompted me to respond (or, unlucky, I
> > guess it depends on how "you view it" <grin>) ...
>
> > I realize "something IS wrong" with the basic platform all "antenna
> > theory/equations/formulas/maths/truths/etc." is/are built upon ... but
> > what that "something" is? ... all I can say, I am looking and wondering
> > ... but then, so are many -- and, if you are one of that "many", you
> > already have foot on the right path ... need I include, IMHO?
>
> > Regards,
> > JS
>
> Sorry about that. Don't you think it is odd that all computer programs
> based on Maxwells laws reflect every thing I have stated? I am not a
> computer freak
> How I could make all this up and several computer programs made by
> different
> people both sides of the pond can reproduce without conivance a
> computer program
> that provides the details of every thing that I have stated?
> None of this is in the antenna books or relavent books on science and
> do you know why?

> My generation has been taken over by computers where prior generations
> resorted to origanal thought from first principles.
> They accept that the computer will spill out a lot of inaplicable
> information but feel the sorting problem
> is so much easier for the lazy. Problem is that books on the sciences
> have not had critical analysis by the following generation which
> always call for revisions. The books used for supplying questions to
> the computer are those taken from the books that never received the
> normal generational
> revisions. Sorting computer answers requires common sense but with the
> absence of required revisions what one calls common sense is one that
> needs revision ala garbage in garbage out. Now we get statements that
> if more gain came from tipping antennas the world would have tipped
> the towers
> years ago. To me that is totally absent of common sence but for people
> who rely on unrevised books it is perfectly understandable. If people
> have discarded Universal laws then the computers will not reflect same
> based on input. We have to many academics churning out physics papers
> which reflects direction of past papers as a way of getting them
> accepted and published and a path to a higher station. What we need is
> design by first principles which other countries still have by not yet
> smitten by computers and who are capable of original thought.
> Universities in the industrial world state the books that must be
> followedand the student realizes that the answer in the books are the
> datum used by professors so.......... follow the same path formed by
> those that proceded you as the primary for getting a job is that piece
> of paper without original thought. There are many of past generations
> that have
> generalized about point radiation alas this generations belittles it
> and successfully resist change. Sad   Sad   Sad
> Art Unwin   KB9MZ........xg

If you really want us "lesser mortals" to appreciate your thoughts ,
why don't you just put down your formulations in terms of concrete
mathematical equations and post it to a website or some place as a
document or something. That way we can see what you mean. In all of
these I assume that your thoughts are at least expressible in terms of
the known mathematics.
We would appreciate your endeavor and who knows it can lead to a new
form of mathematics with your pure and powerful thoughts.
And don't think that I am saying you are wrong outright because what
you have said as reaction forces, are involved in a local neighborhood
of the electron and the field associated with it. But they don't quite
manifest in a way that you say they does to the best of my knowledge.
Moreover it is not quite a practical idea to think of individual
electrons and the reaction associated with them when they are in all
probable states and with well practically innumerable number of
electrons.

In case you don't like to quantify your thoughts and put them into
practical formulations which can be solved in finite number of

steps.... well I am sorry we will never be enlightened. And prefer to look at an antenna the more conventional way. All these neglecting the fact that mechanics of particles at microscopic level deviates considerably from the macroscopic world formulations, the inclusion of which might make this thread more bitter.
--DB

2517. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 05:05:59 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <0q21d4ho57f70sml70qv8ok60cki2moqtl@4ax.com>
Source record: 22091

On Tue, 16 Sep 2008 17:29:08 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Well you may have hit on it. I am an englishman still in the learning
>of American.

Except for a few odd terms, the kings English still works on this side
of the pond.

>The law I am refering to is that every action has an opposite
>reaction, not quite the words Newtons
>used but the reaction is on par with the initial action. If you are in
>doubt look up Newtons actual words.

You could lookup the exact quote for Newton's 3rd law.
<http://en.wikipedia.org/wiki/Newton%27s_laws_of_motion>
"Every action has an equal and opposite reaction."
Please note that the words "parity" and "on par" are not used anywhere
in the explanation and discussion. If you want to introduce new
physical principles, it would probably be best if you used more
conventional terminology suitable for the GUM (great unwashed masses).

>Parity is what I picked up on this newsgroup so when in Rome........
>Parity means the maintainance of balance
>still sounds O.K. but I will not use it any more!
>Art

Well, there are also online dictionaries. Try:
<http://www.google.com/search?hl=en&q=define%3A+parity>
None of the definitions for parity resemble whatever it is you're
trying to do, explain, or complain about.

Incidentally, the way you use Google as a dictionary is to inscribe:
define: parity
in the search box.

You also use the term equilibrium in a similar manner. Your use is
correct (to mean a type of balance) but you consistently fail to
adequately describe what is balancing against what else. Some people
may prefer your technobabble description, but if there's a balance,
there's also a corresponding equation which equates whatever it is
you're balancing. I like equations and numbers.

If you genuinely want to understand how antennas work based on first
principles, you might consider that all an antenna does is provide an
optimum transfer (match) of power between a transmitting device at
some impedance (usually 50 ohms) and the impedance of free space (377

ohms). Everything else in antenna design is controlling the direction
and efficiency of this power transfer.

--

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2518. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 05:30:38 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <r341d4t3f36q38h89p11pcbg9huqvnetqk@4ax.com>
Source record: 22092

On Tue, 16 Sep 2008 17:38:29 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Truth is stranger than fiction and what I am saying is the truth or
>factual.

Assertion does not constitute proof. Speaking strictly for myself, I really don't care what you think, advocate, imply, or suggest. What I do care is the reasoning behind your thinking, your advocacy, etc. Simply stating that something is right, wrong, or works in some manner is insufficient. Unless you're an established authority on the topic of antenna design, I have no intention of accepting your rants at face value.

>In all the years that I have been on this group nobody has proved me
>wrong
>with respect to radiation.

That's easy to understand. You haven't said anything. There's no substance to your "explanations". I can't argue against an insubstantial fog or cloud, and neither can anyone else. No models, no measurements, no tests, no numbers, no nothing. Besides, it's not my position to prove that you are wrong. It's your job to convince us that you're correct. We pass judgement on your ideas, you do not. Of course, you're always welcome to pass judgements on my qualifications to make such a judgement.

>If they had I would have apologized for the
>record.

I should hope so. I've been wrong a few times. It happens.
<http://groups.google.com/groups/profile?hl=en&enc_user=bLQuYRAAAACBvdjA7WBXQw3w3fqwxHRj>
<http://groups.google.com/groups/profile?hl=en&enc_user=tWGMphwAAAAGTj9X4k0U7wKkGyU8QhaBhaxMG2M1PWkMtCZAt5tdxQ>
Hmmm.... 24,000 postings. Maybe I should find something more productive to do.

>For myself I can run all of these people out of town on antennas as
>they are all self perceived experts
>bestowing glory on them selves in retirement to supply the recognition
>they feel they earned in the past.

Wow. I'm not retired yet, but I'm not worried. You would have no trouble running me out of town with your expertise on antennas. I'm still learning and probably will never be an expert. I read the NEC mailing list. I dabble with EzNEC and 4NEC2. I designm model, and build some rather odd microwave antennas. I have two antenna related

products to my name from about 20 years ago. Not quite an expert but sufficiently functional to hold my own:
<http://802.11junk.com/jeffl/antennas/>
Note: I did *NOT* design the commercial antennas shown.

>Find an expert for yourself and ask him the same questions that you
>ask of me.

I only asked one question. What do you mean by equalibrium and what is being balanced against what else. No expert or beginner could answer that. Only you can.

> My statements are nothing special and nor am I

Actually, your statements initially appeared quite special to me. I was serious when I asked what program you used to generate your rant. I couldn't believe that anyone intentionally wrote such a word salad. I suspected there was some software behind it. I even attempted to duplicate the feat by hand (and failed). Your statements are special to me for no better reason than I failed to mimick the style.

--
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http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

2519. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 05:52:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <td51d493kch5nsfevdp38h6kar3ldmpaet@4ax.com>
Source record: 22093

On Tue, 16 Sep 2008 20:33:04 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 16 Sep 2008 08:06:15 -0700 (PDT), Art Unwin
><ArthurUnwin@gmail.com> wrote:
>
>>I consider it a real shame that equilibrium is not a part of
>>examinations since equilibrium
>>is a basic in the electrical circuit of all antennas
>
>A very simple observation:
>
> Give us one question you would expect to see.
>
> Give us the answer that would be marked as passing.
>
>Without both, this sappy sentiment of yours is nothing more than a
>late night exercise of crying bitter tears into the pillow - and
>leaving the window open so the neighbors can hear the sobs of regret.

It appears that sentimentality rules the thread. Lacking any steps
taken by Art towards providing a question with its corresponding
answer must mean he couldn't pass the same test it might be placed in.

Barring Art's hesitancy to supply his own solution, I can only rummage
up a similar instance from him where we might make this a quality of
test a CBer might tackle that is drawn from patented (5,625,367)
technology:

Q. reflector element is usually tuned to a frequency slightly
higher than the driver resonant frequency - TRUE or FALSE?

Q. director elements are usually tuned to frequencies slightly
lower than the driver resonant frequency - TRUE or FALSE?

Thankfully, the PTO does not test nor issue licenses based upon this
technology source used as reference material.

I can well imagine how "equilibrium" would similarly pollute the
question pool and the lack of follow-up leaves us with the soap opera
it was always meant to be.

73's
Richard Clark, KB7QHC

2520. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 06:34:00 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <vt51d4hnvq7c8af4b9u8g5ko7qq5a3scfr@4ax.com>
Source record: 22094

On Tue, 16 Sep 2008 21:18:45 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

Consider the following as rhetorical questions. I don't expect you to
answer. My purpose is to demonstrate what you have left out of your
rants.

>Sorry about that. Don't you think it is odd that all computer programs
>based on Maxwells laws reflect every thing I have stated?

Name one or more of these computer programs based on Maxwell's
Equations (not laws).

>How I could make all this up and several computer programs made by
>different
> people both sides of the pond can reproduce without conivance a
>computer program
>that provides the details of every thing that I have stated?

Who are these people and what programs are they using?
What results did they obtain?
Which NEC models were they using (NEC2, NEC4, etc)?

>None of this is in the antenna books or relavent books on science and
>do you know why?

Which antenna books are lacking? I have about 5 linear feet of
printed antenna books, several boxes of IEEE Antenna and Propagation
SIG proceedings, and much of my hard disk stuffed with free and
commercial modeling and design software. Which antenna books are you
suggesting are lacking and why?

>My generation has been taken over by computers where prior generations
>resorted to origanal thought from first principles.

Nice topic switch. I'm 60.8 years old and am also in the computer
business.
<http://802.11junk.com/jeffl/pics/office/>
I've never had an original thought in my life. I base everything I do
on what myself and others have done before. Short of divine
revelations, I suspect that much of the scientific and engineering
world works the same way. Everything is based somewhat on past
experience and history.

>They accept that the computer will spill out a lot of inaplicable
>information but feel the sorting problem
>is so much easier for the lazy.

I can see you've never actually used a computah to solve problems. I have. Computers are difficult to deal with for solving an individual problem. They are truly wonderful for solving repetitive and interactive problems. Simulations and emulations are fantastic for uncovering bugs and problems before they become too difficult or too expensive to fix. There are many companies that go directly from a computah model to manufacturing without a prototype because they are confident their computah models will work. If saving huge amounts of time and effort constitutes being lazy, you have a warped perspective of what computahs can do for you.

>Problem is that books on the sciences
>have not had critical analysis by the following generation which
>always call for revisions.

Nice topic switch again. Books tend to be several years behind.

Which technical antenna books are you suggesting have failed to obtain a peer review? I played tech editor on one Unix book (never again!) and have a fair idea of the process. There are many books published under various vanity press labels which are solely the responsibility of the author. Some of those, I will agree have not been extensively peer reviewed. I know of several in the ham radio market that have not been properly reviewed, but which are generally accurate.

Which antenna books do you find inadequate due to lack of a "critical analysis"?

>The books used for supplying questions to
>the computer are those taken from the books that never received the
>normal generational
>revisions.

My computer does not accept questions. We're not there yet. I have to frame the problem in a language that the computer can understand. The questions are implied in the framing of the problem.

There are books which only survive the first printing. Those will never survive a "normal generational revision" because there will be no 2nd generation.

Which antenna books do you find inadequate due to the lack of a 2nd printing?

>Sorting computer answers requires common sense

My computer does the sorting, not me. I do the interpretation of the results produced by the computer. My computer also lacks common sense. We're not there yet. It's also possible that I lack common sense, but I won't admit to that.

>but with the
>absence of required revisions what one calls common sense is one that
>needs revision ala garbage in garbage out.

Who or what organization requires a revision?

Where does common sense come into the design of an antenna? What equations govern the application of common sense in an antenna design? What are the units of measure of common sense?

>Now we get statements that
>if more gain came from tipping antennas the world would have tipped
>the towers
>years ago.

That's not common sense. It's designing within the limitations of the technology and within conventional construction practices. If you've ever had to deal with populating a tower full of assorted antennas and trying to optimize the arrangement for maximum revenue (more antennas), versus minimum interaction and intermod, you'll understand what practical limitations are all about. Anyone can design an antenna that works in free space. It takes some skill and experience to design it to meet regulatory and practical limitations.

>To me that is totally absent of common sence but for people
>who rely on unrevised books it is perfectly understandable.

Most authors include an email address to which you can send corrections and objections. Some of mine have appeared in the errata pages for at least one book. What antenna book is in need of revision because it discusses tilting antennas?

>If people
>have discarded Universal laws then the computers will not reflect same
>based on input.

What universal law? I don't recall seeing a Universal Law in my computer or software.

>We have to many academics churning out physics papers
>which reflects direction of past papers as a way of getting them
>accepted and published and a path to a higher station.

Well, yes... that's the way it works. You learn from the past and you build on it. Most of those papers consist of a summary of existing technology and understanding. They then add their own research. You can see that on everything from traffic laws to patents. Have you ever even read a single issue of IEEE Antennas and Propagation SIG proceedings?

>What we need is
>design by first principles which other countries still have by not yet
>smitten by computers and who are capable of original thought.

No need to go looking outside the industrialized world. I sometimes help at the local skool on senior projects. The students are required to build something to graduate. I have a difficult time keeping the ideas down to something that can be built in a few weeks of class. However, the imagination and creativity of some of these students is

well beyond what I would expect to see from a seasoned professional.
If you want originality, get it before it's squashed by the
responsibilities and realities of life.

>Universities in the industrial world state the books that must be
>followedand the student realizes that the answer in the books are the
>datum used by professors so.....

Really? Skool textbooks are rotated almost constantly. That's
allegedly to keep up to date, but really to squash the used book
market. I spent much of college career arguing with the professors,
much of which was over reality versus what's in the books. When the
instructors have a political agenda added to the mix, things get
really interesting. Incidentally, one has to understand the books,
before one can argue against them.

>follow the same path formed by
>those that proceded you as the primary for getting a job is that piece
>of paper without original thought.

There are those that are capable of original thinking and those that
simply become cogs in the system. I don't have time to expound on the
relative merits of each. If you want to see a small riot, get all the
independent thinkers together. They can never agree on anything. Are
you sure you want everyone to be an original thinker? I shudder at
what methinks will happen to something like the traffic laws.

>There are many of past generations
>that have
>generalized about point radiation alas this generations belittles it
>and successfully resist change.

Nice topic switch again. How many and which generations generalized
about point radiation? How have these generations "belittled" point
radiation? Do you know that it's actually called zero-point energy?
What does zero-point energy have to do with antennas? How are you
going to deal with the infinite energy density required to obtain
zero-point energy?
<http://en.wikipedia.org/wiki/Zero-point_energy>

>Sad Sad Sad
>Art Unwin KB9MZ........xg

Ah... The servers are finally done backing up and updating. Thanks
for the diversion.

--
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http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

2521. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 06:52:37 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <3o91d4lh5ral53m8i9ncf6v2c8iljm2vqu@4ax.com>
Source record: 22095

On Tue, 16 Sep 2008 14:23:55 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>I am sure, I am least correct at the quantum level ... <wink>
>Regards,
>JS

There are quantum mechanics in antennas:
<http://www.amazon.com/24775-Quantum-Indoor-HDTV-Antenna/dp/B000W8XQJC>
It's even amplified.

More realistically:
"Superconducting quantum antenna"
<http://www.google.com/patents?id=rM2pAAAAEBAJ&dq=7369093>
Apparently it uses a quantum screen to generate fringing. That's
common at infrared but I haven't seen it used to focus RF. I can't
tell if it's for real. I'll get brain damage from trying to read this
stuff after midnight. Tomorrow...

--
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http://www.LearnByDestroying.com AE6KS

2522. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 07:13:47 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <nfa1d498mtr2qc2btr3uprm121or0uavkb@4ax.com>
Source record: 22096

On Tue, 16 Sep 2008 17:58:35 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>No Newtonians in this crowd. Perhaps it was the relativistic term
>"speed of light" that confused this group so much. Let's restate it
>in units that Newton could have appreciated.
>
>We know that we can accelerate an electron to 167,770 miles/s - it
>happens every femtosecond in one of any 100 billion crt
>displays still glowing in the world. Some of us know its mass at this
>speed. A question for the Newtonian philosopherz:
> "What is the mass of a photon traveling at 167,770 miles/s?"

Google to the rescue:
<http://asistm.duit.uwa.edu.au/synchrotron/downloads/pdfs/chapter11_7.pdf>

mr / mo = 1 / (1 - (v^2/c^2))^0.5

where:
mr = relativistic mass
mo = mass at rest
v = velocity of particle
c = speed-o-light = 186,000 miles/sec

For v = 167,700 miles/sec
mr/mo = 1/ (1 - (167,700^2 / 186,000^2))^0.5
mr/mo = 1/ 1 - 0.813^0.5 = 1/ (1 - 0.902) = 1/ 0.0984 = 10.2

So, the mass of the particle at 90% the speed-o-light is 10 times that
of the particle at rest. It doesn't matter what particle. Do I get a
gold star?

(Somebody please check my arithmetic as I forgot to eat dinner, it's
after midnight, my brain is mush, and my calculator battery is fading
fast).

>73's
>Richard Clark, KB7QHC
--
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http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

2523. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 07:18:37 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9jb1d4dta8aqka01mf8e4fseeha5j2ori7@4ax.com>
Source record: 22097

On Tue, 16 Sep 2008 19:37:27 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 16 Sep 2008 18:15:07 -0700 (PDT), Art Unwin
><ArthurUnwin@gmail.com> wrote:
>
>>No respionse
>
>Well that comes as no surprise that you can't do a Newtonian
>calculation. OK, that is one down.

Ummm... that wasn't Newton. No quantum effects in Newton's work. That
was Einstein's theory of special relativity. See gamma.
<http://www2.slac.stanford.edu/vvc/theory/relativity.html>

--
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http://www.LearnByDestroying.com AE6KS

2524. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 07:25:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <0rb1d4tjlaafvvjs8629ohe05f6fq957pe@4ax.com>
Source record: 22098

On Wed, 17 Sep 2008 00:13:47 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>On Tue, 16 Sep 2008 17:58:35 -0700, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>>No Newtonians in this crowd. Perhaps it was the relativistic term
>>"speed of light" that confused this group so much. Let's restate it
>>in units that Newton could have appreciated.
>>
>>We know that we can accelerate an electron to 167,770 miles/s - it
>>happens every femtosecond in one of any 100 billion crt
>>displays still glowing in the world. Some of us know its mass at this
>>speed. A question for the Newtonian philosopherz:
>> "What is the mass of a photon traveling at 167,770 miles/s?"
>
>Google to the rescue:
><http://asistm.duit.uwa.edu.au/synchrotron/downloads/pdfs/chapter11_7.pdf>
>
>mr / mo = 1 / (1 - (v^2/c^2))^0.5
>
>where:
> mr = relativistic mass
> mo = mass at rest
> v = velocity of particle
> c = speed-o-light = 186,000 miles/sec
>
>For v = 167,700 miles/sec
> mr/mo = 1/ (1 - (167,700^2 / 186,000^2))^0.5
> mr/mo = 1/ 1 - 0.813^0.5 = 1/ (1 - 0.902) = 1/ 0.0984 = 10.2
>
>So, the mass of the particle at 90% the speed-o-light is 10 times that
>of the particle at rest. It doesn't matter what particle. Do I get a
>gold star?
>
>(Somebody please check my arithmetic as I forgot to eat dinner, it's
>after midnight, my brain is mush, and my calculator battery is fading
>fast).

All wrong. No gold star for that mess. I just hate it when I click
"send" and only then discover my arithmetic error. Rev 1.0 follows:

mr / mo = 1 / (1 - (v^2/c^2))^0.5

where:
mr = relativistic mass
mo = mass at rest
v = velocity of particle
c = speed-o-light = 186,000 miles/sec

For v = 167,700 miles/sec
mr/mo = 1/ (1 - (167,700^2 / 186,000^2))^0.5
mr/mo = 1/ (1 - 0.813)^0.5 = 1/ (0.187)^0.5 = 1/ 0.432 = 2.31

So, the mass of the particle at 90% the speed-o-light is 2.3 times
that of the particle at rest. It doesn't matter what particle. Maybe
a silver star?

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
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http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

2525. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 07:52:19 UTC
From: Jon LA4RT <dev@null.com>
Message-ID: <1mljxrdxak.fsf@persaunet.uninett.no>
Source record: 22099

dfinn1@nc.rr.com writes:

> John, Quiz Question: Suppose you tried to modulate a 14 Khz carrier
> with a 50MHz digital signal. Would that be possible? (Y/N) Where would
> you locate the side bands? (________ and ________)

If we interpret this as a signal occupying the spectrum from DC to 28 kHz, we need about 1800 bits/Hz. Mathematically, this isn't impossible, but according to the Shannon/Hartley theorem, we need an SNR of 2^1800, or more than 5400 dB. Assuming noise of -120 dBm, the signal has to 5250 dBW, og 10^525 W. Making detection circuitry work at this power level would be a challange, as it is the equivalent of more than 10^498 suns, 10^486 milky ways or 10^475 observable universes.

73
Jon LA4RT

2526. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:08:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaqoeq$q0f$1@news.albasani.net>
Source record: 22100

Richard Clark wrote:

> ...
> Just waiting for Cecileo to sign in for the last of the Three Stoogz.
>
> 73's
> Richard Clark, KB7QHC

Richard:

Can't go with you there; he is asking some of the same questions as myself, just in a different way. I am just weird enough to understand him and his questions.

Three? LOL How about Forty-Three? And those are constantly changing, depends on the umpires, I guess ...

Regards,
JS

2527. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:13:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <SD5Ak.557$x%.346@nlpi070.nbdc.sbc.com>
Source record: 22001

Jim Kelley wrote:
> According to Einstein, anything with energy has mass equivalence -
> especially photons. But other than that, nothing with mass can travel
> at the speed of light.

Make that "nothing with *rest* mass can travel at the
speed of light". From an earlier posting of mine:

"Photons have zero rest mass. Otherwise, they couldn't
travel at the speed of light."
--
73, Cecil http://www.w5dxp.com

2528. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:20:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaqp5tqug1@news.albasani.net>
Source record: 22002

Jeff:

I am top posting here, just because your post is so damn long, and I could NOT bring myself to cut any of it ...

Thanks for being candid with us. Yep, you are one of us alright. Yep, we have to use others past books, thoughts, knowledge, computer apps, papers, etc. ... it is just too much, it is inundating ... I mean, my home office here looks like yours! And, the wife is a "neat-freak" ... I tell you, I spend all my time looking for materials she has "organized" for me ... <smirk>

I hope you didn't come here for answers, I mean I can't speak for everyone here, but all I have is questions! And, if I ask something that doesn't have a black and white answer, I get slapped in the face! <blank-look>

Demands for answers, demands for open discussions, demands we look at even the quantum world in "explorations into antennas", especially from some of the STRONG personalities you find here, can be intimidating ... but, welcome aboard.

However, if you thought you would find peace of mind, bliss and enlightenment here ... think again. ROFLOL

You are just about to find out "how deep this Rabbit-Hole goes!"

Warm regards,
JS

Jeff Liebermann wrote:
> On Tue, 16 Sep 2008 21:18:45 -0700 (PDT), Art Unwin
> <ArthurUnwin@gmail.com> wrote:
>
> Consider the following as rhetorical questions. I don't expect you to
> answer. My purpose is to demonstrate what you have left out of your
> rants.
>
>> Sorry about that. Don't you think it is odd that all computer programs
>> based on Maxwells laws reflect every thing I have stated?
>
> Name one or more of these computer programs based on Maxwell's
> Equations (not laws).
>
>> How I could make all this up and several computer programs made by
>> different
>> people both sides of the pond can reproduce without conivance a

>> computer program
>> that provides the details of every thing that I have stated?
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> Who are these people and what programs are they using?
> What results did they obtain?
> Which NEC models were they using (NEC2, NEC4, etc)?
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>> My generation has been taken over by computers where prior generations
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> Nice topic switch. I'm 60.8 years old and am also in the computer
> business.
> <http://802.11junk.com/jeffl/pics/office/>
> I've never had an original thought in my life. I base everything I do
> on what myself and others have done before. Short of divine
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> world works the same way. Everything is based somewhat on past
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> confident their computah models will work. If saving huge amounts of
> time and effort constitutes being lazy, you have a warped perspective
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> technology and within conventional construction practices. If you've

> ever had to deal with populating a tower full of assorted antennas and
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>
>> If people
>> have discarded Universal laws then the computers will not reflect same
>> based on input.
>
> What universal law? I don't recall seeing a Universal Law in my
> computer or software.
>
>> We have to many academics churning out physics papers
>> which reflects direction of past papers as a way of getting them
>> accepted and published and a path to a higher station.
>
> Well, yes... that's the way it works. You learn from the past and you
> build on it. Most of those papers consist of a summary of existing
> technology and understanding. They then add their own research. You
> can see that on everything from traffic laws to patents. Have you
> ever even read a single issue of IEEE Antennas and Propagation SIG
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>> What we need is
>> design by first principles which other countries still have by not yet
>> smitten by computers and who are capable of original thought.
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> No need to go looking outside the industrialized world. I sometimes
> help at the local skool on senior projects. The students are required
> to build something to graduate. I have a difficult time keeping the
> ideas down to something that can be built in a few weeks of class.
> However, the imagination and creativity of some of these students is
> well beyond what I would expect to see from a seasoned professional.
> If you want originality, get it before it's squashed by the
> responsibilities and realities of life.
>
>> Universities in the industrial world state the books that must be
>> followedand the student realizes that the answer in the books are the
>> datum used by professors so.....
>

> Really? Skool textbooks are rotated almost constantly. That's
> allegedly to keep up to date, but really to squash the used book
> market. I spent much of college career arguing with the professors,
> much of which was over reality versus what's in the books. When the
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>
>> follow the same path formed by
>> those that proceded you as the primary for getting a job is that piece
>> of paper without original thought.
>
> There are those that are capable of original thinking and those that
> simply become cogs in the system. I don't have time to expound on the
> relative merits of each. If you want to see a small riot, get all the
> independent thinkers together. They can never agree on anything. Are
> you sure you want everyone to be an original thinker? I shudder at
> what methinks will happen to something like the traffic laws.
>
>> There are many of past generations
>> that have
>> generalized about point radiation alas this generations belittles it
>> and successfully resist change.
>
> Nice topic switch again. How many and which generations generalized
> about point radiation? How have these generations "belittled" point
> radiation? Do you know that it's actually called zero-point energy?
> What does zero-point energy have to do with antennas? How are you
> going to deal with the infinite energy density required to obtain
> zero-point energy?
> <http://en.wikipedia.org/wiki/Zero-point_energy>
>
>> Sad Sad Sad
>> Art Unwin KB9MZ........xg
>
> Ah... The servers are finally done backing up and updating. Thanks
> for the diversion.
>

2529. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:26:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaqpi9$r95$1@news.albasani.net>
Source record: 22003

Jeff Liebermann wrote:
> On Tue, 16 Sep 2008 14:23:55 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> I am sure, I am least correct at the quantum level ... <wink>
>> Regards,
>> JS
>
> There are quantum mechanics in antennas:
> <http://www.amazon.com/24775-Quantum-Indoor-HDTV-Antenna/dp/B000W8XQJC>
> It's even amplified.
>
> More realistically:
> "Superconducting quantum antenna"
> <http://www.google.com/patents?id=rM2pAAAAEBAJ&dq=7369093>
> Apparently it uses a quantum screen to generate fringing. That's
> common at infrared but I haven't seen it used to focus RF. I can't
> tell if it's for real. I'll get brain damage from trying to read this
> stuff after midnight. Tomorrow...
>

Jeff:

Another good point, I avoid patents in my searches!

In the google search box, I always include the search terms "-patents"
and "-patent" (minus the double quotes) ... that is the type of stuff
(silly patents) which just accelerates my insane questions to
unfathomable limits!

Heck, I can't even tell the "silly" ones (patents) from the "real" ones
... indeed, I strongly suspect I am a poor one to judge!

LOL!

Regards,
JS

2530. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:29:13 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <bS5Ak.558$x%.4@nlpi070.nbdc.sbc.com>
Source record: 22004

dfinn1@nc.rr.com wrote:
> That would be true if the casual observer did not consider truly empty
> space to be nothingness. I do.

That's obviously a logical contradiction. Space is
something. If space is there, then something is there.
If nothing is there, then space cannot possibly be
there.
--
73, Cecil http://www.w5dxp.com

2531. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:31:48 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <CU5Ak.559$x%.527@nlpi070.nbdc.sbc.com>
Source record: 22005

dfinn1@nc.rr.com wrote:
> The discussion on the makeup of the structure was never closed. You
> put the cart in front of the horse.

The makeup of the structure is irrelevant to this
discussion. Since there is a structure (which is
something) it cannot possibly be nothing.
--
73, Cecil http://www.w5dxp.com

2532. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:33:07 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <RV5Ak.560$x%.505@nlpi070.nbdc.sbc.com>
Source record: 22006

Richard Clark wrote:
> Just waiting for Cecileo to sign in for the last of the Three Stoogz.

How would you ever know since you ploinked me?
--
73, Cecil http://www.w5dxp.com

2533. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:48:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <686Ak.448$as4.376@nlpi069.nbdc.sbc.com>
Source record: 22007

Jeff Liebermann wrote:
> So, the mass of the particle at 90% the speed-o-light is 10 times that
> of the particle at rest. It doesn't matter what particle. Do I get a
> gold star?

That doesn't work for photons which are particles with
zero rest mass.
--
73, Cecil http://www.w5dxp.com

2534. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:53:17 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <O--dnUxCZL9dck3VnZ2dnUVZ_ojinZ2d@pghconnect.com>
Source record: 22008

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:ce3adaac-9e3e-4aba-9878-396771c8343a@c58g2000hsc.googlegroups.com...
On Sep 16, 7:48 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Cecil Moore wrote:
> > Rectifier wrote:
> >> Radiation has no mass ...
>
> > On the contrary, radiation is photons which indeed
> > do have mass when traveling at the speed of light,
> > which radiation does.
>
> According to Einstein, anything with energy has mass equivalence -
> especially photons. But other than that, nothing with mass can travel
> at the speed of light. You can have one, or the other, not both.
>
> 73, ac6xg

True, travel is something less than the speed of light
Art

-

In what medium? Remember that the speed of light is different in different
media.

2535. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 11:56:20 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <8sCdnXfxGozqbU3VnZ2dnUVZ_rbinZ2d@pghconnect.com>
Source record: 22009

<dfinn1@nc.rr.com> wrote in message
news:b007bd53-f1f8-42b8-8bc9-4bc1631ffa55@79g2000hsk.googlegroups.com...
On Sep 16, 9:57 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > Correction: Photons have no rest mass. "radiated" photons have the
> > properties of mass because they are affected by gravitation. Light can
> > be bent by large bodies of mass.
>
> Oh sure, they have a "perceived mass", don't they?; I mean, we seem to
> be able to measure it, don't we? How do you know it "exists ALL ITS
> TRAVEL TIME", what makes you think it is not constantly oscillating for
> energy to mass ... and it is ONLY the average of that which we are
> REALLY measuring ... can you prove that, well, CAN YOU? Can you provide
> any relevant data here to prove it? Any URLs? Any quotes from famous
> physicists? Any psychics? Have you consulted Art? <again-innocent-smile>
>
> But then, you ever try to run along side of one of those photons and
> measure it? I mean, this is how you really gain a critics respect
> (heck, you'd even gain acknowledgment from the arrl, well,
> most-likely--well, I think you would--IMHO anyway, etc.) -- now, the
> question to separate the men from the boys -- now, have you?
> <pleasant-innocent-smile>
>
> Geesh! <looks-out-window>
>
> Regards,
> JS

I should have used black holes as my example. One only needs to accept
that black holes exist in order to believe that gravity affects the
property of mass inerent in light ;-)

-

Maybe it's not gravity that bends the light that comes near black holes.
Maybe it's something more sinister like extremely strong magnetic forces. .
. Maybe I just don't have the faith necessary to believe in black holes
(tongue firmly in cheek).

2536. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 12:01:00 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <UMSdncCco-0obE3VnZ2dnUVZ_v3inZ2d@pghconnect.com>
Source record: 22010

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:1c648ee0-7f6f-4f9f-be77-72bc08ac9662@t54g2000hsg.googlegroups.com...
On Sep 16, 2:49 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:5f13ffe3-7b61-4e01-80f2-5e90b31d0c4a@s50g2000hsb.googlegroups.com...
> On Sep 16, 11:56 am, "Mike Lucas" <w5...@bellsouth.net> wrote:
>
>
>
> > "Art Unwin" wrote
>
> > >I consider it a real shame that equilibrium is not a part of
> > > examinations since equilibrium
> > > is a basic in the electrical circuit of all antennas No where do I see
> > > antennas explained other than the showing of capacitive coupling to
> > > ground of antennas as a perceived circuit of an antenna?. Until this
> > > is corrected we will never have continium of discussion between hams
> > > on antennas.It is not a mystery anymore so why do the ARRL avoid it
> > > like a plague?
> > > Art
>
> > Art:
> > You have written 2,947 posts to RRAA, and at least 2/3 of them
> > contain a reference to " equilibrium". Numerous people have asked
> > you to define or at least explain your usage of the term. So far, you
> > have not done so.Actually, you have either diverted the question, or
> > told questioners to do their own research. Your posts show that you
> > know nothing about how antennas work, and suspect very little.Why
> > would ARRL correct something that's perfectly fine as is???
>
> > Mike W5CHR
> > Memphis Tenn
>
> Mike
> I know more about antennas and radiation than you think !
> For instance, equilibrium demands that charges do not move laterally
> along an antenna when in equilibrium
> Without equilibrium charges do move along the surface of a radiator
> and Newtons law of parity demands
> that charges are moving thru the CENTER of the radiator thus
> encoundering just copper losses.
> Thus for a radiator that is not in equilibrium has three resistance
> 1 Radiation resistance

> 2 outer resistance
> 3 Inner copper resistance.
>
> Equilibrium is nothing more than the enforcement of Newtons law of
> parity.
> This is so simple to those who work from first principles for
> themselves instead of being lemmings.
> Correctness is not always determined from a poll
> Regards
> Art
>
> -
>
> I've heard of Newton's laws of motion, but not Newton's law of parity.
> Newton dealt primarily with motion, mass, and such. Electromagnetic
> radiation hadn't even been discovered when Newton was alive.
> Electromagnetic radiation does not behave the same way as matter, which is
> described in terms such as momentum, inertia, accceleration and such.

Mike
Einstein changed course in study because he could not solve the
description of the weak force
which I see as foucalt current. Knowing this Einstein would be proud
to stand up as state his
thoughts on Universal law has now been proved forget. You cannot
parcel laws based on a particular subject.
Universl laws are just that. UNIVERSAL. What on earth does parity mean
in the U.S.?
Art

-

The equal and opposite reaction thing applies to massive bodies and motion.
It's all different when talking about relativistic speeds for things such as
electromagnetic radiation.

2537. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 12:07:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaqrte$tm8$1@news.albasani.net>
Source record: 22011

Cecil Moore wrote:
> dfinn1@nc.rr.com wrote:
>> This is not relevant to the orginal discussion.
>
> On the contrary, this is the crux of the original
> discussion - whether a wave can exist outside the
> structure of the universe, whatever that may be.

Cecil:

That was what I got out of it ... but then, I focused on Arts' observation, "One thing is certain, Gauss states that static particles cannot radiate in free space as there is no exchange of flux ... "

And, obviously, IMHO, he is referring to a space truly "composed of nothing" and absent of anything even resembling an ether. And, I did accept that as the crux of his ponder-ings/point(s.)

However, also buried in his text are obvious references to a space such as the one our universe resides in ... So, once again, one of those arguments/debates which could go on forever ... and I got those prior appointments ... ;-)

Regards,
JS

2538. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 12:07:24 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <d_udnUydAN2Sbk3VnZ2dnUVZ_sninZ2d@pghconnect.com>
Source record: 22012

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:SBVzk.718$c45.42@nlpi065.nbdc.sbc.com...
> Rectifier wrote:
>> You are applying laws that apply to objects with mass to electromagnetic
>> radiation, which has no mass.
>
> Photons have zero rest mass. Otherwise, they couldn't travel
> at the speed of light. But photons traveling at the speed
> of light certainly have mass. Where in the world did you
> get such irrational ideas?

Read it again! I didn't say photons have zero mass; I said electromagnetic
radiation (EMR) has no mass. EMR exhibits both wave and particle
properties. When travelling at the speed of light, it exhibits wave
properties.

2539. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 12:11:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaqs67$u00$1@news.albasani.net>
Source record: 22013

Cecil Moore wrote:
> dfinn1@nc.rr.com wrote:
>> Why must there be an "it" through which TEM waves proagate? Why cannot
>> they propagate through nothingness?
>
> Because the only thing that can propagate through
> nothingness is nothing. That should be clear to
> the most casual observer.

Well, yeah, makes sense to me ... but then, apparently not others ...
not 100% sure, but yeah, that is where I am at, at the present time.

First that "sea" must fill the void to give us a "media" (ocean) to sail
... and most certainly a must for RF/light to propagate through!

Regards,
JS

2540. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 12:18:08 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <X9SdnfxjjsoOaE3VnZ2dnUVZ_qLinZ2d@pghconnect.com>
Source record: 22014

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:60fa8c84-d5a4-4e00-b66b-b2999f961692@m36g2000hse.googlegroups.com...
On Sep 16, 4:32 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Rectifier wrote:
> > You are applying laws that apply to objects with mass to
> > electromagnetic radiation, which has no mass.
>
> Photons have zero rest mass. Otherwise, they couldn't travel
> at the speed of light. But photons traveling at the speed
> of light certainly have mass. Where in the world did you
> get such irrational ideas?
>
> > I have an Engineering Physics degree from a university program that is
> > an ABET certified engineering program.
>
> After your latest posting, they may de-certify your university's
> program. Exactly what university was it that taught you that
> photons traveling at the speed of light have zero mass?
> --
> 73, Cecil http://www.w5dxp.com

Cecil, this sounds like a regular poster David.Perhaps he is pulling
your leg with his nonsence
Art

-

No. I'm not David; and I just started posting here. I'm not trying to pull
anyone's leg with nonsense. I'm trying to participate in a discussion where
people have different perceptions and understanding of physics. Isn't that
what causes us all to learn and/or change our perceptions on occassion? It
seems that the last vestage of a lack of answers to a point is to mount a
personal attack. Your refusal to answer the salient point and instead mount
a personal attack means your ability to listen is totally stopped.
Discussion over.

2541. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 12:23:20 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d0f67d$0$60065$8046368a@newsreader.iphouse.net>
Source record: 22015

Art Unwin wrote:
> On Sep 16, 8:44 pm, Tom Ring <news0...@taring.org> wrote:
>> Art Unwin wrote:
>>
>>> John, the danger in using mc squared is that it has not stood the test
>>> of time.
>> Next thing he'll claim is that nuclear fission doesn't release energy.
>>
>> tom
>> K0TAR
>
> Oh Tom! bound particles means a LARGE force binding particles
> together.
> Break them apart and you release a large amount of energy which you
> cannot destroy.
> With heavy water you have two bound particles, the particles
> themselves are weak in energy.
> But then you are trying to get away from the subject at hand in this
> thread.
> Want to start atomic stuff then start a thread and attract those who
> are interested in that.
> Think antennas and radiation
> Art

Went right over your head at 30,000 feet Art.

tom
K0TAR

2542. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 12:34:29 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <mP6Ak.775$c45.398@nlpi065.nbdc.sbc.com>
Source record: 22016

John Smith wrote:
> And, obviously, IMHO, he is referring to a space truly "composed of
> nothing" and absent of anything even resembling an ether. And, I did
> accept that as the crux of his ponder-ings/point(s.)

Maybe "absence of anything even resembling a structure"
would be a better way to put it. It's pretty clear that
if there is no structure for space, then space cannot
exist. Absolute nothing would necessarily be the absence
of any and every *thing* including space.
--
73, Cecil http://www.w5dxp.com

2543. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 12:58:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <la7Ak.776$c45.574@nlpi065.nbdc.sbc.com>
Source record: 22017

Rectifier wrote:
> Read it again! I didn't say photons have zero mass; I said
> electromagnetic radiation (EMR) has no mass. EMR exhibits both wave and
> particle properties. When travelling at the speed of light, it exhibits
> wave properties.

When traveling at the speed of light, it exhibits particle
properties. It has been about half a century since experiments
proved that light waves are bent by gravity thus proving that
electromagnetic radiation has mass. That idea was postulated
in 1915. Did you get your degree before then? :-)
--
73, Cecil http://www.w5dxp.com

2544. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 13:01:20 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <008ba684-27ce-4886-acfb-540d567cf651@m45g2000hsb.googlegroups.com>
Source record: 22018

On Sep 17, 7:23 am, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
> > On Sep 16, 8:44 pm, Tom Ring <news0...@taring.org> wrote:
> >> Art Unwin wrote:
>
> >>> John, the danger in using mc squared is that it has not stood the test
> >>> of time.
> >> Next thing he'll claim is that nuclear fission doesn't release energy.
>
> >> tom
> >> K0TAR
>
> > Oh Tom! bound particles means a LARGE force binding particles
> > together.
> > Break them apart and you release a large amount of energy which you
> > cannot destroy.
> > With heavy water you have two bound particles, the particles
> > themselves are weak in energy.
> > But then you are trying to get away from the subject at hand in this
> > thread.
> > Want to start atomic stuff then start a thread and attract those who
> > are interested in that.
> > Think antennas and radiation
> > Art
>
> Went right over your head at 30,000 feet Art.
>
> tom
> K0TAR

OK So nobody wants to talk about equilibrium or current flow on a
radiator.
Thats fine by me. Took a lot of posts to get to that point. JB I
apologize
I have been nailed to the cross so many times I tend to bundle things
together.
When I started I zeroed on equilibrium as a start because existing
laws state that if a charge is moving on the outside of a radiator
then there is movement on the inside of a radiator Now that is not in
the books. Why is that? However discussion went away from the intent
of the thread. equilibrium with respect to radiation. O well another
try later
Regards
Art

2545. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 13:22:28 UTC
From: Dave <dave@dave.dave>
Message-ID: <48d10494$0$29106$bd467cd0@news.dslextreme.com>
Source record: 22019

Art Unwin wrote:
>
>
> OK So nobody wants to talk about equilibrium or current flow on a
> radiator.
> Thats fine by me. Took a lot of posts to get to that point. JB I
> apologize
> I have been nailed to the cross so many times I tend to bundle things
> together.
> When I started I zeroed on equilibrium as a start because existing
> laws state that if a charge is moving on the outside of a radiator
> then there is movement on the inside of a radiator Now that is not in
> the books. Why is that? However discussion went away from the intent
> of the thread. equilibrium with respect to radiation. O well another
> try later
> Regards
> Art

WTF?

2546. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 13:43:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6dde4970-13c8-4c85-9f88-225855188479@b1g2000hsg.googlegroups.com>
Source record: 22020

On Sep 17, 12:30 am, Jeff Liebermann <je...@cruzio.com> wrote:
> On Tue, 16 Sep 2008 17:38:29 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >Truth is stranger than fiction and what I am saying is the truth or
> >factual.
>
> Assertion does not constitute proof. Speaking strictly for myself, I
> really don't care what you think, advocate, imply, or suggest. What I
> do care is the reasoning behind your thinking, your advocacy, etc.
> Simply stating that something is right, wrong, or works in some manner
> is insufficient. Unless you're an established authority on the topic
> of antenna design, I have no intention of accepting your rants at face
> value.
>
> >In all the years that I have been on this group nobody has proved me
> >wrong
> >with respect to radiation.
>
> That's easy to understand. You haven't said anything. There's no
> substance to your "explanations". I can't argue against an
> insubstantial fog or cloud, and neither can anyone else. No models,
> no measurements, no tests, no numbers, no nothing. Besides, it's not
> my position to prove that you are wrong. It's your job to convince us
> that you're correct. We pass judgement on your ideas, you do not. Of
> course, you're always welcome to pass judgements on my qualifications
> to make such a judgement.
>
> >If they had I would have apologized for the
> >record.
>
> I should hope so. I've been wrong a few times. It happens.
> <http://groups.google.com/groups/profile?hl=en&enc_user=bLQuYRAAAACBvd...>
> <http://groups.google.com/groups/profile?hl=en&enc_user=tWGMphwAAAAGTj...>
> Hmmm.... 24,000 postings. Maybe I should find something more
> productive to do.
>
> >For myself I can run all of these people out of town on antennas as
> >they are all self perceived experts
> >bestowing glory on them selves in retirement to supply the recognition
> >they feel they earned in the past.
>
> Wow. I'm not retired yet, but I'm not worried. You would have no
> trouble running me out of town with your expertise on antennas. I'm

> still learning and probably will never be an expert. I read the NEC
> mailing list. I dabble with EzNEC and 4NEC2. I designm model, and
> build some rather odd microwave antennas. I have two antenna related
> products to my name from about 20 years ago. Not quite an expert but
> sufficiently functional to hold my own:
> <http://802.11junk.com/jeffl/antennas/>
> Note: I did *NOT* design the commercial antennas shown.
>
> >Find an expert for yourself and ask him the same questions that you
> >ask of me.
>
> I only asked one question. What do you mean by equalibrium and what
> is being balanced against what else. No expert or beginner could
> answer that. Only you can.
>
> > My statements are nothing special and nor am I
>
> Actually, your statements initially appeared quite special to me. I
> was serious when I asked what program you used to generate your rant.
> I couldn't believe that anyone intentionally wrote such a word salad.
> I suspected there was some software behind it. I even attempted to
> duplicate the feat by hand (and failed). Your statements are special
> to me for no better reason than I failed to mimick the style.
>
> --
> # Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
> # 831-336-2558   je...@comix.santa-cruz.ca.us
> #http://802.11junk.com   je...@cruzio.com
> #http://www.LearnByDestroying.com   AE6KS

Jeff
Let us straighten out a few things about me that most know
I am nowhere as clever or versatile in all the subjects that you
mentioned.
Frankly my present knoweledge is very limited.
I had a heart attack, 5 bypasses plus a loss in memory.So that I could
continue to live I chose radiation as a niche
study for recovery. Ofcourse I will never recover fully. So basically
I have tunnel vision built around the niche of radiation and antennas
where I went back to first principles and started with Newton
This process has lasted for several years, very slow progress but I
have got to a point that my thoughts on antennas and radiation is so
different from the books that I have to go back to the beginning with
respect tp Newton and re evaluate with my peers. Yes I am seen as an
idiot, very understandable but I am persistent in talking and
discussing the initial point in radiation .From Newtons laws I deduce
that current flow on a fractional wavelength antenna includes current
flow thru the centre of a radiator. I am going right back to my new
beginnings but the books do not say that! Soi I can't participate in
the many diversions from the niche I have taken and thus ask for a

similar focus from others. No sympathy or crying desired as I am comfortable and living a good life but even with tunnel vision I am determined to continue and participate in the route I have chosen as there is no alternative.
Sooooo after more than a thousand posts based on the initial radiator and equilibrium I have been unable to make one step forward in a re evaluation of my journey. But I will never give up so you will have to live with that. All of this is old hat to most of the posters who give me hell and sometimes I respond in kind to new posters in a like manner which is wrong but it happens. So to sum up I am a simple man with tunnel vision in a single subject and no where as knoweledgable as other posters outside my field of choice.
My very best regards
Art Unwin KB9MZ....xg

2547. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 14:42:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <en52d4pejo3rd51anls15krulpfqda015h@4ax.com>
Source record: 22021

On Wed, 17 Sep 2008 06:33:07 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>Richard Clark wrote:
>> Just waiting for Cecileo to sign in for the last of the Three Stoogz.
>
>How would you ever know since you ploinked me?

You misspelled plonk, but baby makes three. That makes the last one
who can't do the math.

73's
Richard, KB7QHC

2548. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 14:44:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ir52d414332q4c8nhn8ga0038fg28n1j9u@4ax.com>
Source record: 22022

On Wed, 17 Sep 2008 04:08:04 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Richard Clark wrote:
>
>> ...
>> Just waiting for Cecileo to sign in for the last of the Three Stoogz.

>Three?

All have been accounted for in muster. It wasn't that hard to find
them in the wading pool.

73's
Richard Clark, KB7QHC

2549. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 14:58:34 UTC
From: JB <nospam@goofball.net>
Message-ID: <uW8Ak.257$Jw.183@nwrddc02.gnilink.net>
Source record: 22023

> That was what I got out of it ... but then, I focused on Arts'
> observation, "One thing is certain, Gauss states that static particles
> cannot radiate in free space as there is no exchange of flux ... "
>
Static particles? Does he mean statically charged particles? They don't
radiate, they are attracted to opposite charged matter. But then there is
ionization of a substance.

2550. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:00:57 UTC
From: JB <nospam@goofball.net>
Message-ID: <JY8Ak.258$Jw.116@nwrddc02.gnilink.net>
Source record: 22024

<dfinn1@nc.rr.com> wrote in message
news:420cfbd3-a132-4ef2-bcd8-fe926ecf82b3@c58g2000hsc.googlegroups.com...
On Sep 16, 12:28 am, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
>
> >> ...
>
> > > do. Certainly we are a long way from saying that this is an ether or
> > > medium that supports the transmission of TEM waves.
>
> So, let's call it "whipped bananas" and let it go at that ...
> traditionally, it has been called the ether or aether ... I just tend to
> follow the tradition of the men who first defined it ...
>
> Regards,
> JS

Why must there be an "it" through which TEM waves proagate? Why cannot
they propagate through nothingness? Not all volumes of space are
necessarily occupied by any form of matter.

What would the velocity factor of whipped bananas be?

2551. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:03:16 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gar67ssuc1@registered.motzarella.org>
Source record: 22025

"Rectifier" <redgranite_2000@yahoo.com> wrote in message
news:X9SdnfxjjsoOaE3VnZ2dnUVZ_qLinZ2d@pghconnect.com...
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:60fa8c84-d5a4-4e00-b66b-b2999f961692@m36g2000hse.googlegroups.com...
> On Sep 16, 4:32 pm, Cecil Moore <nos...@w5dxp.com> wrote:
>> Rectifier wrote:
>> > You are applying laws that apply to objects with mass to
>> > electromagnetic radiation, which has no mass.
>>
>> Photons have zero rest mass. Otherwise, they couldn't travel
>> at the speed of light. But photons traveling at the speed
>> of light certainly have mass. Where in the world did you
>> get such irrational ideas?
>>
>> > I have an Engineering Physics degree from a university program that is
>> > an ABET certified engineering program.
>>
>> After your latest posting, they may de-certify your university's
>> program. Exactly what university was it that taught you that
>> photons traveling at the speed of light have zero mass?
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Cecil, this sounds like a regular poster David.Perhaps he is pulling
> your leg with his nonsence
> Art
>
> -
>
> No. I'm not David; and I just started posting here. I'm not trying to
> pull anyone's leg with nonsense. I'm trying to participate in a
> discussion where people have different perceptions and understanding of
> physics. Isn't that what causes us all to learn and/or change our
> perceptions on occassion? It seems that the last vestage of a lack of
> answers to a point is to mount a personal attack. Your refusal to answer
> the salient point and instead mount a personal attack means your ability
> to listen is totally stopped. Discussion over.

Hmm. Seems to move that the old wave/particle duality thing comes into play
in this instance. A wave has no mass, agreed? So, if we collapse the wave
function, the photon (a particle by popular concensus) loses its velocity,
which means, you guessed it, no mass.

Ed, NM2K

2552. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:09:48 UTC
From: JB <nospam@goofball.net>
Message-ID: <059Ak.261$Jw.170@nwrddc02.gnilink.net>
Source record: 22026

> > Why must there be an "it" through which TEM waves proagate? Why cannot
> > they propagate through nothingness?
>
> Because the only thing that can propagate through
> nothingness is nothing. That should be clear to
> the most casual observer.
> --
> 73, Cecil http://www.w5dxp.com

So you are trying to tell me that if I completely evacuate a sealed glass jar it then contains space? That's like saying the absence of light is darkness. True as a conceptual description of nothingness. If you choose to rename nothingness, does that mean it aint nothin? You guys have too much time on your hands.

2553. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:12:48 UTC
From: JB <nospam@goofball.net>
Message-ID: <Q79Ak.262$Jw.240@nwrddc02.gnilink.net>
Source record: 22027

> > That would be true if the casual observer did not consider truly empty
> > space to be nothingness. I do.
>
> That's obviously a logical contradiction. Space is
> something. If space is there, then something is there.
> If nothing is there, then space cannot possibly be
> there.
> --
> 73, Cecil http://www.w5dxp.com

So if nothing is there, it aint nothing after all?

2554. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:13:57 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <c49Ak.37198$De7.2672@bignews7.bellsouth.net>
Source record: 22028

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gaoubgutf1@news.albasani.net...
> JB wrote:
>> The neat thing about going full digital? You no longer have any idea why
>> the signal breaks up. PERIOD. The Customer is no longer bothered by
>> interference of any kind. Either it works or not. If your QSO, Phone
>> Call,
>> Mayday, Police call for backup, TV signal gets knocked off the air, you
>> won't have a clue why.
>>
>
> Actually, NOT. Even the simple bars on a cell phone tell you if
> communication is possible or not. The software running on an up-to-date
> rig can describe the exact reason to you, if your rig interfaces to your
> computer screen ... not to mention broadcast HDTV is in its' infancy,
> taking its' first baby-steps ... even if you give the avg. American TV
> viewer this information, do you think he would know what to do about it?
> For "those dummies" you will pretty much have to have the software handle
> the problems ... or make simple recommendations, perhaps "MOVE THE ANTENNA
> DUMMY", or "RAISE THE ANTENNA DUMMY", or "BUY A DECENT EXTERNAL ANTENNA
> DUMMY", or "POSSIBLE SIGNAL REFLECTIONS ARE OCCURING, MOVE/REPOSITION THE
> ANTENNA DUMMY", etc. ROFLOL!
>
>> I have experimented with Easy Pal Digi SSTV and DRM it is neat but I can
>> rarely get the S/N high enough for a complete transfer. Text is more
>> reliable, but it is hard for me to put my faith in a signal that sounds
>> clean and strong to my ear but with no result. I could have passed
>> several
>> photos on MMSSTV with half the S/N and knew well what they were.
>> Sometimes
>> getting the information through is more important than waiting for
>> conditions to get better to get it perfect.
>>
>
> If the binary signal just clears the noise floor, and not by much mind you
> (I am hesitant to quote an exact figure here) a perfect signal is quite
> possible ... that is simply the nature of digital.
>
> I just don't know why anyone would claim that digital signals are not MUCH
> superior to analog -- remember the old analog cell phones -- who would
> ever wish to "go-back-there???" ... the only software I have used with
> HF/VHF/UHF digital processing is open source ... I immediately made
> modifications to the decoding/coding scheme (Ogg Vorbis), "packet hold
> time" and size of the buffers and implemented my own CRC checking (faster

> algorithm) ... however, others must get a copy of it from me and we both
> share it or no communications are possible. I see amateur software in the
> same light I see amateur antennas -- build your own or have another
> amateur elmer/tutor/instruct/assist/share-with-you ... it is just
> traditional and the true spirit of amateur radio ...
>
>> I don't mind being a network admin. but being a radio op isn't quite dead
>> yet.
>>
>
> I actually worked at the college I attended in the 1990's when I returned
> to go "full into computers" (my previous degree was as in electronic
> engineering), and before I began an intern position in my field of study.
> My last few months, before receiving my diploma, the actually created a
> new position for me, "Student Programmer", I was actually quite proud of
> it--even though the "big boys" seen it as a joke! LOL Being both a
> programmer and a network admin. assistant made the job seem like "money
> for nothing", what other sys admins seen as major problems and were on the
> phone to Digital Equipment Corp. (DEC) over, for the VAX, I usually had
> fixed by the time the techs got there ... made me rather "hated", really
> ... however, most finally came around and asked for the perl-scripts and C
> programs I used to automate every task I could find! ... common computer
> users worshiped us ... "some of us" let this go to their heads ...
>
>>>> picture breaks up and quits. At other times the same station will give
>>>> a
>>>> solid 3 or 4 bars.This happens on all channels. Perhaps atmospheric
>>>> movement? Lots of dust here in the desert. Any other ideas?
>>>>
>
> As I have said, I am anxious for it to be deployed in my area ... I am
> already looking into "digital to analog conversion boxes" which I can
> download the firmware from to "reverse engineer" and then flash open
> source firmware into ... either by hook or by crook. <grin>
>
> Only God can control atmospheric conditions (but then, there is HARRP and
> other such projects which do SEEM to alter them), and who can stop that
> neighbor from erecting that steel storage shed, building that wrought iron
> fence, installing those bars on his windows, operating that ham rig from
> his stealth antenna <grin>, etc? :-(
>
>>> Yes, ducting and "ghosting" of the signal(s) due to reflections, etc.--I
>>> can see these as being a REAL problem. From your description(s), sounds
>>> like "they" just took the exact-same
>>> technology/encoding/decoding-schemes and implemented them onto broadcast
>>
>
> Regards,
> JS

My following comments are totally off topic and are the mutterings of an old curmudgeon. You have been warned.

What the hell happened to the word "saw"? I seen this, or I seen that. Folks, that isn't correct. How can you get through four years of college without using the "saw", except for when referring to a woodworking tool?

It is - "I saw that". Not, "I seen that". For crying out loud!!! <G>

Ed Cregger

2555. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:18:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <4c9Ak.392$Ei5.384@flpi143.ffdc.sbc.com>
Source record: 22029

Richard Clark wrote:
> You misspelled plonk, but baby makes three. That makes the last one
> who can't do the math.

The photon mass math is trivial.

E= mc^2 = hf

m = hf/c^2 = h/(c)lamda

If I remember correctly, a photon cannot travel slower
than the speed of light.
--
73, Cecil http://www.w5dxp.com

2556. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:19:02 UTC
From: JB <nospam@goofball.net>
Message-ID: <Gd9Ak.263$Jw.118@nwrddc02.gnilink.net>
Source record: 22030

> >> Why must there be an "it" through which TEM waves proagate? Why cannot
> >> they propagate through nothingness?
> >
> > Because the only thing that can propagate through
> > nothingness is nothing. That should be clear to
> > the most casual observer.
>
> Well, yeah, makes sense to me ... but then, apparently not others ...
> not 100% sure, but yeah, that is where I am at, at the present time.
>
> First that "sea" must fill the void to give us a "media" (ocean) to sail
> ... and most certainly a must for RF/light to propagate through!
>
> Regards,
> JS

But if nothingness is something (because it has a name) then you can propagate through it because even nothingness is something so that can be our "media". In fact it must be the perfect medium because it has a velocity factor of 1.

2557. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:23:02 UTC
From: JB <nospam@goofball.net>
Message-ID: <qh9Ak.265$Jw.3@nwrddc02.gnilink.net>
Source record: 22031

"John Smith" <assemblywizard@gmail.com> wrote in message
news:galo04dtc1@news.albasani.net...
> Cecil Moore wrote:
> > John Smith wrote:
> >> But the new pictures of light-waves do suggest they travel a medium
> >> which exists, ...
> >
> > One of my books on the subject calls it the "quantum soup".
>
> And, again, very much in few words ...
>
> And, what a strange "soup", indeed ...
>
> Even a simple observer can change what "soup" finally emerges from the
> quantum-soup-can! Be it, chicken? Beef? Vegetable? <chuckle>
>
> Regards,
> JS

Since we need leaps of faith to bridge the gaps in our theories, lets make
it frog's leg soup.

2558. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:28:07 UTC
From: JB <nospam@goofball.net>
Message-ID: <bm9Ak.266$Jw.154@nwrddc02.gnilink.net>
Source record: 22032

"Dave" <noone@nowhere.com> wrote in message
news:ZPVzk.211$Jw.123@nwrddc02.gnilink.net...
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:18384bb9-5c02-4ea4-afe1-3acb499d47c4@r66g2000hsg.googlegroups.com...
> >I want to share with you one problem that I have on the above subject
> > > When placing a yagi in free space the computor programs supply a gain
> > > figure
> > > where according to my thinking the root cause for ejection is the
> > > intersection of two magnetic field.How this happens with a yagi is a
> > > matter of conjecture. Any pointers?
> > > Performing the same with an arrangement in equilibhrium there is no
> > > gravity and yet gain is shown. This leads to four posabilities
>
> > 4 The concept of initial reliance on equilibrium as preached by the
> > masters is incorrect and my reasoning is in error
>
> HOORAY! He finally got the right answer!!!

Sounds like a Scientology test to me
>

2559. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:40:44 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <_x9Ak.522$be.89@nlpi061.nbdc.sbc.com>
Source record: 22033

JB wrote:
> Why must there be an "it" through which TEM waves proagate? Why cannot
> they propagate through nothingness?

Nothingness that contains something is not nothing,
i.e. is an obvious logical contradiction. Every cubic
meter of the universe contains energy. Therefore,
nothingness cannot exist.
--
73, Cecil http://www.w5dxp.com

2560. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:50:53 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <wH9Ak.523$be.483@nlpi061.nbdc.sbc.com>
Source record: 22034

Ed Cregger wrote:
> A wave has no mass, agreed?

Not agreed. An EM wave possesses momentum per unit volume
from which the mass of the wave can be calculated.

A container of light has more mass than a similar
container that does not contain light.

EM waves certainly have mass that can bend a comet's
tail away from the sun.
--
73, Cecil http://www.w5dxp.com

2561. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 15:59:16 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <mP9Ak.524$be.351@nlpi061.nbdc.sbc.com>
Source record: 22035

JB wrote:
> So you are trying to tell me that if I completely evacuate a sealed glass
> jar it then contains space?

Casimir effect experiments have been run in
a vacuum and proved there is lots of "stuff"
still there even in empty space. There is
no such thing as nothingness, at least not
within the space of our universe.
--
73, Cecil http://www.w5dxp.com

2562. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:03:09 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <%S9Ak.525$be.239@nlpi061.nbdc.sbc.com>
Source record: 22036

JB wrote:
> So if nothing is there, it aint nothing after all?

There is no "there" within the space of our universe
where nothing is there. Casimir effect experiments
have been run on spaces where nothing is supposed to
be. But instead of nothing, they found the quantum soup
which is the space occupied by our universe.
--
73, Cecil http://www.w5dxp.com

2563. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:04:15 UTC
From: JB <nospam@goofball.net>
Message-ID: <3U9Ak.332$MN3.183@nwrddc01.gnilink.net>
Source record: 22037

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gapl99onn1@news.albasani.net...
> JB wrote:
>
> >
> > That is all it can tell you.
> >
>
> Think about it man! What more do you need ... I mean, I really can not
> elaborate here, do you have children? Have them explain "it" to you ...

You mean to say that if your radio says you can't talk on it, that should be
enough?
Are you a Mac salesman?

> > Maybe you know of a secret diagnostic menu for my DTX9900?
> > If I remember correctly, all they know is RSSI and data errors. Please,
> > tell me if there are other indications that discern multipath,
interference,
> > or any other reception problem without either sophisticated test
equipment
> > or an analog indication - perhaps a color coded bar graph or channel
> > spectra that can react faster than the stream filling the buffer. I
don't
> > know how ATSC handles error correction, but being a broadcast stream, I
> > would suppose only forward error correction is possible.
>
> Most, if not all, you have stated is really quite unnecessary, or
> certainly should be, to a REAL amateur ... think about it, what error
> correction have you ever had with your analog equipment. What error
> messages did your Drake ever give you, your Hallicrafters, your Gonset,
> your Johnson (no pun intended on your "natural gear", lol!), etc., etc.
> ... however, count on MUCH MORE from digital equipment!

Error correction all happens in the analog computer AKA radio operator.
>
> > PACTOR yes, but I don't see that with DRM or ATSC at all. How is it
that an
> > s9 signal isn't enough? I'm truly glad to have SSB so I can tell the
other
> > station to resend the file again. The Universe isn't digital.
Certainly
> > not radio. The signal, no matter what modulation scheme you use to
improve
> > recovery of usable clipped and buffered data, is still in the realm of

the
> > analog during transmission over the air. Ok, you might not understand
that
> > if you are only the network guy and all your traffic worries start at
the
> > protocol level as long as the Fiber box is energized.
>
> Yanno', this "all" is getting too long, I feel like I am replying to an
> idiot--now that isn't happening, is it?

This is what happens when your religion is shaken.

> Yanno', it sounds as if you have problems alright, I am beginning
> digital equipment will neither make them better or worse--however, your
> perception(s) may deceive you--think about a psychiatrist!
>
> >
> > Actually the best sounding mobile phone I ever had was my full-duplex
450
> > Motrac linked to a mountain top site with wide area direct dialing. No
one
> > ever suspected I was mobile. But that was because my Analog link was
better
> > than a voice grade phone line. Digital is great if you can find the
> > bandwidth, but great sacrifices and compromises have often been made in
> > audio quality for the sake of keeping the occupied bandwidth of the RF
> > channel within limits. What I am seeing on DTV, are stations that are
doing
> > one 1080i or 720p stream on one RF channel with maybe 2 more streams of
480i
> > (often annoyingly compressed) OR up to 6 - 480i streams not so heavily
> > compressed. So I hate to disappoint you, that not all channels will be
> > better than analog until they find a way to do better than MPEG
compression
> > and conversion from an NTSC source.
> >
>
> Wow, the brass pounders would just love you ... let me see, you remind
> me of "Art Bell -- Stuck In Times" ... hmmm, that is the title of that
> book, isn't it? ROFLOL
>
> Your arguments suck ... you jam technical details into matters where
> your eyes would serve as proof enough ... are you taking your meds? Are
> you doing so on schedule?
>
> MP3, MPEG, etc., etc. provides a MINOR increase in preformance (well,
> not really, but it is a not a point worth arguing, consider this a "bone
> tossing") at the cost of paying patent holders -- believe me,
> audio/video is SO SLOW Ogg Vorbis is much more than "TOO QUICK" for
> available systems/processors ... <sad-sad-pitiful-look>

So make them change it! I didn't make the standards.

> Yanno', as a teenager, I would only wear Levis, it is called "Brand Name
> Addiction" ... I am a recovered addict ... I can't claim a twelve-step
> program for my recovery, but hey ... LOL

I am the opposite. I never buy Levis or McDonalds. I have sales resistance
to junk.
>
> > The move to digital cellular allowed channel re-use without having the
> > customer hear interference from co-channel sites so that many sites
could be
> > used to communicate with many small handsets. Do you think that will be
> > much of an issue on Ham radio? Ham radio's greatest protection is in
the
> > fact that it isn't supposed to compete with other services. No privacy
is
> > needed or allowed either. If you copy the consumer model, you have no
> > amateur radio anymore. So I ask you sir, wouldn't you rather be using a
> > digital cell phone and leave the ham bands alone? Experimentation will
> > continue and things will be learned, people will contest and rag chew
and
> > chase DX, but when ham radio for free is simple enough to compete with
cell
> > phone services or a twisted pair, there will be a problem.
> >
>
> Comparing analog to digital is almost an exact example to

some idiot
> attempting the comparison of a stone knife (obsidian actually) to a
> LASER Scalpel ...
Who is making the comparison of a stone knife to a LASER Scalpel??

I just don't know how to state that with more force
> and certainty ... perhaps someone will get through to you at some future
> date ... all you look like to me is an ignoramus with little knowledge
> ... and living in "yesterday" -- sad really, very sad ...
>
> If you ever awaken from that "tomb of stupidness" you are entombed in, I
> bet you will be one embarrassed guy!
>
> I'd say, you are just a "Stupid Brass Pounder" and an "arrl wannabe" ...
> but then, I am guessing--I have no real psychic abilities ... ROFLOL,
AGAIN!
>
> Thanks for the laughs ...
>
> Regards,
> JS

You have to look objectively at the advantages and disadvantages of both
unless your goal is to do away with the radio operator specifically, and

perhaps ham radio too. No license should be required at all to buy an "RF data box complete with antenna and battery" then all we would need to do is load our software and plug in the USB cable. If there aren't enough bars, then we would need to "DO SOMETHING STUPID" or wait until there are enough bars. Or just get bored and QSY to the Internet. I got it now... Viva la revolucion! Won't get fooled again. Perhaps if you do away with all the hams when you do away with ham radio, no one will remember how fun it was.

2564. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:06:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gar9uv$e6c$1@news.albasani.net>
Source record: 22038

Cecil Moore wrote:

> ...
> Maybe "absence of anything even resembling a structure"
> would be a better way to put it. It's pretty clear that
> if there is no structure for space, then space cannot
> exist. Absolute nothing would necessarily be the absence
> of any and every *thing* including space.

Well, yeah, that would pretty much be my call. Its' just a bit to "swallow." And, add to that the fact, we have never seen "nothing", but then probably never will ... LOL

I have been attempting to locate my exact old school physics text(s), have had no luck. But, if I remember correctly, my books only mentioned Einsteins first claim, that the structure/ether of space does not exist. Indeed, if I am remembering correctly, they lumped structure/ether together with alchemists, charlatans, magic, witches, etc. ...

Somewhere, later in college, I am suspecting, Einstein, this time reneging on that claim, was quoted again, this time allowing for the structure/ether:

Ether and the Theory of Relativity
Albert Einstein, an address delivered on May 5th, 1920, in the University of Leyden.

" ...
More careful reflection teaches us, however, that the special theory of relativity does not compel us to deny ether. We may assume the existence of an ether,; only we must give up ascribing a definite state of motion to it, i.e. we must by abstraction take from it the last mechanical characteristic which Lorentz had still left it. We shall see later that this point of view, the conceivability of which shall at once endeavour to make more intelligible by a somewhat halting comparison, is justified by the results of the general theory of relativity.
... "

His implication in the words, " ... we must by abstraction take from it the last mechanical characteristic ... ", implies the ether will, almost, be as difficult to "view" as "nothing." 8-)

LET ME POINT OUT, Einstein was NOT too intimidated to use that ugly word, "ether." ;-) This is supposed to be the exact text, translated, from his presentation. If someone knows of another which differs, please let me know ...

Regards,
JS

2565. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:17:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <garaj1euf1@news.albasani.net>
Source record: 22039

JB wrote:

>> ...
> Static particles? Does he mean statically charged particles? They don't
> radiate, they are attracted to opposite charged matter. But then there is
> ionization of a substance.
>

I don't know why that should be so difficult to ponder ... in the post to Cecil, above, note that Einstein takes "all" mechanical structure from the ether (but, I think Cecil is still correct--some "other" type of structure IS there.)

However, with "entangled particles", no "real" movement is necessary, one particle "imparts" its' behavior to another, that one to another and on and on ... why they preform this "dance" in our perceived form of a wave, or sine-wave even--I cannot fathom nor suggest a reason for ... but then, maybe something else is really happening ... their are theories which deal with this all ... the "particle dance" is/are just my thoughts on what "seems" to be occurring and "envisioned" from others works ... what space "really" is composed of ???, Art seems to suggest looking at the CERN project, I don't think we have a choice--if we wish to proceed in this quest ...

Regards,
JS

2566. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:20:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <garaoheuf2@news.albasani.net>
Source record: 22040

Cecil Moore wrote:

>
> m = hf/c^2 = h/(c)lamda
>

Uh, you over simplify there, a bit, don't you?

Where is motion? Where is time? etc. However, on "energy at rest",
that might come very close ...

Regards,
JS

2567. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:26:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <garb3beuf3@news.albasani.net>
Source record: 22041

Ed Cregger wrote:

> ...
> ------------
>
> My following comments are totally off topic and are the mutterings of an old
> curmudgeon. You have been warned.
>
> What the hell happened to the word "saw"? I seen this, or I seen that.
> Folks, that isn't correct. How can you get through four years of college
> without using the "saw", except for when referring to a woodworking tool?
>
> It is - "I saw that". Not, "I seen that". For crying out loud!!! <G>
>
> Ed Cregger
>
>

Sorry Ed, last time I seen my saw it was in the garage. Yanno', I'll
check, I bet it is still there! ;-)

Warm regards, and a chuckle,
JS

2568. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:41:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <garc0ugmg1@news.albasani.net>
Source record: 22042

JB wrote:

> ...
> But if nothingness is something (because it has a name) then you can
> propagate through it because even nothingness is something so that can be
> our "media". In fact it must be the perfect medium because it has a
> velocity factor of 1.
>

JB:

Please, just consider these few words, "You can't 'see' nothing! You can't go 'through nothing' (or, go to nothing)."

I know, it is too simple, one wonders how he missed the concept--nothing is just what it means--nothing!

You are "seeing something" when you look at space (and, I know, it IS hard to swallow--"time" brings ones' thinking into line on this, or, it worked for me ...)

Regards,
JS

2569. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:45:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <garc6kgmg2@news.albasani.net>
Source record: 22043

JB wrote:

> ...
> So you are trying to tell me that if I completely evacuate a sealed glass
> jar it then contains space? That's like saying the absence of light is
> darkness. True as a conceptual description of nothingness. If you choose
> to rename nothingness, does that mean it aint nothin? You guys have too
> much time on your hands.
>

Yes, exactly. As hard to believe as it is, once you evacuate that jar,
the structure of Cecils' and my ether still "drifts" in and out of that
jar like it does not even exist! (the jar that is)

And don't complain to me about that being "impossible", I already said
that and claimed that--long ago ... ROFLOL

Regards,
JS

2570. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:48:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <garcdsgmg3@news.albasani.net>
Source record: 22044

JB wrote:

> ...
> Since we need leaps of faith to bridge the gaps in our theories, lets make
> it frog's leg soup.
>

You remind me of myself when first grappling with these concepts.

I am going to love it when you have your first revelation, your first epiphany ... <HEHEHEHEEEEEEEEEEEEEEEEEE!>

Regards,
JS :-)

2571. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 16:49:01 UTC
From: JB <nospam@goofball.net>
Message-ID: <1yaAk.298$3e1.66@trnddc02>
Source record: 22045

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:vuZzk.12311$rV4.1079@newsfe03.iad...
>
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:9JNzk.386$pr6.122@flpi149.ffdc.sbc.com...
> > Sal M. Onella wrote:
> > > By the old TASO standards, you need over 40 dB s/n to get a nice
> picture,
> > > which requires a lot more peak RF power. By comparison, the digital
> signal
> > > needs only about 17 dB s/n.
> >
> > What happens at a 12 dB s/n for both? That's probably
> > what happened here during Hurricane Ike.
> > --
> > 73, Cecil http://www.w5dxp.com
>
> Digital: No lock and no indication of trying to lock (which is provided
on
> some receivers)
>
> Analog: Recognizable signal, possibly with sound, probably with no color
> and so much snow as to be unwatchable.
>
> For the analog experiance, I am relying on bench tests I did with a TV
> servicing generator. For baseline, I advanced the RF amplitude just to
the
> point where I had a snow-free picture. Next, I added 10 dB attenuators and
> noted the results with each addition.
>
> One: observable snow, no big deal
> Two: Objectionable snow, this ain't good
> Three: horrible snow, I can't watch this.
> Four: Is there even a picture?
>
This is my experience too. 36 db S/N gives you a decent picture, 55-60db
S/N gives you a good fade margin for analog and a perfect picture (if
convergence and purity are capable)

For digital, 30 db S/N gives you a "perfect" picture if it is 1080i, or no
better and maybe worse if it is only 480i but you still need at least 50 db
S/N for fade margin or everything will break up when there is a 5-20 db
fade. At least with the Analog signal, you will still have audio during
deep fades.

Smith makes sense in light of consumers who only complain about what they see. Most people won't be doing TV DXing. Tough luck for those who do. There is a real big point about all the extra connectors as the entertainment system grows. Lots of people needed to have someone hook it up for them, and now complain about having to punch too many buttons on too many remotes to get their picture and sound.

As a ham, I like to be able to do things the kids and consumers might not want to be bothered with. If only ARRL would consider this concept. Ham radio will never be a mainstream consumer product unless it ceases to be ham radio completely.

2572. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 17:18:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hhe2d41jojv4kporl2ulckjfhnmufomqpf@4ax.com>
Source record: 22046

On Wed, 17 Sep 2008 00:18:37 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>Ummm... that wasn't Newton. No quantum effects in Newton's work.

Hi Jeff,

167,770 miles/s is hardly quantum speed but it is achievable in
electrons and photons.

At last report
F = M ï¿½ A
was Newton's work among two other laws (something the trio can't
manage to compute). Art can't even manage parity here.

If the prospects of error due to Quantum effects appear to be ugly,
then any could have named a lower figure that is tolerable.
Unfortunately it would still require computation, and the outcome
would be those Newtonian Philosopherz would shy from an honest
scribbling on the blackboard as taking their precious gaze away from
their navels.

73's
Richard Clark, KB7QHC

2573. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 17:24:59 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <L3bAk.405$1a2.155@trnddc04>
Source record: 22047

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:b32fac3f-2cd3-4c05-bf8b-4b9cf7c2c9e4@a1g2000hsb.googlegroups.com...
On Sep 16, 3:39 pm, "Wayne" <mygarbage...@verizon.net> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:5ea4517b-0ce6-4629-841e-51d92743be06@a1g2000hsb.googlegroups.com...>I
>> consider it a >real shame that equilibrium is not a part of
>> > examinations since equilibrium
>> > is a basic in the electrical circuit of all antennas No where do I see
>> > antennas explained other than the showing of capacitive coupling to
>> > ground of antennas as a perceived circuit of an antenna?. Until this
>> > is corrected we will never have continium of discussion between hams
>> > on antennas.It is not a mystery anymore so why do the ARRL avoid it
>> > like a plague?
>> > Art
>>
>> -
>> My engineering training is many years old now, but I haven't seen
>> equilibrium in the context of antennas discussed anywhere except by you,
>> in
>> this newsgroup. Do you have any references to papers that have been peer
>> reviewed and published?
>
>Oh I suppose a search on google re antennas and equilibrium will get
>you something to read
>but difficult if you are starting from Zero.
-
-
I'm not starting from zero, but it has been a number of years since I did
theoretical analysis.

When I google "equilibrium" and then start trying to filter the responses
down to things that are potentially "on topic", the references lead back to
you on this newsgroup.

>The point where you begin
>is Newtons laws, if they are in error then so am I
>I doubt if you will find anything that definitely proves that he is
>wrong.If a professor does not know what I have stated he should be
>nfired
>which goes for some of the people at University of Illinois in the
>electrical engineering area.
-
I'm not saying that you are wrong. But your claims would hve much more
credibility if they were explained somewhere in addition to r.r.a.a.

>.EVERYTHING in science revolves around equilibrium. If a posting denys
>that or does not respond to that Law
>i will not respond and that includes Richard whose sole aim in life if
>to divert the crowd with off topic nothings as he does not ahve any
>engineering degree from any accredited college and thus is a pretender
>looking for a date with any poster.
>Art

2574. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 17:30:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u5f2d4p7eba8pl2tcfkr1ggmstmvl4fbk0@4ax.com>
Source record: 22048

On Wed, 17 Sep 2008 10:18:49 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>The photon mass math is trivial.

I still don't see a computation, so trivial must be beyond your
capacity.

>E= mc^2 = hf
>
>m = hf/c^2 = h/(c)lamda
>
>If I remember correctly, a photon cannot travel slower
>than the speed of light.

Well, we've established you can't compute it for an electron,
certainly. And this speculation about a photon.... Do it for 167,770
miles/s then.

Naw, let's simply say you've done it (there will never be any actual
evidence of your work as we can all agree), and move on. So much for
practicing Newtonian Philosopherz.

I don't "ploink" your postings, I just don't read them because they
are run off the xerox with no obvious intellectual value added - this
last round fairly confirmed that.

2575. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 17:34:38 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <qcCdnUDWwYFeokzVnZ2dnUVZ_vjinZ2d@pghconnect.com>
Source record: 22049

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:wH9Ak.523$be.483@nlpi061.nbdc.sbc.com...
> Ed Cregger wrote:
>> A wave has no mass, agreed?
>
> Not agreed. An EM wave possesses momentum per unit volume
> from which the mass of the wave can be calculated.
>
> A container of light has more mass than a similar
> container that does not contain light.
>
> EM waves certainly have mass that can bend a comet's
> tail away from the sun.
> --
> 73, Cecil http://www.w5dxp.com

Do you know that the sun puts out a lot of neutrons and other particles?
It's not the light that bends the comet's tail.

2576. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 17:45:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c352b457-d26e-4c5c-a412-14f64c72b2db@s50g2000hsb.googlegroups.com>
Source record: 22050

On Sep 17, 12:24 pm, "Wayne" <mygarbage...@verizon.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:b32fac3f-2cd3-4c05-bf8b-4b9cf7c2c9e4@a1g2000hsb.googlegroups.com...
> On Sep 16, 3:39 pm, "Wayne" <mygarbage...@verizon.net> wrote:
>
> >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >>news:5ea4517b-0ce6-4629-841e-51d92743be06@a1g2000hsb.googlegroups.com...>I
> >> consider it a >real shame that equilibrium is not a part of
> >> > examinations since equilibrium
> >> > is a basic in the electrical circuit of all antennas No where do I see
> >> > antennas explained other than the showing of capacitive coupling to
> >> > ground of antennas as a perceived circuit of an antenna?. Until this
> >> > is corrected we will never have continium of discussion between hams
> >> > on antennas.It is not a mystery anymore so why do the ARRL avoid it
> >> > like a plague?
> >> > Art
>
> >> -
> >> My engineering training is many years old now, but I haven't seen
> >> equilibrium in the context of antennas discussed anywhere except by you,
> >> in
> >> this newsgroup. Do you have any references to papers that have been peer
> >> reviewed and published?
>
> >Oh I suppose a search on google re antennas and equilibrium will get
> >you something to read
> >but difficult if you are starting from Zero.
>
> -
> -
> I'm not starting from zero, but it has been a number of years since I did
> theoretical analysis.
>
> When I google "equilibrium" and then start trying to filter the responses
> down to things that are potentially "on topic", the references lead back to
> you on this newsgroup.
>
> >The point where you begin
> >is Newtons laws, if they are in error then so am I
> >I doubt if you will find anything that definitely proves that he is
> >wrong.If a professor does not know what I have stated he should be
> >nfired

> >which goes for some of the people at University of Illinois in the
> >electrical engineering area.
>
> -
> I'm not saying that you are wrong. But your claims would hve much more
> credibility if they were explained somewhere in addition to r.r.a.a.
>
> >.EVERYTHING in science revolves around equilibrium. If a posting denys
> >that or does not respond to that Law
> >i will not respond and that includes Richard whose sole aim in life if
> >to divert the crowd with off topic nothings as he does not ahve any
> >engineering degree from any accredited college and thus is a pretender
> >looking for a date with any poster.
> >Art

Wayn everybody wants me to answer their questions and not address mine
so they took over the thread
So to clear the air I started at the very beginning a radiator in
equilibrium and what it presents to me.
It has nothing to do with any of the sciences presented by the
posters. In direct terms I have stated that current flows down the
center
of a radiator if it is of a fractional wave length. A very simple
statement which nobody wishes to address. Fine by me, the thread would
then have a single posting and the multitude can generate questions
and discussion about deep space or other topics of choice. Ofcourse I
am not knowledable in those areas and I would stand aside. I would
prefer however the discussion to at least start with equilibrium which
leads to why or why not it is correct that current can flow thru the
center of a conductor the answer of which is not in the books. Some
people prefer to read the last page of the book first.
I prefere to examine foundations before determining the merits of a
house.
Regards
Art

2577. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 17:55:31 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <42913526-7db6-40c9-b0c5-3d6f95d10a45@2g2000hsn.googlegroups.com>
Source record: 21951

On Sep 17, 9:58 am, "JB" <nos...@goofball.net> wrote:
> > That was what I got out of it ... but then, I focused on Arts'
> > observation, "One thing is certain, Gauss states that static particles
> > cannot radiate in free space as there is no exchange of flux ... "
>
> Static particles? Does he mean statically charged particles? They don't
> radiate, they are attracted to opposite charged matter. But then there is
> ionization of a substance.

JB
If I called those particles Neutrinos all hell would break out again
as in the past
I am refering to the Gaussian law of statics without comment of how I
could see
things differently from Gauss. Some would like to state them with
reference to charge
some another way. The medium that I take is static particles very
simple and understood by all
but then an opening for an auguement about a correction required.
Go figure
Art

2578. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 17:57:56 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gargk9$5ul$1@news.service.uci.edu>
Source record: 21955

Cecil Moore wrote:

> When traveling at the speed of light, it exhibits particle
> properties.

When does light travel at a speed other than the speed of light?

> It has been about half a century since experiments
> proved that light waves are bent by gravity thus proving that
> electromagnetic radiation has mass. That idea was postulated
> in 1915.

And later it was postulated that space is curved by massive objects and
that light simply follows the curves.

The idea of epicycles was first postulated in the 6th century BC.
Therefore, what?

73 ac6xg

2579. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 18:01:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <45h2d4tl2t2lcq5k7lrjst6ag0mnov4ngg@4ax.com>
Source record: 21952

On Tue, 16 Sep 2008 22:52:40 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 16 Sep 2008 20:33:04 -0700, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>>On Tue, 16 Sep 2008 08:06:15 -0700 (PDT), Art Unwin
>><ArthurUnwin@gmail.com> wrote:
>>
>>>I consider it a real shame that equilibrium is not a part of
>>>examinations since equilibrium
>>>is a basic in the electrical circuit of all antennas
>>
>>A very simple observation:
>>
>> Give us one question you would expect to see.
>>
>> Give us the answer that would be marked as passing.
>>
>>Without both, this sappy sentiment of yours is nothing more than a
>>late night exercise of crying bitter tears into the pillow - and
>>leaving the window open so the neighbors can hear the sobs of regret.
>
>It appears that sentimentality rules the thread. Lacking any steps
>taken by Art towards providing a question with its corresponding
>answer must mean he couldn't pass the same test it might be placed in.
>
>Barring Art's hesitancy to supply his own solution, I can only rummage
>up a similar instance from him where we might make this a quality of
>test a CBer might tackle that is drawn from patented (5,625,367)
>technology:
>
> Q. reflector element is usually tuned to a frequency slightly
> higher than the driver resonant frequency - TRUE or FALSE?
>
> Q. director elements are usually tuned to frequencies slightly
> lower than the driver resonant frequency - TRUE or FALSE?
>
>Thankfully, the PTO does not test nor issue licenses based upon this
>technology source used as reference material.
>
>I can well imagine how "equilibrium" would similarly pollute the
>question pool and the lack of follow-up leaves us with the soap opera
>it was always meant to be.

It is painfully obvious that Art will never offer the questions only he can sign off on. The other Newtonian Philosopherz are equally flummoxed.

As for others following this tempest in a teapot, Art has already answered the two TRUE/FALSE questions above:

Q. reflector element is usually tuned to a frequency slightly higher than the driver resonant frequency - TRUE!

Q. director elements are usually tuned to frequencies slightly lower than the driver resonant frequency - TRUE!

and thus fulfills my observation he couldn't pass a test he Authured.

Gad, the irony is thick and gooey sweet.

73's
Richard Clark, KB7QHC

2580. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 18:04:00 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <fOmdnROh8do420zVnZ2dnUVZ_sDinZ2d@pghconnect.com>
Source record: 21953

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:la7Ak.776$c45.574@nlpi065.nbdc.sbc.com...
> Rectifier wrote:
>> Read it again! I didn't say photons have zero mass; I said
>> electromagnetic radiation (EMR) has no mass. EMR exhibits both wave and
>> particle properties. When travelling at the speed of light, it exhibits
>> wave properties.
>
> When traveling at the speed of light, it exhibits particle
> properties. It has been about half a century since experiments
> proved that light waves are bent by gravity thus proving that
> electromagnetic radiation has mass. That idea was postulated
> in 1915. Did you get your degree before then? :-)
> --
> 73, Cecil http://www.w5dxp.com

Photons (the particle nature explanation of EMR) have no mass:

http://www.physchem.co.za/OB12-ele/radiation.htm

2581. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 18:06:48 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <GcednT-QNJXR2kzVnZ2dnUVZ_gqdnZ2d@pghconnect.com>
Source record: 21954

> When traveling at the speed of light, it exhibits particle
> properties. It has been about half a century since experiments
> proved that light waves are bent by gravity thus proving that
> electromagnetic radiation has mass. That idea was postulated
> in 1915. Did you get your degree before then? :-)

You say the "idea was postulated in 1915." Since when does a postulate
become proof making something a law?

2582. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 18:21:11 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ouh2d4daqkpu9u7ol8am81asgch8r1fk1a@4ax.com>
Source record: 21956

On Wed, 17 Sep 2008 06:48:05 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>Jeff Liebermann wrote:
>> So, the mass of the particle at 90% the speed-o-light is 10 times that
>> of the particle at rest. It doesn't matter what particle. Do I get a
>> gold star?
>
>That doesn't work for photons which are particles with
>zero rest mass.

Yep. Brain damage after midnight. I first read electron, due to the
preceding CRT example. I then read proton without my reading glasses.
This morning, it morphed into photon. My apologies and I promise
never to post anything after midnight, on an empty stomach, without
glasses, while still working in my palatial office, and on subjects I
know little.

However, the jury is still out if photons have mass. NASA and others
say no:
<http://imagine.gsfc.nasa.gov/docs/ask_astro/answers/960731.html>
<http://www.ccmr.cornell.edu/education/ask/index.html?quid=240>
However, photons do have momentum or:
p = m v
which yields a calculatable value for mass at light speed for a
measurable momentum (i.e. transfer of momentum due to light pressure).
It's stuff like this that make me which quantum effects should never
have been discovered.

Fire the photon torpedoes...

--
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2583. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 18:40:25 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9mi2d4pp030ot9kmbfnd1npvj8sl71gae7@4ax.com>
Source record: 21957

On Wed, 17 Sep 2008 04:20:23 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>I am top posting here, just because your post is so damn long, and I
>could NOT bring myself to cut any of it ...

I wish you would edit my drivel. I just hate reading my own writing.
I even have myself entered in my kill file. Don't worry about the
length. The problem was that a tape backup and restore was taking far
longer than I expected. I didn't wanna do anything useful, so I
decided to dive into Usenet. Don't worry, it probably won't happen
again.

>Thanks for being candid with us.

I was too tired and overworked to fabricate any lies. It's so much
easier to tell the truth, especially since I don't have to later
remember and untangle the lies that I fabricated.

>Yep, you are one of us alright. Yep,
>we have to use others past books, thoughts, knowledge, computer apps,
>papers, etc. ... it is just too much, it is inundating ...

I'm cleaning up. After many years of neglect and sloth, there's no
more room left to add more things. I've already tossed or recycled
most of the junk. I'm now working on the good stuff. I just
discovered I have 5 air compressors, 5 bicycles, 3 sweep generators,
etc. Time to downsize.

>I mean, my
>home office here looks like yours! And, the wife is a "neat-freak" ...
>I tell you, I spend all my time looking for materials she has
>"organized" for me ... <smirk>

My secret is that I'm not married. Things tend to stay where I leave
them. Count your blessings. If your wife didn't pickup after you,
your shop would look like mine.

>I hope you didn't come here for answers, I mean I can't speak for
>everyone here, but all I have is questions! And, if I ask something
>that doesn't have a black and white answer, I get slapped in the face!
><blank-look>

If you check my posting history, you'll find that I usually answer
questions, not ask them. I learn more by doing the necessary research
to answer other peoples questions, than I do by asking questions.

>Demands for answers, demands for open discussions, demands we look at
>even the quantum world in "explorations into antennas", especially from
>some of the STRONG personalities you find here, can be intimidating ...
>but, welcome aboard.

You obviously haven't read my postings. Try alt.internet.wireless.
I'm the one that is doing the intimidating.

>However, if you thought you would find peace of mind, bliss and
>enlightenment here ... think again. ROFLOL

Nope. My life is an endless search for entertainment value. That
might explain why I wasted an hour or more replying to Art.

How my world works:
<http://www.LearnByDestroying.com/panorama/jeffl.htm>
(Wait for the page to load. Move mouse around image.)

>You are just about to find out "how deep this Rabbit-Hole goes!"

Well, thanks for the welcome and warnings.

>Warm regards,

Yep. I just stacked about half a cord of firewood. I wanna be warm
this winter.

>JS
--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2584. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 18:53:13 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b2fd39b0-a543-4daf-864e-7689fbb2db36@e39g2000hsf.googlegroups.com>
Source record: 21958

On Sep 17, 7:34 am, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith wrote:
> > And, obviously, IMHO, he is referring to a space truly "composed of
> > nothing" and absent of anything even resembling an ether. And, I did
> > accept that as the crux of his ponder-ings/point(s.)
>
> Maybe "absence of anything even resembling a structure"
> would be a better way to put it. It's pretty clear that
> if there is no structure for space, then space cannot
> exist. Absolute nothing would necessarily be the absence
> of any and every *thing* including space.
> --
> 73, Cecil http://www.w5dxp.com

Cecil Why not say what one call nothing is a reaction to the pressure
of gravity to zero but only on the earths surface
Vacuum is a datum pressure on earth only whereas there are different
datums thruout the universe.
If one could determin the datum of the many datums there still is no
reason that pressure positive or negative has an overpowing
force on every posible content. A case in point is a particle that is
projected within the Earths boundary that exceeds the force of gravity
but still exists in terms of matter un affected by negative
gravitational forces. When the datum for perfect nothingness is
determined in terms of the four forces only then can we equate nothing
with energy contained by particles with no affinity to gravity. All
nonsence probably since no problem can be solved with missing entities
such as particles of resistive particles that have yet to be detected
or what can affect them. A vacuum is just a measure of pressure
nothing more and nothing less with the assumption that all has mass
and zero resistance to datum pressure of our Earth. Lookng at things
in a totally different manner
if there was a volume of nothing in our Universe would it not implode
to zero dimension with the understanding that external forces are in
existance to every point in the Universe
I supply this post purely to be part of the discussion that this
thread now represents without ever being present to conditions of
outer space and thus unable to respond in detail to those who have
intimate knoweledge of such via their interrestial travels where they
had the opportunity to touch to lift and touch with the toungue to
determine the characteristics of all. If I knew some shakesphere I
would enter the first act in detail and then compare that act with
something that would then be comparible to the three stuges which has
nothing to do with this thread if you get my gist. No names mentioned

ofcours but keep a watch to the rear! I have arrived in Rome
Best Regards
Art

2585. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 18:55:25 UTC
From: dfinn1@nc.rr.com
Message-ID: <fbe3e000-5465-4641-94bc-8637d9dae9c5@x41g2000hsb.googlegroups.com>
Source record: 21959

On Sep 16, 10:23 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
> > ...
> > I should have used black holes as my example. One only needs to accept
> > that black holes exist in order to believe that gravity affects the
> > property of mass inerent in light ;-)
>
> Really?
>
> Then your mind is so limited it doesn't realize that a black hole would
> warp the very fabric of space/time itself, and therefore the wave
> propagating though it, and therefore the wave would have to choice but
> purse a course towards it? ... yanno', I suspected just that thing!
>
> Regards,
> JS

Right. Black holes have high gravity. Gravity warps space. Light can
travel only through the boundaries of space, therefore light has mass.
No need to say space-time, "space" is sufficient. The discussion may
be quantum related but it is not relativistic.

2586. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 19:08:34 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <garkpa$8bg$1@news.service.uci.edu>
Source record: 21961

Cecil Moore wrote:

> The amazing thing is that space cannot exist without
> those particles which provide the very structure of
> space itself.

One would first have to presume to know what space is in order to
stipulate the conditions for its existence. Ample amounts of
foolishness and arrogance would be required to make such a presumption.
On the other hand reasonable men speculate about what it might be.
The only thing we can be sure of is what it is _not_.

73, ac6xg

2587. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 19:09:44 UTC
From: dfinn1@nc.rr.com
Message-ID: <6001026d-b535-483f-8bcf-c724c3f6f5df@k30g2000hse.googlegroups.com>
Source record: 21960

On Sep 17, 3:25 am, Jeff Liebermann <je...@cruzio.com> wrote:
> On Wed, 17 Sep 2008 00:13:47 -0700, Jeff Liebermann <je...@cruzio.com>
> wrote:
>
>
>
>
>
> >On Tue, 16 Sep 2008 17:58:35 -0700, Richard Clark <kb7...@comcast.net>
> >wrote:
>
> >>No Newtonians in this crowd. Perhaps it was the relativistic term
> >>"speed of light" that confused this group so much. Let's restate it
> >>in units that Newton could have appreciated.
>
> >>We know that we can accelerate an electron to 167,770 miles/s - it
> >>happens every femtosecond in one of any 100 billion crt
> >>displays still glowing in the world. Some of us know its mass at this
> >>speed. A question for the Newtonian philosopherz:
> >>   "What is the mass of a photon traveling at 167,770 miles/s?"
>
> >Google to the rescue:
> ><http://asistm.duit.uwa.edu.au/synchrotron/downloads/pdfs/chapter11_7.pdf>
>
> >mr / mo = 1 / (1 - (v^2/c^2))^0.5
>
> >where:
> > mr = relativistic mass
> > mo = mass at rest
> > v = velocity of particle
> > c = speed-o-light = 186,000 miles/sec
>
> >For v = 167,700 miles/sec
> > mr/mo = 1/ (1 - (167,700^2 / 186,000^2))^0.5
> > mr/mo = 1/ 1 - 0.813^0.5 = 1/ (1 - 0.902) = 1/ 0.0984 = 10.2
>
> >So, the mass of the particle at 90% the speed-o-light is 10 times that
> >of the particle at rest. It doesn't matter what particle. Do I get a
> >gold star?
>
> >(Somebody please check my arithmetic as I forgot to eat dinner, it's
> >after midnight, my brain is mush, and my calculator battery is fading
> >fast).
>

> All wrong. No gold star for that mess. I just hate it when I click
> "send" and only then discover my arithmetic error. Rev 1.0 follows:
>
> mr / mo = 1 / (1 - (v^2/c^2))^0.5
>
> where:
>   mr = relativistic mass
>   mo = mass at rest
>   v = velocity of particle
>   c = speed-o-light = 186,000 miles/sec
>
> For v = 167,700 miles/sec
>   mr/mo = 1/ (1 - (167,700^2 / 186,000^2))^0.5
>   mr/mo = 1/ (1 - 0.813)^0.5 = 1/ (0.187)^0.5 = 1/ 0.432 = 2.31
>
> So, the mass of the particle at 90% the speed-o-light is 2.3 times
> that of the particle at rest. It doesn't matter what particle. Maybe
> a silver star?
>
> --
> # Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
> # 831-336-2558   je...@comix.santa-cruz.ca.us
> #http://802.11junk.com   je...@cruzio.com
> #http://www.LearnByDestroying.com   AE6KS- Hide quoted text -
>
> - Show quoted text -

Not correct. It's not quite as simple as e = m*c**2. You must use the
Lorentz transformation.

Using the same values you have assiged to c and v, the correct
equation would be:

mr = mo/SQRT(1 - v**2/c**2)

As v => c, mr must => infinity (therefore no mass can reach c)

2588. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 19:26:40 UTC
From: JB <nospam@goofball.net>
Message-ID: <QRcAk.278$UB3.247@trnddc07>
Source record: 21962

OK So nobody wants to talk about equilibrium or current flow on a radiator.
Thats fine by me. Took a lot of posts to get to that point. JB I apologize
I have been nailed to the cross so many times I tend to bundle things together.
When I started I zeroed on equilibrium as a start because existing laws state that if a charge is moving on the outside of a radiator then there is movement on the inside of a radiator Now that is not in the books. Why is that? However discussion went away from the intent of the thread. equilibrium with respect to radiation. O well another try later
Regards
Art

Consider that there is little difference in the performance of a solid radiator and hollow radiator.

There are things about Electromagnetic Radiation that aren't discussed by Newton. Study classical antenna theory, then you will be on common ground with others that study antennas. The danger of concentrating on your own line of study so much is that you wind up out on a limb. I see this often when dealing with different terminology spawned of different paradigms, where similar circuits are redrawn and renamed by different engineering teams. This is nowhere more evident in Psychology and Philosophy, where insight springs from the conclusions derived from the limited experiences of an isolated group or individual. It is like the blind men describing an elephant when they have only one part in front of them. They each call the elephant something else based on their singular experience and arrive at logical conclusions that are false. The fact that we only have one lifetime to devote to all the pieces is indeed a limitation.

2589. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 19:38:11 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <B0dAk.549$be.281@nlpi061.nbdc.sbc.com>
Source record: 21963

John Smith wrote:
> Where is motion?

Velocity = c

> Where is time?

Time stands still for anything traveling at
velocity = c
--
73, Cecil http://www.w5dxp.com

2590. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 19:44:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <S6dAk.438$Rx.228@flpi144.ffdc.sbc.com>
Source record: 21964

Rectifier wrote:
> It's not the light that bends the comet's tail.

If the sun put out nothing except EM waves, what
would a comet's tail look like? I suggest you
read Eugene Hecht's section in "Optics" titled:
"3.3.4 Radiation Pressure and Momentum" in my
4th edition.
--
73, Cecil http://www.w5dxp.com

2591. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 19:53:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f5258651-0508-4aa4-8f35-e398766ae9a3@26g2000hsk.googlegroups.com>
Source record: 21965

On Sep 16, 4:07 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 16, 3:39 pm, "Wayne" <mygarbage...@verizon.net> wrote:
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >news:5ea4517b-0ce6-4629-841e-51d92743be06@a1g2000hsb.googlegroups.com...>Iconsider it a
real shame that equilibrium is not a part of
> > > examinations since equilibrium
> > > is a basic in the electrical circuit of all antennas No where do I see
> > > antennas explained other than the showing of capacitive coupling to
> > > ground of antennas as a perceived circuit of an antenna?. Until this
> > > is corrected we will never have continium of discussion between hams
> > > on antennas.It is not a mystery anymore so why do the ARRL avoid it
> > > like a plague?
> > > Art
>
> > -
> > My engineering training is many years old now, but I haven't seen
> > equilibrium in the context of antennas discussed anywhere except by you, in
> > this newsgroup. Do you have any references to papers that have been peer
> > reviewed and published?
>
> Oh I suppose a search on google re antennas and equilibrium will get
> you something to read
> but difficult if you are starting from Zero. The point where you begin
> is Newtons laws, if they are in error then so am I
> I doubt if you will find anything that definitely proves that he is
> wrong.If a professor does not know what I have stated he should be
> nfired
> which goes for some of the people at University of Illinois in the
> electrical engineering area.
> EVERYTHING in science revolves around equilibrium. If a posting denys
> that or does not respond to that Law
> i will not respond and that includes Richard whose sole aim in life if
> to divert the crowd with off topic nothings as he does not ahve any
>Wayne
engineering degree from any accredited college and thus is a
pretender
> looking for a date with any poster.
> Art
Wayn e I stated that I started at the point of first principles which
is Newton and I went from there.
There is not a book that I know that starts there. You want a lst of
authors that physics examiners look for to determine

what"famous " people will side with him if he accepts it. That lesson is not lost on all that aspire to heights in the academic world so a paper MUST be buillt on the works of others whose work has been accepted. In my case I start at a point where the shoulders that I stand aupon are all dead. I made reference to Newton only and I havent got a list of supporters. So I start at the beginning with just one name in consideration to isolate the point of possible error. The ARRL infers the circuit is the capacitance to ground where as I put the cuircuit as going thru the center of the conductor.
I dont see the need to bring in quantum physics or to speculate about photons or massless items or how many gears that they can race thru to obtain
the speed of light. I was not an electrical engineer and I am not wired like Richard as I have a wife and I am a great grandpa and no wish to be any part of his world. My subject is and will always be until in someway I am satisfied is what is the electrical circuit of a fractional wavelength antenna which is not specifically stated in the books and where every poster is waiting for somnebody else to dip his toe in the water and thus avoid any subsequent
verbal thrashing. I can never point to a list of supporting evidence beyond Newton and his laws.
Best regards.....I have to cut an acre of grass with a hand mower as my daily excercise yes I do have a tractor but that is not excercise
Art

2592. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 19:56:27 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <KhdAk.552$be.301@nlpi061.nbdc.sbc.com>
Source record: 21966

Jim Kelley wrote:
> Cecil Moore wrote:
>> Rectifier wrote:
>>> When travelling at the speed of light, it exhibits wave properties.

>> When traveling at the speed of light, it exhibits particle
>> properties.
>
> When does light travel at a speed other than the speed of light?

From another of my postings: "If I remember correctly,
a photon cannot travel slower than the speed of light."

The first nine words in my first statement above are
not mine but were copied verbatim from Rectifier's posting
(except for the misspelled word). If there was an implication
that light can travel at less than the speed of light, it
didn't come from me.
--
73, Cecil http://www.w5dxp.com

2593. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 20:00:09 UTC
From: JB <nospam@goofball.net>
Message-ID: <dldAk.279$UB3.0@trnddc07>
Source record: 21967

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:%S9Ak.525$be.239@nlpi061.nbdc.sbc.com...
> JB wrote:
> > So if nothing is there, it aint nothing after all?
>
> There is no "there" within the space of our universe
> where nothing is there. Casimir effect experiments
> have been run on spaces where nothing is supposed to
> be. But instead of nothing, they found the quantum soup
> which is the space occupied by our universe.
> --
> 73, Cecil http://www.w5dxp.com

Don't blame me, I never spilled any quantum soup in your space.

2594. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 20:15:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <czdAk.555$be.81@nlpi061.nbdc.sbc.com>
Source record: 21968

Rectifier wrote:
> Photons (the particle nature explanation of EMR) have no mass:
> http://www.physchem.co.za/OB12-ele/radiation.htm

They should have said "no rest mass" to keep the
uninitiated from getting confused. Any particle that
can apply pressure, possesses momentum and "penetrating
ability" at the least has relativistic mass.

http://math.ucr.edu/home/baez/physics/ParticleAndNuclear/photon_mass.html

"In special relativity, it turns out that we are still able to
define a particle's momentum p such that it behaves in well-
defined ways that are an extension of the Newtonian case.
Although p and v still point in the same direction, it turns
out that they are no longer proportional; the best we can
do is relate them via the particle's 'relativistic mass'."

"It is almost certainly impossible to do any experiment that
would establish the photon rest mass to be exactly zero."
--
73, Cecil http://www.w5dxp.com

2595. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 20:22:12 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <SFdAk.475$W06.85@flpi148.ffdc.sbc.com>
Source record: 21969

Rectifier wrote:
> You say the "idea was postulated in 1915." Since when does a postulate
> become proof making something a law?

It was postulated by Einstein in 1915 and measurements
agreed in 1919. It is said to have been proven a scientific
fact in 1959. I'm just surprised that your university didn't
teach it in the postulate stage, valid measurement stage, or
in the scientific fact stage. :-)
--
73, Cecil http://www.w5dxp.com

2596. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 20:41:09 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <DXdAk.559$be.461@nlpi061.nbdc.sbc.com>
Source record: 21970

Jim Kelley wrote:
> One would first have to presume to know what space is in order to
> stipulate the conditions for its existence.

We know space exists and according to quantum physics,
nothing except particles exist. It doesn't take a
rocket scientist to conclude that, if quantum physics
is correct, then space must be constructed of particles
albeit possibly as yet undiscovered and possibly
unmeasurable particles.

http://www.astronomycafe.net/qadir/q1501.html
http://www.world-science.net/othernews/othernews-nfrm/051014_empty.htm
http://en.wikipedia.org/wiki/Vacuum_energy
http://www.infidels.org/library/modern/mark_vuletic/vacuum.html
http://discovermagazine.com/2008/aug/18-nothingness-of-space-theory-of-everything/
--
73, Cecil http://www.w5dxp.com

2597. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 20:49:34 UTC
From: JB <nospam@goofball.net>
Message-ID: <y3eAk.338$pp3.76@trnddc06>
Source record: 21971

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:mP9Ak.524$be.351@nlpi061.nbdc.sbc.com...
> JB wrote:
> > So you are trying to tell me that if I completely evacuate a sealed
glass
> > jar it then contains space?
>
> Casimir effect experiments have been run in
> a vacuum and proved there is lots of "stuff"
> still there even in empty space. There is
> no such thing as nothingness, at least not
> within the space of our universe.
> --
> 73, Cecil http://www.w5dxp.com

Ok now yer giving me a headache by explaining an observation on theories based upon theories base upon theories. In the Casimir experiments, there are plates or shapes deliberately placed in the vacuum.

Quantum theory goes too far into the theoretical for my taste. It is a curious mental and mathematical exercise but it reminds me of Leibnitz' Monad theory of existence. It doesn't help me with antenna performance. Go there without me.

2598. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 20:55:10 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <M8eAk.560$be.532@nlpi061.nbdc.sbc.com>
Source record: 21972

JB wrote:
> Ok now yer giving me a headache by explaining an observation on theories
> based upon theories base upon theories.

Welcome to Flatland. :-)
--
73, Cecil http://www.w5dxp.com

2599. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 20:58:47 UTC
From: dfinn1@nc.rr.com
Message-ID: <1f2b00ae-9df4-4c7b-a3ad-63618fcb2861@j22g2000hsf.googlegroups.com>
Source record: 21973

On Sep 17, 11:18 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Richard Clark wrote:
> > You misspelled plonk, but baby makes three. That makes the last one
> > who can't do the math.
>
> The photon mass math is trivial.
>
> E= mc^2 = hf
>
> m = hf/c^2 = h/(c)lamda
>
> If I remember correctly, a photon cannot travel slower
> than the speed of light.
> --
> 73, Cecil http://www.w5dxp.com

Are you proposing that a photon cannot travel slower than the speed of
light in a vacuum, or it cannot travel slower than the speed of light
in water or the speed of light through glass or air? Please reference
which speed of light a photon cannot travel slower than. Assuming your
answer is the universal constrant "c", then my question is, knowing
that light travels faster through a vacuum than it does through water,
is the light travelling through water still "photons" or is that
impossible because they are travelling too slow? What are they then?
Please advise. Thanks.

2600. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 20:59:50 UTC
From: dfinn1@nc.rr.com
Message-ID: <092a0d0d-27c2-42e9-86a1-7776ad51cef0@e53g2000hsa.googlegroups.com>
Source record: 21974

On Sep 17, 2:04 pm, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Cecil Moore" <nos...@w5dxp.com> wrote in message
>
> news:la7Ak.776$c45.574@nlpi065.nbdc.sbc.com...
>
> > Rectifier wrote:
> >> Read it again! I didn't say photons have zero mass; I said
> >> electromagnetic radiation (EMR) has no mass. EMR exhibits both wave and
> >> particle properties. When travelling at the speed of light, it exhibits
> >> wave properties.
>
> > When traveling at the speed of light, it exhibits particle
> > properties. It has been about half a century since experiments
> > proved that light waves are bent by gravity thus proving that
> > electromagnetic radiation has mass. That idea was postulated
> > in 1915. Did you get your degree before then? :-)
> > --
> > 73, Cecil http://www.w5dxp.com
>
> Photons (the particle nature explanation of EMR) have no mass:
>
> http://www.physchem.co.za/OB12-ele/radiation.htm

No REST mass.

2601. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 21:17:27 UTC
From: dfinn1@nc.rr.com
Message-ID: <03ef17a5-fca1-4f8f-aa67-5538870e3891@25g2000hsx.googlegroups.com>
Source record: 21975

On Sep 17, 7:31 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > The discussion on the makeup of the structure was never closed. You
> > put the cart in front of the horse.
>
> The makeup of the structure is irrelevant to this
> discussion. Since there is a structure (which is
> something) it cannot possibly be nothing.
> --
> 73, Cecil http://www.w5dxp.com

True under some abstract (non-physical) conditions. For example, the "structure" could be a mere figment of your imagination which is something, an abstraction, a figment. However, it is not something which measureable TEM waves could use as an aether for propagation. The answer lies in the fact that, if TEM waves are present, then something (the TEM WAVE itself) is present where nothing existed before. TEM waves need only by their very presence propagagate through nothing. This does not suggest I am stating that they travel outside the boundaries of the Universe which you believe is the only locus where nothing exists, and to which I disagree since empty space is also "nothing" as defined in this universe. Empty space,in locii where the exotic paricles do not exist, needs no structure. It is that without structure.

2602. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 21:28:56 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <NYSdnXXMaOlz60zVnZ2dnUVZ_uudnZ2d@pghconnect.com>
Source record: 21976

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:S6dAk.438$Rx.228@flpi144.ffdc.sbc.com...
> Rectifier wrote:
>> It's not the light that bends the comet's tail.
>
> If the sun put out nothing except EM waves, what
> would a comet's tail look like? I suggest you
> read Eugene Hecht's section in "Optics" titled:
> "3.3.4 Radiation Pressure and Momentum" in my
> 4th edition.
> --
> 73, Cecil http://www.w5dxp.com

You cut off the first line of my post, "Do you know that the sun puts out a lot of neutrons and other particles?" I didn't say the sun puts out nothing except EM waves.

2603. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 21:29:55 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <gNydnZLxAOJ360zVnZ2dnUVZ_vKdnZ2d@pghconnect.com>
Source record: 21977

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:KhdAk.552$be.301@nlpi061.nbdc.sbc.com...
> Jim Kelley wrote:
>> Cecil Moore wrote:
>>> Rectifier wrote:
>>>> When travelling at the speed of light, it exhibits wave properties.
>
>>> When traveling at the speed of light, it exhibits particle
>>> properties.
>>
>> When does light travel at a speed other than the speed of light?
>
> From another of my postings: "If I remember correctly,
> a photon cannot travel slower than the speed of light."
>
> The first nine words in my first statement above are
> not mine but were copied verbatim from Rectifier's posting
> (except for the misspelled word). If there was an implication
> that light can travel at less than the speed of light, it
> didn't come from me.
> --
> 73, Cecil http://www.w5dxp.com

Light travels at different speeds in different media, such as water, glass,
etc.

2604. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 21:37:01 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <907ac485-15ba-4070-bd92-57006bf4e611@z72g2000hsb.googlegroups.com>
Source record: 21978

On Sep 17, 2:26 pm, "JB" <nos...@goofball.net> wrote:
> OK So nobody wants to talk about equilibrium or current flow on a
> radiator.
> Thats fine by me. Took a lot of posts to get to that point. JB I
> apologize
> I have been nailed to the cross so many times I tend to bundle things
> together.
> When I started I zeroed on equilibrium as a start because existing
> laws state that if a charge is moving on the outside of a radiator
> then there is movement on the inside of a radiator Now that is not in
> the books. Why is that? However discussion went away from the intent
> of the thread. equilibrium with respect to radiation. O well another
> try later
> Regards
> Art
>
> Consider that there is little difference in the performance of a solid
> radiator and hollow radiator.
>
> There are things about Electromagnetic Radiation that aren't discussed by
> Newton. Study classical antenna theory, then you will be on common ground
> with others that study antennas. The danger of concentrating on your own
> line of study so much is that you wind up out on a limb. I see this often
> when dealing with different terminology spawned of different paradigms,
> where similar circuits are redrawn and renamed by different engineering
> teams. This is nowhere more evident in Psychology and Philosophy, where
> insight springs from the conclusions derived from the limited experiences of
> an isolated group or individual. It is like the blind men describing an
> elephant when they have only one part in front of them. They each call the
> elephant something else based on their singular experience and arrive at
> logical conclusions that are false. The fact that we only have one lifetime
> to devote to all the pieces is indeed a limitation.

Could well be but I have no alternative and am going my own way. Why
should this disturb others?
They could easily show me the error of my ways instead of taking up
the cause against change
We all know Newtons Laws (some interprete in different ways) So we
have a radiator upon which a charge rests
there for ethere is no need for a opposing vector inside the radiator.
Then we have a radiator that is not in equilibrium and thus we have a
vector
which according to the laws of Newton or equilibrium or what ever
requires a responding vector inside the conductor. Inside the

conductor there is no magnetic field nor the Foucalt current thus it is not radiating just spending copper losses. Put the apparatus in a vacuum and the current will take a less resistive route by producing an arc at the ends AWAY from the radiator. To me that sounds as perfect logic but there is no book that states it or the presence of the Foucalt current. That is not to say there are not a lot of explanations all of which are different so I go back to first principles and people get angry at the idea of change. Now the tide on this post has turned around on Cecil. Let me warn you that Cecil has outlasted this group several times to the tune of threads extending more than a thousand more than a few times over the last 20 years. One person who harasses him tries a lot of tactics on him including pointing out that his only difference he has with a dog is lipstickl but only the newbies respond to him unnowingly. Cecil will out last them all.
Art Back to the mowing

2605. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 21:52:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <W_eAk.668$Ws1.421@nlpi064.nbdc.sbc.com>
Source record: 21979

dfinn1@nc.rr.com wrote:
> Are you proposing that a photon cannot travel slower than the speed of
> light in a vacuum, or it cannot travel slower than the speed of light
> in water or the speed of light through glass or air?

In any random medium, a photon cannot travel slower
than the speed of light through that medium. In
particular, photons associated with standing waves
do NOT stand still.
--
73, Cecil http://www.w5dxp.com

2606. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 21:56:34 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <m2fAk.394$Pv5.275@edtnps83>
Source record: 21980

In direct terms I have stated that current flows down the
center
of a radiator if it is of a fractional wave length. A very simple
statement which nobody wishes to address. Fine by me, the thread would
then have a single posting and the multitude can generate questions
and discussion about deep space or other topics of choice.

2607. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 22:01:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <N5fAk.406$Ei5.386@flpi143.ffdc.sbc.com>
Source record: 21981

dfinn1@nc.rr.com wrote:
> ... I disagree since empty space is
> also "nothing" as defined in this universe. Empty space,in locii where
> the exotic paricles do not exist, needs no structure. It is that
> without structure.

You need to update your knowledge to the 21st century.
"Empty" space has been proved not to be empty and
therefore not "nothing".
--
73, Cecil http://www.w5dxp.com

2608. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 22:03:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <B7fAk.408$Ei5.190@flpi143.ffdc.sbc.com>
Source record: 21982

Rectifier wrote:
>
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
>> If the sun put out nothing except EM waves, what
>> would a comet's tail look like? I suggest you
>> read Eugene Hecht's section in "Optics" titled:
>> "3.3.4 Radiation Pressure and Momentum" in my
>> 4th edition.
>
> You cut off the first line of my post, "Do you know that the sun puts
> out a lot of neutrons and other particles?" I didn't say the sun puts
> out nothing except EM waves.

I am asking you: What if the sun put out nothing except
EM waves. Would comets still have a tail or not?
--
73, Cecil http://www.w5dxp.com

2609. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 22:04:44 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <C8fAk.409$Ei5.155@flpi143.ffdc.sbc.com>
Source record: 21983

Rectifier wrote:
> Light travels at different speeds in different media, such as water,
> glass, etc.

It is still traveling at the speed of light in that medium.
--
73, Cecil http://www.w5dxp.com

2610. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 22:16:29 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <1IfAk.401$Pv5.202@edtnps83>
Source record: 21984

>In direct terms I have stated that current flows down the
>center
>of a radiator if it is of a fractional wave length. A very simple
>statement which nobody wishes to address. Fine by me, the thread would
>then have a single posting and the multitude can generate questions
>and discussion about deep space or other topics of choice.

Severns, QEX, Nov/Dec 2000, pp 20-29 does address the issue.
On page 22: "At some points within the wire, the instantaneous current is
actually flowing backwards (minus signs) due to the self-induced
eddy currents that are the underlying phenomena responsible for skin
effect."
These results were verified with Ansoft's "Maxwell" FEM software.
An excellent treatment of the math can be found at:
http://www.g3ynh.info/zdocs/comps/zint.html

Frank

2611. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 22:16:41 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <garvsgejd1@news.service.uci.edu>
Source record: 21985

Cecil Moore wrote:
> Jim Kelley wrote:
>> One would first have to presume to know what space is in order to
>> stipulate the conditions for its existence.
>
> We know space exists and according to quantum physics,
> nothing except particles exist. It doesn't take a
> rocket scientist to conclude that, if quantum physics
> is correct, then space must be constructed of particles
> albeit possibly as yet undiscovered and possibly
> unmeasurable particles.

And with that you feel that you can claim to know what space 'is'.

It must be just marvelous to be you. :-)

ac6xg

2612. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 23:11:52 UTC
From: joe <none@home.now>
Message-ID: <gas28e$54f$1@aioe.org>
Source record: 21986

Art Unwin wrote:

<snip>

>In direct terms I have stated that current flows down the
> center
> of a radiator if it is of a fractional wave length.

OK, you must be talking about an AC current as there is a wavelength involved. But if you are implying there is current in the center matching the amplitude of the current on the surface you are wrong.

See this link
http://en.wikipedia.org/wiki/Skin_depth

Note the phrase regarding current;"the magnitude of which is greatest at the conductor's surface". This is where the current is.

There is also this statement "the current can be flowing in the opposite direction to that at the surface." Note that there are qualifications on that statement (on the page referenced).

So, while there can be some current flowing inside the conductor, it does not say it is a matching current in the other direction. By saying most of the current is at the surface, it conflicts with your statement.

> A very simple
> statement which nobody wishes to address.

You are trying to apply "For a force there is always an equal and opposite reaction: or the forces of two bodies on each other are always equal and are directed in opposite directions."
(from "http://en.wikipedia.org/wiki/Newton%27s_laws_of_motion")

You make a simple statement, brought about but applying a concept incorrectly. I don't think Newton said anything about electricity and flow in conductors. Newton's law doesn't say what the opposing force is, so I don't think you can say it is anything specific.

<snip>

> I would
> prefer however the discussion to at least start with equilibrium which
> leads to why or why not it is correct that current can flow thru the
> center of a conductor the answer of which is not in the books.

The right books would tell you that AC current does not flow in the center of a conductor.

As others have stated, you need to clearly define what _you_ mean by equilibrium.

> Some
> people prefer to read the last page of the book first.
> I prefere to examine foundations before determining the merits of a
> house.

Those foundations need to take into account all the considerations, not just the ones you know or want to talk about. You may have read some of the book, but you skipped quite a few chapters.

> Regards
> Art

Consider your statement to have been addressed.

You will note that both links include some math. This is something you don't provide with your explanations. If you went through the rigor to work out the math and present it to the group with sufficient clarity you might get someone to believe you. If you want someone to believe you, it is up to you to effectively communicate your ideas.

It is hard to tell if you have a useful concept regarding antennas, are completely lost, or just a troll.

But, just in case you have something, then...

Many antennas are built using tubing for light weight. So, if there is a current flowing in the middle, it is good that the ends of the tubes are crimped, or plugged. I wouldn't want the flowing electrons spilling out onto my lawn.

2613. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 23:20:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <qhgAk.556$as4.181@nlpi069.nbdc.sbc.com>
Source record: 21987

Jim Kelley wrote:
> And with that you feel that you can claim to know what space 'is'.

Sorry, I never claimed to know what space is, just
that I know it's not empty which has been proved.
Space is something, as opposed to nothing.
--
73, Cecil http://www.w5dxp.com

2614. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-17 23:59:14 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <64edf620-7c97-43f8-bbe7-5e2ccfec43e8@26g2000hsk.googlegroups.com>
Source record: 21988

On Sep 17, 6:11 pm, joe <n...@home.now> wrote:
> Art Unwin wrote:
>
> <snip>
>
> >In direct terms I have stated that current flows down the
> > center
> > of a radiator if it is of a fractional wave length.
>
> OK, you must be talking about an AC current as there is a wavelength
> involved. But if you are implying there is current in the center matching
> the amplitude of the current on the surface you are wrong.
>
> See this linkhttp://en.wikipedia.org/wiki/Skin_depth
>
> Note the phrase regarding current;"the magnitude of which is greatest at the
> conductor's surface". This is where the current is.
>
> There is also this statement "the current can be flowing in the opposite
> direction to that at the surface." Note that there are qualifications on
> that statement (on the page referenced).
>
> So, while there can be some current flowing inside the conductor, it does
> not say it is a matching current in the other direction. By saying most of
> the current is at the surface, it conflicts with your statement.
>
> > A very simple
> > statement which nobody wishes to address.
>
> You are trying to apply "For a force there is always an equal and opposite
> reaction: or the forces of two bodies on each other are always equal and
> are directed in opposite directions."
> (from "http://en.wikipedia.org/wiki/Newton%27s_laws_of_motion")
>
> You make a simple statement, brought about but applying a concept
> incorrectly. I don't think Newton said anything about electricity and flow
> in conductors. Newton's law doesn't say what the opposing force is, so I
> don't think you can say it is anything specific.
>
> <snip>
>
> > I would
> > prefer however the discussion to at least start with equilibrium which
> > leads to why or why not it is correct that current can flow thru the

> > center of a conductor the answer of which is not in the books.
>
> The right books would tell you that AC current does not flow in the center
> of a conductor.
>
> As others have stated, you need to clearly define what _you_ mean by
> equilibrium.
>
> > Some
> > people prefer to read the last page of the book first.
> > I prefere to examine foundations before determining the merits of a
> > house.
>
> Those foundations need to take into account all the considerations, not just
> the ones you know or want to talk about. You may have read some of the
> book, but you skipped quite a few chapters.
>
> > Regards
> > Art
>
> Consider your statement to have been addressed.
>
> You will note that both links include some math. This is something you don't
> provide with your explanations. If you went through the rigor to work out
> the math and present it to the group with sufficient clarity you might get
> someone to believe you. If you want someone to believe you, it is up to you
> to effectively communicate your ideas.
>
> It is hard to tell if you have a useful concept regarding antennas, are
> completely lost, or just a troll.
>
> But, just in case you have something, then...
>
> Many antennas are built using tubing for light weight. So, if there is a
> current flowing in the middle, it is good that the ends of the tubes are
> crimped, or plugged. I wouldn't want the flowing electrons spilling out
> onto my lawn.

Ok Joe I will go along with everything you said Thank you for your
comments
Arft

2615. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 00:20:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <38abd4f4-47c0-4651-8fe2-5099c38096c7@25g2000hsx.googlegroups.com>
Source record: 21989

On Sep 17, 6:11 pm, joe <n...@home.now> wrote:
> Art Unwin wrote:
>
> <snip>
>
> >In direct terms I have stated that current flows down the
> > center
> > of a radiator if it is of a fractional wave length.
>
> OK, you must be talking about an AC current as there is a wavelength
> involved. But if you are implying there is current in the center matching
> the amplitude of the current on the surface you are wrong.
>
> See this linkhttp://en.wikipedia.org/wiki/Skin_depth
>
> Note the phrase regarding current;"the magnitude of which is greatest at the
> conductor's surface". This is where the current is.
>
> There is also this statement "the current can be flowing in the opposite
> direction to that at the surface." Note that there are qualifications on
> that statement (on the page referenced).
>
> So, while there can be some current flowing inside the conductor, it does
> not say it is a matching current in the other direction. By saying most of
> the current is at the surface, it conflicts with your statement.
>
> > A very simple
> > statement which nobody wishes to address.
>
> You are trying to apply "For a force there is always an equal and opposite
> reaction: or the forces of two bodies on each other are always equal and
> are directed in opposite directions."
> (from "http://en.wikipedia.org/wiki/Newton%27s_laws_of_motion")
>
> You make a simple statement, brought about but applying a concept
> incorrectly. I don't think Newton said anything about electricity and flow
> in conductors. Newton's law doesn't say what the opposing force is, so I
> don't think you can say it is anything specific.
>
> <snip>
>
> > I would
> > prefer however the discussion to at least start with equilibrium which
> > leads to why or why not it is correct that current can flow thru the

> > center of a conductor the answer of which is not in the books.
>
> The right books would tell you that AC current does not flow in the center
> of a conductor.
>
> As others have stated, you need to clearly define what _you_ mean by
> equilibrium.
>
> > Some
> > people prefer to read the last page of the book first.
> > I prefere to examine foundations before determining the merits of a
> > house.
>
> Those foundations need to take into account all the considerations, not just
> the ones you know or want to talk about. You may have read some of the
> book, but you skipped quite a few chapters.
>
> > Regards
> > Art
>
> Consider your statement to have been addressed.
>
> You will note that both links include some math. This is something you don't
> provide with your explanations. If you went through the rigor to work out
> the math and present it to the group with sufficient clarity you might get
> someone to believe you. If you want someone to believe you, it is up to you
> to effectively communicate your ideas.
>
> It is hard to tell if you have a useful concept regarding antennas, are
> completely lost, or just a troll.
>
> But, just in case you have something, then...
>
> Many antennas are built using tubing for light weight. So, if there is a
> current flowing in the middle, it is good that the ends of the tubes are
> crimped, or plugged. I wouldn't want the flowing electrons spilling out
> onto my lawn.

I know books say a lot of things but do they explain WHY current
cannot flow thru the center?
Somebody said the current flow backwards now that is hard to
understand unles he is refering to a tank circuit
where the antenna has capacitance at one end and inductance at the
other and the current goes nowhere.
I think I will sit back and see what the experts say and if the IEEE
has accepted al these explanations.
One thing I particularly have difficulty with is that the secondary
current can overcome the primary current
where the power flows back to a wall plug or something like that.
Another infers that current travel in a aluminum tube is different to

the flow of a solid conductor presumably with double the surface area you have double the amount of radiation. The next publication from the ARRL is going to rock the science world with these findings on radiation. Funny thing is that based on my findings I designed an antenna which computer program AO Pro
determined was quite good, an arrangement that is if the program doesn;'t follow the teachings of the books should I then throw the program away?
NEC4 models the antenna that is in equilibrium also isn't that a bummer? If only somebody would come up with a vector diagram of a radiator that was NOT in equilibrium I could locate my fault very quickly. Still if all of what has been described will be published in the ARRL and IEEE papers I can afford to wait.
Thank you all
Art

2616. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 00:22:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gas70b$ig9$1@news.albasani.net>
Source record: 21990

Cecil Moore wrote:
> John Smith wrote:
>> Where is motion?
>
> Velocity = c
>
>> Where is time?
>
> Time stands still for anything traveling at
> velocity = c

Yeah, well, if you take a cubic centimeter of "energy" around yourself, of even myself, for that matter, it better be at rest! Otherwise, the motion/time thing, which your simplistic equation ignores, will, MOST CERTAINLY, come into play ...

However, the equation you gave is good ... but just NOT that simple for REAL world situations ... but then, I stated that, before you gave the equation ...

You have argued this yourself, most vehemently, with photons ... think about it ... an argument I actually agreed with, and echo here ... motion DOES change things, a bit ... and, it is VERY DIFFICULT to keey energized particles at rest, but then, not impossible ;-)

Regards,
JS

2617. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 00:25:46 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6b30e38c-a4b2-46a9-a46f-290473632489@l43g2000hsh.googlegroups.com>
Source record: 21991

On Sep 17, 5:16 pm, "Frank" <frank...@nospam.telus.net> wrote:
> >In direct terms I have stated that current flows down the
> >center
> >of a radiator if it is of a fractional wave length. A very simple
> >statement which nobody wishes to address. Fine by me, the thread would
> >then have a single posting and the multitude can generate questions
> >and discussion about deep space or other topics of choice.
>
> Severns, QEX, Nov/Dec 2000, pp 20-29 does address the issue.
> On page 22: "At some points within the wire, the instantaneous current is
> actually flowing backwards (minus signs) due to the self-induced
> eddy currents that are the underlying phenomena responsible for skin
> effect."
> These results were verified with Ansoft's "Maxwell" FEM software.
> An excellent treatment of the math can be found
at:http://www.g3ynh.info/zdocs/comps/zint.html
>
> Frank

I read that last one Frank but I think it is aimed at computer geeks
which I am not.
Pleased to see eddy currents are the underlying phenomina responsible
for skin depth
presumably he explains how the secondary current can overcome that
which creats it.
At last we have a source for free energy
Regards
Art

2618. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 00:34:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gas7mo$j5j$1@news.albasani.net>
Source record: 21992

dfinn1@nc.rr.com wrote:

> ...
> Are you proposing that a photon cannot travel slower than the speed of
> light in a vacuum, or it cannot travel slower than the speed of light
> in water or the speed of light through glass or air? Please reference
> which speed of light a photon cannot travel slower than. Assuming your
> answer is the universal constrant "c", then my question is, knowing
> that light travels faster through a vacuum than it does through water,
> is the light travelling through water still "photons" or is that
> impossible because they are travelling too slow? What are they then?
> Please advise. Thanks.
>

My gawd that is a LOT of text for a simple point! Do you have any schooling at all? But then, there is a "velocity factor" and this is the property of the media "it" travels ... And, the velocity of light, or RF, though a media, is differing, yes ...And, I have nothing to add on photons speed thought any material ... indeed ... photons and waves are very much in debate here ... but then, if you are/were awake, you already "know" that ...

Anyway, the short answer, think "velocity factor" and yes, "they" do travel MUCH slower than the speed of light ...

And, actually, your question seems one posed by a complete idiot ... but then, you DON'T REALIZE THAT, DO YOU?

Anyway, good luck in all your pursuits ... ;-)

Regards,
JS

2619. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 00:47:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <fa0a0ce5-9c3e-482c-a527-b15413542459@y38g2000hsy.googlegroups.com>
Source record: 21993

On Sep 17, 5:16 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Cecil Moore wrote:
> > Jim Kelley wrote:
> >> One would first have to presume to know what space is in order to
> >> stipulate the conditions for its existence.
>
> > We know space exists and according to quantum physics,
> > nothing except particles exist. It doesn't take a
> > rocket scientist to conclude that, if quantum physics
> > is correct, then space must be constructed of particles
> > albeit possibly as yet undiscovered and possibly
> > unmeasurable particles.
>
> And with that you feel that you can claim to know what space 'is'.
>
> It must be just marvelous to be you. :-)
>
> ac6xg

Jim
If I drew a vacuum on a bottle on earth and then let the black hole
apply its forces upon the innards of the bottle
would it extract any thing more than the operation on earth? I kinda
look at the black hole as the datum level of maximum force
as a reaction to the big bang and that datum is not the same as that
on earth. Thus a vacuum on earth is not a perfect vacuum in terrestial
form. Quite a quandry for me when determining what nothing is and when
a implosion would occur. Frankly Jim I don't feel what nothing is can
be answered
Very best regards
Art

2620. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 00:55:24 UTC
From: dfinn1@nc.rr.com
Message-ID: <680640fb-e7b8-4944-8be0-f58c4b5591a8@s50g2000hsb.googlegroups.com>
Source record: 21994

On Sep 17, 6:01 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > ... I disagree since empty space is
> > also "nothing" as defined in this universe. Empty space,in locii where
> > the exotic paricles do not exist, needs no structure. It is that
> > without structure.
>
> You need to update your knowledge to the 21st century.
> "Empty" space has been proved not to be empty and
> therefore not "nothing".
> --
> 73, Cecil http://www.w5dxp.com

Please show me the reference that proves empty is not nothing and I
will prove by definition of the word empty that empty is not
something. This is true even in the 21st centruy.

2621. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 01:22:30 UTC
From: dfinn1@nc.rr.com
Message-ID: <68974ae6-b3fd-469f-a282-b03095c8399b@e53g2000hsa.googlegroups.com>
Source record: 21995

On Sep 17, 5:52 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > Are you proposing that a photon cannot travel slower than the speed of
> > light in a vacuum, or it cannot travel slower than the speed of light
> > in water or the speed of light through glass or air?
>
> In any random medium, a photon cannot travel slower
> than the speed of light through that medium. In
> particular, photons associated with standing waves
> do NOT stand still.
> --
> 73, Cecil http://www.w5dxp.com

What about Cerenkov radiation? In this case, beta particles with mass
travel faster than light in a water medium. So much for 'nothing can
travel faster than a photon'. It depends on the medium. If the medium
is a vacuum, then yes, nothing can travel faster than the speed of
light in that medium. Need to be careful. I have to Credit R. Clark
for pointinmg this out some time ago. See http://nuclear.mst.edu/research/reactor.html

2622. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 01:39:22 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d1b0f7$0$90343$8046368a@newsreader.iphouse.net>
Source record: 21996

Rectifier wrote:
>
>> The first nine words in my first statement above are
>> not mine but were copied verbatim from Rectifier's posting
>> (except for the misspelled word). If there was an implication
>> that light can travel at less than the speed of light, it
>> didn't come from me.
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Light travels at different speeds in different media, such as water,
> glass, etc.

And yet all are the speed of light. In that media. What's your issue
with that?

tom
K0TAR

2623. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 01:48:53 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <9siAk.432$Pv5.23@edtnps83>
Source record: 21997

>I read that last one Frank but I think it is aimed at computer geeks
>which I am not.
>Pleased to see eddy currents are the underlying phenomina responsible
>for skin depth
>presumably he explains how the secondary current can overcome that
>which creats it.
>At last we have a source for free energy
>Regards
>Art

Not sure if you got the correct site Art, since there should be nothing
concerning computers at: http://www.g3ynh.info/zdocs/comps/zint.html.
Also the excellent references at:
http://www.g3ynh.info/zdocs/comps/refs.html
Note that the central current in the conductor is significantly less than
than the surface current. Solution of the Kelvin functions should
be easy with Mathcad, or similar, providing only the first few
terms of the series are considered. Direct computation of
these modified Bessel functions is limited to the latest versions of
Mathcad,
since the earlier versions cannot handle complex arguments.
A more rigorous treatment can be found at the following:
http://mathworld.wolfram.com/KelvinFunctions.html
http://mathworld.wolfram.com/Bei.html
http://mathworld.wolfram.com/Ber.html
Where, even with Mathcad 7, using the 20, or so, first terms of the series
expansions, I have gotten good agreement with the published curves.
Mathcad certainly does not like the upper limits of the series to
be infinity. Probably even Excel could handle it.

73,

Frank

2624. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 01:52:13 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d1b3fa$0$90343$8046368a@newsreader.iphouse.net>
Source record: 21998

Art Unwin wrote:
> I know books say a lot of things but do they explain WHY current
> cannot flow thru the center?
<snip>
> Art

If you do the differential equations, it doesn't say why the center can't so much as why the skin does. Similar to gravitation and water flowing downhill vs uphill. I'll go into detail if you can't figure it out. Or not.

tom
K0TAR

2625. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 01:54:37 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d1b48a$0$90343$8046368a@newsreader.iphouse.net>
Source record: 21999

Cecil Moore wrote:
>
> We know space exists and according to quantum physics,
> nothing except particles exist. It doesn't take a
> rocket scientist to conclude that, if quantum physics
> is correct, then space must be constructed of particles
> albeit possibly as yet undiscovered and possibly
> unmeasurable particles.
>

No strings allowed then? ;)

tom
K0TAR

2626. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 01:57:39 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d1b53f$0$90343$8046368a@newsreader.iphouse.net>
Source record: 22000

Art Unwin wrote:
> Jim
> If I drew a vacuum on a bottle on earth and then let the black hole
> apply its forces upon the innards of the bottle
> would it extract any thing more than the operation on earth? I kinda
> look at the black hole as the datum level of maximum force
> as a reaction to the big bang and that datum is not the same as that
> on earth. Thus a vacuum on earth is not a perfect vacuum in terrestial
> form. Quite a quandry for me when determining what nothing is and when
> a implosion would occur. Frankly Jim I don't feel what nothing is can
> be answered
> Very best regards
> Art

So you are saying that the quantum foam would disappear because of the
black hole? Ever hear of Hawking Radiation?

Bet Cecil and I agree on this one.

tom
K0TAR

2627. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 02:07:38 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d1b7ac$0$60065$8046368a@newsreader.iphouse.net>
Source record: 21901

dfinn1@nc.rr.com wrote:
> On Sep 17, 6:01 pm, Cecil Moore <nos...@w5dxp.com> wrote:
>> dfi...@nc.rr.com wrote:
>>> ... I disagree since empty space is
>>> also "nothing" as defined in this universe. Empty space,in locii where
>>> the exotic paricles do not exist, needs no structure. It is that
>>> without structure.
>> You need to update your knowledge to the 21st century.
>> "Empty" space has been proved not to be empty and
>> therefore not "nothing".
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Please show me the reference that proves empty is not nothing and I
> will prove by definition of the word empty that empty is not
> something. This is true even in the 21st centruy.

I think what he means and hasn't said is "Nothing can be truly empty".
Period. No matter what you do.

Although extracting energy through the Casimir effect can cause a very
small space to have lower that normal foam in it. It's due to very
short spacing constraining the longest wavelength allowed in between the
plates. Which is not really different than the normal ways things
temporarily can change entropy in a volume.

tom
K0TAR

2628. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 02:11:21 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d1b88c$0$60064$8046368a@newsreader.iphouse.net>
Source record: 21902

JB wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:mP9Ak.524$be.351@nlpi061.nbdc.sbc.com...
>> JB wrote:
>>> So you are trying to tell me that if I completely evacuate a sealed
> glass
>>> jar it then contains space?
>> Casimir effect experiments have been run in
>> a vacuum and proved there is lots of "stuff"
>> still there even in empty space. There is
>> no such thing as nothingness, at least not
>> within the space of our universe.
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Ok now yer giving me a headache by explaining an observation on theories
> based upon theories base upon theories. In the Casimir experiments, there
> are plates or shapes deliberately placed in the vacuum.
>
> Quantum theory goes too far into the theoretical for my taste. It is a
> curious mental and mathematical exercise but it reminds me of Leibnitz'
> Monad theory of existence. It doesn't help me with antenna performance. Go
> there without me.
>

The Casimir effect is NOT theory. It's pretty easily detected and
measured, as quantum things go.

tom
K0TAR

2629. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 02:12:35 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e5a1a86e-63a5-45fa-ad1b-c5a0772825be@x35g2000hsb.googlegroups.com>
Source record: 21903

On Sep 17, 8:57 pm, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
> > Jim
> > If I drew a vacuum on a bottle on earth and then let the black hole
> > apply its forces upon the innards of the bottle
> > would it extract any thing more than the operation on earth? I kinda
> > look at the black hole as the datum level of maximum force
> > as a reaction to the big bang and that datum is not the same as that
> > on earth. Thus a vacuum on earth is not a perfect vacuum in terrestial
> > form. Quite a quandry for me when determining what nothing is and when
> > a implosion would occur. Frankly Jim I don't feel what nothing is can
> > be answered
> > Very best regards
> > Art
>
> So you are saying that the quantum foam would disappear because of the
> black hole? Ever hear of Hawking Radiation?
>
> Bet Cecil and I agree on this one.
>
> tom
> K0TAR

No I am not saying anything I was asking for Jim's thoughts on the
matter.
He is a straight shooter and I admit to having tunnel vision and this
sort of stuff
is outside my focus. On the question....No I have not heard of
Hawkings radiation.
I am aware that he does not agree CERN will be successfull and that he
is also
trying for a divorce, nothing more. and that includes quantum foam
which stays in the bottle possibly.
Art

2630. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 02:27:09 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngd3f3s.lc9.bit-bucket@shell.config.com>
Source record: 21905

On Tue, 16 Sep 2008 20:32:47 -0700, Jeff Liebermann wrote:
> <-snip-> However, the same kids will go ballistic if there are
> any artifacts on their shinny new HDTV screen, their MP3 player
> trashes a tune, or their streaming audio/video skips a beat.

> We have raise a generation of connoisseurs.

s/connoisseurs/whiners/

2631. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 02:28:08 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <6ee3d4p2lo9mv3ks49sdbe00pl52855k9j@4ax.com>
Source record: 21904

On Wed, 17 Sep 2008 12:09:44 -0700 (PDT), dfinn1@nc.rr.com wrote:

>On Sep 17, 3:25ï¿½am, Jeff Liebermann <je...@cruzio.com> wrote:
>> wrote:
>>
>> mr / mo = 1 / (1 - (v^2/c^2))^0.5
>>
>> where:
>> ï¿½ mr = relativistic mass
>> ï¿½ mo = mass at rest
>> ï¿½ v ï¿½= velocity of particle
>> ï¿½ c ï¿½= speed-o-light = 186,000 miles/sec
>>
>> For v = 167,700 miles/sec
>> ï¿½ mr/mo = 1/ (1 - (167,700^2 / 186,000^2))^0.5
>> ï¿½ mr/mo = 1/ (1 - 0.813)^0.5 = 1/ (0.187)^0.5 = 1/ 0.432 = 2.31
>>
>> So, the mass of the particle at 90% the speed-o-light is 2.3 times
>> that of the particle at rest. ï¿½It doesn't matter what particle. ï¿½Maybe
>> a silver star?

>Not correct. It's not quite as simple as e = m*c**2. You must use the
>Lorentz transformation.

I didn't use e = m * c^2

>Using the same values you have assiged to c and v, the correct
>equation would be:
>
>mr = mo/SQRT(1 - v**2/c**2)

That's exactly the same equation I used but with different notation.
It's still the square root:
SQRT(whatever) = (whatever)^0.5

Is there a standard notation or style for arithmetic and
exponentiation for usenet posting? I've been switching around using
different styles almost at random over the years.

I also divided both sides of the equation by mo to get the ratio of
relativistic mass to the at rest mass.

>As v => c, mr must => infinity (therefore no mass can reach c)

Yep.
Go FTL (faster than light), and you get a cosmic speeding ticket.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2632. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 02:28:50 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <86f32b17-d163-4ed6-b727-c349db727998@e39g2000hsf.googlegroups.com>
Source record: 21906

On Sep 17, 8:52 pm, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
> > I know books say a lot of things but do they explain WHY current
> > cannot flow thru the center?
> <snip>
> > Art
>
> If you do the differential equations, it doesn't say why the center
> can't so much as why the skin does. Similar to gravitation and water
> flowing downhill vs uphill. I'll go into detail if you can't figure it
> out. Or not.
>
> tom
> K0TAR

Please do. I would love to see your take on it. I am gratified that
somebody is tackling the problem
hopefully in laymans language so all can benefit. Possibly you could
start another thread as this one is greatly contaminated
I can then respond on my take of the matter and hopefully the flaw
will be exposed.
Regards
Art

2633. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 02:31:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ed4f244f-068b-44ea-8859-18739acd5bb4@m45g2000hsb.googlegroups.com>
Source record: 21907

On Sep 17, 8:48 pm, "Frank" <frank...@nospam.telus.net> wrote:
> >I read that last one Frank but I think it is aimed at computer geeks
> >which I am not.
> >Pleased to see eddy currents are the underlying phenomina responsible
> >for skin depth
> >presumably he explains how the secondary current can overcome that
> >which creats it.
> >At last we have a source for free energy
> >Regards
> >Art
>
> Not sure if you got the correct site Art, since there should be nothing
> concerning computers at:http://www.g3ynh.info/zdocs/comps/zint.html.
> Also the excellent references at:http://www.g3ynh.info/zdocs/comps/refs.html
> Note that the central current in the conductor is significantly less than
> than the surface current. Solution of the Kelvin functions should
> be easy with Mathcad, or similar, providing only the first few
> terms of the series are considered. Direct computation of
> these modified Bessel functions is limited to the latest versions of
> Mathcad,
> since the earlier versions cannot handle complex arguments.
> A more rigorous treatment can be found at the following:http://mathworld.wolfram.com/Kel
vinFunctions.htmlhttp://mathworld.wolfram.com/Bei.htmlhttp://mathworld.wolfram.com/Ber.htm
l
> Where, even with Mathcad 7, using the 20, or so, first terms of the series
> expansions, I have gotten good agreement with the published curves.
> Mathcad certainly does not like the upper limits of the series to
> be infinity. Probably even Excel could handle it.
>
> 73,
>
> Frank

Thanks for your effots Frank I would appreciate your presence when Tom
discusses it
as I suspect that both of you overshadow my expertise on the matter
Regards
Art

2634. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 02:41:43 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <HdjAk.445$Pv5.409@edtnps83>
Source record: 21908

>I know books say a lot of things but do they explain WHY current
>cannot flow thru the center?
>Somebody said the current flow backwards now that is hard to
>understand unles he is refering to a tank circuit
>where the antenna has capacitance at one end and inductance at the
>other and the current goes nowhere.
>I think I will sit back and see what the experts say and if the IEEE
>has accepted al these explanations.

As mentioned before; in particular reference [9a] of:
http://www.g3ynh.info:80/zdocs/comps/refs.html
Ramo, et. al was published in 1965. The methods of computation
for cylindrical conductors has been known for some time.

>One thing I particularly have difficulty with is that the secondary
>current can overcome the primary current

Note the central current flow is significantly less than
the surface current.

>where the power flows back to a wall plug or something like that.
>Another infers that current travel in a aluminum tube is different to
>the flow of a solid conductor presumably with double the surface area
>you have double the amount of radiation.

As in a charged sphere the net internal field is zero.

>The next publication from the
>ARRL is going to rock the science world with these findings on
>radiation. Funny thing is that based on my findings I designed an
>antenna which computer program AO Pro
>determined was quite good, an arrangement that is if the program
>doesn;'t follow the teachings of the books should I then throw the
>program away?

I am not familiar with AO Pro, but usually NEC based programs
will compute an average gain test, which helps determine the
validity of the model. Pushing the limits of the program concerning
conductor proximity, length to diameter ratio, etc. can produce
erroneous results.

>NEC4 models the antenna that is in equilibrium also isn't that a
>bummer?

NEC 4, and 2, for that matter, use a "Thin wire approximation" which
assumes current only exists at the surface of the wire, has only axial
components, and the surface current is uniform around the wire.

>If only somebody would come up with a vector diagram of a
>radiator that was NOT in equilibrium
>I could locate my fault very
>quickly.

I am not sure what you mean by a "Vector diagram".

>Still if all of what has been described will be published in
>the ARRL and IEEE papers I can afford to wait.
>Thank you all
>Art

Frank

2635. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 03:07:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <e6f3d45dkp2i1omgtvlf63tb2rgufbob52@4ax.com>
Source record: 21909

On Wed, 17 Sep 2008 06:43:22 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Frankly my present knoweledge is very limited.

Then learn. Antenna design and modeling is not easy. Just
understanding Maxwell's Equations is enough to keep you busy for a few
months. Antenna modeling (I suggest using 4NEC2) will keep you busy
for another few months. Trying to reconcile theory, models, and
reality will burn a few more months. However, when you're done, you
will understand something about antennas and how they work.
<http://home.ict.nl/~arivoors/>

Personally, I judge people by their willingness and ability to learn.
That's what distinguished modern technological humans from a inanimate
rock.

>I had a heart attack, 5 bypasses plus a loss in memory.

In 2002, I just barely missed having a heart attack. I nearly passed
out during the treadmill test. I celebrated the event with a triple
bypass, which effectively rolled back my biological clock about 10
years. Best thing I ever did. No memory loss except from the
anaesthetics used during surgery. Incidentally, I'm now 60.8 years
old. Kinda sounds like you also had a stroke. You're lucky to be
alive. My father had a stroke in 1986 and did not do very well
afterwards.

>So that I could
>continue to live I chose radiation as a niche
>study for recovery.

Fine, but I question the methods you call "study". It's considered
good form to gather your evidence first, and then supply your
conclusions, not the reverse order.

>Of course I will never recover fully.

Neither will I. I'm still collecting medical problems. Man was meant
to live for about 25 years. Anything beyond that is a free ride.

>So basically
>I have tunnel vision built around the niche of radiation and antennas
>where I went back to first principles and started with Newton
>This process has lasted for several years, very slow progress but I
>have got to a point that my thoughts on antennas and radiation is so
>different from the books that I have to go back to the beginning with

>respect tp Newton and re evaluate with my peers.

Radio and antennas are built of physics. However, it's not Newtonian physics, but electrodynamics as in Maxwell's Equations. Have you studied those? They're quite different from Newton's equations, which a sometimes called "classical mechanics". (Note: It's not easy. Just decoding the notation is a major challenge).
<http://en.wikipedia.org/wiki/Maxwell's_equations>

>Yes I am seen as an
>idiot, very understandable but I am persistent in talking and
>discussing the initial point in radiation .

You make an attempt at understanding. An idiot doesn't even try.

>From Newtons laws I deduce
>that current flow on a fractional wavelength antenna includes current
>flow thru the centre of a radiator.

Which of Newton's laws? What equations or thought experiment resulted in this deduction? How do you reconcile your conclusion with the common assumption that RF current flows on the outside of a conductor?

>I am going right back to my new
>beginnings but the books do not say that!

For good reason. You're wrong and your unspecified books are correct.

>So I can't participate in
>the many diversions from the niche I have taken and thus ask for a
>similar focus from others.

Yes you can. You can take it one step at a time. No need to jump directly from Newton to skin effect. Just walk me through your logic.

>No sympathy or crying desired as I am
>comfortable and living a good life but even with tunnel vision I am
>determined to continue and participate in the route I have chosen as
>there is no alternative.

By contrast, I'm willing to throw out everything I have learned and presume to be correct, if any of it can be proven or demonstrated wrong. I hold absolutely nothing (except my bank balance) as sacred, and consider everything subject to suspicion and debate. If you are permanently attached to your pet theory, you effectively refuse to accept input or criticism. Therefore, you have stopped learning and are starting to resemble the previously mentioned inanimate rock.

For example, did you know that the direction one counts causes the final count to vary? A simple example is counting the number of fingers on both hands. Start from one end counting 1,2,3,4,5,6... and ending in 10, which appears to be the correct count. Yet counting fingers downward results in 10, 9, 8, 7, 6, plus 5 more makes 11. Surprise, you have 11 fingers. Like I said, nothing is sacred.

>Sooooo after more than a thousand posts based on the initial radiator
>and equilibrium I have been unable to make one step forward in a re
>evaluation of my journey. But I will never give up so you will have to
>live with that. All of this is old hat to most of the posters who give
>me hell and sometimes I respond in kind to new posters in a like
>manner which is wrong but it happens. So to sum up I am a simple man
>with tunnel vision in a single subject and no where as knoweledgable
>as other posters outside my field of choice.

Suit yourself. As you make your bed, so shall you sleep in it.
Repetition of incorrect gibberish only works in politics, not in
science and technology.

>My very best regards
>Art Unwin KB9MZ....xg

Good luck. Let me know when you produce some logic, equations, or
numbers.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2636. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 03:17:31 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <mgh3d4tbjt7mmv6t1dfs0eek8u6gh7qaj2@4ax.com>
Source record: 21910

On Wed, 17 Sep 2008 16:52:40 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>dfinn1@nc.rr.com wrote:
>> Are you proposing that a photon cannot travel slower than the speed of
>> light in a vacuum, or it cannot travel slower than the speed of light
>> in water or the speed of light through glass or air?
>
>In any random medium, a photon cannot travel slower
>than the speed of light through that medium. In
>particular, photons associated with standing waves
>do NOT stand still.

Try again...would you believe light as 38 miles per hour?
<http://www.hno.harvard.edu/gazette/1999/02.18/light.html>
or at near absolute zero, coming to a complete stop?
<http://www.wired.com/science/discoveries/magazine/15-11/st_alphageek>
or used in optoelectronics?
<http://news.zdnet.com/2100-9584_22-145405.html>
or even faster then 3*10^8 meters/sec?
<http://www.scienceblog.com/light.html>

Quiz: How fast do the electrons flow in a copper conductor?
Hint: It's not the speed of light.
Cheat: <http://en.wikipedia.org/wiki/Electric_current>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2637. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 03:26:29 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <efffb0af-c6b8-465c-af49-b2e0282eee20@m44g2000hsc.googlegroups.com>
Source record: 21911

On Sep 17, 9:41 pm, "Frank" <frank...@nospam.telus.net> wrote:
> >I know books say a lot of things but do they explain WHY current
> >cannot flow thru the center?
> >Somebody said the current flow backwards now that is hard to
> >understand unles he is refering to a tank circuit
> >where the antenna has capacitance at one end and inductance at the
> >other and the current goes nowhere.
> >I think I will sit back and see what the experts say and if the IEEE
> >has accepted al these explanations.
>
> As mentioned before; in particular reference [9a]
of:http://www.g3ynh.info:80/zdocs/comps/refs.html
> Ramo, et. al was published in 1965. The methods of computation
> for cylindrical conductors has been known for some time.
>
> >One thing I particularly have difficulty with is that the secondary
> >current can overcome the primary current
>
> Note the central current flow is significantly less than
> the surface current.
>
> >where the power flows back to a wall plug or something like that.
> >Another infers that current travel in a aluminum tube is different to
> >the flow of a solid conductor presumably with double the surface area
> >you have double the amount of radiation.
>
> As in a charged sphere the net internal field is zero.
>
> >The next publication from the
> >ARRL is going to rock the science world with these findings on
> >radiation. Funny thing is that based on my findings I designed an
> >antenna which computer program AO Pro
> >determined was quite good, an arrangement that is if the program
> >doesn;'t follow the teachings of the books should I then throw the
> >program away?
>
> I am not familiar with AO Pro, but usually NEC based programs
> will compute an average gain test, which helps determine the
> validity of the model. Pushing the limits of the program concerning
> conductor proximity, length to diameter ratio, etc. can produce
> erroneous results.
>
> >NEC4 models the antenna that is in equilibrium also isn't that a
> >bummer?

>
> NEC 4, and 2, for that matter, use a "Thin wire approximation" which
> assumes current only exists at the surface of the wire, has only axial
> components, and the surface current is uniform around the wire.
>
> >If only somebody would come up with a vector diagram of a
> >radiator that was NOT in equilibrium
> >I could locate my fault very
> >quickly.
>
> I am not sure what you mean by a "Vector diagram".
>
> >Still if all of what has been described will be published in
> >the ARRL and IEEE papers I can afford to wait.
> >Thank you all
> >Art
>
> Frank

A vector diagram that shows a charge at rest on the surface of a
radiator which shows that there is no opposing vector at the center.
Then we have a radiator that is not in equilibrium. In that case i
would place a vector on the surface and another vector at the center.
Thus charges are in motion both on the outside and the inside of the
radiator.I base this on the reasoning that the inner resistance is
less
than 377 where an arc is produced at the ends. the idea that the
leading edge of current flow will reverse at the radiator ends and
oppose the trailing current is just beyond my thinking as you do not
have a closed circuit. I have not seen an illustration that shows
current that reverses upon itself in a open circuit.
Regards
Art

2638. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 03:33:46 UTC
From: dfinn1@nc.rr.com
Message-ID: <2c35ab56-5d51-490e-946a-e05eb3c28bf1@e39g2000hsf.googlegroups.com>
Source record: 21912

On Sep 17, 5:56 pm, "Frank" <frank...@nospam.telus.net> wrote:
> In direct terms I have stated that current flows down the
> center
> of a radiator if it is of a fractional wave length. A very simple
> statement which nobody wishes to address. Fine by me, the thread would
> then have a single posting and the multitude can generate questions
> and discussion about deep space or other topics of choice.

I did not research your reason for making the statement. However,
there is a commonly accepted derivation of a skin effect calculation
that makes frequency inversely proportional to skin depth. There is
nothing about the fraction of the wavelength that occupies the
conductor length. Can you provide a technical cite? Thanks.

2639. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 03:37:04 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <fqi3d4pefukla79opmf84b20quplomi0hj@4ax.com>
Source record: 21913

On Wed, 17 Sep 2008 17:20:56 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I know books say a lot of things but do they explain WHY current
>cannot flow thru the center?

Sure they do. Look under "skin effect".
<http://en.wikipedia.org/wiki/Skin_effect>
The components of the fields generated by AC conduction tend to repell
each other, causing them to drift towards the points of maximum
seperation, which is the outside of the conductor.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2640. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 03:40:40 UTC
From: dfinn1@nc.rr.com
Message-ID: <c831f67b-ed43-49e1-8095-b61ed8168a28@i76g2000hsf.googlegroups.com>
Source record: 21914

On Sep 17, 6:16 pm, "Frank" <frank...@nospam.telus.net> wrote:
> >In direct terms I have stated that current flows down the
> >center
> >of a radiator if it is of a fractional wave length. A very simple
> >statement which nobody wishes to address. Fine by me, the thread would
> >then have a single posting and the multitude can generate questions
> >and discussion about deep space or other topics of choice.
>
> Severns, QEX, Nov/Dec 2000, pp 20-29 does address the issue.
> On page 22: "At some points within the wire, the instantaneous current is
> actually flowing backwards (minus signs) due to the self-induced
> eddy currents that are the underlying phenomena responsible for skin
> effect."
> These results were verified with Ansoft's "Maxwell" FEM software.
> An excellent treatment of the math can be found
at:http://www.g3ynh.info/zdocs/comps/zint.html
>
> Frank

What is the frequency of the currents flowing backwards? If the same
as forward current (which it would be), then that and a few other
attributes such as conductor size, resistivity and mu, I can give you
skin depth by simple subtraction of the forward/reverse current
vectors. However, it will not necessarily indicate indicate that some/
no current flows in the center....it depends on the above variables.
At lower frequencies, a certain proportion of the current distribution
may occupy the center if the conductor is thin enough.

2641. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 03:46:00 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <964930a9-d8a2-4db1-b366-53d12a2af3cd@e53g2000hsa.googlegroups.com>
Source record: 21915

On Sep 17, 10:07 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Wed, 17 Sep 2008 06:43:22 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >Frankly my present knoweledge is very limited.
>
> Then learn. Antenna design and modeling is not easy. Just
> understanding Maxwell's Equations is enough to keep you busy for a few
> months. Antenna modeling (I suggest using 4NEC2) will keep you busy
> for another few months. Trying to reconcile theory, models, and
> reality will burn a few more months. However, when you're done, you
> will understand something about antennas and how they work.
> <http://home.ict.nl/~arivoors/>
>
> Personally, I judge people by their willingness and ability to learn.
> That's what distinguished modern technological humans from a inanimate
> rock.
>
> >I had a heart attack, 5 bypasses plus a loss in memory.
>
> In 2002, I just barely missed having a heart attack. I nearly passed
> out during the treadmill test. I celebrated the event with a triple
> bypass, which effectively rolled back my biological clock about 10
> years. Best thing I ever did. No memory loss except from the
> anaesthetics used during surgery. Incidentally, I'm now 60.8 years
> old. Kinda sounds like you also had a stroke. You're lucky to be
> alive. My father had a stroke in 1986 and did not do very well
> afterwards.
>
> >So that I could
> >continue to live I chose radiation as a niche
> >study for recovery.
>
> Fine, but I question the methods you call "study". It's considered
> good form to gather your evidence first, and then supply your
> conclusions, not the reverse order.
>
> >Of course I will never recover fully.
>
> Neither will I. I'm still collecting medical problems. Man was meant
> to live for about 25 years. Anything beyond that is a free ride.
>
> >So basically
> >I have tunnel vision built around the niche of radiation and antennas

> >where I went back to first principles and started with Newton
> >This process has lasted for several years, very slow progress but I
> >have got to a point that my thoughts on antennas and radiation is so
> >different from the books that I have to go back to the beginning with
> >respect tp Newton and re evaluate with my peers.
>
> Radio and antennas are built of physics. However, it's not Newtonian
> physics, but electrodynamics as in Maxwell's Equations. Have you
> studied those? They're quite different from Newton's equations, which
> a sometimes called "classical mechanics". (Note: It's not easy. Just
> decoding the notation is a major challenge).
> <http://en.wikipedia.org/wiki/Maxwell's_equations>
>
> >Yes I am seen as an
> >idiot, very understandable but I am persistent in talking and
> >discussing the initial point in radiation .
>
> You make an attempt at understanding. An idiot doesn't even try.
>
> >From Newtons laws I deduce
> >that current flow on a fractional wavelength antenna includes current
> >flow thru the centre of a radiator.
>
> Which of Newton's laws? What equations or thought experiment resulted
> in this deduction? How do you reconcile your conclusion with the
> common assumption that RF current flows on the outside of a conductor?
>
> >I am going right back to my new
> >beginnings but the books do not say that!
>
> For good reason. You're wrong and your unspecified books are correct.
>
> >So I can't participate in
> >the many diversions from the niche I have taken and thus ask for a
> >similar focus from others.
>
> Yes you can. You can take it one step at a time. No need to jump
> directly from Newton to skin effect. Just walk me through your logic.
>
> >No sympathy or crying desired as I am
> >comfortable and living a good life but even with tunnel vision I am
> >determined to continue and participate in the route I have chosen as
> >there is no alternative.
>
> By contrast, I'm willing to throw out everything I have learned and
> presume to be correct, if any of it can be proven or demonstrated
> wrong. I hold absolutely nothing (except my bank balance) as sacred,
> and consider everything subject to suspicion and debate. If you are
> permanently attached to your pet theory, you effectively refuse to
> accept input or criticism. Therefore, you have stopped learning and

> are starting to resemble the previously mentioned inanimate rock.
>
> For example, did you know that the direction one counts causes the
> final count to vary? A simple example is counting the number of
> fingers on both hands. Start from one end counting 1,2,3,4,5,6... and
> ending in 10, which appears to be the correct count. Yet counting
> fingers downward results in 10, 9, 8, 7, 6, plus 5 more makes 11.
> Surprise, you have 11 fingers. Like I said, nothing is sacred.
>
> >Sooooo after more than a thousand posts based on the initial radiator
> >and equilibrium I have been unable to make one step forward in a re
> >evaluation of my journey. But I will never give up so you will have to
> >live with that. All of this is old hat to most of the posters who give
> >me hell and sometimes I respond in kind to new posters in a like
> >manner which is wrong but it happens. So to sum up I am a simple man
> >with tunnel vision in a single subject and no where as knoweledgable
> >as other posters outside my field of choice.
>
> Suit yourself. As you make your bed, so shall you sleep in it.
> Repetition of incorrect gibberish only works in politics, not in
> science and technology.
>
> >My very best regards
> >Art Unwin KB9MZ....xg
>
> Good luck. Let me know when you produce some logic, equations, or
> numbers.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

It has been placedon this newsgroup a couple of times or more over the
years and I will try to find
it. If I can't then I will write it up again the best way I can which
all have difficulty with.
I thank you very very much for your most genourous offer and Frank if
you want a copy we can do that to
Regards
Art

2642. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 05:04:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9976c900-5713-4ea8-99f3-6e5743b7cbb6@r66g2000hsg.googlegroups.com>
Source record: 21916

On Sep 17, 10:40 pm, dfi...@nc.rr.com wrote:
> On Sep 17, 6:16 pm, "Frank" <frank...@nospam.telus.net> wrote:
>
>
>
> > >In direct terms I have stated that current flows down the
> > >center
> > >of a radiator if it is of a fractional wave length. A very simple
> > >statement which nobody wishes to address. Fine by me, the thread would
> > >then have a single posting and the multitude can generate questions
> > >and discussion about deep space or other topics of choice.
>
> > Severns, QEX, Nov/Dec 2000, pp 20-29 does address the issue.
> > On page 22: "At some points within the wire, the instantaneous current is
> > actually flowing backwards (minus signs) due to the self-induced
> > eddy currents that are the underlying phenomena responsible for skin
> > effect."
> > These results were verified with Ansoft's "Maxwell" FEM software.
> > An excellent treatment of the math can be found
at:http://www.g3ynh.info/zdocs/comps/zint.html
>
> > Frank
>
> What is the frequency of the currents flowing backwards? If the same
> as forward current (which it would be), then that and a few other
> attributes such as conductor size, resistivity and mu, I can give you
> skin depth by simple subtraction of the forward/reverse current
> vectors. However, it will not necessarily indicate indicate that some/
> no current flows in the center....it depends on the above variables.
> At lower frequencies, a certain proportion of the current distribution
> may occupy the center if the conductor is thin enough.

No Im not going that direction. Visulise a salvage yard that use
magnetic
fields on a conveyor which produces a collision of magnetic fields
which
levitates artucles made of aluminum such that it falls in a selected
container
the ejection being created by the foucault or eddy current.
Now look at that same conveyor belt as a antenna or radiator upon
which particles are at rest.I easily can visualise
the same action as a replica of a antenna with particles at rest since
Gaussian law of statics when extended equals maxwells law
Thus equilibrium and the presence of particles I take as a given. Also

by viewing the Gaussian field one can determine that a radiator
can be any size shape or elevation as long as the arrangement in
equilibrium. This points away from planar designs as well as the final
arrangement must not posses external lumped loads as maxwell provides
no place for them. In a way I am working backwards that render the
eddy force as the weak force
of the four forces of the standard model. Placing a verticle antenna
in a computor program without leaning it to a planar design and the
resulting radiator
shows the angle and magnitude of the "weak" force according to
Maxwells laws upon which the program is founded. This weak force is
thus appearing as the pitch of a helix antenna which confirmes the
reasoning against straight planar antennas. As far as how the static
particle obtained its own magnetic field I assume that exposure to the
earths magnetic field left a residue of thst immersion which is the
other field on the conveyor belt. Since the ejection of the partical
must be of a straight line projection the combination of the two
magnetic fields will provide that spin and where the reaction to the
ejection creates a vivration on the radiator as with the human ear
bone with the reverse acting on the receiving antenna. The particle
chose diamagnetic material to rest upon because as an free electron it
will not be absorbed in the matrix of other materials. Now that is in
laymans language based upon the salvage actions in use today as well
as non destructive material measurements which appear to be a
duplicate of the antenna function. Yes it is a woven dialogue but it
does duplicate functions in use that are not theoretical and for me
matches perfectly. I don't see how I can explain my thoughts any
better to avoid
the implication that it is all blabber since to me it explaind
radiation in detail where it does not appear as a mystery.
unfortunately hams will not follow in detail my reasoningas emotion
rules their responses and where they then introduce other areas of
science that was not present in the initial reasoning
and thus make me an easy mark for derision. So stick with my reasoning
and break it apart piece by piece scientifically to show my resoning
produces
an impossibility. I might add that nobody accepts that the addition of
a radiator and a time varying field produces a dynamic field which
mathematically
reflects Maxwells laws which if they are correct tears my reasoning
apart . I know it is very hard to follow and leaving many places to
laugh at.
I also placed a helix antenna in euilibrium and without external
lumped loads which produces a pattern of gun shot form whigch again I
expected with a gain of around 10dbi. Go figure
Art

2643. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 06:08:43 UTC
From: JB <nospam@goofball.net>
Message-ID: <LfmAk.461$8v5.379@trnddc01>
Source record: 21917

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:907ac485-15ba-4070-bd92-57006bf4e611@z72g2000hsb.googlegroups.com...
On Sep 17, 2:26 pm, "JB" <nos...@goofball.net> wrote:
> OK So nobody wants to talk about equilibrium or current flow on a
> radiator.
> Thats fine by me. Took a lot of posts to get to that point. JB I
> apologize
> I have been nailed to the cross so many times I tend to bundle things
> together.
> When I started I zeroed on equilibrium as a start because existing
> laws state that if a charge is moving on the outside of a radiator
> then there is movement on the inside of a radiator Now that is not in
> the books. Why is that? However discussion went away from the intent
> of the thread. equilibrium with respect to radiation. O well another
> try later
> Regards
> Art
>
> Consider that there is little difference in the performance of a solid
> radiator and hollow radiator.
>
> There are things about Electromagnetic Radiation that aren't discussed by
> Newton. Study classical antenna theory, then you will be on common ground
> with others that study antennas. The danger of concentrating on your own
> line of study so much is that you wind up out on a limb. I see this often
> when dealing with different terminology spawned of different paradigms,
> where similar circuits are redrawn and renamed by different engineering
> teams. This is nowhere more evident in Psychology and Philosophy, where
> insight springs from the conclusions derived from the limited experiences
of
> an isolated group or individual. It is like the blind men describing an
> elephant when they have only one part in front of them. They each call the
> elephant something else based on their singular experience and arrive at
> logical conclusions that are false. The fact that we only have one
lifetime
> to devote to all the pieces is indeed a limitation.

Could well be but I have no alternative and am going my own way. Why
should this disturb others?
They could easily show me the error of my ways instead of taking up
the cause against change
We all know Newtons Laws (some interprete in different ways) So we
have a radiator upon which a charge rests
there for ethere is no need for a opposing vector inside the radiator.

Then we have a radiator that is not in equilibrium and thus we have a vector
which according to the laws of Newton or equilibrium or what ever requires a responding vector inside the conductor. Inside the conductor there is no magnetic field nor the Foucalt current thus it is not radiating just spending copper losses. Put the apparatus in a vacuum and the current will take a less resistive route by producing an arc at the ends AWAY from the radiator. To me that sounds as perfect logic but there is no book that states it or the presence of the Foucalt current. That is not to say there are not a lot of explanations all of which are different so I go back to first principles and people get angry at the idea of change. Now the tide on this post has turned around on Cecil. Let me warn you that Cecil has outlasted this group several times to the tune of threads extending more than a thousand more than a few times over the last 20 years. One person who harasses him tries a lot of tactics on him including pointing out that his only difference he has with a dog is lipstickl but only the newbies respond to him unnowingly. Cecil will out last them all.
Art Back to the mowing

--Well Art, there are some people out there that tend to boasting and jump on any opportunity.

No, there is no arcing at the end of the elements. The ends of a center fed dipole are a high impedance so there is high voltage there but as long as there are clean decent insulators there should be no trouble with that. With VERY HIGH power, ionization may take place and there will be a glow off the ends. The cubical Quad antenna was developed to combat that problem. It utilizes a full wave loop fed directly. Look also to the folded dipole. Find out though that the current in the loop is the same in that there will be a high voltage node at the points 1/4 wave away from the feedpoint even though the wire goes continuously around and back. Certainly if you touched it there, you would fry yourself by being a path to ground just as you would with a classic dipole.

These things are known and proven, unlike the quantum physics tangent the thread went off on. It is possible that Quantum Physics is all true. But it is really just a construct to explain certain realities that aren't fully explained with other theories. This should tell you that there is a better explanation out there but we don't have all the pieces. It is certainly an avenue of research. It could just as well be something else entirely where all the questions are answered even better. Quantum physics isn't needed to build antennas. Good luck in your studies. There is a lot of misunderstanding about antennas. And you might have confusion about parts that the writer considered evident. Concepts that I have found burdensome, I tend to place into a box for later, more in-depth study and chose not to trust them or myself with hard conclusions, especially if practical experience won't support them.

2644. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 11:50:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <VfrAk.630$x%.86@nlpi070.nbdc.sbc.com>
Source record: 21918

John Smith wrote:
> ... "they" do travel MUCH slower than the speed of light ...

When traveling through a medium other than a vacuum
they do travel MUCH slower than the speed of light
in a vacuum but they travel at exactly the speed
of light *in the medium*, i.e. the photons don't
know that they have slowed down. :-)
--
73, Cecil http://www.w5dxp.com

2645. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 11:57:07 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <lmrAk.430$hc1.137@flpi150.ffdc.sbc.com>
Source record: 21919

Art Unwin wrote:
> If I drew a vacuum on a bottle on earth and then let the
> black hole apply its forces upon the innards of the bottle
> would it extract any thing more than the operation on earth?

An interesting question. Assuming a perfect vacuum
and the entire bottle outside of the event horizon
of the stationary black hole, would the black hole
ever eat the bottle? I suspect the black hole would
collapse space inside the bottle on its way to eating
the bottle.
--
73, Cecil http://www.w5dxp.com

2646. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:07:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <RvrAk.431$hc1.106@flpi150.ffdc.sbc.com>
Source record: 21920

dfinn1@nc.rr.com wrote:
> Please show me the reference that proves empty is not nothing and I
> will prove by definition of the word empty that empty is not
> something. This is true even in the 21st centruy.

If you chose to use colloquial English, you have to
live (or die) by fuzzy unscientific definitions. The
definition for "empty" that I have been using here is
"absolute nothing", i.e. no space and not even the
structure of space is there. I defined my use of the
word "empty" days ago. It is the same as a *literal*
interpretation of the definition from Websters's:

"empty - 1. containing nothing", i.e. literally

"empty - containing absolutely nothing including space"
--
73, Cecil http://www.w5dxp.com

2647. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:16:54 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <UErAk.633$x%.578@nlpi070.nbdc.sbc.com>
Source record: 21921

dfinn1@nc.rr.com wrote:
> What about Cerenkov radiation?

Up until now, I haven't said anything about particles
other than photons - but what about neutrinos which
cannot catch photons in free space but overtake and
pass photons when they hit the water? Or, unlike
most photons, usually pass through the entire earth
without hitting anything.
--
73, Cecil http://www.w5dxp.com

2648. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:25:51 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hNrAk.636$x%.12@nlpi070.nbdc.sbc.com>
Source record: 21922

Tom Ring wrote:
> So you are saying that the quantum foam would disappear because of the
> black hole? Ever hear of Hawking Radiation? Bet Cecil and I agree on this one.

I'm sure we agree *in the long run* that the black
hole would eventually dissipate. In the short term,
I would guess that the black hole would eat the bottle.

I wonder if our universe is nothing more than Hawking
Radiation?
--
73, Cecil http://www.w5dxp.com

2649. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:27:16 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <xaOdnd3Q8qCq1E_VnZ2dnUVZ_g2dnZ2d@pghconnect.com>
Source record: 21923

> I am asking you: What if the sun put out nothing except
> EM waves. Would comets still have a tail or not?
> --
> 73, Cecil http://www.w5dxp.com

Are you talking about the ion tail or the dust tail? The dust tail is affected by EM; but the ion tail is affected only by magnetic forces.

http://www.ifa.hawaii.edu/~jewitt/tail.html

2650. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:35:09 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <%VrAk.639$x%.625@nlpi070.nbdc.sbc.com>
Source record: 21924

Jeff Liebermann wrote:
> Is there a standard notation or style for arithmetic and
> exponentiation for usenet posting? I've been switching around using
> different styles almost at random over the years.

For exponents (HTML superscripts) some browsers convert

c^2 to c² HTML.

That's the convention I use for exponents.
--
73, Cecil http://www.w5dxp.com

2651. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:42:55 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <U_rAk.480$eb4.110@flpi147.ffdc.sbc.com>
Source record: 21925

Jeff Liebermann wrote:
> Try again...would you believe light as 38 miles per hour?

38 miles per hour is the speed of light in that medium
but not in a vacuum.

> Quiz: How fast do the electrons flow in a copper conductor?
> Hint: It's not the speed of light.

Of course not, compared to photons, electrons are massive,
capable of absorbing photons with ease.
--
73, Cecil http://www.w5dxp.com

2652. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:48:24 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d24dc3$0$90351$8046368a@newsreader.iphouse.net>
Source record: 21926

Art Unwin wrote:
> On Sep 17, 8:52 pm, Tom Ring <news0...@taring.org> wrote:
>> Art Unwin wrote:
>>> I know books say a lot of things but do they explain WHY current
>>> cannot flow thru the center?
>> <snip>
>>> Art
>> If you do the differential equations, it doesn't say why the center
>> can't so much as why the skin does. Similar to gravitation and water
>> flowing downhill vs uphill. I'll go into detail if you can't figure it
>> out. Or not.
>>
>> tom
>> K0TAR
>
> Please do. I would love to see your take on it. I am gratified that
> somebody is tackling the problem
> hopefully in laymans language so all can benefit. Possibly you could
> start another thread as this one is greatly contaminated
> I can then respond on my take of the matter and hopefully the flaw
> will be exposed.
> Regards
> Art

I did not mean to imply I would explain the diff eqs. That would currently be a lost cause on you, because I am sure that I couldn't put it in "layman's terms" - you need the math to understand it. I meant that I would explain why the 2 situations were similar, or not explain, depending upon my mood.

To understand the situation, I would suggest that you start down the calculus road. The internet has to have tutorials on it. Differential equations look terribly obtuse, but they are an obtainable destination down that road if you choose to follow it.

tom
K0TAR

2653. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:49:04 UTC
From: Dave <dave@dave.dave>
Message-ID: <48d24e40$0$29081$bd467cd0@news.dslextreme.com>
Source record: 21927

Cecil Moore wrote:
> Jeff Liebermann wrote:
>> Is there a standard notation or style for arithmetic and
>> exponentiation for usenet posting? I've been switching around using
>> different styles almost at random over the years.
>
> For exponents (HTML superscripts) some browsers convert
>
> c^2 to c² HTML.
>
> That's the convention I use for exponents.

Why don't you two get a room? This bullshit has nothing to do with ham radio. However, maybe if we ionized your hot air we could bounce some 70 cm off the cloud.

2654. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:51:07 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <qtydncSeE4FM00_VnZ2dnUVZ_vednZ2d@pghconnect.com>
Source record: 21928

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:KhdAk.552$be.301@nlpi061.nbdc.sbc.com...
> Jim Kelley wrote:
>> Cecil Moore wrote:
>>> Rectifier wrote:
>>>> When travelling at the speed of light, it exhibits wave properties.
>
>>> When traveling at the speed of light, it exhibits particle
>>> properties.
>>
>> When does light travel at a speed other than the speed of light?
>
> From another of my postings: "If I remember correctly,
> a photon cannot travel slower than the speed of light."
>
> The first nine words in my first statement above are
> not mine but were copied verbatim from Rectifier's posting
> (except for the misspelled word). If there was an implication
> that light can travel at less than the speed of light, it
> didn't come from me.
> --
> 73, Cecil http://www.w5dxp.com

The word was not misspelled. According to dictionary.com, which quotes the American Heritage Dictionary, "traveling" and "travelling" are both accepted ways of spelling the word.

Also, I never meant to assert that light can travel at less than the speed of light. I took modern physics in college and understand the concepts of relativity, although it's been 20 years; so I may get some terminology wrong or not be able to explain it as well as I could before. However, discussions like these are interesting and stimulate thought and a desire to go back and review the subject.

2655. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:54:35 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Q9sAk.483$eb4.388@flpi147.ffdc.sbc.com>
Source record: 21929

Rectifier wrote:
>> I am asking you: What if the sun put out nothing except
>> EM waves. Would comets still have a tail or not?
>
> Are you talking about the ion tail or the dust tail? The dust tail is
> affected by EM; but the ion tail is affected only by magnetic forces.

So a large part of the visible tail of the comet would
still point away from the sun even if the sun emitted
nothing but EM waves. EM waves possess momentum, apply
radiation pressure to dust particles (matter), and have
relativistic mass.
--
73, Cecil http://www.w5dxp.com

2656. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 12:57:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ScsAk.485$eb4.483@flpi147.ffdc.sbc.com>
Source record: 21930

Cecil Moore wrote:
> For exponents (HTML superscripts) some browsers convert
>
> c^2 to c² HTML.

:-) That was c ^ 2 without the spaces. :-)
--
73, Cecil http://www.w5dxp.com

2657. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 13:03:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <%hsAk.486$eb4.1@flpi147.ffdc.sbc.com>
Source record: 21932

Dave wrote:
> This bullshit has nothing to do with ham radio.

Exponents used in such terms as P = I^2R have
nothing to do with ham radio?

That's a really sad statement about the present
technical level of amateur radio.
--
73, Cecil http://www.w5dxp.com

2658. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 13:03:27 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <DNqdnV0PaewszE_VnZ2dnUVZ_rrinZ2d@pghconnect.com>
Source record: 21931

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:Q9sAk.483$eb4.388@flpi147.ffdc.sbc.com...
> Rectifier wrote:
>>> I am asking you: What if the sun put out nothing except
>>> EM waves. Would comets still have a tail or not?
>>
>> Are you talking about the ion tail or the dust tail? The dust tail is
>> affected by EM; but the ion tail is affected only by magnetic forces.
>
> So a large part of the visible tail of the comet would
> still point away from the sun even if the sun emitted
> nothing but EM waves. EM waves possess momentum, apply
> radiation pressure to dust particles (matter), and have
> relativistic mass.
> --
> 73, Cecil http://www.w5dxp.com

That is correct.

2659. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 13:08:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <CpsAk.642$x%.516@nlpi070.nbdc.sbc.com>
Source record: 21933

Rectifier wrote:
> The word was not misspelled. According to dictionary.com, which quotes
> the American Heritage Dictionary, "traveling" and "travelling" are both
> accepted ways of spelling the word.

Sorry, Thunderbird said it was misspelled. Guess I
should add "travelling" to Thunderbird's dictionary.
--
73, Cecil http://www.w5dxp.com

2660. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 13:18:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gatkeglq1@news.albasani.net>
Source record: 21934

JB wrote:
>> ... It doesn't help me with antenna performance. Go
> there without me.
>

I can see the "spirit" you said that in, however, that statement could not be further from the truth ... "it" (or "those" theories and "ponderings"--space-structure/ether) is the whole reason why a signal gets from point a to point b ...

We cannot know if there are possibly better ways to manipulate this/these mediums, or if it is possible to design antennas "better" to manipulate "it", until we know what "it" is ... barring "dumb luck" and someone just "stumbles" onto some antenna which shows some improvement, somehow.

But yes; build something from present-day data/technology, it looks as if all this is going to take a bit before we know.

Regards,
JS

2661. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 13:29:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hJsAk.643$x%.361@nlpi070.nbdc.sbc.com>
Source record: 21935

John Smith wrote:
> ... if all this is going to take a bit before we know.

How about a repeater that utilizes entangled photons?
--
73, Cecil http://www.w5dxp.com

2662. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 13:33:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gatlc1$1av$1@news.albasani.net>
Source record: 21936

Rectifier wrote:
> ... so I may get some
> terminology wrong or not be able to explain it as well as I could
> before. However, discussions like these are interesting and stimulate
> thought and a desire to go back and review the subject.

Yes, that is the important thing. I don't mind my spelling corrected,
and I may mention the misspelling of another ... however, you have it right.

To error is human ...

Regards,
JS

2663. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 13:59:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gatmse$397$1@news.albasani.net>
Source record: 21937

Tom Ring wrote:

> ...
> To understand the situation, I would suggest that you start down the
> calculus road. The internet has to have tutorials on it. Differential
> equations look terribly obtuse, but they are an obtainable destination
> down that road if you choose to follow it.
>
> tom
> K0TAR

My take on that is a bit different ... on "AMATEUR Radio" that is.

In building antennas, tank ciruits, etc., I very seldom whip out a programmable scientific calculator and delve into the depths of the maths which allow them to preform/function/"work."

A few times, I have just grabbed up some tubing/wire a variable condenser or two, and "eyeballed" the construction--past experience provided "ballpark" figures/placements/wiring, testing, trimming and adjusting got me the final result ...

Mainly, I point this out so as not to "obsfucate" that layman, or discourage him ... the men who first started/awakened my interest in such things never gave any indication, to me, they had an understanding of calculus, only basic-math/algebra, and of course, geometry!

Indeed, at least one passed away without ever expressing any real interest in learning it!

However, in Arts pursuits, an understanding would be a real advantage ...

Regards,
JS

2664. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 14:02:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gatn2h$397$2@news.albasani.net>
Source record: 21938

Cecil Moore wrote:
> John Smith wrote:
>> ... if all this is going to take a bit before we know.
>
> How about a repeater that utilizes entangled photons?

Cecil:

If I had not seen direct cases of where truth is stranger than fiction
... I'd laugh. ;-)

Krist, who knows? Someone could be building one in their garage right
now! :-P

Regards,
JS

2665. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 16:12:02 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <fuu4d4dpgqq3le97kcg0qs2vj30ss96u6p@4ax.com>
Source record: 21939

On Thu, 18 Sep 2008 07:42:55 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>Jeff Liebermann wrote:
>> Try again...would you believe light as 38 miles per hour?
>
>38 miles per hour is the speed of light in that medium
>but not in a vacuum.

You're still using vacuum tubes? Most of my equipment runs in a
medium, not in a vacuum.

>> Quiz: How fast do the electrons flow in a copper conductor?
>> Hint: It's not the speed of light.
>
>Of course not, compared to photons, electrons are massive,
>capable of absorbing photons with ease.

Well, to split hairs, electrons don't emit or absorb photons. The
energy or momentum from or to a photon is absorbed or emitted and
photons are either destroyed or created in the interaction in descrete
quanta levels. However, unless I heat my copper wire to
incandescence, it's is not going to emit or absorb any photons. I
just wanted to point out that the speed of propagation through a
medium is not the same as the speed of the particles involved in
conduction.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2666. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 16:21:33 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <sev4d45fi7ga0pbhscqdgpm1m9nsnpvor1@4ax.com>
Source record: 21940

On Thu, 18 Sep 2008 12:49:04 +0000, Dave <dave@dave.dave> wrote:

>Cecil Moore wrote:
>> Jeff Liebermann wrote:
>>> Is there a standard notation or style for arithmetic and
>>> exponentiation for usenet posting? I've been switching around using
>>> different styles almost at random over the years.
>>
>> For exponents (HTML superscripts) some browsers convert
>>
>> c^2 to c² HTML.
>>
>> That's the convention I use for exponents.
>
>Why don't you two get a room? This bullshit has nothing to do with ham
>radio. However, maybe if we ionized your hot air we could bounce some
>70 cm off the cloud.

I've always suspected that some hams hated math and other technical subjects. While it is conceivable that you could build a ham antenna without using math, I don't think the results would be optimal. There are also those that advocate converting ham radio from a technical hobby, to a sport, where the technical aspects are diminished to the point of extinction, and the operational exercises of contesting, DX, CW, and rag chewing are predominant. No math required. Perhaps the FCC could balkanize the ham bands into technical and non-technical sub-bands, where the clueless and those that still design, calculate, and build their own equipment can be seperated for their own safety.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2667. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 16:26:18 UTC
From: JB <nospam@goofball.net>
Message-ID: <KivAk.387$MN3.96@nwrddc01.gnilink.net>
Source record: 21941

> >>> I know books say a lot of things but do they explain WHY current
> >>> cannot flow thru the center?
> >> <snip>
> >>> Art
> >> If you do the differential equations, it doesn't say why the center
> >> can't so much as why the skin does. Similar to gravitation and water
> >> flowing downhill vs uphill.

My understanding was about molecular alignment and that the flow of electrons would be there first. Notice that stranded wire is often preferred for it's current handling ability even though solid is easier to terminate to and doesn't have the problem of discontinuities due to corrosion on many surfaces that rub together.

This doesn't mean that eddy currents aren't there in hollow elements. Solid or stranded or hollow tubing, the eddy currents contribute to loss but don't contribute to radiation.

Ejection of particles should lead to deterioration of the metal but if you were to coat the elements (with non-conductive and non-reactive coating) there would be no deterioration. It would also prevent rain static.

I don't burden myself with paradigms to explain electromagnetic wave propagation in free space. It and Gravity do very well without my explanation. We know that the AC current in the antenna induces an electromagnetic wave is sufficient for my purpose. Unless I can find funding for renewed efforts... (wink nudge)

2668. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 16:31:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <dnvAk.442$hc1.176@flpi150.ffdc.sbc.com>
Source record: 21942

Jeff Liebermann wrote:
> Well, to split hairs, electrons don't emit or absorb photons.

I was just quoting "QED", by Richard Feynman:

"-Action #1: A photon goes from place to place."
"-Action #2: An electron goes from place to place."
"-Action #3: An electron emits or absorbs a photon."

I'm sorry that Feynman was not precise enough for you. :-)
--
73, Cecil http://www.w5dxp.com

2669. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 16:34:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hqvAk.443$hc1.411@flpi150.ffdc.sbc.com>
Source record: 21943

Jeff Liebermann wrote:
> Perhaps the
> FCC could balkanize the ham bands into technical and non-technical
> sub-bands, where the clueless and those that still design, calculate,
> and build their own equipment can be seperated for their own safety.

10-4 Gud Buddy! Didn't that already happen back in
the 60's when they took 11m away from hams?
--
73, Cecil http://www.w5dxp.com

2670. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 16:52:00 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <635c694c-9a6d-4381-871b-8d743adc7faf@p25g2000hsf.googlegroups.com>
Source record: 21944

On Sep 18, 1:08 am, "JB" <nos...@goofball.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:907ac485-15ba-4070-bd92-57006bf4e611@z72g2000hsb.googlegroups.com...
> On Sep 17, 2:26 pm, "JB" <nos...@goofball.net> wrote:
>
>
>
> > OK So nobody wants to talk about equilibrium or current flow on a
> > radiator.
> > Thats fine by me. Took a lot of posts to get to that point. JB I
> > apologize
> > I have been nailed to the cross so many times I tend to bundle things
> > together.
> > When I started I zeroed on equilibrium as a start because existing
> > laws state that if a charge is moving on the outside of a radiator
> > then there is movement on the inside of a radiator Now that is not in
> > the books. Why is that? However discussion went away from the intent
> > of the thread. equilibrium with respect to radiation. O well another
> > try later
> > Regards
> > Art
>
> > Consider that there is little difference in the performance of a solid
> > radiator and hollow radiator.
>
> > There are things about Electromagnetic Radiation that aren't discussed by
> > Newton. Study classical antenna theory, then you will be on common ground
> > with others that study antennas. The danger of concentrating on your own
> > line of study so much is that you wind up out on a limb. I see this often
> > when dealing with different terminology spawned of different paradigms,
> > where similar circuits are redrawn and renamed by different engineering
> > teams. This is nowhere more evident in Psychology and Philosophy, where
> > insight springs from the conclusions derived from the limited experiences
> of
> > an isolated group or individual. It is like the blind men describing an
> > elephant when they have only one part in front of them. They each call the
> > elephant something else based on their singular experience and arrive at
> > logical conclusions that are false. The fact that we only have one
> lifetime
> > to devote to all the pieces is indeed a limitation.
>
> Could well be but I have no alternative and am going my own way. Why
> should this disturb others?

> They could easily show me the error of my ways instead of taking up
> the cause against change
> We all know Newtons Laws (some interprete in different ways) So we
> have a radiator upon which a charge rests
> there for ethere is no need for a opposing vector inside the radiator.
> Then we have a radiator that is not in equilibrium and thus we have a
> vector
> which according to the laws of Newton or equilibrium or what ever
> requires a responding vector inside the conductor. Inside the
> conductor there is no magnetic field nor the Foucalt current thus it
> is not radiating just spending copper losses. Put the apparatus in a
> vacuum and the current will take a less resistive route by producing
> an arc at the ends AWAY from the radiator. To me that sounds as
> perfect logic but there is no book that states it or the presence of
> the Foucalt current. That is not to say there are not a lot of
> explanations all of which are different so I go back to first
> principles and people get angry at the idea of change. Now the tide on
> this post has turned around on Cecil. Let me warn you that Cecil has
> outlasted this group several times to the tune of threads extending
> more than a thousand more than a few times over the last 20 years. One
> person who harasses him tries a lot of tactics on him including
> pointing out that his only difference he has with a dog is lipstickl
> but only the newbies respond to him unnowingly. Cecil will out last
> them all.
> Art   Back to the mowing
>
> --Well Art, there are some people out there that tend to boasting and jump
> on any opportunity.
>
> No, there is no arcing at the end of the elements. The ends of a center fed
> dipole are a high impedance so there is high voltage there but as long as
> there are clean decent insulators there should be no trouble with that. With
> VERY HIGH power, ionization may take place and there will be a glow off the
> ends. The cubical Quad antenna was developed to combat that problem. It
> utilizes a full wave loop fed directly. Look also to the folded dipole.
> Find out though that the current in the loop is the same in that there will
> be a high voltage node at the points 1/4 wave away from the feedpoint even
> though the wire goes continuously around and back. Certainly if you touched
> it there, you would fry yourself by being a path to ground just as you would
> with a classic dipole.
>
> These things are known and proven, unlike the quantum physics tangent the
> thread went off on. It is possible that Quantum Physics is all true. But it
> is really just a construct to explain certain realities that aren't fully
> explained with other theories. This should tell you that there is a better
> explanation out there but we don't have all the pieces. It is certainly an
> avenue of research.   It could just as well be something else entirely
> where all the questions are answered even better. Quantum physics isn't
> needed to build antennas. Good luck in your studies. There is a lot of
> misunderstanding about antennas. And you might have confusion about parts

> that the writer considered evident. Concepts that I have found burdensome, I
> tend to place into a box for later, more in-depth study and chose not to
> trust them or myself with hard conclusions, especially if practical
> experience won't support them.

Well I disagree with you Quito was using a radiator that was not in a
state of equilibriun ie a half wave
format. As I have said earlier without equilibrium shows the charge in
movement which requires a complimentary movement
With the higher altitude Quito provided an alternative to placing the
vector inside the conductor and the circuit took a different route.
This was solved by using a full wave circuit in equilibrium that
removed the arcing choice by suppling a continous route on the outside
of the radiator.
If the quad was divided into two bent dipoles it would still arc at
the extremities because of the lower external pressure.
Really this is a good example of the necessity of equilibrium in
vector form where for equilibrium the circuit must be long enough or
multiples there of to provide the allowance of repeatability of
current flow ie. equal to the PERIOD length of the time varient
frequency . I stated multiples because it reflects the movement of a
pendulum where the occillation calcullation(formular) is the same as
the oscillation applied to a radiator when in resonance.
Thus the logic has evolved back to the starting point ala the
arbitrary border used by Gauss.
I slept to 11 oc this morning but it was not because of you I did to
much mowing and there is still some left. If I just used the tractor I
would surely die
Best regards
Art

2671. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 17:08:32 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ah05d4h0u6p5jc8rrol3s21mkkci1dsuht@4ax.com>
Source record: 21945

On Thu, 18 Sep 2008 06:59:35 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>In building antennas, tank ciruits, etc., I very seldom whip out a
>programmable scientific calculator and delve into the depths of the
>maths which allow them to preform/function/"work."

And what do you do when they don't work? Cut-n-try is a rather
expensive way to build something that works. Given infinite time and
materials, it will eventually result in a functional antenna. You
could probably do that at HF frequencies where construction errors are
about equal to calculation errors. However, don't try it at microwave
frequencies. While it's possible to cut-n-try various microwave
structures, it's messy, difficult, prone to error, and not very
effective. The techniques used to build a coat hanger ground plane at
VHF just are not going to work at X-band.

The only way to get it close to right the first time is to calculate
first, calculate again, have someone check the calculations, drink
some wine, and check your calcs again. Then build it.

>A few times, I have just grabbed up some tubing/wire a variable
>condenser or two, and "eyeballed" the construction--past experience
>provided "ballpark" figures/placements/wiring, testing, trimming and
>adjusting got me the final result ...

Yep. That will work at HF because the lower frequencies allow for
much larger construction errors. Your antenna lengths could be off
many cm and still work. Your xmitter can also tolerate a substantial
VSWR and still be considered functional and useful. You match box
could be grossly inefficient trying to match your constructed antenna,
and work well enough. Now, try that at microwave frequencies, where
every milliwatt is precious, where VSWR is too crude and reflection
coefficient comes close to describing the ultimate goal of a perfect
match, and where cm errors are disastrous. Some broadband antennas
(helix and horn) are very forgiving and can be build fairly crudely.
Others (stripline, phased arrays, cavity backed antennas, etc) have a
higher Q and require more accuracy than the eyeball can provide.

>Mainly, I point this out so as not to "obsfucate" that layman, or
>discourage him ... the men who first started/awakened my interest in
>such things never gave any indication, to me, they had an understanding
>of calculus, only basic-math/algebra, and of course, geometry!

Same here. My original mentors were operators first and technical
types last. However, I saw the light (and the distinction) between

amateur and professional when I went to college and saw that radio things were easier and better if they were calculated (and understood) first. I have several humorous examples of hams operating in a professional environment (engineering lab at a radio manufactory) and failing miserably using cut-n-try methods popularized by ham radio.

>Indeed, at least one passed away without ever expressing any real
>interest in learning it!

There are suspicions that math may hasten one's demise. Perhaps he tried to do a calculation before he died?

>However, in Arts pursuits, an understanding would be a real advantage ...

Agreed. Once he gets that understanding, he can work on the communications problem. Perhaps publish his works. After solving all that, he can possibly consider the applications and implementations. The twisted road towards technical nirvana is littered with the wreckage of failed great ideas.

Incidentally, I was also going to bash your suggestion of ignoring patents. Might as well add that to my rant.

Patent are confusing. Many of them are totally bogus. It's difficult to recognize the difference. However, at the bottom of every garbage dumpster lies a diamond. You have to sift through a huge amount of garbage in order to find the gem, but it's worth it. Just because a typical patent search returns bogus patents, doesn't mean you should ignore them. Most technical patents are legitimate and worth inspecting. If you want to know exactly how something works, the patents are the place to start. I haven't had time to look at the quantum comb filter antenna thing, but plan to do so eventually.

During the dot.com heyday, I was doing sanity checks and technological assessments for a venture capitalist. Many business plans had technical problems. Some were based on bogus patents. Some held conflicting patents. Identifying these was more than the VC's staff could handle. I did fairly well, but still managed to miss a few. Anyway, sifting through patents was part of the exercise and a great learning experience. Often, a patent looks legitimate, but has a fatal flaw or omission in the middle of the claims. It's not easy. If you have the patience, it's possible to find these.

Also, I assembled a small list of tech patents that appear to be bogus. I was going to post the list on the web but my attorney advised against it. Even holders of bogus patents can sue for damages. Oh well.

--
Jeff Liebermann jeffl@cruzio.com
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Skype: JeffLiebermann AE6KS 831-336-2558

2672. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 17:40:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <vu25d45gflct60cr6ahjnvjvoqe54pp3po@4ax.com>
Source record: 21946

On Thu, 18 Sep 2008 11:34:23 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>Jeff Liebermann wrote:
>> Perhaps the
>> FCC could balkanize the ham bands into technical and non-technical
>> sub-bands, where the clueless and those that still design, calculate,
>> and build their own equipment can be seperated for their own safety.
>
>10-4 Gud Buddy! Didn't that already happen back in
>the 60's when they took 11m away from hams?

Yep. Also the bottom of the 1296MHz band went to GPS because hams
couldn't do anything useful with it. Also most of the 220MHz band
went to ACSSB and inland waterways because it was under-utilized and
because the ARRL couldn't get it together on no-code licensing. We
almost lost the 2.4GHz band because the ARRL was going to demand
priority over unlicensed wi-fi operation, but that was averted when
the ARRL directors received a rare dose of common sense from unknown
sources.

Unfortunately, the common justification these days is that ham radio
is a service hobby. When was the last time that ham radio advanced
the state of the art? I have some examples, but they're sufficiently
obscure that none would be sufficient to justify ham radios continued
existence. There is some logic in using the ham bands as a proving
ground for new technologies. Metricom did exactly that, but rapidly
switched to commerical operation. It seems that such advanced
experimentation is discouraged by Part 97. Most of the progress today
is in HF digital modes. These have their own sub-bands by convention.
Also QRP operation, spacecom, CW, and weak signal sub-bands. Various
nets also operate on specific frequencies. It wouldn't be much of a
stretch to unofficially allocate a sub-band to the technically
challenged, such as the old Novice class sub-bands.

Personally, I've suggested that CB'ers and Free Banders be issued
complimentary ham licenses for 10 meters and let them fight it out.
I'll be betting that the CB'ers win. Most of the "new hams" these
days are former CB'ers. With a few notable exceptions, most are quite
nice, but also technically lacking.

--
Jeff Liebermann jeffl@cruzio.com
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Skype: JeffLiebermann AE6KS 831-336-2558

2673. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 17:50:32 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1b50d5be-5163-4487-b39c-6a099092fda6@k7g2000hsd.googlegroups.com>
Source record: 21947

On Sep 18, 7:48 am, Tom Ring <news0...@taring.org> wrote:
> Art Unwin wrote:
> > On Sep 17, 8:52 pm, Tom Ring <news0...@taring.org> wrote:
> >> Art Unwin wrote:
> >>> I know books say a lot of things but do they explain WHY current
> >>> cannot flow thru the center?
> >> <snip>
> >>> Art
> >> If you do the differential equations, it doesn't say why the center
> >> can't so much as why the skin does. Similar to gravitation and water
> >> flowing downhill vs uphill. I'll go into detail if you can't figure it
> >> out. Or not.
>
> >> tom
> >> K0TAR
>
> > Please do. I would love to see your take on it. I am gratified that
> > somebody is tackling the problem
> > hopefully in laymans language so all can benefit. Possibly you could
> > start another thread as this one is greatly contaminated
> > I can then respond on my take of the matter and hopefully the flaw
> > will be exposed.
> > Regards
> > Art
>
> I did not mean to imply I would explain the diff eqs. That would
> currently be a lost cause on you, because I am sure that I couldn't put
> it in "layman's terms" - you need the math to understand it. I meant
> that I would explain why the 2 situations were similar, or not explain,
> depending upon my mood.
>
> To understand the situation, I would suggest that you start down the
> calculus road. The internet has to have tutorials on it. Differential
> equations look terribly obtuse, but they are an obtainable destination
> down that road if you choose to follow it.
>
> tom
> K0TAR

Tom but I have put in terms of the layman so that should be paradise
to those skilled in mathematicWhen the good Doctor
frm MIT provided the mathemartic showing the correctness of logic I
proposed with respect to Gauss and Maxwellk
mathematics as a route of viability was rejected by all. That really

needs exposure to the group as it is the foundation of radiation.
The computor is a wonderful thing but if an arrow is pointed in the
wrong direction it then becmes useless.
Nearly finished the mowing
Art

2674. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 17:58:09 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <iu45d4l9vudnbtuvon8clua4rjpgfkaqog@4ax.com>
Source record: 21948

On Thu, 18 Sep 2008 16:26:18 GMT, "JB" <nospam@goofball.net> wrote:

>We know that the AC current in the antenna induces an
>electromagnetic wave is sufficient for my purpose. Unless I can find
>funding for renewed efforts... (wink nudge)

Funding is easy these days. All you need is an anti-terrorism or
disaster link. For example:
- Use of HF antennas for airport security.
- Antenna design optimized for disaster services.
- Survivable antenna design and construction.
While these topics are contrived, there has been considerable
rethinking of the basics in order to enhance survivability, tampering,
security, terrorist activities, general mayhem, and other post-911
buzzwords. I'm not sure this extends to basic concepts, but it's
possible. Something like:
- Re-evaluating E-M concepts in a post 911 world.
- Survey of antenna technology for optimum disaster communications.

You will need to use your imagination because all the obvious studies
have already been taken. Perhaps combining everything into:
- The effects of global warming, terrorism, economic collapse, and
natural disasters on antenna technology.
Try to emphasize the positive aspects such as the improved HF antenna
grounding provided by rising sea levels.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2675. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 18:09:57 UTC
From: JB <nospam@goofball.net>
Message-ID: <VPwAk.389$MN3.86@nwrddc01.gnilink.net>
Source record: 21949

>
> Yep. Also the bottom of the 1296MHz band went to GPS because hams
> couldn't do anything useful with it. Also most of the 220MHz band
> went to ACSSB and inland waterways because it was under-utilized and
> because the ARRL couldn't get it together on no-code licensing. We
> almost lost the 2.4GHz band because the ARRL was going to demand
> priority over unlicensed wi-fi operation, but that was averted when
> the ARRL directors received a rare dose of common sense from unknown
> sources.

Yer crocked! 1296 is fully utilized here and so was 220. People like YOU
who underutilized it and TOLD everyone it was underutilized are to blame for
US losing it!! Did you get a Ham license just so you could use 802.11/g on
channel 13?

> Personally, I've suggested that CB'ers and Free Banders be issued
> complimentary ham licenses for 10 meters and let them fight it out.
> I'll be betting that the CB'ers win. Most of the "new hams" these
> days are former CB'ers. With a few notable exceptions, most are quite
> nice, but also technically lacking.

Bendict Arnold! Anarchist!! Anti-Ham!! Your web domain says it all!!
> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

2676. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 18:56:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a02874c9-c21b-4638-9249-190d630cf930@w1g2000prk.googlegroups.com>
Source record: 21950

On Sep 18, 12:58 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Thu, 18 Sep 2008 16:26:18 GMT, "JB" <nos...@goofball.net> wrote:
> >We know that the AC current in the antenna induces an
> >electromagnetic wave is sufficient for my purpose. Unless I can find
> >funding for renewed efforts... (wink nudge)
>
> Funding is easy these days. All you need is an anti-terrorism or
> disaster link. For example:
> - Use of HF antennas for airport security.
> - Antenna design optimized for disaster services.
> - Survivable antenna design and construction.
> While these topics are contrived, there has been considerable
> rethinking of the basics in order to enhance survivability, tampering,
> security, terrorist activities, general mayhem, and other post-911
> buzzwords. I'm not sure this extends to basic concepts, but it's
> possible. Something like:
> - Re-evaluating E-M concepts in a post 911 world.
> - Survey of antenna technology for optimum disaster communications.
>
> You will need to use your imagination because all the obvious studies
> have already been taken. Perhaps combining everything into:
> - The effects of global warming, terrorism, economic collapse, and
>   natural disasters on antenna technology.
> Try to emphasize the positive aspects such as the improved HF antenna
> grounding provided by rising sea levels.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

Jeff you are a man after my own heart in your phillosophy . If I had
you
exposure of mathematics to replace what I have lost I would instantly
do what the good doctor did
and show the correllation of Maxwells laws to those of Gaussian static
laws when made dynamic
ie the addition of a radiator and a time varying field inside the
existing arbitrary boundary.
What the doctor showed has been totally rejected by this group without
I might had evidence to the contrary
Just....well....because. This is a throw back to the initiation of
mathematics where the Universe is founded on Equilibrium.

A pendulum when made long enough becomes sensative to changes in equilibrium in a similar way to the action of a super conductor Mathematics started with a balance exhib iting the ultimate of equilibrium and the mathematician invented "nothing" by placing both weights on one side
of a fulcrum. The long pendulum shows that sdame point when an eclipse occurrs where the equilibrium is momentarily disturbed as its boundaries are momentarily severed. Now we are pushing those same limits with superconductivity where laws such as V =IR become unmathomabble.
It is the same with antennas where all can realize that equilibrium tho fragile with respect to the term stable will provide maximum radiation but without resistance it is an imaginary term. Quadratics shows two terms show up where one is imaginary ala zero resistance so one moves to the other answer
anti resonance which is high knowing at the same time one can extend the length of the wire(number of periods) to produce the sensitivity of the extra
long pendulum which in mathematics follows the same laws. I use that same thinking because it is part of a universal laws. Thus I extend the length of wire used and at the same time balance the winding directions such that lumped loads are added such that the impedance and thus resonance goes down
as the number of wavelength goes up. Now I apply that same arrangement to antenna programs that have free reign to modify the arrangement according to the laws of Maxell based on equilibrium and the final version of the four forces plus the particles ala the standard model. The computor program which is designed around the standard model which was modified to suit the present planar antenna of today is overjoyed for being used for its initial use confirmes the arrangement produces above. As a check the same arrangement is supplied to a nec4 set up controlled by a academic and it againl passed the check.
Equilibrium cannot be discarded and all of the masters stipulate that as the founding condition, yet the present world has rejected it in favour of a computor
Shame Shame Shame. Now I finish off the mowing
Art Unwin ...KB9MZ.....xg
Art Unwin KB9MZ....xg

2677. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 19:14:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gau9au$pv8$1@news.albasani.net>
Source record: 21851

Jeff Liebermann wrote:

>
> And what do you do when they don't work? Cut-n-try is a rather
> expensive way to build something that works. Given infinite time and
> materials, it will eventually result in a functional antenna. You
> could probably do that at HF frequencies where construction errors are
> about equal to calculation errors. However, don't try it at microwave
> frequencies. While it's possible to cut-n-try various microwave
> structures, it's messy, difficult, prone to error, and not very
> effective. The techniques used to build a coat hanger ground plane at
> VHF just are not going to work at X-band.
>

Well, ya', an adjustable whip(s) is good, especially with the cost of
copper and the pain in "resoldering your prunings." LOL

> The only way to get it close to right the first time is to calculate
> first, calculate again, have someone check the calculations, drink
> some wine, and check your calcs again. Then build it.
>

You have wine? Why didn't you say so, that changes everything:

1) Put antennas away.

2) Have a glass of wine and contemplate the design/construction.

3) Repeat 2) until ALL wine is gone.

4) Take a nap.

5) Now get the antenna(s) back out and begin work ... LOL

>> A few times, I have just grabbed up some tubing/wire a variable
>> condenser or two, and "eyeballed" the construction--past experience
>> provided "ballpark" figures/placements/wiring, testing, trimming and
>> adjusting got me the final result ...
>
> Yep. That will work at HF because the lower frequencies allow for
> much larger construction errors. Your antenna lengths could be off
> many cm and still work. Your xmitter can also tolerate a substantial
> VSWR and still be considered functional and useful. You match box
> could be grossly inefficient trying to match your constructed antenna,
> and work well enough. Now, try that at microwave frequencies, where
> every milliwatt is precious, where VSWR is too crude and reflection
> coefficient comes close to describing the ultimate goal of a perfect

> match, and where cm errors are disastrous. Some broadband antennas
> (helix and horn) are very forgiving and can be build fairly crudely.
> Others (stripline, phased arrays, cavity backed antennas, etc) have a
> higher Q and require more accuracy than the eyeball can provide.
>

Or, to summarize, the more complex the antenna, the more meters you are
going to need ... LOL

>> Mainly, I point this out so as not to "obsfucate" that layman, or
>> discourage him ... the men who first started/awakened my interest in
>> such things never gave any indication, to me, they had an understanding
>> of calculus, only basic-math/algebra, and of course, geometry!
>
> Same here. My original mentors were operators first and technical
> types last. However, I saw the light (and the distinction) between
> amateur and professional when I went to college and saw that radio
> things were easier and better if they were calculated (and understood)
> first. I have several humorous examples of hams operating in a
> professional environment (engineering lab at a radio manufactory) and
> failing miserably using cut-n-try methods popularized by ham radio.
>

Indeed, mine drank beer too! <grin>

>> Indeed, at least one passed away without ever expressing any real
>> interest in learning it!
>
> There are suspicions that math may hasten one's demise. Perhaps he
> tried to do a calculation before he died?
>

If away from my laptop, the programmable calculator is always in my
pocket! (I mean, my gawd man, I have space invaders on it!) <straight-face>

>> ...

> Also, I assembled a small list of tech patents that appear to be
> bogus. I was going to post the list on the web but my attorney
> advised against it. Even holders of bogus patents can sue for
> damages. Oh well.
>

... some patents are NOT what they used to be ... but then, there has
always been some suspicion about the politics involved, not to mention
courts ...

Regards,
JS

2678. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 19:25:33 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gauaperpr1@news.service.uci.edu>
Source record: 21852

Art Unwin wrote:

> For instance, equilibrium demands that charges do not move laterally
> along an antenna when in equilibrium
> Without equilibrium charges do move along the surface of a radiator
> and Newtons law of parity demands
> that charges are moving thru the CENTER of the radiator thus
> encoundering just copper losses.

Hi Art,

Which one was Newton's Law of Parity again? I'm drawing a blank.

Google had this:

Your search - "Newton's law of parity" - did not match any documents.

73, ac6xg

2679. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 19:47:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <57e332db-e657-4b6f-b112-8012376bd3df@a18g2000pra.googlegroups.com>
Source record: 21853

On Sep 18, 2:14 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Jeff Liebermann wrote:
>
> > And what do you do when they don't work? Cut-n-try is a rather
> > expensive way to build something that works. Given infinite time and
> > materials, it will eventually result in a functional antenna. You
> > could probably do that at HF frequencies where construction errors are
> > about equal to calculation errors. However, don't try it at microwave
> > frequencies. While it's possible to cut-n-try various microwave
> > structures, it's messy, difficult, prone to error, and not very
> > effective. The techniques used to build a coat hanger ground plane at
> > VHF just are not going to work at X-band.
>
> Well, ya', an adjustable whip(s) is good, especially with the cost of
> copper and the pain in "resoldering your prunings." LOL
>
> > The only way to get it close to right the first time is to calculate
> > first, calculate again, have someone check the calculations, drink
> > some wine, and check your calcs again. Then build it.
>
> You have wine? Why didn't you say so, that changes everything:
>
> 1) Put antennas away.
>
> 2) Have a glass of wine and contemplate the design/construction.
>
> 3) Repeat 2) until ALL wine is gone.
>
> 4) Take a nap.
>
> 5) Now get the antenna(s) back out and begin work ... LOL
>
>
>
> >> A few times, I have just grabbed up some tubing/wire a variable
> >> condenser or two, and "eyeballed" the construction--past experience
> >> provided "ballpark" figures/placements/wiring, testing, trimming and
> >> adjusting got me the final result ...
>
> > Yep. That will work at HF because the lower frequencies allow for
> > much larger construction errors. Your antenna lengths could be off
> > many cm and still work. Your xmitter can also tolerate a substantial
> > VSWR and still be considered functional and useful. You match box
> > could be grossly inefficient trying to match your constructed antenna,

> > and work well enough. Now, try that at microwave frequencies, where
> > every milliwatt is precious, where VSWR is too crude and reflection
> > coefficient comes close to describing the ultimate goal of a perfect
> > match, and where cm errors are disastrous. Some broadband antennas
> > (helix and horn) are very forgiving and can be build fairly crudely.
> > Others (stripline, phased arrays, cavity backed antennas, etc) have a
> > higher Q and require more accuracy than the eyeball can provide.
>
> Or, to summarize, the more complex the antenna, the more meters you are
> going to need ... LOL
>
> >> Mainly, I point this out so as not to "obsfucate" that layman, or
> >> discourage him ... the men who first started/awakened my interest in
> >> such things never gave any indication, to me, they had an understanding
> >> of calculus, only basic-math/algebra, and of course, geometry!
>
> > Same here. My original mentors were operators first and technical
> > types last. However, I saw the light (and the distinction) between
> > amateur and professional when I went to college and saw that radio
> > things were easier and better if they were calculated (and understood)
> > first. I have several humorous examples of hams operating in a
> > professional environment (engineering lab at a radio manufactory) and
> > failing miserably using cut-n-try methods popularized by ham radio.
>
> Indeed, mine drank beer too! <grin>
>
> >> Indeed, at least one passed away without ever expressing any real
> >> interest in learning it!
>
> > There are suspicions that math may hasten one's demise. Perhaps he
> > tried to do a calculation before he died?
>
> If away from my laptop, the programmable calculator is always in my
> pocket! (I mean, my gawd man, I have space invaders on it!) <straight-face>
>
> >> ...
>
> > Also, I assembled a small list of tech patents that appear to be
> > bogus. I was going to post the list on the web but my attorney
> > advised against it. Even holders of bogus patents can sue for
> > damages. Oh well.
>
> ... some patents are NOT what they used to be ... but then, there has
> always been some suspicion about the politics involved, not to mention
> courts ...
>
> Regards,
> JS

JS
Mathematics is founded on the proposition of zero means nothing ONLY
if you ignore the presence of the weak force.
Thus mathematic has contaminated that which is the "equal" sign which
then is misused without the assumption of the underlying condition
You can cancell the effects of gravity but it is a lot different to
canceling the weak force.
Put scales on a bench to oppose gravity does nothing to neutralise the
weak force
Thus in mathematics you can obtain negative answers which is the
measure of the weak force which is contradictory
to the "term" nothing in celestial terms but possibly is O.K. in
polotics
The CERN project is based on the collision of particles of the same
polarity but without the constraints of sideways movement
but the electron is much smaller than the area taken by an electron so
to my mind there is no collision only contra or lamina
flow UNLESs the particles are of different polarities which some
theorise as equating to the big bang.!
Art
Have fun
Art

2680. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 19:47:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaub98$s4m$1@news.albasani.net>
Source record: 21854

Jeff Liebermann wrote:
[stuff]

Forgot to mention, on those "real complex antennas", you are going to
need more wine too! ;-)

Just one more of those laws that Murphy forgot to mention.

Regards,
JS

2681. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 19:55:59 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <52758ac9-782c-4403-8964-e1509e0f9fb9@r15g2000prd.googlegroups.com>
Source record: 21855

On Sep 18, 2:25 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Art Unwin wrote:
> > For instance, equilibrium demands that charges do not move laterally
> > along an antenna when in equilibrium
> > Without equilibrium charges do move along the surface of a radiator
> > and Newtons law of parity demands
> > that charges are moving thru the CENTER of the radiator thus
> > encoundering just copper losses.
>
> Hi Art,
>
> Which one was Newton's Law of Parity again? I'm drawing a blank.
>
> Google had this:
>
> Your search - "Newton's law of parity" - did not match any documents.
>
> 73, ac6xg

I have been accused often in the using of the wrong term
In the case of Newtons law as action creates reaction or similar.
Then somebody mentioned the law of parity which I considered as being
on par with what Newton said
Now another poster mentioned that parity described a farming practice
which also featured the pursuit of balance and parity
with respect to prices. Thus when the term parity was used I thought
that was a regrinding of the english language which I am now exposed
to.
I now remove the association of parity in the Laws as stated by Newton
who lived in the UK and not in the USA.
Best regards
Art Unwin KB9MZ.......xg

2682. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 20:11:20 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <97805717-08e8-4f04-b6db-7379c885868c@s9g2000prg.googlegroups.com>
Source record: 21856

On Sep 18, 2:47 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Jeff Liebermann wrote:
>
> [stuff]
>
> Forgot to mention, on those "real complex antennas", you are going to
> need more wine too! ;-)
>
> Just one more of those laws that Murphy forgot to mention.
>
> Regards,
> JS

JS You know the saying that when one door closes another opens.
In my case starvation of oxogen to the brain was momentary such that
only the lines of communication
withered. Thus nothing was left to provide communication between the
different store houses of knowledge.
Due to experience the lines of communication of most people reflect
the motorways of New youk where the accumulation of intersections
allow misdirection of communication or the memory of where one was
originally going! Over a period of years where I concentrated on
antennas
as a method of rehab those missing communication lines were re
generated in reflection of my new experience as one would measure the
power of the growth of a babies brain. Thus my concentration on a
niche form of study is not impaired by the traffic jams of the past
which are now just decaying wreckage. Maybe the same is happening with
Hawkings. Ofcouse that leaves an opening for Dave that the decay
extended to the store houses of knowledge! My goodness isn't this
thread getting deep?
Best regards
Art

2683. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 20:15:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gauctttsl1@news.albasani.net>
Source record: 21857

Art Unwin wrote:

> ...
> JS You know the saying that when one door closes another opens.
> In my case starvation of oxogen to the brain was momentary such that
> only the lines of communication
> withered. Thus nothing was left to provide communication between the
> different store houses of knowledge.
> Due to experience the lines of communication of most people reflect
> the motorways of New youk where the accumulation of intersections
> allow misdirection of communication or the memory of where one was
> originally going! Over a period of years where I concentrated on
> antennas
> as a method of rehab those missing communication lines were re
> generated in reflection of my new experience as one would measure the
> power of the growth of a babies brain. Thus my concentration on a
> niche form of study is not impaired by the traffic jams of the past
> which are now just decaying wreckage. Maybe the same is happening with
> Hawkings. Ofcouse that leaves an opening for Dave that the decay
> extended to the store houses of knowledge! My goodness isn't this
> thread getting deep?
> Best regards
> Art

Yes Art, it is getting deep ...
<sound-of-hip-waders-being-pulled-on> ;-)

Regards,
JS

2684. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 21:11:54 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <jhg5d4hrobhi90o5qlra9baqgfsoqgi0m6@4ax.com>
Source record: 21858

On Thu, 18 Sep 2008 12:55:59 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I now remove the association of parity in the Laws as stated by Newton
>who lived in the UK and not in the USA.

Yep. Newton's Laws of Motion are different on this side of the pond.

1. A particle will stay at rest or continue at a constant velocity
unless acted upon by revisionist politics, traffic laws, zoning
restrictions, local ordinances, or erroneous navigation information.

2. The net force on anything is equal to size of the politically
motivated masses multiplied by the sum total their campaign
contributions.

3. Every action has an equally reactionary opposition.

--
Jeff Liebermann jeffl@cruzio.com
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2685. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 21:28:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <05436cb5-5321-4d0e-8b2c-f84f5d7a8191@m45g2000hsb.googlegroups.com>
Source record: 21859

On Sep 18, 12:58 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Thu, 18 Sep 2008 16:26:18 GMT, "JB" <nos...@goofball.net> wrote:
> >We know that the AC current in the antenna induces an
> >electromagnetic wave is sufficient for my purpose. Unless I can find
> >funding for renewed efforts... (wink nudge)
>
> Funding is easy these days. All you need is an anti-terrorism or
> disaster link. For example:
> - Use of HF antennas for airport security.
> - Antenna design optimized for disaster services.
> - Survivable antenna design and construction.
> While these topics are contrived, there has been considerable
> rethinking of the basics in order to enhance survivability, tampering,
> security, terrorist activities, general mayhem, and other post-911
> buzzwords. I'm not sure this extends to basic concepts, but it's
> possible. Something like:
> - Re-evaluating E-M concepts in a post 911 world.
> - Survey of antenna technology for optimum disaster communications.
>
> You will need to use your imagination because all the obvious studies
> have already been taken. Perhaps combining everything into:
> - The effects of global warming, terrorism, economic collapse, and
>   natural disasters on antenna technology.
> Try to emphasize the positive aspects such as the improved HF antenna
> grounding provided by rising sea levels.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

Jeff if you have everything placed before you your enthuseasm will
wain.
There is nothing wrong in exactly following in MY footsteps you have
your own
bag of choices by not being a follower which enables you to challenge
each step of logic.
Fortunately in my case it was the foundation on which I built that was
the subject of
challengr despite evidence opresented to the contrary The foundation
upon which everything rest
is that the supposition of making Gaussian law of statics equal to the
dynamic field of Maxwell only requires the addition of a radiator

and a time varying field such that both are equal in physical and mathematical form, from which point the details offered provide all the relavent points of logic.
This group mainly of electrical engineers have been brought up on the idea that statics are totally divorced from the mechanics of the electrical curriculum
to the rejection of particle mechanics and towards the idea that sciences all have diifferent laws to each other. Scientists understand this but authors
have not got to the stage of placing those findings in books which are initially provided by followers of science in the hope that some will carry the flag forward instead of concentration on the accumulation of wealth. If they can't read it in a book then it is not believable the same way as a scientific paper will not be accepted that do not
prevail on previous thoughts. Initial thought is thus rejected by the education of today. Academia will never accept anything
that is not received approval from their peers.
Thus without dragging them forcibly into the acception of change no change will occur., where as, your expertise in mathematics can test the logic to its limits which defy opposition
Best regards
Art Unwin KB9MZ.....xg

2686. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 21:35:38 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <i1h5d493ubec0qdvchja0ebmobn6590n92@4ax.com>
Source record: 21860

On Thu, 18 Sep 2008 18:09:57 GMT, "JB" <nospam@goofball.net> wrote:

>> Yep. Also the bottom of the 1296MHz band went to GPS because hams
>> couldn't do anything useful with it. Also most of the 220MHz band
>> went to ACSSB and inland waterways because it was under-utilized and
>> because the ARRL couldn't get it together on no-code licensing. We
>> almost lost the 2.4GHz band because the ARRL was going to demand
>> priority over unlicensed wi-fi operation, but that was averted when
>> the ARRL directors received a rare dose of common sense from unknown
>> sources.

>Yer crocked! 1296 is fully utilized here and so was 220. People like YOU
>who underutilized it and TOLD everyone it was underutilized are to blame for
>US losing it!! Did you get a Ham license just so you could use 802.11/g on
>channel 13?

Been licensed since about 1964. There was about a 7 year period where
I let my license lapse. Hmmm... I should probably let it lapse again
as I was profitable, happy, and optimistic during those 7 years.

About 8 ago, I setup several scanners and a computah to run long term
statistics on channel utiliziation for a variety of services. For
fun, I threw in some local VHF and UHF repeaters. For 14 daytime
hours (I used 6am to 8pm) median utilization on public safety
frequencies ran about 20%. Somewhat less for various shared
commerical repeaters. However, of the 5 or so ham repeaters I
monitored, utilization was well below 1% (less than 1.5hrs per day). I
didn't bother to do any 1.2GHz repeaters, but I'll guess from one that
I have in my scanner, it's probably even lower. I had no way to count
users per channel per day, but if I did it manually, I suspect ham
radio would also be scraping bottom. Many ham repeaters have only one
user.

For what it's worth, I consider myself party responsible for educating
at least one ARRL director on the realities of the FCC balancing the
300 million wi-fi users against perhaps a handfull of hams on 2.4GHz.

I don't use Channel 13 for Wi-Fi. It's an unlucky number (and not
legal in the US).

>> Personally, I've suggested that CB'ers and Free Banders be issued
>> complimentary ham licenses for 10 meters and let them fight it out.
>> I'll be betting that the CB'ers win. Most of the "new hams" these
>> days are former CB'ers. With a few notable exceptions, most are quite
>> nice, but also technically lacking.
>

>Bendict Arnold! Anarchist!! Anti-Ham!! Your web domain says it all!!

Guilty as charged. If I can't be a part of the solution, I'll become part of the problem.

Incidentally, the LearnByDestroying.com has nothing to do with ham radio. A college I attended has the motto "Learn by Doing". <http://en.wikipedia.org/wiki/California_Polytechnic_State_University> That morphed into "Learn By Destroying" which seemed to be the practice in the engineering department. Since graduating with a rather substantial damage fee, I have adopted it as my personal motto. If you haven't destroyed and later repaired it, you don't understand how it works.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2687. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 21:51:13 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <aei5d4hbjpofs1gvunmnmpponr5fe43bdi@4ax.com>
Source record: 21861

On Thu, 18 Sep 2008 12:14:31 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Well, ya', an adjustable whip(s) is good, especially with the cost of
>copper and the pain in "resoldering your prunings." LOL

Incidentally, one of the tricks I learned (the hard way) was to
replace the mobile whip antenna with a piece of copper electrical
wire. Then cut it to length, tune, optimize, test and whatever. Once
the optimum length is established, replace the copper wire antenna
with the real stainless whip, cut to the exact same length.

>You have wine? Why didn't you say so, that changes everything:

The antenna transfer function of wine is highly exponential and very
non-linear. A little wine will produce a superior antenna. However,
incremental increases in wine dosage will tend to have lesser effects.
At some threshold, additional can cause a substantial drop in
performance. It may even go negative. Think equilibrium.

>Or, to summarize, the more complex the antenna, the more meters you are
>going to need ... LOL

Kinda reminds me of a former tech. All day, he would spend his time
working with the latest state of the art test equipment in the lab.
After hours, he would drag out his ham radio, and tune the xmitter to
maximum using a light bulb dummy load. Attempts to convince him that
the company test equipment might be useful for dealing with his radios
were futile.

>If away from my laptop, the programmable calculator is always in my
>pocket! (I mean, my gawd man, I have space invaders on it!) <straight-face>

That doesn't leave much room for the pocket protector. I collect HP
calculators. There are numerous calculators scattered around the
office and house. No need to drag a calculator around.

>... some patents are NOT what they used to be ... but then, there has
>always been some suspicion about the politics involved, not to mention
>courts ...

There's plenty wrong with patents that I don't wanna get into. Suffice
to say that it's very helpful to understand something about patents
before trying to create one. I'm just suggesting that you make the
effort to read patents.

Groan. I decide to stay home today to recover from my home cooking.
Outside, PG&E (the power company) and the local tree service just

arrived. There goes my power...

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2688. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 21:58:40 UTC
From: Dave <noone@nowhere.com>
Message-ID: <kaAAk.392$Yw1.179@trnddc03>
Source record: 21862

"joe" <none@home.now> wrote in message news:gas28e$54f$1@aioe.org...
> Many antennas are built using tubing for light weight. So, if there is a
> current flowing in the middle, it is good that the ends of the tubes are
> crimped, or plugged. I wouldn't want the flowing electrons spilling out
> onto my lawn.

thats why they put those plastic plugs on elements, to keep the magical mystery dielectric particles from falling off instead of going back up the middle... if you ever lose the plastic caps you will notice the antenna starts leaking and the particles pileup in your yard making a real mess.

2689. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 22:04:25 UTC
From: Dave <noone@nowhere.com>
Message-ID: <JfAAk.393$Yw1.236@trnddc03>
Source record: 21863

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:e6f3d45dkp2i1omgtvlf63tb2rgufbob52@4ax.com...

> Good luck. Let me know when you produce some logic, equations, or
> numbers.

don't hold your breath, he hasn't produced anything logical and definitely
no equations for anything he has said.

2690. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 23:12:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <d1o5d41gp61oldi9pkjhbc7sauut9kpe8o@4ax.com>
Source record: 21864

On Thu, 18 Sep 2008 22:04:25 GMT, "Dave" <noone@nowhere.com> wrote:

>"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
>news:e6f3d45dkp2i1omgtvlf63tb2rgufbob52@4ax.com...
>
>> Good luck. Let me know when you produce some logic, equations, or
>> numbers.
>
>don't hold your breath, he hasn't produced anything logical and definitely
>no equations for anything he has said.

Not a problem. Neither have I.

--
Jeff Liebermann jeffl@cruzio.com
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2691. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 23:30:13 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3b75ce6c-a4ab-4e5f-88ee-7cb93e08d3e1@i76g2000hsf.googlegroups.com>
Source record: 21865

On Sep 18, 4:51 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Thu, 18 Sep 2008 12:14:31 -0700, John Smith
>
> <assemblywiz...@gmail.com> wrote:
> >Well, ya', an adjustable whip(s) is good, especially with the cost of
> >copper and the pain in "resoldering your prunings." LOL
>
> Incidentally, one of the tricks I learned (the hard way) was to
> replace the mobile whip antenna with a piece of copper electrical
> wire. Then cut it to length, tune, optimize, test and whatever. Once
> the optimum length is established, replace the copper wire antenna
> with the real stainless whip, cut to the exact same length.
>
> >You have wine? Why didn't you say so, that changes everything:
>
> The antenna transfer function of wine is highly exponential and very
> non-linear. A little wine will produce a superior antenna. However,
> incremental increases in wine dosage will tend to have lesser effects.
> At some threshold, additional can cause a substantial drop in
> performance. It may even go negative. Think equilibrium.
>
> >Or, to summarize, the more complex the antenna, the more meters you are
> >going to need ... LOL
>
> Kinda reminds me of a former tech. All day, he would spend his time
> working with the latest state of the art test equipment in the lab.
> After hours, he would drag out his ham radio, and tune the xmitter to
> maximum using a light bulb dummy load. Attempts to convince him that
> the company test equipment might be useful for dealing with his radios
> were futile.
>
> >If away from my laptop, the programmable calculator is always in my
> >pocket! (I mean, my gawd man, I have space invaders on it!) <straight-face>
>
> That doesn't leave much room for the pocket protector. I collect HP
> calculators. There are numerous calculators scattered around the
> office and house. No need to drag a calculator around.
>
> >... some patents are NOT what they used to be ... but then, there has
> >always been some suspicion about the politics involved, not to mention
> >courts ...
>
> There's plenty wrong with patents that I don't wanna get into. Suffice
> to say that it's very helpful to understand something about patents

> before trying to create one. I'm just suggesting that you make the
> effort to read patents.
>
> Groan. I decide to stay home today to recover from my home cooking.
> Outside, PG&E (the power company) and the local tree service just
> arrived. There goes my power...
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

Jeff we all make mistakes by over estimating ones ability
In making one of my antennas I made a last minuit change just in time
before I finished the antenna
It was some weeks before that antenna was tested on the air in
Australia
That test proved that reprocity with respect to radiation is not a
given!.
I had neutralised the weak force such that particles could arrive but
not depart!
Yes it was an error on my part but it didn't rule out the value of
experimentationj.
Has anybody got a use for such an antenna?. This error in many ways
provided
proof that the trail I followed was coirrect. This is why I have
delayed the sending of a antenna to AC6XG
as the correction took over some of my free time. But Jim understands
what happened not necessarily why.
as he does have trust and an open mind as well as my respect.
When I supplied an antenna to the U of I I gave them a sample of the
same antenna in Australia
because of their treatment towards me and comments made in advance of
getting the antenna.
Thus I gave them exactly what they expected to get based on pre
examine comments similar to those of this group
He who laughs last laughs longer and forever. Something like getting a
bunch of wire with lip stick all over it
Best regards
Art Unwin....KB9MZ.......xg

2692. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 23:35:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7bf6d360-12f3-4f91-aa33-6ba1b8b89551@t54g2000hsg.googlegroups.com>
Source record: 21866

On Sep 18, 4:58 pm, "Dave" <no...@nowhere.com> wrote:
> "joe" <n...@home.now> wrote in messagenews:gas28e$54f$1@aioe.org...
> > Many antennas are built using tubing for light weight. So, if there is a
> > current flowing in the middle, it is good that the ends of the tubes are
> > crimped, or plugged. I wouldn't want the flowing electrons spilling out
> > onto my lawn.
>
> thats why they put those plastic plugs on elements, to keep the magical
> mystery dielectric particles from falling off instead of going back up the
> middle... if you ever lose the plastic caps you will notice the antenna
> starts leaking and the particles pileup in your yard making a real mess.

If the inside is covered with an eddy current field the particle
cannot get to the aluminum
which debunks the idea that the electron can penetrate evreything.
Forgeting the fact that it is searching for a
diamagnetic surface to rest upon. The same situyation is repeated
inside a wave guide.
Do you think I could put "Doc' with my name to impress people?
Art Unwin...KB9MZ

2693. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 23:38:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gauoqa$m9o$1@news.albasani.net>
Source record: 21867

Dave wrote:

> ...
> don't hold your breath, he hasn't produced anything logical and definitely
> no equations for anything he has said.

Now let me analyze this and see ...

1) He is dealing with matters/effects/theories/speculations which
universities/physicists/scholars/mathematician/theorists/amateurs/etc.
are working/speculating/experimenting on.

2) Usually actions/effects/affects/phenomenon are observed before it
even occurs to anyone to design an equation or formula about it.

3) Some speculations will, obviously, be incorrect or partially correct
and need rethinking, or scraped and new ones advanced.

4) Etc., etc.

Nope, you are quite correct ... he hasn't. However, to some, the
reason(s) will be quite obvious; for others, it may take a bit longer ...

Regards,
JS

2694. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 23:44:52 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c9a0ab68-fff9-4c7a-b59c-8828b45904eb@b1g2000hsg.googlegroups.com>
Source record: 21868

On Sep 18, 5:04 pm, "Dave" <no...@nowhere.com> wrote:
> "Jeff Liebermann" <je...@cruzio.com> wrote in message
>
> news:e6f3d45dkp2i1omgtvlf63tb2rgufbob52@4ax.com...
>
> > Good luck. Let me know when you produce some logic, equations, or
> > numbers.
>
> don't hold your breath, he hasn't produced anything logical and definitely
> no equations for anything he has said.

Oh David emotion has got such a hold on you that you can't think
straight.
In one of the management classes I took they said if an employee can
not be calmed
always protect the path to exit. Medics say that anger or emotion can
shut down the route
to the house of logic in the human brain such that logic cannot come
into being.
Seams like the human brain is subdivided into physical block of
knoweledge
This explains why a baby learnes to walk quicker than a grown man with
experience
and tangled information routes.. You need a 2 by 4 to shake things up
Think about that Dave
Still your friend
Art

2695. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 23:47:43 UTC
From: dfinn1@nc.rr.com
Message-ID: <cef88cca-7610-432a-bcc3-1fbd20d4350e@59g2000hsb.googlegroups.com>
Source record: 21870

On Sep 18, 8:07 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > Please show me the reference that proves empty is not nothing and I
> > will prove by definition of the word empty that empty is not
> > something. This is true even in the 21st centruy.
>
> If you chose to use colloquial English, you have to
> live (or die) by fuzzy unscientific definitions. The
> definition for "empty" that I have been using here is
> "absolute nothing", i.e. no space and not even the
> structure of space is there. I defined my use of the
> word "empty" days ago. It is the same as a *literal*
> interpretation of the definition from Websters's:
>
> "empty - 1. containing nothing", i.e. literally
>
> "empty - containing absolutely nothing including space"
> --
> 73, Cecil http://www.w5dxp.com

From Collaborative International Dictionary of English v.0.48 :

1. Containing nothing; not holding or having anything within;
void of contents or appropriate contents; not filled; --
said of an inclosure, or a container, as a box, room,
house, etc.; as, an empty chest, room, purse, or pitcher;
an empty stomach; empty shackles.
[1913 Webster]

A. I see no induication that the word has changed since at least 1913.
I see no indication of the use of "empty" as a scientific term that
includes absence of space.

B. It is obvious from the above definition that "empty" includes the
presence of space, otherwise there would be no locus of points which
could be characterized as empty. Another way to say it is, in the
absence of space, there is nothing to be empty. Without space, the
word "empty" has no utility or purpose.

2696. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 23:48:50 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <5qp5d4h2664qnovoi3e0aolvnfh39o0mq6@4ax.com>
Source record: 21869

On Thu, 18 Sep 2008 14:35:38 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>Incidentally, the LearnByDestroying.com has nothing to do with ham
>radio. A college I attended has the motto "Learn by Doing".
><http://en.wikipedia.org/wiki/California_Polytechnic_State_University>
>That morphed into "Learn By Destroying" which seemed to be the
>practice in the engineering department. Since graduating with a
>rather substantial damage fee, I have adopted it as my personal motto.
>If you haven't destroyed and later repaired it, you don't understand
>how it works.

Oops. Wrong Cal Poly:
<http://en.wikipedia.org/wiki/California_State_Polytechnic_University,_Pomona>
The San Luis Obispo motto of "Discere Faciendo" which is Latin for "To
Learn by Doing" was once the motto for both skools. The motto and
seal for Pomona changed when the skools split in the 1960's to
"Instrumentum Disciplinae" which is Latin for "Application of
Knowledge". This was often incorrectly interpreted as "Instrument of
Discipline" as indicated by the hammer and mace like weapons in the
logos.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2697. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-18 23:59:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gauq0fnot1@news.albasani.net>
Source record: 21871

dfinn1@nc.rr.com wrote:
[stuff, stuff, and a lot more stuff]

Yep, I think you are on the right path ...

To summarize Cecil:

"Yep, even the astronaut floating in space cannot empty his bucket!
And, worse than that, no one has ever even seen an empty bucket!
Speculations to what an empty bucket would look like should be able to
be done, however."

If you are out there, Cecil, feel free to correct me ... ;-)

Regards,
JS

2698. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 00:00:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b8ffc1f2-1524-466c-aa32-f4fe1c4afedb@s50g2000hsb.googlegroups.com>
Source record: 21872

On Sep 18, 6:47 pm, dfi...@nc.rr.com wrote:
> On Sep 18, 8:07 am, Cecil Moore <nos...@w5dxp.com> wrote:
>
>
>
> > dfi...@nc.rr.com wrote:
> > > Please show me the reference that proves empty is not nothing and I
> > > will prove by definition of the word empty that empty is not
> > > something. This is true even in the 21st centruy.
>
> > If you chose to use colloquial English, you have to
> > live (or die) by fuzzy unscientific definitions. The
> > definition for "empty" that I have been using here is
> > "absolute nothing", i.e. no space and not even the
> > structure of space is there. I defined my use of the
> > word "empty" days ago. It is the same as a *literal*
> > interpretation of the definition from Websters's:
>
> > "empty - 1. containing nothing", i.e. literally
>
> > "empty - containing absolutely nothing including space"
> > --
> > 73, Cecil http://www.w5dxp.com
>
> From Collaborative International Dictionary of English v.0.48 :
>
> 1. Containing nothing; not holding or having anything within;
>   void of contents or appropriate contents; not filled; --
>   said of an inclosure, or a container, as a box, room,
>   house, etc.; as, an empty chest, room, purse, or pitcher;
>   an empty stomach; empty shackles.
>   [1913 Webster]
>
> A. I see no induication that the word has changed since at least 1913.
> I see no indication of the use of "empty" as a scientific term that
> includes absence of space.
>
> B. It is obvious from the above definition that "empty" includes the
> presence of space, otherwise there would be no locus of points which
> could be characterized as empty. Another way to say it is, in the
> absence of space, there is nothing to be empty. Without space, the
> word "empty" has no utility or purpose.

in 1913 the study of particles was not linked to the four forces of
the standard model
It hasn,t hit the books because there is no series of references that
can be included.
No book no need for a revised dictionary no need for change
Re
obvious.. a word used when supporting logic is not readily available
Art
Art

2699. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 00:02:56 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <bbq5d4trk2kdm4lkh28sv8sooguk4l84lc@4ax.com>
Source record: 21873

On Thu, 18 Sep 2008 14:28:18 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>...where as, your expertise in mathematics can test
>the logic to its limits which defy opposition

Ok, let's test your logic. So far, I've seen exactly one prediction of yours worth testing. It's you claim that current flows primarily in the center of a conductor. Avoiding the math for now, let's do the necessary thought experiments. If this were a court of law, the judge would prepare a set of rhetorical questions, all of which must be true if the plaintiffs claims were true. I'll do the same.

1. If current flows along the inside of a wire, and not on the outside, how does the field radiate through the alleged non-conducting outer part of the wires? The radiation would be trapped inside the conductor, only to perhaps emerge at ends.

2. If current flow along the inside of a wire, then it would seem that increasing the effective diameter of the conductor would have no effect on its impedance. Measurements of the Q of large diameter conductors versus small diameter conductors have show that impedance goes down with an increase in wire diameter.

3. How does a cage antenna work? The effective diameter is huge, but there's a giant hole in the middle, through which no current is conducted. If most of the RF current flowed through the center, and there is no center, then a cage antenna can't work.

I can conjur a few more rhetorical questions, but these should be sufficient to illustrate the problem. Your antenna current distribution model does not fit very well with tested reality.

Got any more prediction? I need the target practice.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2700. Re: ObaMao is GAY!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 00:15:42 UTC
From: "n8wwm mrbindwell (fatboy)" <dougay@nospam.com>
Message-ID: <gauqvg$h35$1@news.mixmin.net>
Source record: 21874
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

http://img529.imageshack.us/my.php?image=n8dontbeadickheadwd9.jpg

2701. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 00:20:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaur8b$pi3$1@news.albasani.net>
Source record: 21875

dfinn1@nc.rr.com wrote:
[...]

You simply take up too much effort on a very small point. Read this:

http://itis.volta.alessandria.it/episteme/ep3-24.htm

If that doesn't do it for you, or whets your appetite, try this book:

http://books.google.com/books?id=_24EAAAACAAJ&dq=ether

Regards,
JS

2702. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 00:27:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gaurmoqed1@news.albasani.net>
Source record: 21876

dfinn1@nc.rr.com wrote:
[...]

How about a 1894, download-able .pdf "book?":

http://books.google.com/books?id=_rUAAAAAMAAJ&printsec=frontcover&dq=ether#PPP10,M1

(Look in the top right hand corner for the download link ... I include
this particular book for historical reasons. ;-))

Regards,
JS

2703. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 00:35:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <pi8bq5-es6.ln1@mail.specsol.com>
Source record: 21877

Art Unwin <ArthurUnwin@gmail.com> wrote:

> in 1913 the study of particles was not linked to the four forces of
> the standard model
> It hasn,t hit the books because there is no series of references that
> can be included.

Einstein's paper on special relativity was published in 1905.

--
Jim Pennino

Remove .spam.sux to reply.

2704. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 00:47:59 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gauu1i$9ib$1@news.service.uci.edu>
Source record: 21878

Cecil Moore wrote:
> Jim Kelley wrote:
>> And with that you feel that you can claim to know what space 'is'.
>
> Sorry, I never claimed to know what space is,

Ah, but you did pretend to.

73, ac6xg

2705. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 01:21:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <afe33c00-da24-4308-b530-f8f8872c6a5f@y21g2000hsf.googlegroups.com>
Source record: 21879

On Sep 18, 7:35 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > in 1913 the study of particles was not linked to the four forces of
> > the standard model
> > It hasn,t hit the books because there is no series of references that
> > can be included.
>
> Einstein's paper on special relativity was published in 1905.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Yes but not printed in a text book. Even Plank had to wait for a few
years
and he was a buddy of Einstein where he saw that Einstein was often in
error
Art

2706. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 01:36:43 UTC
From: dfinn1@nc.rr.com
Message-ID: <87f525f0-a3db-4513-bda8-fb3d5540071f@y21g2000hsf.googlegroups.com>
Source record: 21880

On Sep 18, 7:59 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
>
> [stuff, stuff, and a lot more stuff]
>
> Yep, I think you are on the right path ...
>
> To summarize Cecil:
>
> "Yep, even the astronaut floating in space cannot empty his bucket!
> And, worse than that, no one has ever even seen an empty bucket!
> Speculations to what an empty bucket would look like should be able to
> be done, however."
>
> If you are out there, Cecil, feel free to correct me ... ;-)
>
> Regards,
> JS

I guess the word "empty" has no meaning anymore. Why, an astronaut in space cannot even carry an empty bucket. I'm sure you would agree that we should just strike the word from the Webster and Oxford dictionaries because you, who are immersed in advanced scientific thought, are convinced that a state of emptiness anywhere in the universe is impossible. I am truly humbled by your profound reasoning which I know would not be possible without that little extra touch of senility that releases you from the confining boundaries of logic. I assume that the absence of a correction by Mr. Cecil will indicate his agreement with your tripe. I might also mention that you need not reach out to Mr. Cecil to validate your bizzare pronouncements. Get some self-confidence in your statements Johhny, grow a spine!

2707. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 01:52:26 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <5e8d54b4-146a-4d78-a9a9-0b9115d9ce97@f36g2000hsa.googlegroups.com>
Source record: 21881

On Sep 18, 7:02 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Thu, 18 Sep 2008 14:28:18 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >...where as, your expertise in mathematics can test
> >the logic to its limits which defy opposition

I am having a go at this before I read the questions!!!!

>
> Ok, let's test your logic. So far, I've seen exactly one prediction
> of yours worth testing. It's you claim that current flows primarily
> in the center of a conductor. Avoiding the math for now, let's do the
> necessary thought experiments. If this were a court of law, the judge
> would prepare a set of rhetorical questions, all of which must be true
> if the plaintiffs claims were true. I'll do the same.

>
> 1. If current flows along the inside of a wire, and not on the
> outside, how does the field radiate through the alleged non-conducting
> outer part of the wires? The radiation would be trapped inside the
> conductor, only to perhaps emerge at end
Answer
Not so a length of radiator which is a fractional wavelenth will have
charges in motion on the outside creating radiation
the rest of the charge length will be inside the radiator where a
magnetic field cannot be created and particles if they were present
cannot pierce the eddy current on the surface. For radiation at all
times the radiator must be a wavelength or multiple thereof or a
period of the frequency in use for radiation to not disappear from the
surface where the levitating force is present to eject particles
>

> 2. If current flow along the inside of a wire, then it would seem
> that increasing the effective diameter of the conductor would have no
> effect on its impedance. Measurements of the Q of large diameter
> conductors versus small diameter conductors have show that impedance
> goes down with an increase in wire diameter.

Answer
Not so. the increase in diameter does not affect conditions that are
exposed to air
thus the progression of skin depth is the same. Thus copper losses on
the inside circuit
will be reduced as well as lost radiation resistance in the circuit. I
previously stated that

copper losses on the inside of a fractional wavelength antenna must be
considered separately from the groundplain resistance
which is required i.e. they are two separate resistances in series.

Answer

>
> 3. How does a cage antenna work? The effective diameter is huge, but
> there's a giant hole in the middle, through which no current is
> conducted. If most of the RF current flowed through the center, and
> there is no center, then a cage antenna can't work.

I am not familiar with a cage antenna but from the above description
is
that it is transformed into a Farady cage

Answer
>
> I can conjur a few more rhetorical questions, but these should be
> sufficient to illustrate the problem. Your antenna current
> distribution model does not fit very well with tested reality.

Hmm why not?
>
> Got any more prediction? I need the target practice.
Yes
Earlier I pointed to the fact that eddy current can be neutralised
such that particles canot be ejected from the surface
Indeependent testing showed there was nothing to prevent particles
from settling on a diamagnetic substance thereby inducing
an oscillation . At the same time on the transmitting side the
particles were still present on the diamagnetic surface because the
ejection force
was neutralised thus preventing ejection otherwise seen as
transmission.

Another one
The computor on the first example disapointed me as I expected a
higher gain (stated on this net)When I corrected the nullification of
the foucault current by separation the computor program gave the gain
I initiall expected in gun shot form which migrates in a way to a
lazer ray which is oif a similar science
thus HF does not necessarily have to diverge such that gain is
nullified.

If you want more target to aim at listen for the BIG BANG and then aim
at the resulting BLACK HOLE
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com

> Skype: JeffLiebermann AE6KS 831-336-2558

Art

2708. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 02:10:26 UTC
From: dfinn1@nc.rr.com
Message-ID: <1f15d411-56d7-4618-8902-990fc4ea51ae@d45g2000hsc.googlegroups.com>
Source record: 21882

On Sep 18, 8:20 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
>
> [...]
>
> You simply take up too much effort on a very small point. Read this:
>
> http://itis.volta.alessandria.it/episteme/ep3-24.htm
>
> If that doesn't do it for you, or whets your appetite, try this book:
>
> http://books.google.com/books?id=_24EAAAACAAJ&dq=ether
>
> Regards,
> JS

Now I see where you are getting all this sci-fi. Finally. You mistake a philosophical, abstract ether with the type of physical ether being inferred in this thread, i.e. the ether that was banished from normal scientific thought by Einstein in 1905 after publishing the Special Theory. Kostro is not a scientist, he is a Philosopher of Science who longs for the old ether concept (I would suppose to assist in his understanding of the universe) and who claims Einstein really did believe in a revised concept of ether after 195 or so...no way. He did not, as a physicist. As a philosopher, for him anything was possible, even a unified theory. But there is no ether variable or constant that must be present in order for the relativity calculations to work. It is the job of a philosopher to analyse these parameters, real or imagined, and remind us that those concepts we threw over the fence decades ago MAY still have validity. Philosophically this is true if in your mind experiments you think there actually may be a connection between light and an ether medium. But philosophy does not show up in the math. Kostro correctly states that Einstein himself did not completely dismiss this notion but that is far cry from resurrecting another century of ether theory. Nice try Johnny boy.

2709. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 02:29:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <75eb4592-55cc-4a97-ae01-9d0174aab718@59g2000hsb.googlegroups.com>
Source record: 21883

On Sep 18, 8:52 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 18, 7:02 pm, Jeff Liebermann <je...@cruzio.com> wrote:
>
> > On Thu, 18 Sep 2008 14:28:18 -0700 (PDT), Art Unwin
>
> > <ArthurUn...@gmail.com> wrote:
> > >...where as, your expertise in mathematics can test
> > >the logic to its limits which defy opposition
>
> I am having a go at this before I read the questions!!!!
>
>
>
> > Ok, let's test your logic. So far, I've seen exactly one prediction
> > of yours worth testing. It's you claim that current flows primarily
> > in the center of a conductor. Avoiding the math for now, let's do the
> > necessary thought experiments. If this were a court of law, the judge
> > would prepare a set of rhetorical questions, all of which must be true
> > if the plaintiffs claims were true. I'll do the same.
>
> > 1. If current flows along the inside of a wire, and not on the
> > outside, how does the field radiate through the alleged non-conducting
> > outer part of the wires? The radiation would be trapped inside the
> > conductor, only to perhaps emerge at end
>
> Answer
> Not so a length of radiator which is a fractional wavelenth will have
> charges in motion on the outside creating radiation
> the rest of the charge length will be inside the radiator where a
> magnetic field cannot be created and particles if they were present
> cannot pierce the eddy current on the surface. For radiation at all
> times the radiator must be a wavelength or multiple thereof or a
> period of the frequency in use for radiation to not disappear from the
> surface where the levitating force is present to eject particles
>
>
>
> > 2. If current flow along the inside of a wire, then it would seem
> > that increasing the effective diameter of the conductor would have no
> > effect on its impedance. Measurements of the Q of large diameter
> > conductors versus small diameter conductors have show that impedance
> > goes down with an increase in wire diameter.
>
> Answer

> Not so. the increase in diameter does not affect conditions that are
> exposed to air
> thus the progression of skin depth is the same. Thus copper losses on
> the inside circuit
> will be reduced as well as lost radiation resistance in the circuit. I
> previously stated that
> copper losses on the inside of a fractional wavelength antenna must be
> considered separately from the groundplain resistance
> which is required i.e. they are two separate resistances in series.
>
> Answer
>
>
>
> > 3. How does a cage antenna work? The effective diameter is huge, but
> > there's a giant hole in the middle, through which no current is
> > conducted. If most of the RF current flowed through the center, and
> > there is no center, then a cage antenna can't work.
>
> I am not familiar with a cage antenna but from the above description
> is
> that it is transformed into a Farady cage
>
> Answer
>
>
>
> > I can conjur a few more rhetorical questions, but these should be
> > sufficient to illustrate the problem. Your antenna current
> > distribution model does not fit very well with tested reality.
>
> Hmm why not?
>
> > Got any more prediction? I need the target practice.
>
> Yes
> Earlier I pointed to the fact that eddy current can be neutralised
> such that particles canot be ejected from the surface
> Indeependent testing showed there was nothing to prevent particles
> from settling on a diamagnetic substance thereby inducing
> an oscillation . At the same time on the transmitting side the
> particles were still present on the diamagnetic surface because the
> ejection force
> was neutralised thus preventing ejection otherwise seen as
> transmission.
>
> Another one
> The computor on the first example disapointed me as I expected a
> higher gain (stated on this net)When I corrected the nullification of
> the foucault current by separation the computor program gave the gain

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> lazer ray which is oif a similar science
> thus HF does not necessarily have to diverge such that gain is
> nullified.
>
> If you want more target to aim at listen for the BIG BANG and then aim
> at the resulting BLACK HOLE
>
>
>
> > --
> > Jeff Liebermann   je...@cruzio.com
> > 150 Felker St #D   http://www.LearnByDestroying.com
> > Santa Cruz CA 95060http://802.11junk.com
> > Skype: JeffLiebermann   AE6KS   831-336-2558
>
> Art

Here is another on per Newton for stabalization ech action has an
opposite
reaction. I have pointed to the construct to represent these two
forces where the
rotators are at right angles to each other as with the Foucault
current.
On a terrstial scale tidal forces must also produce eddy currents of
circulating water.
Such large areas have beem found lately of the coast of Spain which is
now widening the search
rather than relying on idle reports from shipping. Since weather is
also in terrestial form a storm force
by definition requires the same force for stabalisation thus the whirl
pool and the tornado. Note the reaction force is sometimes swamped by
the
providing force by paramagnetic effects tho with respect to tornadoes
droplets of water as well as the particles at rest are drawn up into
the sky where water as a diamagnetic material provides a shift in
energy of a static form. Jeff everything seems to mesh with what I am
disclosing In addition when the droplets of water gets colder and
turns to ice the resident particles are forced to find a new home and
gyrate towards water which trees and humans consist of. The contained
energy of such particles is so small that it is inconseivable that
serch for a new resting place would contain energy of stellar size
but the movement of such particles at a high speed would provide
harmonic motion to the particles to generate a swarth of different
frequencies.
And it gos on and on
Art

2710. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 02:35:11 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b59120fc-d617-460f-943a-a15dad9af397@c58g2000hsc.googlegroups.com>
Source record: 21884

On Sep 18, 9:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 18, 8:52 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > On Sep 18, 7:02 pm, Jeff Liebermann <je...@cruzio.com> wrote:
>
> > > On Thu, 18 Sep 2008 14:28:18 -0700 (PDT), Art Unwin
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> > > <ArthurUn...@gmail.com> wrote:
> > > >...where as, your expertise in mathematics can test
> > > >the logic to its limits which defy opposition
>
> > I am having a go at this before I read the questions!!!!
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> > > of yours worth testing. It's you claim that current flows primarily
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> > > outer part of the wires? The radiation would be trapped inside the
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> > charges in motion on the outside creating radiation
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> > times the radiator must be a wavelength or multiple thereof or a
> > period of the frequency in use for radiation to not disappear from the
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> > the foucault current by separation the computor program gave the gain
> > I initiall expected in gun shot form which migrates in a way to a
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> > > --
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> > > Skype: JeffLiebermann   AE6KS   831-336-2558
>
> > Art
>
> Here is another on per Newton for stabalization ech action has an
> opposite
> reaction. I have pointed to the construct to represent these two
> forces where the
> rotators are at right angles to each other as with the Foucault
> current.
> On a terrstial scale tidal forces must also produce eddy currents of
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> turns to ice the resident particles are forced to find a new home and
> gyrate towards water which trees and humans consist of. The contained
> energy of such particles is so small that it is inconseivable that
> serch for a new resting place would contain energy of stellar size
> but the movement of such particles at a high speed would provide
> harmonic motion to the particles to generate a swarth of different
> frequencies.
> And it gos on and on
> Art

Added observation
In the UK it is not unusual after a storm to find isolated patches of
frogs etc far from their normal habitat
A frog consists mainly of water upon which the surface is covered with
particles such that the frog is drawn up
in the Newton cycle. Unfortunately the frog does not freeze such that
the particles need to move away.
Unfortunately the frog falls a long way back to the ground again. The

same thing has happened with fish and frogspawn
after a storm
Art

2711. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 02:47:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9ca8d13e-2b31-4a4d-91d0-579c2d907898@k37g2000hsf.googlegroups.com>
Source record: 21885

On Sep 18, 9:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 18, 8:52 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
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> > > On Thu, 18 Sep 2008 14:28:18 -0700 (PDT), Art Unwin
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> > > <ArthurUn...@gmail.com> wrote:
> > > >...where as, your expertise in mathematics can test
> > > >the logic to its limits which defy opposition
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> > I am having a go at this before I read the questions!!!!
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> > > Ok, let's test your logic. So far, I've seen exactly one prediction
> > > of yours worth testing. It's you claim that current flows primarily
> > > in the center of a conductor. Avoiding the math for now, let's do the
> > > necessary thought experiments. If this were a court of law, the judge
> > > would prepare a set of rhetorical questions, all of which must be true
> > > if the plaintiffs claims were true. I'll do the same.
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> > > 1. If current flows along the inside of a wire, and not on the
> > > outside, how does the field radiate through the alleged non-conducting
> > > outer part of the wires? The radiation would be trapped inside the
> > > conductor, only to perhaps emerge at end
>
> > Answer
> > Not so a length of radiator which is a fractional wavelenth will have
> > charges in motion on the outside creating radiation
> > the rest of the charge length will be inside the radiator where a
> > magnetic field cannot be created and particles if they were present
> > cannot pierce the eddy current on the surface. For radiation at all
> > times the radiator must be a wavelength or multiple thereof or a
> > period of the frequency in use for radiation to not disappear from the
> > surface where the levitating force is present to eject particles
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> > > 2. If current flow along the inside of a wire, then it would seem
> > > that increasing the effective diameter of the conductor would have no
> > > effect on its impedance. Measurements of the Q of large diameter
> > > conductors versus small diameter conductors have show that impedance
> > > goes down with an increase in wire diameter.
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> > Answer

> > Not so. the increase in diameter does not affect conditions that are
> > exposed to air
> > thus the progression of skin depth is the same. Thus copper losses on
> > the inside circuit
> > will be reduced as well as lost radiation resistance in the circuit. I
> > previously stated that
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> > considered separately from the groundplain resistance
> > which is required i.e. they are two separate resistances in series.
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> > > conducted. If most of the RF current flowed through the center, and
> > > there is no center, then a cage antenna can't work.
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> > that it is transformed into a Farady cage
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> > > sufficient to illustrate the problem. Your antenna current
> > > distribution model does not fit very well with tested reality.
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> > Hmm why not?
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> > > Got any more prediction? I need the target practice.
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> > Yes
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> > such that particles canot be ejected from the surface
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> > thus HF does not necessarily have to diverge such that gain is
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> Here is another on per Newton for stabalization ech action has an
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> frequencies.
> And it gos on and on
> Art

Another prediction
Particles are known to collect in bunches where the bunch contains
three basic electrons
bound together by the force of colour which is known to be very strong
Ofcourse not all
of the particles bunch together as previously stated. When the color
bound bunch of electrons
come into contact with a strong magnetic field, the strongest being at

the poles the electons are torn apart releasing
the binding energy in a aurora that spreads for thousands of miles. In
the case of a lazer on can imagine that that same particle
is similar to others but with the vestiges of color and we know that
the energy emmitted dose not fan out giving strength to my antenna
which also
gravitate to a non spreading relation ship.
And it goes on and on and..
Art

2712. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 03:15:39 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <8u56d493e7dhdq0237aqei49rekpq0bjbq@4ax.com>
Source record: 21886

On Sat, 13 Sep 2008 05:41:13 -0400, ml <m@di.net> wrote:

>hi Paul
>
>see responces below, and thanks very much
>
>In article
><26ee0c60-dd0f-4c9a-adc3-46a669d5cf9f@a18g2000pra.googlegroups.com>,
> "pdrahn@coinet.com" <co_farmer@yahoo.com> wrote:
>
>> >
>> > so assuming ï¿½ , ï¿½they let me do that, ï¿½ and ï¿½my test ï¿½reveils ï¿½noise ï¿½
>> > along the ï¿½wires ï¿½ , ï¿½what ï¿½types ï¿½of snap on ï¿½chokes /material would ï¿½
>> > be ï¿½recomened?
>> >
>> > i wonder if they conduit is a 'poor' ï¿½shield ï¿½ i could easily wrap that
>> > w/rf tape
>>
>> Hi.
>> I am coming into ths discussion kind of late, but see no mention as to
>> changes in the noise level as the elevator is operating or not. Is the
>> motor and control circuit live all the time or just when the elevator
>> is occupied or in motion.
><<from being inside my house i can't really tell elevator
>movement, i can say the noise is constantly intermittant, that is
>on a few min off a few min, it 'seems' not to correspond to
>elevator movement but i'd need a second guy to prove that
>
>However being in the elevator room, as previously mentioned w/my
>ft817 i can tell you the motor and magnatek is always slightly
>energized however with no elevator movement the noise is
>extreemly small soo as the motor kicks in the magnatek makes a
>ton of noise same test standing ontop of the motor shows little
>noise i didn't test the conduit
>
>>
>> As far as snap-on ferrite chokes, they must allow the largest wire to
>> pass and should be fairly large for the low frequency involved.
>>
>> Perhaps this has been mentioned before, but conduit will certainly
>> radiate if it is not connected to a common ground point at each end.
>> Otherwise, it is an antenna. No amount of tape will stop that. If
>> connected to two "ground" points, the conduit could still radiate as a
>> loop antenna. The building framework may make an electrical ground,

>> but not an RF ground.
><<yea that got me thinking i noticed the manual for the magnatek
>actually talked about how to keep one end only 'grounded' and the
>book was very good at explaning it, i have to go back up and see if
>they did that i bet they sure didn't my guess is they didn't use
>shielded wire to the motor sensor i'd guess iether plain wire or if
>i am luckey
>
>they have really only an electrical ground up their they did make a
>single buss on the bottom and everything terminates at least to a
>single point the conduit is 'grounded' by connecting with the metal
>cabinet which is connected to that elec ground my building water,
>heat, Ibeams and elec ground seem to all be at same potential and do
>connect with earth soil, naturally the elevator room on the roof is
>14stories high
>
>i disagree with you however that 'no ammount' of tape would help if
>the conduit was radiating copper or mu-metal, or lead or RFpaint
>wrapped around the conduit and possibly grounded i think would have
>an effect but i could be wrong my guess is it could work why do you
>think it's not possible?
>>
>> Do you have a portable am shortwave radio with an external antenna?
>> Use it to explore (safely!) the wiring with the external antenna. I
>> did this at home and discovered lots of HF noise coming from a VCR,
>> DVD player and TV that were always on, but on standby. I think this
>> exercise will let you track the noise a lot easier than your expensive
>> ham rig.
>Yes the ft817 also has am but i've been testing ssb easier on
>the ears and just a strong interference hihi
>
>yeah it's funny how sometimes you find a vcr or a cable modem
>that puts out so much noise on even standbuy a lot of companies these
>days really are rf poluters and seem to get away with murder
>
>I wonder if that magnetek is legal , just say the unit by itself
>is it fcc approved to radiate such a strong signal so broad ??
>second to that since it is interfering with a licensed ham station
>per rules and regs would it be in violation? i wonder how i
>confirm that ultimately i might hve to file a complaignt
>
>
>
>
>>
>> Good luck!
>>
>> Paul, KD7HB

Seeing as you are trying to stop RF, using copper tape / foil and copper screens / expanded sheet metal / densely perforated sheet metal is the best bet for shielding approaches. Very large ferrites for creating chokes (high motor currents). Try very large snap on ferrites around the lead groups entering and exiting the Magnetek. Both on individual leads and on three / (four ?) / six lead groups headed to the motor.

2713. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 03:44:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <91fb6e91-c18a-4ca3-8e45-aff4ecb78ebe@c65g2000hsa.googlegroups.com>
Source record: 21887

On Sep 18, 9:29 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
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> > the rest of the charge length will be inside the radiator where a
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> but the movement of such particles at a high speed would provide
> harmonic motion to the particles to generate a swarth of different
> frequencies.
> And it gos on and on
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It is argued that emmisission from the Sun consist of Leptons which
have different flavours
I submit that what you are seing is neutrinos which by virture of the
coupling forces with other neutrinos which generate different
"flavours"
Some bunches provide a coupling force and thus produces what is termed
a coupling force of three primary colors
Tho arora is a result of separation there is noo reason to believe

that only single particles make it to earth even tho colour is
distincly ly a part of polar aurora. In the case of light or lazer
ejection the final color depends on the coupling between neutros and
the primary color binding thst they posses
Thus lepton are nothing but smoke equivalentsin single or different
bunching form which while the sun is burning will continue to be
emitted by the sun as the arbitrary boundary expands and release
particles to re attain equilibrium. When a eruption occurrs within the
sun occurrs the escaping particles also include particles of a 100
percent energy with respect to life of the particle. It is when such
erruptions occur local networks are in danger with the settling
of particles with a high degree of energy which can over load the
network and create failure. At the sam etime such an erruption is a
reflection of the number of short life particles which are suitable
for particle ejection because they aproach the static level of energy
such that they can be ejected or levitated. All of this can be deduced
by the use of an arbtrary field as used by Gauss with the addition of
observations seen in his future to which he was not privy to. Maxwell
did not use the arbritary border system as he was a mathematician
combining number combinations for simplification. Fortunately all the
laws of others with which he played with included a vevtor required to
fill the gap in the vector arrangement so it would conform with
Newtons law
even tho they could not explain what the missing vector represented.
If other scientists did not include this vector which was absent in
their observations
then Maxwells laws would eventually prove to be useless.
And it goes on and on and
Goodnight
Art Unwin KB9MZ.......xg
Tomorrow honey dooo's

2714. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 04:17:17 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ebc5c0ae-7db4-4832-a3fe-2421dde7087a@e39g2000hsf.googlegroups.com>
Source record: 21888

On Sep 18, 10:44 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
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> > gyrate towards water which trees and humans consist of. The contained
> > energy of such particles is so small that it is inconseivable that
> > serch for a new resting place would contain energy of stellar size
> > but the movement of such particles at a high speed would provide
> > harmonic motion to the particles to generate a swarth of different
> > frequencies.
> > And it gos on and on
> > Art
>
> It is argued that emmisission from the Sun consist of Leptons which
> have different flavours
> I submit that what you are seing is neutrinos which by virture of the
> coupling forces with other neutrinos which generate different
> "flavours"
> Some bunches provide a coupling force and thus produces what is termed

> a coupling force of three primary colors
> Tho arora is a result of separation there is noo reason to believe
> that only single particles make it to earth even tho colour is
> distincly ly a part of polar aurora. In the case of light or lazer
> ejection the final color depends on the coupling between neutros and
> the primary color binding thst they posses
> Thus lepton are nothing but smoke equivalentsin single or different
> bunching form which while the sun is burning will continue to be
> emitted by the sun as the arbitrary boundary expands and release
> particles to re attain equilibrium. When a eruption occurrs within the
> sun occurrs the escaping particles also include particles of a 100
> percent energy with respect to life of the particle. It is when such
> erruptions occur local networks are in danger with the settling
> of particles with a high degree of energy which can over load the
> network and create failure. At the sam etime such an erruption is a
> reflection of the number of short life particles which are suitable
> for particle ejection because they aproach the static level of energy
> such that they can be ejected or levitated. All of this can be deduced
> by the use of an arbtrary field as used by Gauss with the addition of
> observations seen in his future to which he was not privy to. Maxwell
> did not use the arbritary border system as he was a mathematician
> combining number combinations for simplification. Fortunately all the
> laws of others with which he played with included a vevtor required to
> fill the gap in the vector arrangement so it would conform with
> Newtons law
> even tho they could not explain what the missing vector represented.
> If other scientists did not include this vector which was absent in
> their observations
> then Maxwells laws would eventually prove to be useless.
> And it goes on and on and
> Goodnight
> Art Unwin KB9MZ.......xg
> Tomorrow honey dooo's

Yuno I am not fully convinced that Gauss did not provide the extension
to the law of Statics
as circumstances point to unsatisfactory performance by his assistant.
Gauss primarily a mathematician
interested in astomanry. visited a friend in Italy whose interest was
in magnetics so it was natural during his stay that Gauss would
cooperate
in the work even tho it was far from his choice of interest. It was at
that time that the law of statics evolved which is some distance from
magnetism
so I see no reason why he would not have added my extension.
Unfortunatelly his mathematical talents was not producing enough money
to live and it is
believed by some that this was due to his assistant not putting
Gauss's notes in order for publishing. Gauss was offered a job in a
Itallian observatory and his dabbling in magnetism and associated

areas came to a halt or abandoned. After Gaus died his former assistant appeared on the scientific scene with discoveries that many considered beyond his interlect which then produced rumors that finally faded away. So in away what I am relating is a detective story of the fraudulent happenings of yesteryear where the penalty of fraud was never enacted because of death. I know science blabber with no proof
but it would make for a good detective story or sci fi. Maybe I found those very notes and is now claiming them as solely mine and possibly a distant relative of the fraudulent nature. David now is your chance, redirect your energies so justice comes about
Art

2715. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 04:23:28 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <gg76d41g7f6fsdt66pcccfclfnjvvddkii@4ax.com>
Source record: 21889

On Thu, 18 Sep 2008 18:52:26 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Sep 18, 7:02ï¿½pm, Jeff Liebermann <je...@cruzio.com> wrote:
>> On Thu, 18 Sep 2008 14:28:18 -0700 (PDT), Art Unwin
>>
>> <ArthurUn...@gmail.com> wrote:
>> >...where as, your expertise in mathematics can test
>> >the logic to its limits which defy opposition
>
>I am having a go at this before I read the questions!!!!

A go at what? That was your statement that I quoted.

>> 1. ï¿½If current flows along the inside of a wire, and not on the
>> outside, how does the field radiate through the alleged non-conducting
>> outer part of the wires? ï¿½The radiation would be trapped inside the
>> conductor, only to perhaps emerge at end

Due to the length of your extended sentences, I have to edit them in
sections to extract individual concepts.

>a length of radiator which is a fractional wavelenth will have
>charges in motion on the outside

I thought you said that fractional wavelength antennas have maximum
current on the inside of the conductor. (I'm lazy and don't want to
search for the specific quote). Please decide if it's inside or
outside.

>creating radiation
>the rest of the charge length will be inside the radiator where a
>magnetic field cannot be created and particles if they were present
>cannot pierce the eddy current on the surface.

Particles? Where do I get a bottle of RF?

Eddy currents only occur when there is an opposing magnetic field
restricting the flow of electrons. You might have such a problem in a
transformer design, but nobody designs match boxes, xformers, and
antennas that way:
<http://en.wikipedia.org/wiki/Eddy_current>

RF current flows on the outside of a conductor whether it's shorter or
longer than one wavelength long. Show me a formula where there's a
break point at 1 wavelength.

>For radiation at all
>times the radiator must be a wavelength or multiple thereof or a
>period of the frequency in use for radiation to not disappear from the
>surface where the levitating force is present to eject particles

Particles? Where do I get a bottle of RF?

My 80 meter antenna is considerably shorter than one wavelength. No
loading coils but a suitable match box. Are you telling me that my
antenna does not radiate?

>> 2. ï¿½If current flow along the inside of a wire, then it would seem
>> that increasing the effective diameter of the conductor would have no
>> effect on its impedance. ï¿½Measurements of the Q of large diameter
>> conductors versus small diameter conductors have show that impedance
>> goes down with an increase in wire diameter.

>the increase in diameter does not affect conditions that are
>exposed to air
>thus the progression of skin depth is the same.

My antennas are not affected by air. The dielectric constant of air
and a vacuum are sufficiently close to be considered identical. How
does the Q or impedance of an antenna change when exposed to air?

>Thus copper losses on
>the inside circuit
>will be reduced as well as lost radiation resistance in the circuit.

What inside circuit? Do you mean the inside of the conductor?
Radiation resistance is increased or decreased, not lost. It's not a
quantity that can be bottled or sold.

>I
>previously stated that
>copper losses on the inside of a fractional wavelength antenna must be
>considered separately from the groundplain resistance
>which is required i.e. they are two separate resistances in series.

Why must they be considered separately? My radiation resistance
calculations are the vector sum of the antenna impedance and any
resistive losses that present in the conductors. The radiation
resistance is not a resistance that can be added. It's an impedance
that has a phase angle that must be added as a vector.

>> 3. ï¿½How does a cage antenna work? ï¿½The effective diameter is huge, but
>> there's a giant hole in the middle, through which no current is
>> conducted. ï¿½If most of the RF current flowed through the center, and
>> there is no center, then a cage antenna can't work.
>
>I am not familiar with a cage antenna but from the above description
>is
> that it is transformed into a Farady cage

Nope.
<http://en.wikipedia.org/wiki/Cage_antenna>
<http://www.arrl.org/news/stories/2001/05/03/2/>
<http://forums.qrz.com/showthread.php?t=144503> (see drawing)
It's usually an HF dipole with insulating spreaders at each end. One
wire per spreader. This creates an effective wire diameter equal to
the spreader diameter without the necessity of using a huge piece of
tubing. The large effective conductor diameter increases the
operating bandwidth of the antenna. No effect on the gain or pattern.

No, I don't mean an elephant cage antenna:
<http://www.fas.org/irp/program/collect/an-flr-9.htm>
<http://maps.google.com/maps?q=http:%2F%2Fbbs.keyhole.com%2Fubb%2Fdownload.php%3FNumber%3D
112921&t=k&om=1&ie=UTF8&ll=61.26458,-149.847829&spn=0.00654,0.01914&z=16>
I want one...

>> I can conjur a few more rhetorical questions, but these should be
>> sufficient to illustrate the problem. ï¿½Your antenna current
>> distribution model does not fit very well with tested reality.

>Hmm why not?

Because I don't have infinite amounts of time to continue doing this.
I supplied 3 examples of common measurements and constructs that do
not fit into your model of current being maximum at the center of a
conductor. That will have to suffice for now, or at least until I
need some more entertainment.

>> Got any more prediction? ï¿½I need the target practice.

>Yes
>Earlier I pointed to the fact that eddy current can be neutralised
>such that particles canot be ejected from the surface

That's fine. Now, how do I measure those eddy currents? How are they
calculated? What affects their value. Where do I get a bottle of RF
particles?

>Indeependent testing showed there was nothing to prevent particles
>from settling on a diamagnetic substance thereby inducing
>an oscillation .

An antenna by itself cannot oscillate (except maybe in the wind). If
particles "settled" on the antenna, its weight would increase. How
much?

Are you familiar with the definition of diamagnetic?
<http://en.wikipedia.org/wiki/Diamagnetism>
Copper is non-magnetic. None of my antennas levitate themselves.
Diamagnetism will not create oscillations.

>At the same time on the transmitting side the
>particles were still present on the diamagnetic surface because the
>ejection force
>was neutralised thus preventing ejection otherwise seen as

>transmission.

Huh? What ejection force. If there were an ejecting or levitation
force on a copper antenna, it would be measurable. How?

>Another one
>The computor on the first example disapointed me as I expected a
>higher gain (stated on this net)

Here we agree. Measured gain always seems to be less than calculated
gain. That's due to the myriad of minor factors left out of the
calculations.

>When I corrected the nullification of
>the foucault current by separation the computor program gave the gain

Separation from what? Foucault current is exactly the same as eddy
current. Since your separate computer program generated numbers,
could I trouble you for the results? Incidentally, eddy currents are
always losses, not gains.

>I initiall expected in gun shot form which migrates in a way to a
>lazer ray which is oif a similar science
>thus HF does not necessarily have to diverge such that gain is
>nullified.

Brain overload. Cannot compute. Error....error....error... imminent
meltdown predicted.... abort... abort... pffffffzt!

>If you want more target to aim at listen for the BIG BANG and then aim
>at the resulting BLACK HOLE

Too late. My brain just collapsed into a black hole and will soon go
super nova.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2716. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 05:17:15 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <vBGAk.570$T65.385@edtnps82>
Source record: 21890

>A vector diagram that shows a charge at rest on the surface of a
>radiator which shows that there is no opposing vector at the center.
>Then we have a radiator that is not in equilibrium. In that case i
>would place a vector on the surface and another vector at the center.
>Thus charges are in motion both on the outside and the inside of the
>radiator.I base this on the reasoning that the inner resistance is
>less
>than 377 where an arc is produced at the ends. the idea that the
>leading edge of current flow will reverse at the radiator ends and
>oppose the trailing current is just beyond my thinking as you do not
>have a closed circuit. I have not seen an illustration that shows
>current that reverses upon itself in a open circuit.
>Regards
>Art

Art, I am totally confused. I don't understand what you are
trying to say. Can you explain what you mean by the term
"Vector"? For something to be called a vector it must meet
a number of precise mathematical criteria. Note the
"Formal definition" at:
http://en.wikipedia.org/wiki/Vector_space

73, Frank

2717. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 05:25:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gavd4snun1@news.albasani.net>
Source record: 21891

dfinn1@nc.rr.com wrote:

> ...
> I guess the word "empty" has no meaning anymore. Why, an astronaut in
> space cannot even carry an empty bucket. I'm sure you would agree that
> we should just strike the word from the Webster and Oxford
> dictionaries because you, who are immersed in advanced scientific
> thought, are convinced that a state of emptiness anywhere in the
> universe is impossible. I am truly humbled by your profound reasoning
> which I know would not be possible without that little extra touch of
> senility that releases you from the confining boundaries of logic. I
> assume that the absence of a correction by Mr. Cecil will indicate his
> agreement with your tripe. I might also mention that you need not
> reach out to Mr. Cecil to validate your bizzare pronouncements. Get
> some self-confidence in your statements Johhny, grow a spine!

Actually, don't go out of your way. And, all you are required to do is be coherent and realistic ... and no, "empty" for the general population can go forward as it has/is/and-will-do ... the scientific community already knows "empty" has multiple definitions.

Frankly, I don't know how you can misinterpret even the most minor points of human decency ... to place words in anothers' mouth, without asking permission, is just considered rude and crude ... but then, that may just be indicative of ones background, schooling and place of residence ...

Regards,
JS

2718. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 05:28:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gavd9gnun2@news.albasani.net>
Source record: 21892

dfinn1@nc.rr.com wrote:

> ...
> Now I see where you are getting all this sci-fi. Finally. You mistake
> a philosophical, abstract ether with the type of physical ether being
> inferred in this thread, i.e. the ether that was banished from normal
> scientific thought by Einstein in 1905 after publishing the Special
> Theory. Kostro is not a scientist, he is a Philosopher of Science who
> longs for the old ether concept (I would suppose to assist in his
> understanding of the universe) and who claims Einstein really did
> believe in a revised concept of ether after 195 or so...no way. He did
> not, as a physicist. As a philosopher, for him anything was possible,
> even a unified theory. But there is no ether variable or constant that
> must be present in order for the relativity calculations to work. It
> is the job of a philosopher to analyse these parameters, real or
> imagined, and remind us that those concepts we threw over the fence
> decades ago MAY still have validity. Philosophically this is true if
> in your mind experiments you think there actually may be a connection
> between light and an ether medium. But philosophy does not show up in
> the math. Kostro correctly states that Einstein himself did not
> completely dismiss this notion but that is far cry from resurrecting
> another century of ether theory. Nice try Johnny boy.

If there was ever a doubt you were an idiot (and I did attempt to give
you the benefit of the doubt), you have completely dispelled such doubt
there ... sad, really sad ...

Regards,
JS

2719. Re: Chart of HDTV freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 07:16:16 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <kSkBk.16440$Dj1.10466@newsfe01.iad>
Source record: 21793

"Ed Cregger" <ecregger@bellsouff.net> wrote in message
news:c49Ak.37198$De7.2672@bignews7.bellsouth.net...

< snip >

> off topic
>
> What the hell happened to the word "saw"? I seen this, or I seen that.
> Folks, that isn't correct. How can you get through four years of college
> without using the "saw", except for when referring to a woodworking tool?
>
> It is - "I saw that". Not, "I seen that". For crying out loud!!! <G>

For the first 20 years of marriage, I tried to break my wife of that one.
No luck.

Here's my peeve: Don't say "nucular." Anyone who can't say "NEWK-lee-urr"
should stay inside and keep quiet.

2720. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 11:12:49 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ROLAk.480$1a2.75@trnddc04>
Source record: 21893

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:3b75ce6c-a4ab-4e5f-88ee-7cb93e08d3e1@i76g2000hsf.googlegroups.com...
>That test proved that reprocity with respect to radiation is not a
>given!.
>I had neutralised the weak force such that particles could arrive but
>not depart!

Now that is worth a nobel prize! publish that and get it peer reviewed in a
respectable physics journal and i will personally nominate you for a nobel!

2721. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 11:15:48 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <0PLAk.651$D32.74@flpi146.ffdc.sbc.com>
Source record: 21894

dfinn1@nc.rr.com wrote:
> A. I see no induication that the word has changed since at least 1913.
> I see no indication of the use of "empty" as a scientific term that
> includes absence of space.

You saw that indication a few days ago. I said when
I used the word "empty" or "nothing" in the context
of quantum physics, I was talking about "absolute
nothing", i.e. absence of everything including space.
I have many references that supports that quantum physics
definition of "empty" and "nothing". If you take Webster's
definition literally, "empty" means "containing nothing",
including space, i.e. absolute nothingness.

There is a precedent for defining a common word within
a certain context. My physics book says: "In ordinary
conversation the word "power" is often synonymous with
"energy" or "force". In physics we use a much more precise
definition: *power* is the time rate at which work is done."

I am simply using a much more precise definition for "empty"
and "nothing".
--
73, Cecil http://www.w5dxp.com

2722. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 11:17:03 UTC
From: Dave <noone@nowhere.com>
Message-ID: <PSLAk.481$1a2.328@trnddc04>
Source record: 21895

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c9a0ab68-fff9-4c7a-b59c-8828b45904eb@b1g2000hsg.googlegroups.com...
>In one of the management classes I took

Oh, so that is what is wrong with you... sorry I didn't know you had a
serious handicap, I'll go easier on you from now on.

2723. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 11:25:12 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <p_LAk.717$be.422@nlpi061.nbdc.sbc.com>
Source record: 21897

Jim Kelley wrote:
> Cecil Moore wrote:
>> Sorry, I never claimed to know what space is,
>
> Ah, but you did pretend to.

No, I speculated about space and offered my personal
opinion. If that opinion is ever proved wrong, I
will change it.
--
73, Cecil http://www.w5dxp.com

2724. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 11:25:40 UTC
From: Dave <noone@nowhere.com>
Message-ID: <U_LAk.482$1a2.208@trnddc04>
Source record: 21896

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:91fb6e91-c18a-4ca3-8e45-aff4ecb78ebe@c65g2000hsa.googlegroups.com...
>It is argued that emmisission from the Sun consist of Leptons which
>have different flavours

do they come in cherry?

>Some bunches provide a coupling force and thus produces what is termed
>a coupling force of three primary colors

I prefer puce, or maybe mauve... do they come in those colors?

>Tho arora is a result of separation there is noo reason to believe
>that only single particles make it to earth even tho colour is
>distincly ly a part of polar aurora.

now thats an interesting theory... aurora represents the quark colors! why didn't i think of that one! unfortunately art, this one IS well known and studied and is obviously the excitation of oxygen and nitrogen by the highly charged particles in the solar wind captured in the earth's magnetic field..... sorry, too technical? i forgot you had the management handicap and couldn't read that many technical words in a row... i'll try to be more careful in the future.

2725. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 11:34:52 UTC
From: Dave <noone@nowhere.com>
Message-ID: <w7MAk.483$1a2.72@trnddc04>
Source record: 21898

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:ebc5c0ae-7db4-4832-a3fe-2421dde7087a@e39g2000hsf.googlegroups.com...
>David now is your
>chance, redirect your energies so justice comes about

yep, now it makes much more sense. art's management background now explains much of his behavior perfectly... this is the final necessary step, reassigning the underling to a worthless project to remove them from the productive project. It also explains the endless flow of technobabble, the grabbing on to recent events that have neat new buzzwords to add into his vocabulary, and the utter lack of understanding of basic principles. yes art, I'm glad you finally revealed the management background, it makes this all come into perfect focus. now we can all help you to continue your rise up the ladder to your maximum level of incompetence, or is that incontinence?? no, must be incompetence since everyone knows managers have a high bladder to brain ratio so can outlast everyone else at meetings... that must carry over to newsgroup posting also, you can sit at the keyboard and babble on longer than any of us that have a much lower bladder to brain ratio. come to think of it... gotta run... nice wx coming this weekend so I won't be around much, please go easy on the rest of the audience, they may not understand the management handicap as well.

2726. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 12:54:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <XeNAk.523$fD.10@flpi145.ffdc.sbc.com>
Source record: 21899

dfinn1@nc.rr.com wrote:
> Now I see where you are getting all this sci-fi. Finally. You mistake
> a philosophical, abstract ether with the type of physical ether being
> inferred in this thread, i.e. the ether that was banished from normal
> scientific thought by Einstein in 1905 after publishing the Special
> Theory.

Sorry, you are mistaken. Here's a quote of what Einstein said:
"The special theory of relativity does not compel us to deny
the aether. We may assume the existence of an ether, only we
must give up ascribing a definite state of motion to it, ..."

That's what modern quantum physicists have done. No
"state of motion" is ascribed to the particles winking
in and out of existence in the quantum soup of space.

Also quoting "The History of Modern Science":

"Einstein himself, in his application of relativity
principles to the gravitational theory (1915), supposed
that a gravitating body distorts nearby space, and that
these distortions determine the trajectory of a passing
ponderable body. An entity that can distort its shape,
deflect light, and propagate electric and magnetic
disturbances can be called a void only by discourtesy.
More recently, quantum electrodynamics has filled the
void with a vacuum that undergoes energy fluctuations
and acts as a theater for the creation and annihilation
of virtual particles."

If the void was absolutely empty, there would be nothing
there that could be distorted by gravity. Yet we know that
the void is indeed distorted by gravity. Ergo, the void
is NOT empty in the absolute sense of the word.
--
73, Cecil http://www.w5dxp.com

2727. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 12:59:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <YmNAk.787$Ws1.405@nlpi064.nbdc.sbc.com>
Source record: 21900

dfinn1@nc.rr.com wrote:
> ... the ether that was banished from normal
> scientific thought by Einstein in 1905 after publishing the Special
> Theory.

Please correct your incorrect concepts.

Continuing the quote from Einstein: "The special theory
of relativity forbids us to assume the ether to consist
of particles that can be tracked through time, but the
hypothesis of the ether in itself is not in conflict with
the special theory of relativity."

http://www.nd.edu/~dhoward1/Revisiting%20the%20Einstein-Bohr%20Dialogue.pdf
--
73, Cecil http://www.w5dxp.com

2728. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 13:00:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb07ptjap1@news.albasani.net>
Source record: 21801

Cecil Moore wrote:

> ...
> If the void was absolutely empty, there would be nothing
> there that could be distorted by gravity. Yet we know that
> the void is indeed distorted by gravity. Ergo, the void
> is NOT empty in the absolute sense of the word.

Yeah, exactly!

Or, to reword:

For all this time, what have these idiots been thinking?; blackholes warp, "empty", nothing? LOL

Regards,
JS

2729. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 13:11:37 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <pyNAk.788$Ws1.159@nlpi064.nbdc.sbc.com>
Source record: 21802

dfinn1@nc.rr.com wrote:
> ... the ether that was banished from normal
> scientific thought by Einstein in 1905 after publishing the Special
> Theory.

Continuing quotes from Einstein:
http://www.tu-harburg.de/rzt/rzt/it/Ether.html

"What is fundamentally new in the ether of the general theory
of relativity as opposed to the ether of Lorentz consists in
this, that the state of the former is at every place determined
by connections with the matter and the state of the ether in
neighbouring places, which are amenable to law in the form of
differential equations,; whereas the state of the Lorentzian
ether in the absence of electromagnetic fields is conditioned
by nothing outside itself, and is everywhere the same. The ether
of the general theory of relativity is transmuted conceptually
into the ether of Lorentz if we substitute constants for the
functions of space which describe the former, disregarding the
causes which condition its state. Thus we may also say, I think,
that the ether of the general theory of relativity is the outcome
of the Lorentzian ether, through relativation."

"Recapitulating, we may say that according to the general theory of
relativity space is endowed with physical qualities; in this sense,
therefore, there exists an ether. According to the general theory of
relativity space without ether is unthinkable; for in such space there
not only wonld be no propagation of light, but also no possibility of
existence for standards of space and time (measuring-rods and clocks),
nor therefore any space-time intervals in the physical sense."

So much for the ether being banished by Einstein. What is it about
Einstein's words, "the ether of the general theory of relativity",
that you do not understand?
--
73, Cecil http://www.w5dxp.com

2730. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 13:27:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb09cd$mi0$1@news.albasani.net>
Source record: 21803

Cecil Moore wrote:

> ...
> So much for the ether being banished by Einstein. What is it about
> Einstein's words, "the ether of the general theory of relativity",
> that you do not understand?

Oh please, he claims not to understand ANY of it--everything he
reads/has-read/learned/etc. claims the opposite ... :-(

The only thing left? He then claims this has all been a "cleaver ploy!"
ROFLOL

Now, let me see, what ignoramuses have I seen using this "cleaver ploy"
in the past ...

Regards,
JS

2731. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 14:12:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d17688c9-452a-418e-8e96-e3b117ef0b1e@j22g2000hsf.googlegroups.com>
Source record: 21804

On Sep 18, 11:23 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Thu, 18 Sep 2008 18:52:26 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >On Sep 18, 7:02 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> >> On Thu, 18 Sep 2008 14:28:18 -0700 (PDT), Art Unwin
>
> >> <ArthurUn...@gmail.com> wrote:
> >> >...where as, your expertise in mathematics can test
> >> >the logic to its limits which defy opposition
>
> >I am having a go at this before I read the questions!!!!
>
> A go at what? That was your statement that I quoted.
>
> >> 1. If current flows along the inside of a wire, and not on the
> >> outside, how does the field radiate through the alleged non-conducting
> >> outer part of the wires? The radiation would be trapped inside the
> >> conductor, only to perhaps emerge at end
>
> Due to the length of your extended sentences, I have to edit them in
> sections to extract individual concepts.
>
> >a length of radiator which is a fractional wavelenth will have
> >charges in motion on the outside
>
> I thought you said that fractional wavelength antennas have maximum
> current on the inside of the conductor. (I'm lazy and don't want to
> search for the specific quote). Please decide if it's inside or
> outside.
>
> >creating radiation
> >the rest of the charge length will be inside the radiator where a
> >magnetic field cannot be created and particles if they were present
> >cannot pierce the eddy current on the surface.
>
> Particles? Where do I get a bottle of RF?
>
> Eddy currents only occur when there is an opposing magnetic field
> restricting the flow of electrons. You might have such a problem in a
> transformer design, but nobody designs match boxes, xformers, and
> antennas that way:
> <http://en.wikipedia.org/wiki/Eddy_current>
>

> RF current flows on the outside of a conductor whether it's shorter or
> longer than one wavelength long. Show me a formula where there's a
> break point at 1 wavelength.
>
> >For radiation at all
> >times the radiator must be a wavelength or multiple thereof or a
> >period of the frequency in use for radiation to not disappear from the
> >surface where the levitating force is present to eject particles
>
> Particles? Where do I get a bottle of RF?
>
> My 80 meter antenna is considerably shorter than one wavelength. No
> loading coils but a suitable match box. Are you telling me that my
> antenna does not radiate?
>
> >> 2. If current flow along the inside of a wire, then it would seem
> >> that increasing the effective diameter of the conductor would have no
> >> effect on its impedance. Measurements of the Q of large diameter
> >> conductors versus small diameter conductors have show that impedance
> >> goes down with an increase in wire diameter.
> >the increase in diameter does not affect conditions that are
> >exposed to air
> >thus the progression of skin depth is the same.
>
> My antennas are not affected by air. The dielectric constant of air
> and a vacuum are sufficiently close to be considered identical. How
> does the Q or impedance of an antenna change when exposed to air?
>
> >Thus copper losses on
> >the inside circuit
> >will be reduced as well as lost radiation resistance in the circuit.
>
> What inside circuit? Do you mean the inside of the conductor?
> Radiation resistance is increased or decreased, not lost. It's not a
> quantity that can be bottled or sold.
>
> >I
> >previously stated that
> >copper losses on the inside of a fractional wavelength antenna must be
> >considered separately from the groundplain resistance
> >which is required i.e. they are two separate resistances in series.
>
> Why must they be considered separately? My radiation resistance
> calculations are the vector sum of the antenna impedance and any
> resistive losses that present in the conductors. The radiation
> resistance is not a resistance that can be added. It's an impedance
> that has a phase angle that must be added as a vector.
>
> >> 3. How does a cage antenna work? The effective diameter is huge, but
> >> there's a giant hole in the middle, through which no current is

> >> conducted. If most of the RF current flowed through the center, and
> >> there is no center, then a cage antenna can't work.
>
> >I am not familiar with a cage antenna but from the above description
> >is
> > that it is transformed into a Farady cage
>
> Nope.
> <http://en.wikipedia.org/wiki/Cage_antenna>
> <http://www.arrl.org/news/stories/2001/05/03/2/>
> <http://forums.qrz.com/showthread.php?t=144503> (see drawing)
> It's usually an HF dipole with insulating spreaders at each end. One
> wire per spreader. This creates an effective wire diameter equal to
> the spreader diameter without the necessity of using a huge piece of
> tubing. The large effective conductor diameter increases the
> operating bandwidth of the antenna. No effect on the gain or pattern.
>
> No, I don't mean an elephant cage antenna:
> <http://www.fas.org/irp/program/collect/an-flr-9.htm>
> <http://maps.google.com/maps?q=http:%2F%2Fbbs.keyhole.com%2Fubb%2Fdown...>
> I want one...
>
> >> I can conjur a few more rhetorical questions, but these should be
> >> sufficient to illustrate the problem. Your antenna current
> >> distribution model does not fit very well with tested reality.
> >Hmm why not?
>
> Because I don't have infinite amounts of time to continue doing this.
> I supplied 3 examples of common measurements and constructs that do
> not fit into your model of current being maximum at the center of a
> conductor. That will have to suffice for now, or at least until I
> need some more entertainment.
>
> >> Got any more prediction? I need the target practice.
> >Yes
> >Earlier I pointed to the fact that eddy current can be neutralised
> >such that particles canot be ejected from the surface
>
> That's fine. Now, how do I measure those eddy currents? How are they
> calculated? What affects their value. Where do I get a bottle of RF
> particles?
>
> >Indeependent testing showed there was nothing to prevent particles
> >from settling on a diamagnetic substance thereby inducing
> >an oscillation .
>
> An antenna by itself cannot oscillate (except maybe in the wind). If
> particles "settled" on the antenna, its weight would increase. How
> much?
>

> Are you familiar with the definition of diamagnetic?
> <http://en.wikipedia.org/wiki/Diamagnetism>
> Copper is non-magnetic. None of my antennas levitate themselves.
> Diamagnetism will not create oscillations.
>
> >At the same time on the transmitting side the
> >particles were still present on the diamagnetic surface because the
> >ejection force
> >was neutralised thus preventing ejection otherwise seen as
> >transmission.
>
> Huh? What ejection force. If there were an ejecting or levitation
> force on a copper antenna, it would be measurable. How?
>
> >Another one
> >The computor on the first example disapointed me as I expected a
> >higher gain (stated on this net)
>
> Here we agree. Measured gain always seems to be less than calculated
> gain. That's due to the myriad of minor factors left out of the
> calculations.
>
> >When I corrected the nullification of
> >the foucault current by separation the computor program gave the gain
>
> Separation from what? Foucault current is exactly the same as eddy
> current. Since your separate computer program generated numbers,
> could I trouble you for the results? Incidentally, eddy currents are
> always losses, not gains.
>
> >I initiall expected in gun shot form which migrates in a way to a
> >lazer ray which is oif a similar science
> >thus HF does not necessarily have to diverge such that gain is
> >nullified.
>
> Brain overload. Cannot compute. Error....error....error... imminent
> meltdown predicted.... abort... abort... pffffffzt!
>
> >If you want more target to aim at listen for the BIG BANG and then aim
> >at the resulting BLACK HOLE
>
> Too late. My brain just collapsed into a black hole and will soon go
> super nova.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

So I made a mistake with you
I can move on
Art

2732. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 14:30:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ce5e57b0-274b-4e44-b48f-59cf90306bba@t54g2000hsg.googlegroups.com>
Source record: 21805

On Sep 19, 12:17 am, "Frank" <frank...@nospam.telus.net> wrote:
> >A vector diagram that shows a charge at rest on the surface of a
> >radiator which shows that there is no opposing vector at the center.
> >Then we have a radiator that is not in equilibrium. In that case i
> >would place a vector on the surface and another vector at the center.
> >Thus charges are in motion both on the outside and the inside of the
> >radiator.I base this on the reasoning that the inner resistance is
> >less
> >than 377 where an arc is produced at the ends. the idea that the
> >leading edge of current flow will reverse at the radiator ends and
> >oppose the trailing current is just beyond my thinking as you do not
> >have a closed circuit. I have not seen an illustration that shows
> >current that reverses upon itself in a open circuit.
> >Regards
> >Art
>
> Art, I am totally confused. I don't understand what you are
> trying to say. Can you explain what you mean by the term
> "Vector"? For something to be called a vector it must meet
> a number of precise mathematical criteria. Note the
> "Formal definition" at:http://en.wikipedia.org/wiki/Vector_space
>
> 73, Frank

A vetor diagram in my mind evolves around Newtons laws
All forces (vectors) forces when summed must equal zero.
Whether their is a triange or a polygon of forces it always leaves a
gap
whuch thus provides a vector required to make he arrangement equal
zero
and in a state of equilibrium. The masters always followed this
aproach to determine if equilibrium
was present by vectorizing all the forces known within a arbitrary
border. They always came up with
an unclosed vector arrangement even tho it met the requirements of
equilibrium. So all filled in the gap
o arrive at the starting point and labelled this unknown vector that
they were forced to provide as the weak force required for equilibrium
to satisfy Newtons law.
Regards
Art

2733. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 14:40:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ede7d4dbd22kkIldgf1tdq290kfrklstqa@4ax.com>
Source record: 21806

On Fri, 19 Sep 2008 01:13:20 -0700 (PDT), xray66@earthlink.net wrote:

>I'm trying to create a model for a slim-jim type of jpole in NEC, but
>I'm having a hard time figuring out how the coordinates should go in.
>Can anybody help me with some hints? If I can get where each side
>basically goes in X Y & Z and the feed, I can probably get the rest.
>Or maybe there's a file online somewhere? I wouldn't mind figuring out
>how to do a UHF/VHF log either. Thanks,

Draw either on a piece of graph paper. You will have your coordinates
that way when you mark up the grid.

73's
Richard Clark, KB7QHC

2734. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 14:45:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9he7d4hopcvd967trcpvrt3bcmv1peafud@4ax.com>
Source record: 21807

On Fri, 19 Sep 2008 07:12:03 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>So I made a mistake with you

Jeff, from Hero to Zero in 211 posts. It was funny the first time,
now its boring and Art still can't originate a single question with
its answer to prepare an examination that contains "equilibrium."

This is all one very elaborate Troll.

73's
Richard Clark, KB7QHC

2735. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 16:24:46 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <gb0joecka1@news.albasani.net>
Source record: 21808

John Smith wrote:
> dfinn1@nc.rr.com wrote:
>
>> ...
>> If you ever learn how I can plonk you from this Google web interface,
>> please let me know. Thanks.
>
> You could always go screw yourself ... you will be so busy you will not
> have time to gripe! ROFLOL
>
> Regards,
> JS

The wise man takes a deep breath, he ignores the folly of others, he
does not partake of it. Otherwise he too is a fool.

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

2736. Re: Welfare babies, greasy diners and other tidbits

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 16:28:15 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <gb0juvcka2@news.albasani.net>
Source record: 21809

John Smith wrote:

<SNIP FOULNESS>

I'm going to plonk you anyway but could you please keep your foul
language in your head.

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

2737. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 17:04:31 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <rml7d45vaop2lht6gqmdr9r2me5bg19ctv@4ax.com>
Source record: 21810

On Fri, 19 Sep 2008 07:45:13 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Fri, 19 Sep 2008 07:12:03 -0700 (PDT), Art Unwin
><ArthurUnwin@gmail.com> wrote:
>
>>So I made a mistake with you

>Jeff, from Hero to Zero in 211 posts. It was funny the first time,
>now its boring and Art still can't originate a single question with
>its answer to prepare an examination that contains "equilibrium."

Yep. That's what I get for trying to be helpful, an ever increasing
and more elaborate word salad of technobabble. My contributions
certainly didn't help. Now I know how Victor Frankenstein felt when
he intended to create life, and ended up instead creating a monster.

>This is all one very elaborate Troll.

Yeah, but I'm still jealous. I can't juggle technical terms as well
as Art has demonstrated.

It didn't take much effort to see how the smooth transition between
multiple topics was implemented. No sentence has a single subject or
action. By splicing two disconnected subjects or actions into a
single sentence, each sentence can seamlessly transition from one
topic to another. The next sentence picks up the 2nd subject from the
previous sentence, and then adds a 3rd subject, ad infinitum. That
has the benefit of it being very difficult to refute or even discuss
two subject simultaneously, without first surgically dissecting each
sentence into at least two parts. I attempted to do that in my
previous posting, with only marginal effectiveness.

I think I now have enough material to effectively study the technique.
It should be quite useful for writing business plans, patent
applications, and research reports. I would like to thank Art for the
material and apologize to the other readers for becoming part of the
problem.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2738. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 17:32:26 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <ZiRAk.31555$XB4.1732@bignews9.bellsouth.net>
Source record: 21811

"Jeff Liebermann" wrote:
> I think I now have enough material to effectively study the technique.
> It should be quite useful for writing business plans, patent
> applications, and research reports. I would like to thank Art for the
> material and apologize to the other readers for becoming part of the
> problem.

Jeff:
I wonder what the bafflegab would be like if Art had an IEEE
dictionary!!!!!

Mike W5CHR
Memphis Tenn

2739. Re: Small Antennas and small dickies get John SMiths undivided attention. Johnny Boi just loves little dickies but prefers to call em an antennae.....assemblywizard@gmail.com is a pervert from California for sure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 19:27:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb0ufg$sv4$1@news.albasani.net>
Source record: 21812

M0WYM wrote:

> ...
> The wise man takes a deep breath, he ignores the folly of others, he
> does not partake of it. Otherwise he too is a fool.
>

Aye ... that is the plan, that is always the plan ...

Then, you suddenly realize you are going to have to interface to the
real world! ;-)

Regards,
JS

2740. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 20:26:19 UTC
From: dfinn1@nc.rr.com
Message-ID: <57365634-d7dd-42ba-9c98-b1e0823620ba@m3g2000hsc.googlegroups.com>
Source record: 21813

On Sep 18, 1:40 pm, Jeff Liebermann
>
> Personally, I've suggested that CB'ers and Free Banders be issued
> complimentary ham licenses for 10 meters and let them fight it out.
> I'll be betting that the CB'ers win. Most of the "new hams" these
> days are former CB'ers. With a few notable exceptions, most are quite
> nice, but also technically lacking.

I could go along with that. Let them use amateur power amps as well;
at least that would legalize their power amp hardware. Also, I think
CBers do have something to contribute in the construction of some of
those antennas those guys use; some are trash but others are fairly
imaginative at maximizing output power at that frequency. Also those
cheap Galaxy amps. Ise use one myself when I put 10m in my car.

2741. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 20:43:50 UTC
From: dfinn1@nc.rr.com
Message-ID: <98967f04-8d2b-4aba-bdf7-683bea4e6683@s50g2000hsb.googlegroups.com>
Source record: 21814

On Sep 19, 8:59 am, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > ... the ether that was banished from normal
> > scientific thought by Einstein in 1905 after publishing the Special
> > Theory.
>
> Please correct your incorrect concepts.
>
> Continuing the quote from Einstein: "The special theory
> of relativity forbids us to assume the ether to consist
> of particles that can be tracked through time, but the
> hypothesis of the ether in itself is not in conflict with
> the special theory of relativity."
>
> http://www.nd.edu/~dhoward1/Revisiting%20the%20Einstein-Bohr%20Dialog...
> --
> 73, Cecil http://www.w5dxp.com

No correction needed. This ether, i.e. the one which in your words
which the special theory of relativity forbids us to assume that it
consists of particles that can be tracked through time, is forbidden
by relativity. This is obviously the ether that was effectively
"banished" when Special Relativity came out in 1905 due to time
dilation effects when applying the Lorentz transformation. That was
not to say that another type of ether could not exist. I was very very
precise about that in my post. I know that Einstein later on did not
try to dispute that a different type of ether could exist. My point
was that Einstein himself did NOT hypothesize, postulate or theorize
that such an ether DID exist. Kostro seems to think Einstein did
theorize a new ether and that is wrong. That is where you and Jimminy
Cricket Smith are going off track. Suggest you re-read it.

2742. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 20:44:52 UTC
From: dfinn1@nc.rr.com
Message-ID: <459c59b8-9c4c-4342-b7e8-a4d9351a391f@s50g2000hsb.googlegroups.com>
Source record: 21815

On Sep 19, 9:00 am, John Smith <assemblywiz...@gmail.com> wrote:
> Cecil Moore wrote:
> > ...
> > If the void was absolutely empty, there would be nothing
> > there that could be distorted by gravity. Yet we know that
> > the void is indeed distorted by gravity. Ergo, the void
> > is NOT empty in the absolute sense of the word.
>
> Yeah, exactly!
>
> Or, to reword:
>
> For all this time, what have these idiots been thinking?; blackholes
> warp, "empty", nothing? LOL
>
> Regards,
> JS

me too me too me too me too me too me too me too me too me too me too
me too me too me too me too me too me too me too me too me too me too
me too me too me too me too me too

2743. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 20:56:24 UTC
From: dfinn1@nc.rr.com
Message-ID: <8a57b52b-7450-460b-9f36-e04425130f1d@m45g2000hsb.googlegroups.com>
Source record: 21816

On Sep 19, 9:27 am, John Smith <assemblywiz...@gmail.com> wrote:
> Cecil Moore wrote:
> > ...
> > So much for the ether being banished by Einstein. What is it about
> > Einstein's words, "the ether of the general theory of relativity",
> > that you do not understand?
>
> Oh please, he claims not to understand ANY of it--everything he
> reads/has-read/learned/etc. claims the opposite ... :-(
>
> The only thing left? He then claims this has all been a "cleaver ploy!"
>   ROFLOL
>
> Now, let me see, what ignoramuses have I seen using this "cleaver ploy"
> in the past ...
>
> Regards,
> JS

me too me too me too me too me too me too me too me too me too me too
me too me too me too me too me too me too
me too me too me too me too me too me too me too me too me too me too
me too me too me too me too me too me too

2744. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 21:04:29 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <vtUAk.1074$c45.732@nlpi065.nbdc.sbc.com>
Source record: 21817

dfinn1@nc.rr.com wrote:
> My point
> was that Einstein himself did NOT hypothesize, postulate or theorize
> that such an ether DID exist.

That's incorrect. I've added a quote from Einstein
himself to my tag line below.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2745. Snap on ferrite filters for feedline chokes. Do they work?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 21:19:57 UTC
From: john Wiener <jawod@fuse.net>
Message-ID: <cfdb2$48d4161f$d8c4d68b$28041@FUSE.NET>
Source record: 21818

Any comments on effectiveness of snap-on ferrite chokes on transmission
lines...here rg8u ?
There seems to be some dispute about that as well as placement on the line.

Thanks

John
AB8O

PS I was going to finish putting up my Carolina Windom last Sunday but
Ike hit here in Oh...I still don't have power! Out of respect for TX I
do not complain.

2746. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 21:51:01 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <99VAk.772$Pv5.114@edtnps83>
Source record: 21819

>A vetor diagram in my mind evolves around Newtons laws
>All forces (vectors) forces when summed must equal zero.
>Whether their is a triange or a polygon of forces it always leaves a
>gap
>whuch thus provides a vector required to make he arrangement equal
>zero
>and in a state of equilibrium. The masters always followed this
>aproach to determine if equilibrium
>was present by vectorizing all the forces known within a arbitrary
>border. They always came up with
>an unclosed vector arrangement even tho it met the requirements of
>equilibrium. So all filled in the gap
>o arrive at the starting point and labelled this unknown vector that
>they were forced to provide as the weak force required for equilibrium
>to satisfy Newtons law.
>Regards
>Art

I think you are confusing the "Weak force", resposible for "Beta decay"
in radio-active materials. The following web site explains the work
of Enrico Fermi in this area:
http://atomic-molecular-optical-physics.suite101.com/article.cfm/beta_decay_and_the_weak_force
While it is not unreasonable to consider Newtonian mechanics in
an explanation of what hapens within a conductor, there is no
missing force involved.

Computation of the electric and magnetic fields in the vicinity of a
conductor involve manipulation of the "Vector magnetic potential";
as in:
http://en.wikipedia.org/wiki/Magnetic_vector_potential

Frank

2747. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 21:53:55 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gb19h4mlf1@news.service.uci.edu>
Source record: 21824

Cecil Moore wrote:
> Jim Kelley wrote:
>> Cecil Moore wrote:
>>> Sorry, I never claimed to know what space is,
>>
>> Ah, but you did pretend to.
>
> No, I speculated about space and offered my personal
> opinion.

I see. Well, at the time it sounded more like you were saying "The amazing thing is that space cannot exist without those particles which provide the very structure of space itself." Which seems to presume to know what space is.

> If that opinion is ever proved wrong, I
> will change it.

All the while shouting demeaning epithets, and ever after claiming to have never held the opinion in the first place. :-)

73, ac6xg

2748. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 22:01:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb17g3$7bi$1@news.albasani.net>
Source record: 21820

dfinn1@nc.rr.com wrote:

> ...
> I could go along with that. Let them use amateur power amps as well;

Look at those 18 wheelers out there with 10/11 meters on 'em, which one
don't you think is running one?

> at least that would legalize their power amp hardware. Also, I think

Yeah, it'd make 'em feel better, huh? Let's ask 'em what they would
thing about it!

> CBers do have something to contribute in the construction of some of
> those antennas those guys use; some are trash but others are fairly
> imaginative at maximizing output power at that frequency. Also those
> cheap Galaxy amps. Ise use one myself when I put 10m in my car.

Yeah, mass production tends to lower the price.

Regards,
JS

2749. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 22:03:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb17k3$7bi$2@news.albasani.net>
Source record: 21821

dfinn1@nc.rr.com wrote:

> ...
> me too me too me too me too me too me too me too me too me too me too
> me too me too me too me too me too me too me too me too me too me too
> me too me too me too me too me too

Yes dear, it is all about you, now run along and play with your friends;
and, don't bother the adults ... (Said in a very motherly voice) ROFLOL

Regards,
JS

2750. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 22:17:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb18eq$8l2$1@news.albasani.net>
Source record: 21822

dfinn1@nc.rr.com wrote:
[loads of chit he hopes will sound authentic and intimidate others into either shutting up, or agreeing with him ... <puzzled-look>]

Actually, the "Luminiferous aether" was too narrow, by its' sheer definition; Einstein first denied it, then realized it must be replaced with the gravitational ether and that referencing motion in relation to gravitational ether has no meaning ... basically, if you give this any thought at all--this ether exists apart from time and motion, and any possible meaning of time we could attempt to ascribe to it. (time is motion, motion is time ...)

Indeed, this is just one property/aspect of this ether which is speculated on, the ability to jump from a point in it, to a far distant point in it, in "no time." A "folding of space" in some theories, a wormhole in others, etc. ...

You are an idiot, you cannot even get that right ... but, we considered the source, you are forgiven child. :-)

Regards,
JS

2751. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 22:37:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb19kd$a2t$1@news.albasani.net>
Source record: 21823

dfinn1@nc.rr.com wrote:
[the chit I already mentioned ...]

And, in intuiting your next response(s), yes, when we get a good understanding of the gravitational ether instant communications to far distant corners of the universe will happen instantaneously (perhaps we will finally get results from SETI! <grin>) This is why some are speculating we don't have our antennas "correct" and the formulas we design them with are lacking ...

Shortly after we figure this all out (well, years? decades?), we will have craft which can duplicate this same phenomenon--travel to any corner of this universe almost instantaneously. If you don't "read" Einstein and get this out of it ... re-read him!

Need I mention Long Delay Echo? (LDE) ... what is your take on that? A reflection from a cloaked mothership? ROFLOL

Well, I don't know what it is either, but it bears looking into ...

Regards,
JS

2752. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 22:47:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb1a6q$ad2$1@news.albasani.net>
Source record: 21825

Jim Kelley wrote:

> ...
> I see. Well, at the time it sounded more like you were saying "The
> amazing thing is that space cannot exist without those particles which
> provide the very structure of space itself." Which seems to presume to
> know what space is.
> ...
> All the while shouting demeaning epithets, and ever after claiming to
> have never held the opinion in the first place. :-)
>
> 73, ac6xg

Yes, I see your point. Space is real; however, does it consist of
bosons or the imaginings/denials of bozos.

Excellent point ...

Regards,
JS

2753. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-19 23:52:38 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gb1gkmqom1@news.service.uci.edu>
Source record: 21828

Tom Ring wrote:
> Art Unwin wrote:
>> Another prediction
>> Particles are known to collect in bunches where the bunch contains
>> three basic electrons
>> bound together by the force of colour which is known to be very strong
>> Ofcourse not all
>> of the particles bunch together as previously stated. When the color
>> bound bunch of electrons
>> come into contact with a strong magnetic field, the strongest being at
>> the poles the electons are torn apart releasing
>> the binding energy in a aurora that spreads for thousands of miles. In
>> the case of a lazer on can imagine that that same particle
>> is similar to others but with the vestiges of color and we know that
>> the energy emmitted dose not fan out giving strength to my antenna
>> which also
>> gravitate to a non spreading relation ship.
>> And it goes on and on and..
>> Art
>
> WTF?
>
> tom
> K0TAR

Tom

It's somewhat like this I think:

http://video.google.com/videoplay?docid=5125780462773187994

73, ac6xg

2754. Re: Snap on ferrite filters for feedline chokes. Do they work?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 00:06:40 UTC
From: dfinn1@nc.rr.com
Message-ID: <00499d13-0d41-4109-887d-d11d9d0c0e60@y21g2000hsf.googlegroups.com>
Source record: 21826

On Sep 19, 5:19 pm, john Wiener <ja...@fuse.net> wrote:
> Any comments on effectiveness of snap-on ferrite chokes on transmission
> lines...here rg8u ?
> There seems to be some dispute about that as well as placement on the line.
>
> Thanks
>
> John
> AB8O
>
> PS I was going to finish putting up my Carolina Windom last Sunday but
> Ike hit here in Oh...I still don't have power! Out of respect for TX I
> do not complain.

They are effective at HF frequencies, depending on what you are trying
to accomplish.

2755. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 00:21:21 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d441b2$0$90340$8046368a@newsreader.iphouse.net>
Source record: 21827

Art Unwin wrote:
> Another prediction
> Particles are known to collect in bunches where the bunch contains
> three basic electrons
> bound together by the force of colour which is known to be very strong
> Ofcourse not all
> of the particles bunch together as previously stated. When the color
> bound bunch of electrons
> come into contact with a strong magnetic field, the strongest being at
> the poles the electons are torn apart releasing
> the binding energy in a aurora that spreads for thousands of miles. In
> the case of a lazer on can imagine that that same particle
> is similar to others but with the vestiges of color and we know that
> the energy emmitted dose not fan out giving strength to my antenna
> which also
> gravitate to a non spreading relation ship.
> And it goes on and on and..
> Art

WTF?

tom
K0TAR

2756. Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 00:58:25 UTC
From: dfinn1@nc.rr.com
Message-ID: <9f89fc96-29e0-426a-9e2f-6f82bfdb6367@i76g2000hsf.googlegroups.com>
Source record: 21829

Einstein did not prove or disprove or advocate an ether theory. He did dispel ether with any mechanical characteristics, which is what Cecil was talking about (at least he implied with his reference from an Einstein speec) and what I also have said before but hel did not recognize. From Cecil's earlier reference the following paragraph (from a speech long after 1905 by A. Einstein) is found:

"More careful reflection teaches us, however, that the special theory of relativity does not compel us to deny ether. We may assume the existence of an ether (but) only we must give up ascribing a definite state of motion to it, i.e. we must *by abstraction* (dfinn emphasis) take from it the last mechanical characteristic which Lorentz had still left it. We shall see later that this point of view, the conceivability of which shall at once endeavour to make more intelligible by a somewhat halting comparison, is justified by the results of the general theory of relativity."

A key word is "abstraction". That is what the philosopher Kostro does not understand. Johnny Smith, in plain English this whole exercise means that Einstein reflected that forces (in this case gravitational) can be considered to act on space, primarily. The force's effect on mass would then be a secondary condition that occurs due to the force's distortion of space. It is a rather cool way of looking at things...it is an acceptable way of conceptualizing the universe. Looking at space in such a way allows us to consider that "absolute empty" space must be "something" because forces act on it. Light follows space. Space directs the transport of light in a way that is fully dependent on the forces acting on space. The something can be referred to as a type of ether which directs the the transport of light. But this ether is an abstraction, depending upon whether you consider space or mass to be the "primary" entity upon which the forces act. Now Johnny, I really "get" the additional things that you are saying (they are things that have no relationship to this concept). You are calling your ether something that is material, which Einstein definitely ruled out in the Special Theory in 1905. You drag out the well-known hypothesess about the exotic matter stuff, with particles popping in and out of physical form in space-time and neutinos or whatever and call the physical matter (or perhaps exotic matter) "the ether". Even though Einstein ruled that out material ether in 1905, let us bring back the material ether once again for nostalgic purposes. We then find that these exotic/physical matter alternations do not occupy all of space all of the time. This means some parts of space truly are absolutely "empty" some of the time. What is there to propagate your light waves at those points in space-time when the material ether is not there and the space is absolutely

empty? hmmmm...and to add insult to injury, Cecil is faced with the prospect that at some coordinates in space, some of the time, there exists "nothing" some of the time. I agree with Einstein's *abstract* ether in exactly the same way that Einstein does: only when you consider space the primary. But no one says I must take space as the primary; to me it is still more obvious that matter should be the primary, where no ether is required or indicated.

2757. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 01:10:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb1ihhjqi1@news.albasani.net>
Source record: 21830

dfinn1@nc.rr.com wrote:
[ignorant chit we know well]

When a guy gets it wrong, and is corrected, and gets it wrong again, and is corrected, etc. ... he is an idiot.

You have given idiot new meaning; you have take in word idiot to new heights, and you have not stopped there. There has yet to be a name given to the gobble-de-gook you spew.

I am sure they will give you that Guinness Record now!, once a name for it has been determined ... sad, so very sad ...

The personal attacks are a dime a dozen and done here daily ... not even an honorable mention given for those.

Regards,
JS

2758. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 01:13:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb1ioojsu1@news.albasani.net>
Source record: 21831

dfinn1@nc.rr.com wrote:
[...]

And, in conclusion ... plonk ... thread plonk ...

... good luck ... bye ...

JS

2759. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 01:20:18 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d44f99$0$60077$8046368a@newsreader.iphouse.net>
Source record: 21832

```
Jim Kelley wrote:
> Tom Ring wrote:
>> Art Unwin wrote:
>>> Another prediction
>>> Blah blah blah....
>>> And it goes on and on and..
>>> Art
>>
>> WTF?
>>
>> tom
>> K0TAR
>
> Tom
>
> It's somewhat like this I think:
>
> http://video.google.com/videoplay?docid=5125780462773187994
>
> 73, ac6xg
>

Do you think maybe he wrote that?

tom
K0TAR
```

2760. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 01:26:14 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48d450fe$0$60079$8046368a@newsreader.iphouse.net>
Source record: 21833

Frank wrote:
<snip>
>
> Computation of the electric and magnetic fields in the vicinity of a
> conductor involve manipulation of the "Vector magnetic potential";
> as in:
> http://en.wikipedia.org/wiki/Magnetic_vector_potential
>
> Frank

Please no! Now he'll add gauge invariance to the mix!

You fool.

tom
K0TAR

2761. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 01:30:15 UTC
From: dfinn1@nc.rr.com
Message-ID: <bdca63bb-8361-4fd3-a380-d95dd5bf557c@w7g2000hsa.googlegroups.com>
Source record: 21834

On Sep 19, 9:13 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
>
> [...]
>
> And, in conclusion ... plonk ... thread plonk ...
>
> ... good luck ... bye ...
>
> JS

Thanks Johnny, that's what I wanted. You're number 1
@
@
@@@@

2762. Re: Snap on ferrite filters for feedline chokes. Do they work?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 01:40:51 UTC
From: Danny Richardson <>
Message-ID: <ftk8d4lkd3lo2picbvb0e4aiue381em3r7@4ax.com>
Source record: 21835

On Fri, 19 Sep 2008 17:19:57 -0400, john Wiener <jawod@fuse.net>
wrote:

>Any comments on effectiveness of snap-on ferrite chokes on transmission
>lines...here rg8u ?
>There seems to be some dispute about that as well as placement on the line.
>

Ferrite is available in several formulations. Some much better than
others - depending upon the application.

I suggest you check out Jim Brown's excellent paper on the subject.

www.audiosystemsgroup.com/RFI-Ham.pdf

73,
Danny, K6MHE

2763. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 01:53:39 UTC
From: dfinn1@nc.rr.com
Message-ID: <ef6cef73-585b-4cdc-a897-5684d648b41a@z72g2000hsb.googlegroups.com>
Source record: 21836

On Sep 19, 6:47 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Jim Kelley wrote:
> > ...
> > I see. Well, at the time it sounded more like you were saying "The
> > amazing thing is that space cannot exist without those particles which
> > provide the very structure of space itself." Which seems to presume to
> > know what space is.
> > ...
> > All the while shouting demeaning epithets, and ever after claiming to
> > have never held the opinion in the first place. :-)
>
> > 73, ac6xg
>
> Yes, I see your point. Space is real; however, does it consist of
> bosons or the imaginings/denials of bozos.
>
> Excellent point ...
>
> Regards,
> JS

Johns Rules for Posting:

CASE I

1. Author makes post.

2. Cecil validates post.

3. John pounces on author's opponent.

CASE II

1. Author makes post.

2. Cecil invalidates post.

3. John pounces on author.

2764. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 01:56:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7ul8d4h6dbmttnncfop851qc3ei2ia532b@4ax.com>
Source record: 21838

On Fri, 19 Sep 2008 20:20:18 -0500, Tom Ring <news0004@taring.org>
wrote:

>Jim Kelley wrote:
>> Tom Ring wrote:
>>> Art Unwin wrote:
>>>> Another prediction
>>>
>>> WTF?

>> It's somewhat like this I think:
>>
>> http://video.google.com/videoplay?docid=5125780462773187994
>
>Do you think maybe he wrote that?

It makes too much sense.

Now, if someone could dredge up the last stockholder's meeting with
the board of Lehman Brothers, it might come closer to Art's style.

73's
Richard Clark, KB7QHC

2765. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 01:58:14 UTC
From: dfinn1@nc.rr.com
Message-ID: <5f7aeff0-c344-400f-8b7b-4bb07ce95bdc@k13g2000hse.googlegroups.com>
Source record: 21837

On Sep 19, 6:37 pm, John Smith <assemblywiz...@gmail.com> wrote:
> dfi...@nc.rr.com wrote:
>
> [the chit I already mentioned ...]
>
> And, in intuiting your next response(s), yes, when we get a good
> understanding of the gravitational ether instant communications to far
> distant corners of the universe will happen instantaneously (perhaps we
> will finally get results from SETI! <grin>) This is why some are
> speculating we don't have our antennas "correct" and the formulas we
> design them with are lacking ...
>
> Shortly after we figure this all out (well, years? decades?), we will
> have craft which can duplicate this same phenomenon--travel to any
> corner of this universe almost instantaneously. If you don't "read"
> Einstein and get this out of it ... re-read him!
>
> Need I mention Long Delay Echo? (LDE) ... what is your take on that? A
> reflection from a cloaked mothership? ROFLOL
>
> Well, I don't know what it is either, but it bears looking into ...
>
> Regards,
> JS

Oops...another senility eruption by Captain John ("moon unit") Smith.

2766. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 04:37:41 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <n6%Ak.19$Ce3.6@fe091.usenetserver.com>
Source record: 21839

Art Unwin wrote:
> I am begining to believe that there is really no interest in small
> antennas

I'm interested, Art. I have a small antenna for 432 MHz and an even
smaller one for 1296 MHz.

Dave K8MN

2767. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 04:38:44 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <m7%Ak.20$Ce3.1@fe091.usenetserver.com>
Source record: 21840

Art Unwin wrote:

> If you are looking for a University to compare with try Rhode Island
> I don't believe any University can show antenna results in the past
> few years that are better than those produced in any other state.

Perhaps it takes a small state to research small antennas.

> What has your State University done that is notable?

It has lost two of its three football games.

Dave K8MN

2768. Final Word on Relativistic Ether

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 05:54:45 UTC
From: dfinn1@nc.rr.com
Message-ID: <f509e5bc-4feb-4959-878b-6725baaa46d6@d45g2000hsc.googlegroups.com>
Source record: 21841

This Google web interface places limits on my posting so I guess I will have to put in my last word on this, assuming I can still get this posted. "John" may be rsponsible for my posting problems. My response is as follows:

Cecil is referring to the (abstract) ether of the general theory...Please understand that Einstein was saying that space itself is an "ether" IF you consider space to be the primary force acted upon by gravitation because space then "controls" phenomemon of light propagation. Space is "manipulating" the light path in accordance with gravitational forces present; it acts like a medium, like an "ether". It is like Cecil and "John" are reading a parable in the Bible and they are reading the story literally without looking for the essence of the story. He was not speaking about an ether as a physical entity that really exists in material form in a motionless, non-relativistic setting that most of us find ourselves in (we are not photons). It is an abstraction for us. Do abstractions exist? Yes. As physical entities? No. Can you physically measure an infinitely large number of infinitely small rectangle under a curve? No. Can you compute the area under the curve by use of calculus which uses that principle? Yes. The Einsteinian ether you are referring to is as much an abstraction in our non-relativistic existence as the Newtonian infinitely small rectangles of a calculus integral, i.e. an abstraction.

2769. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 11:28:35 UTC
From: Dave <noone@nowhere.com>
Message-ID: <D75Bk.388$Jw.167@nwrddc02.gnilink.net>
Source record: 21842

"Tom Ring" <news0004@taring.org> wrote in message
news:48d450fe$0$60079$8046368a@newsreader.iphouse.net...
> Frank wrote:
> <snip>
>>
>> Computation of the electric and magnetic fields in the vicinity of a
>> conductor involve manipulation of the "Vector magnetic potential";
>> as in:
>> http://en.wikipedia.org/wiki/Magnetic_vector_potential
>>
>> Frank
>
> Please no! Now he'll add gauge invariance to the mix!
>
> You fool.

when he starts quoting gauge's laws and how they describe the weak force
equilibrium in Maxwell's equations it should add another level of laugh
potential.

2770. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 11:33:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <lc5Bk.389$Jw.51@nwrddc02.gnilink.net>
Source record: 21843

"Tom Ring" <news0004@taring.org> wrote in message
news:48d450fe$0$60079$8046368a@newsreader.iphouse.net...
> Frank wrote:
> <snip>
>>
>> Computation of the electric and magnetic fields in the vicinity of a
>> conductor involve manipulation of the "Vector magnetic potential";
>> as in:
>> http://en.wikipedia.org/wiki/Magnetic_vector_potential
>>
>> Frank
>
> Please no! Now he'll add gauge invariance to the mix!
>
> You fool.
>
> tom
> K0TAR
>

here is the best description of art's equilibrium i have found:

Perturbative string theory may be used to show that massless particles can
only have spins 0, 1/2, 1, 3/2, 2. This conclusion follows from an analysis
of the energy of various harmonic oscillators included in the string that
contribute to the mass of the resulting particle. This conclusion
beautifully agrees with facts about gauge invariance that may be derived
using spacetime arguments.

If you consider any semirealistic physical system, it reduces to quantum
fields at long distances - fields that are able to create particles. Because
of the rotational symmetry, these particles may be classified according to
their spin. For spins equal to 0 or 1/2, one only creates states of positive
norms (think about the Klein-Gordon and Dirac fields). However, for spin 1
and higher, there are inevitably negative-norm states in the Hilbert space
created by the simplest version of these quantum fields. For example, the
time-like component of a 4-vector field creates states whose norm has the
opposite (negative) sign than the space-like components of the same field.
Such a decoupling implies an infinite amount of accidents that are
equivalent to a symmetry.

2771. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 12:33:39 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <e57124d2-2d0a-4102-bb29-a773376c7001@z66g2000hsc.googlegroups.com>
Source record: 21844

On Sep 11, 2:58 pm, ml <m...@di.net> wrote:
> hi
>
> a while ago i posted hoping to get some ideas how to eliminate
> some s9 noise caused by my buildings new elevators
>
> only took them 9months to install some electrical filters but the
> guy doing it was very nice and showed me a few things
>
> since the filters didn't help seemingly at all, i wanted to provide
> some more information and see what anyone might think would be
> either some good tests to make and or further corrective actions
>
> a recap, jan 08 we got a new elevator system the original 1940's unit
> was just a rack of relays there are 2 elevators motor and stuff in
> a small room rooftop noise was always s0 or s1
>
> the new system i can see is made by galaxy believe it or not made in
> the bronx ny i am told they are a large world wide supplier since i
> live in the bronx at least they are local
>
> my first look in there today shows they did at least take pride
> in there work, all the wiring in there is really nice
>
> there is kinda 2 main parts in the cabinet a large pc board and a
> magnetek HPV 600
>
> i took my ft817 shut the other elevator off and moving the rig
> around i see i got no interference from the computer board getting
> near the magnetek big time noise
>
> they have the manual onlinehttp://www.elevatorcontrols.com/downloads/files/hpv600.pdf
>
> pretty interesting a section in there on how to mitigate noise
> perhaps a few things in there i could maybe double check
>
> when noone is using the elevator they throw out some noise like about
> s2 maybe more when the elevator starts moving it jumps naturally
> to about s9
>
> i was wondering how to first see where the noise is leaking from
> the metal cabinet is pretty think i say double the gague of say a
> file cabnet , it does have slits on either side for air a few
> holes for conduit which runs to the power and to the motor

>
> they seemed to pay attention to grounding   the door had a little
> ground wire on it,   etc naturally this is all fast first impression
> stuff i didn't have a lot of time up there
>
> i thought perhaps   painting the cabinet w/rf paint and getting some
> screens over the vent slits thou obv that wouldn't help if it's
> radiating along the conduit didn't have a chance to measure for that
>
> the magnetek is a bread sized box it gets hot and has a fan so i
> can't cover it, but perhaps a perferated copper/lead enclousure might
> help?(assuming it's not radiating along its wires)
>
> as a last resort perhaps replacing the magnatek w/another brand known
> to be rf quite   however i personally don't know how i would find
> that out and no garantee they would risk swaping the unit oout
>
> so i am hoping   that there might be some brainstorming and thoughts
> you all might share?
>
> any advice tips   much appreciated
>
> thanks for all

Elevator motors are DC, in the old one the DC was supplied by a motor/
generator combination, The new ones get their DC from a huge SMPS and
they can be electrically noisy. They can also induce harmonics into
the electrical system that UPSs dont like at all. It is my
understanding the elevator rehab project where I work has been put on
hold for that reason.

Jimmie

2772. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 13:04:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Wx6Bk.1172$yr3.229@nlpi068.nbdc.sbc.com>
Source record: 21845

Jim Kelley wrote:
> Well, at the time it sounded more like you were saying "The
> amazing thing is that space cannot exist without those particles which
> provide the very structure of space itself."

Quantum Physics tells us that particles are the only
things that exist in reality so since space exists,
it must be made of particles without which space couldn't
exist. My personal opinion is that Quantum Physics is
correct and that's what I was paraphrasing above.

My personal opinion is that Einstein was correct when
he said:

"Recapitulating, we may say that according to the
general theory of relativity space is endowed with
physical qualities; in this sense, therefore, there
exists an ether. According to the general theory of
relativity space without ether is unthinkable; for
in such space there not only would be no propagation
of light, but also no possibility of existence for
standards of space and time (measuring-rods and
clocks), nor therefore any space-time intervals in
the physical sense."

Replace "physical qualities" with "particles" in
accordance with the latest thinking in Quantum
Physics and you will have arrived at my personal
opinion. Feel free to continue to harass me for
having opinions based on science. In exactly what
ways do you disagree with Quantum Physics and
Einstein?
--
73, Cecil http://www.w5dxp.com

2773. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 13:07:21 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <aA6Bk.1173$yr3.836@nlpi068.nbdc.sbc.com>
Source record: 21846

John Smith wrote:
> This is why some are
> speculating we don't have our antennas "correct" and the formulas we
> design them with are lacking ...

Maybe we should fire up our modulated gravity wave
and entangled particle receivers.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2774. FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 13:36:47 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <c73a808e-123e-47dd-850f-f4635a2972ad@s50g2000hsb.googlegroups.com>
Source record: 21847

I got my first class license back in the early 70s. Never really needed it anywhere except to legally work on CB radios. I cant find it and dont really remember if ther was an expiration on it or not. I inquired by letter with the FCC a couple of years ago but never heard back from them. I there a website that may have this data

Jimmie

2775. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 13:57:36 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gb2vgldsk1@aioe.org>
Source record: 21849

The FCC "First Class Radio Telephone Operator" license was replaced many years ago by the "General Radiotelephone Operator License."

The General license was issued automatically to anyone sending in a First 'Phone license for renewal at the end of its term, and is valid for the lifetime of the licensee.

Here is an FCC link about the General...

http://wireless.fcc.gov/commoperators/pg.html

RF

2776. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 14:02:06 UTC
From: Dave <dave@dave.dave>
Message-ID: <48d5025f$0$22179$bd467cd0@news.dslextreme.com>
Source record: 21850

Jeff Liebermann wrote:
> On Thu, 18 Sep 2008 12:49:04 +0000, Dave <dave@dave.dave> wrote:

>> Why don't you two get a room? This bullshit has nothing to do with ham
>> radio. However, maybe if we ionized your hot air we could bounce some
>> 70 cm off the cloud.
>
> I've always suspected that some hams hated math and other technical
> subjects. While it is conceivable that you could build a ham antenna
> without using math, I don't think the results would be optimal. There
> are also those that advocate converting ham radio from a technical
> hobby, to a sport, where the technical aspects are diminished to the
> point of extinction, and the operational exercises of contesting, DX,
> CW, and rag chewing are predominant. No math required. Perhaps the
> FCC could balkanize the ham bands into technical and non-technical
> sub-bands, where the clueless and those that still design, calculate,
> and build their own equipment can be seperated for their own safety.

What equipment do you build for the amateur bands? Where does one
employ that much theoretical physics?

I have software and analyzers to help me; I don't need to throw
general theory around on a bulletin board that is over the head of 95%
of the people whose curiosity might be piqued by the name of the group.
Perhaps if you applied your quantoid lunacy to making a suitcase
quadrifilar helix for HF or something, I'd be less hurt.

2777. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 14:07:02 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9B1F5CBF5F5F4VeebleFetzer@216.250.184.7>
Source record: 21751

In news:c73a808e-123e-47dd-850f-f4635a2972ad@s50g2000hsb.googlegroups.com
JIMMIE <JIMMIEDEE123@yahoo.com> wrote:

> I there a website that may have this data
>

The FCC's ULS data can be accessed at

http://wireless.fcc.gov/uls/index.htm?job=home

--
Bert Hyman St. Paul, MN bert@iphouse.com

2778. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 14:07:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Ps7Bk.541$hc1.120@flpi150.ffdc.sbc.com>
Source record: 21752

dfinn1@nc.rr.com wrote:
> Einstein did not prove or disprove or advocate an ether theory.

On the contrary, he said in 1920: "According to the general
theory of relativity, *space without ether is unthinkable*; ..."

> From Cecil's earlier reference the following paragraph
> (from a speech long after 1905 by A. Einstein) is found:
> "More careful reflection teaches us, however, that the special theory
> of relativity does not compel us to deny ether."

Could be, but what about the general theory of relativity
which came later? You seem to be missing the fact that Einstein's
statement applies to the *special theory of relativity* which
preceded the *general theory of relativity* about which Einstein
said in 1920:

"Recapitulating, we may say that according to the general
theory of relativity, space is endowed with *physical qualities*;
in this sense, therefore, *there exists an ether*. According to
the general theory of relativity, *space without ether is unthinkable*;
for in such space there not only would be *no propagation of light*,
but also no possibility of existence for standards of space and time
(measuring-rods and clocks), nor therefore any space-time intervals
in the physical sense."

According to Einstein, the ether is a necessary requirement
for the general theory of relativity to be valid. Without ether,
there would obviously be no propagation of RF either. As I said
earlier, EM waves cannot propagate through absolute nothing and
I am just agreeing with Einstein.

> Einstein reflected that forces (in this case gravitational)
> can be considered to act on space, primarily. The force's effect on
> mass would then be a secondary condition that occurs due to the
> force's distortion of space.

You have a built-in contradiction there. If gravity can distort
space, then space consists of particles upon which gravity can
act (in accordance with the tenets of quantum physics). They may
be exotic particles but particles nonetheless.

> You are calling your ether something that is material, which
> Einstein definitely ruled out in the Special Theory in 1905.

But by 1920, Einstein had reintroduced a physical either as
a necessary condition for the general theory of relativity

to be valid.

Quantum Physics tells us that everything that exists exists
as particles. If that is true, then everything that exists
is indeed "material" although ether is most likely an "exotic
material" like (or maybe the same as) dark-matter/dark-energy.
--
73, Cecil http://www.w5dxp.com

2779. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 14:08:52 UTC
From: Dave <dave@dave.dave>
Message-ID: <48d503f4$0$22179$bd467cd0@news.dslextreme.com>
Source record: 21753

> Personally, I've suggested that CB'ers and Free Banders be issued
> complimentary ham licenses for 10 meters and let them fight it out.
> I'll be betting that the CB'ers win. Most of the "new hams" these
> days are former CB'ers. With a few notable exceptions, most are quite
> nice, but also technically lacking.
>
Hahahahahahahahahaha!

Like this?

http://members.cruzio.com/~jeffl/pics/antennas/index.html

2780. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 14:10:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <lv7Bk.542$hc1.229@flpi150.ffdc.sbc.com>
Source record: 21754

John Smith wrote:
> You have given idiot new meaning; you have take in word idiot to new
> heights, and you have not stopped there. There has yet to be a name
> given to the gobble-de-gook you spew.

e.g.
1. Transmission line currents are common-mode.
2. Richard Feynman was not a quantum physicist.
3. Ether is not required for propagation of light waves.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2781. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 14:15:07 UTC
From: Dave <dave@dave.dave>
Message-ID: <48d5056b$0$22179$bd467cd0@news.dslextreme.com>
Source record: 21755

JIMMIE wrote:
> I got my first class license back in the early 70s. Never really
> needed it anywhere except to legally work on CB radios. I cant find it
> and dont really remember if ther was an expiration on it or not. I
> inquired by letter with the FCC a couple of years ago but never heard
> back from them. I there a website that may have this data
>
> Jimmie

It would be here, but you would be a General these days.

http://wireless2.fcc.gov/UlsApp/UlsSearch/searchFrc.jsp;JSESSIONID_ULSSEARCH=PgJVLVGJMBhhrgqwSjzhP1b1RGYxMhGjk2H6pz4pg2jvhYNTwz8J!742460248!NONE

2782. Re: Final Word on Relativistic Ether

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 14:37:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <OU7Bk.789$x%.41@nlpi070.nbdc.sbc.com>
Source record: 21756

dfinn1@nc.rr.com wrote:
> He [Einstein] was not speaking about an ether as a physical entity
> that really exists in material form ...

Einstein said: "... we may say that according to the general
theory of relativity space is endowed with physical qualities ...
According to the general theory of relativity, space without
ether is unthinkable."

I don't recall Einstein saying that his ether was just an
abstraction devoid of physical qualities. In fact, he said
space is indeed endowed with physical qualities. And that
was long before dark-matter/dark-energy theory had been
introduced.

Quantum Physics tells us that everything that exists exists
as particles.

We have not discovered all of the particles. We may not even
have conceived of all the particles. We have accounted for
approximately 5% of the material that exists in the universe.
It doesn't take a genius to postulate that some of the missing
material may be in the structure that keeps space from collapsing
into absolute nothingness.
--
73, Cecil http://www.w5dxp.com

2783. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 14:54:12 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <qL-dnSlg_bGgnUjVnZ2dnUVZ_uidnZ2d@earthlink.com>
Source record: 21848

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:c73a808e-123e-47dd-850f-f4635a2972ad@s50g2000hsb.googlegroups.com...
>I got my first class license back in the early 70s. Never really
> needed it anywhere except to legally work on CB radios. I cant find it
> and dont really remember if ther was an expiration on it or not. I
> inquired by letter with the FCC a couple of years ago but never heard
> back from them. I there a website that may have this data
>
> Jimmie

I had one about the same time. They do expire every 5 years. There is no longer a First or Second class license. They were converted over to a nonexpiring General license. That thing is almost useless now. Most of the old requirements to work on transmitters have been eliminated.
As your First class has expired, you will have to take the test again if you want the General.

For more information:
http://wireless.fcc.gov/commoperators/pg.html

2784. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 14:59:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb335m$c9o$1@news.albasani.net>
Source record: 21757

Cecil Moore wrote:
> John Smith wrote:
>> This is why some are speculating we don't have our antennas "correct"
>> and the formulas we design them with are lacking ...
>
> Maybe we should fire up our modulated gravity wave
> and entangled particle receivers.

Cecil:

I am just telling you what I see suggested in his papers, lectures and talks (not to mention a whole slew of others chiming in along the way) ... and, of course, even Einstein himself found it, almost, unbelievable! Indeed, he made a direct comment to this (not before me right now, will quote it later.)

But, yes, although "the how we will do this" is much like space/structure/ether--at this point, it requires a wee-bit of faith ...

Regards,
JS

2785. Re: Equilibrium in free space

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 15:16:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb344a$e22$1@news.albasani.net>
Source record: 21758

Cecil Moore wrote:
> John Smith wrote:
>> This is why some are speculating we don't have our antennas "correct"
>> and the formulas we design them with are lacking ...
>
> Maybe we should fire up our modulated gravity wave
> and entangled particle receivers.

Cecil:

When ever I become timid, cautious and have a lack of courage in being able to state exactly where it appears "we are being taken", or what is possible, I think what existed before my birth and early childhood: (indeed, I am still such a coward on these matters, I tend to stick to what Einstein suggests!)

1) We didn't have the Maser/Laser. (Buck Rogers ray gun)

2) We hadn't been to space nor walked the Moon. (only speculated on it in science fiction)

3) Our doctors still appeared like Witch Doctors (well, they still do, a bit, baby steps, baby steps ...)

4) Computers were mere "toys." (a decent one would have occupied square miles and consumed the output power of nuclear reactor)

5) The speed of sound was considered a "wall", much like the speed of light today ...

6) [Continue this almost endless list--at will ...]

Back then, mention any of these advances as speculations on where the science "of the time" was about to go, you would have been laughed out of the room--why should we expect different today? People/society just doesn't change "that much", that quickly ...

Regards,
JS

2786. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 15:19:08 UTC
From: JB <nospam@goofball.net>
Message-ID: <Mv8Bk.393$UB3.12@trnddc07>
Source record: 21759

I have worked on maybe 5 CBs, a little Marine and did a Avionics project. Most of my time was spent with cutting edge PLMR and SMR projects for commercial, business, and Industrial customers. Most of those customers have gone to the phone companies though.

I was successful with the Fire customers, but the LE bunch always wanted a piece of the action. Hard to subsidize them when they are THE only action left.

They may have automatically converted you. I too let it slide but they converted and renewed it to lifetime anyway. You can look up your name (the one that you used) in ULS and find out if you have an active license. They seem to like to keep their database entries. I couldn't even throw mine away.

Here's the search page to look yours up:
http://wireless2.fcc.gov/UlsApp/UlsSearch/searchFrc.jsp

2787. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 15:46:52 UTC
From: JB <nospam@goofball.net>
Message-ID: <MV8Bk.563$8v5.389@trnddc01>
Source record: 21760

> Here's the search page to look yours up:
> http://wireless2.fcc.gov/UlsApp/UlsSearch/searchFrc.jsp
>
The search engine isn't too swift though. Last name first.

2788. Re: Moonbounce by KB9RQZ

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 15:48:51 UTC
From: Leland C Scott <lelandcscott@14mile.com>
Message-ID: <48d51b6a@news.x-privat.org>
Source record: 21761
Cross-posted to: rec.radio.amateur.policy,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

"kb9rqz" <kb9rqz@puncemail.com> wrote in message
news:4874c775@news.x-privat.org...
> kb9rqz prepairs two howl at the moon
>
> http://emekb9rqz.blogspot.com/2006/06/kb9rqz-prepares-to-howl-at-moon.html
>
http://img529.imageshack.us/my.php?image=n8dontbeadickheadwd9.jpg

2789. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 15:58:22 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gb36j1ueo1@registered.motzarella.org>
Source record: 21762

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:Iv7Bk.542$hc1.229@flpi150.ffdc.sbc.com...
> John Smith wrote:
>> You have given idiot new meaning; you have take in word idiot to new
>> heights, and you have not stopped there. There has yet to be a name
>> given to the gobble-de-gook you spew.
>
> e.g.
> 1. Transmission line currents are common-mode.
> 2. Richard Feynman was not a quantum physicist.
> 3. Ether is not required for propagation of light waves.
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

All of this chatter is really a contest to see who will lose their self control and scream, "IT'S AETHER, DAMN IT - NOT ETHER!!!".

But I'm not gonna fall for that. Nosiree!!! <G>

Ed, NM2K

2790. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 16:14:59 UTC
From: JB <nospam@goofball.net>
Message-ID: <7k9Bk.535$1a2.501@trnddc04>
Source record: 21763

I noticed that you need to submit passport type photos and 6 month endorsement from somebody. Gotta laugh. If you want to do away with a license, make sure they have to pass muster from someone unqualified.

2791. Re: Final Word on Relativistic Ether

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 16:19:58 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Mo9Bk.793$x%.40@nlpi070.nbdc.sbc.com>
Source record: 21764

dfinn1@nc.rr.com wrote:
> He [Einstein] was not speaking about an ether as a physical entity
> that really exists in material form in a motionless, non-relativistic
> setting that most of us find ourselves in (we are not photons). It is
> an abstraction for us. Do abstractions exist? Yes. As physical
> entities? No.

Would you please explain to all of us how gravity can
distort an abstraction? Good Grief!
--
73, Cecil http://www.w5dxp.com

2792. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 16:21:35 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hq9Bk.795$x%.358@nlpi070.nbdc.sbc.com>
Source record: 21765

Ed Cregger wrote:
> All of this chatter is really a contest to see who will lose their self
> control and scream, "IT'S AETHER, DAMN IT - NOT ETHER!!!".

Einstein called it "ether" and who am I to argue?
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2793. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 16:40:34 UTC
From: JB <nospam@goofball.net>
Message-ID: <6I9Bk.514$MN3.171@nwrddc01.gnilink.net>
Source record: 21766

I have also noticed that most of the PGs don't even have an FRN #

"JB" <nospam@goofball.net> wrote in message
news:7k9Bk.535$1a2.501@trnddc04...
> I noticed that you need to submit passport type photos and 6 month
> endorsement from somebody. Gotta laugh. If you want to do away with a
> license, make sure they have to pass muster from someone unqualified.
>

2794. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 17:14:53 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ajaad4hcv71q6botgo0pmdfe52kcm2mpo6@4ax.com>
Source record: 21767

On Sat, 20 Sep 2008 14:08:52 +0000, Dave <dave@dave.dave> wrote:

>
>> Personally, I've suggested that CB'ers and Free Banders be issued
>> complimentary ham licenses for 10 meters and let them fight it out.
>> I'll be betting that the CB'ers win. Most of the "new hams" these
>> days are former CB'ers. With a few notable exceptions, most are quite
>> nice, but also technically lacking.
>>
>Hahahahahahahahahaha!

I'm serious. It's kinda like the red light districts in many cities.
If you can't supress prostitution, at least you can control it in a
confined space. Give the lunatics room to jam each other, and they
won't be tempted to land on licensed frequencies.

It's also great for contesting. The art of rudeness, jamming, and
tuning up on other peoples conversations have been sufficiently
optimized on the ham bands. Time for a new challenge, which will be
contesting in a band full of hostile interference. I was running
PSK31 on CB for a while, much to the irritation of the channel
"owners". Worked nicely and there was little intererence. I consider
this advancing the state of the art in communications effectiveness.

Surely the FCC and Congress will recognize the value of ham radio to
global harmony, where international cooperation is enhanced by the
wireless exchange of a signal report, call letter, and contact number,
with foreign operators sufficiently politically connected to obtain a
ham radio license in their country. Perhaps ham radio should be
nominated for the Nobel peace price.

I dread to think what such hams might do with their spare time if ham
radio were to disappear. Give them a sandbox in which to play and get
out of the way.

>Like this?
>http://members.cruzio.com/~jeffl/pics/antennas/index.html

Ugh. That's my "old" site, where I've been playing with JAlbum
formatting. I haven't updated it in a while. Go unto:
<http://802.11junk.com/jeffl/antennas/>
for the latest version. The coffee can antenna is in there with
better 4NEC2 output.

Ooops. The NEC model files seem to have evaporated. I'll fix later
tonite.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2795. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 17:31:18 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <stbad4lg2nt0vf4tvs68eal45l1hdpbt7j@4ax.com>
Source record: 21768

On Sat, 20 Sep 2008 14:02:06 +0000, Dave <dave@dave.dave> wrote:

>Jeff Liebermann wrote:
>> On Thu, 18 Sep 2008 12:49:04 +0000, Dave <dave@dave.dave> wrote:
>
>>> Why don't you two get a room? This bullshit has nothing to do with ham
>>> radio. However, maybe if we ionized your hot air we could bounce some
>>> 70 cm off the cloud.
>>
>> I've always suspected that some hams hated math and other technical
>> subjects. While it is conceivable that you could build a ham antenna
>> without using math, I don't think the results would be optimal. There
>> are also those that advocate converting ham radio from a technical
>> hobby, to a sport, where the technical aspects are diminished to the
>> point of extinction, and the operational exercises of contesting, DX,
>> CW, and rag chewing are predominant. No math required. Perhaps the
>> FCC could balkanize the ham bands into technical and non-technical
>> sub-bands, where the clueless and those that still design, calculate,
>> and build their own equipment can be seperated for their own safety.
>
>What equipment do you build for the amateur bands? Where does one
>employ that much theoretical physics?

I spent about 15 year repairing commercial 2way radios, designing
accessories, working for several radio manufacturers, and playing RF
consultant. Methinks I can count about 15 independent products I
helped design during this time. None of them were specific to ham
radio, but could be adapted for ham use. At no time did I ever resort
to theoretical fizzix, quantum theory, or other occult arts. However,
I did employ a few magical incantations, especially when things did
not work as expected.

I never even suggested that theoretical fizzix was involved in the
design of amateur radio and antennas. Please re-read what you quoted
from my previous posting. Do you see any fizzix in there? What are
you suggesting?

Incidentally, since quantum theory violates every rule of logic,
causality, rationality, common sense, conventional wisdom, and
intuition, I've always suspected that it was a refuge of such
thinkers.

> I have software and analyzers to help me;

Same here. However, my analyst charges far too much money per hour
and is used sparingly.

>I don't need to throw
>general theory around on a bulletin board that is over the head of 95%
>of the people whose curiosity might be piqued by the name of the group.

Then don't throw general theory around. Nobody will learn anything
new. Ham radio will remain exactly as it is now and has been since
the invention of radio. Progress will cease and life will be easy for
all involved.

>Perhaps if you applied your quantoid lunacy to making a suitcase
>quadrifilar helix for HF or something, I'd be less hurt.

Umm... I think I see a problem here. Please check your attribution. I
think your question is for Art, not me. I don't think either of us
intentend to hurt you, but now that you mention it, a little temporary
pain might revive you from your sleep typing.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2796. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 17:57:17 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <gsdad4lke26v0cb8k1r1jf2hin4s1p6emu@4ax.com>
Source record: 21769

On Sat, 20 Sep 2008 16:40:34 GMT, "JB" <nospam@goofball.net> wrote:

>I have also noticed that most of the PGs don't even have an FRN #

What's a PG?
#11th commandment: thou shalt not abrev.

I haven't seen any FRN numbers in any signatures.
Here's mine, if you must: 0003838828
<http://wireless2.fcc.gov/UlsApp/UlsSearch/results.jsp?licSearchKey=licSearcKey20088201351
478&curPage=1&reqPage=1&printable>
Oh swell. My marine radio operators license is missing...

--
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2797. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 19:04:47 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <jPbBk.803$T65.472@edtnps82>
Source record: 21770

"Tom Ring" <news0004@taring.org> wrote in message
news:48d450fe$0$60079$8046368a@newsreader.iphouse.net...
> Frank wrote:
> <snip>
>>
>> Computation of the electric and magnetic fields in the vicinity of a
>> conductor involve manipulation of the "Vector magnetic potential";
>> as in:
>> http://en.wikipedia.org/wiki/Magnetic_vector_potential
>>
>> Frank
>
> Please no! Now he'll add gauge invariance to the mix!
>
> You fool.
>
> tom
> K0TAR

Heck, I never noticed that reference. Just wanted to show
Art how vectors are used in reality!

73, Frank

2798. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 19:20:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ctiad45mi2ijer498gpcmsk8br8p3jor8s@4ax.com>
Source record: 21771

On Sat, 20 Sep 2008 19:04:47 GMT, "Frank" <frank599@nospam.telus.net>
wrote:

>Heck, I never noticed that reference. Just wanted to show
>Art how vectors are used in reality!

Frank - from Hero to Zero with that last sentence's observation.

73's
Richard Clark, KB7QHC

2799. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 19:40:47 UTC
From: JB <nospam@goofball.net>
Message-ID: <3lcBk.347$nl3.313@trnddc05>
Source record: 21772

>
> Einstein called it "ether" and who am I to argue?
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

In most of science, God is unthinkable. But then, God said he won't do tricks for non-believers. "The fool in his heart says there is no God"

I can't conceive of God being a medium, but perhaps he is all that and much more. There is no "nothingness" Philosophically. Only degrees of scarcity of something that we perceive or expect to be there. Space is predominantly empty of matter but there is some from time to time. Perhaps the stars, planets and other phenomenon are there to keep the space clean. We don't fully know what we don't perceive (damn little enough what we DO perceive) . "Ether" is a supposed medium that facilitates an operational paradigm.

Bottom line is: Not all things must be theoretically proven to be practically utilized. The fact that a theory is practically utilized in a given application, does not infer that theory is infallible. For instance, in the application that at any given instant we are oriented with respect to the tangent of the Earth's surface. So that for the case that we are instantaneously at one point on the Earth, it doesn't matter if the Earth is flat, round, oblong or Spherical, even though it has been proven otherwise. Likewise, to think that an experiment that uses a particular theory and is successful will fully prove that theory over another yet to come is foolish.

So, conclusions based on application of far reaching theories should be held at arms length that we might maintain our objectivity. After all, Einstein and Newton both died before they could achieve a unified theory of the universe. Nor do I expect those still living will either. For now, none of them have been proved infallible.

"FREE SPACE" with respect to antenna theory is what? I thought it was conceptual place so an antenna with a known potential at it's terminals could be evaluated without ground effects. Is there truly a difference for our calculations between outer space and several wavelengths above ground in reasonably dry air?

2800. Re: Snap on ferrite filters for feedline chokes. Do they work?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 19:44:15 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <40aa9e48-8994-4749-9c5b-83fb3f4ce32a@e39g2000hsf.googlegroups.com>
Source record: 21773

On 19 sep, 23:19, john Wiener <ja...@fuse.net> wrote:
> Any comments on effectiveness of snap-on ferrite chokes on transmission
> lines...here rg8u ?
> There seems to be some dispute about that as well as placement on the line.
>
> Thanks
>
> John
> AB8O
>
> PS I was going to finish putting up my Carolina Windom last Sunday but
> Ike hit here in Oh...I still don't have power! Out of respect for TX I
> do not complain.

Hello John,

As others say, it depends on the frequency, actual application and
ferrite type.

M o s t snap-on ferrites use "fast" ferrite material, so they are
effective (read: give highest impedance) at several hundred MHz.
When using at low HF, the effect is limited.

I checked the 2008/2009 WURTH catalog (it is on my table): You can
expect common mode impedance (one turn, inner diameter suited for
8..12mm cable) of about 50…120 Ohms at 10 MHz. At 3.7 MHz impedance
drops to about 25 to 45 Ohms. Putting more of them onto the cable
gives proportionally more impedance.

It depends on the common mode impedance at the intended position
whether they will be effective. As OCF dipoles have high common mode
impedance, you have to use many of them (weight increase?).

When you think you need them at low HF, you might add some ferrite
rings/sleeves with high relative permeability (you probably have more
choice in ferrite materials in ring/sleev shape). The rings do act at
the low HF part, while the clamp on ferrites act on the high HF part.

Best regards,

Wim
PA3DJS
www.tetech.nl
without abc you can use the email address.

2801. zzzz

2802. FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 20:17:58 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gb3lpn$b0f$1@news.netins.net>
Source record: 21775

The expiration now is at 10 years old. There is a 2 year grace period for renewing it.

2803. Re: Final Word on Relativistic Ether

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 20:41:22 UTC
From: dfinn1@nc.rr.com
Message-ID: <3cceb2c8-c289-426e-8166-83969e080f1d@y21g2000hsf.googlegroups.com>
Source record: 21776

On Sep 20, 12:19 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > He [Einstein] was not speaking about an ether as a physical entity
> > that really exists in material form in a motionless, non-relativistic
> > setting that most of us find ourselves in (we are not photons). It is
> > an abstraction for us. Do abstractions exist? Yes. As physical
> > entities? No.
>
> Would you please explain to all of us how gravity can
> distort an abstraction? Good Grief!
> --
> 73, Cecil http://www.w5dxp.com

Good Grief indeed. You are reduced to playing word games. The physical operant of gravitational force from an entity of mass is another entity of mass or one with the some of the physical qualities of mass such as light. Since the gravitational force between 2 or more entities may affect the space between such entities, we can form the abstraction which considers that gravitational force distorts space as the primary operant of this force and its effects on mass and light are secondary results of the distortion of space. In your posts you have surprisingly chosen to view space as the latter (abstract view) giving almost no consideration to the physical view where matter-to-matter is the primary operant. I prefer the physical view because I reference my thinking as an oberserver at rest. A big problem with chosing the abstract view (matter-space operant) is that it depends upon no future findings ever being discovered that would alter the theory upon which it is based, But I agree, IF the General Relativity theory is ever proven to be an endpoint upon which no additional finding can ever be found, and you know this will never be the case, then according to the 1920's abstract view, space itself must be *the* ether for light (as least, as far as the "light" is concerned). This non-material ether "with Physical qualities" as Einstein calls it, can never be observed or measured because it is an abstraction to us at rest. Your view can never be proven false until such time as the general theory is modified which will not happen in our life time. This puts you on safe ground in that you cannot lose the argument. Neither can you win. I can see that you are about 75% there in "getting" relativity...you can't get there with word games. I suggest you confine your concepts of the physical world to 4 dimensions where you, the observer are at rest. Everything you see in that setting is your "physical" word". From there you can conceptualize the universe as if your were an observer at relativistic speeds. Everything in that world is an abstraction. Then consider that physical elements and

abstract elements of an observation can be true at the same time even if they seem to contradict each other in one or the other setting. But never mix up the two universes as you are doing right now. Finis.

2804. Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-20 23:14:21 UTC
From: charrid <richfur@gmail.com>
Message-ID: <000b7859-691e-418d-b9a1-609626329f79@k7g2000hsd.googlegroups.com>
Source record: 21777
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Would anybody who owns Eico model 710 GDO be willing to supply coil data (diameter, length, No. of turns, wire diameter) so that I could duplicate the coils? I bought the coil-less 710 at the fleamarket and cannot find the coil set. I am mainly interested in the 2.9-7,5 and 7.5-18 MHz ranges. Or maybe a close-up photo with a ruler laying next to the coils would be enough.
73, Rich OK8RF

2805. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 01:54:03 UTC
From: Michael Black <et472@ncf.ca>
Message-ID: <Pine.LNX.4.64.0809202145490.28405@darkstar.example.org>
Source record: 21778
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sat, 20 Sep 2008, charrid wrote:

> Would anybody who owns Eico model 710 GDO be willing to supply coil
> data (diameter, length, No. of turns, wire diameter) so that I could
> duplicate the coils? I bought the coil-less 710 at the fleamarket and
> cannot find the coil set. I am mainly interested in the 2.9-7,5 and
> 7.5-18 MHz ranges. Or maybe a close-up photo with a ruler laying next
> to the coils would be enough.
> 73, Rich OK8RF
>
>
The coils are bound to have so many turns that they will be hard to
count, unless someone actually unwound them.

Open it up, see if you can figure the capacitance of the variable
capacitor (or maybe there's a schematic somewhere that provides
that information?), and then use the equations to figure out the
needed inductance and then the number of turns to make that value
of inductance. Then you can use any size coil form, just so long
as you can rig it to fit whatever the GDO is using for the coils
to plug into. Wind some extra turns, and then remove them if
necessary (since it's easier to remove than add turns).

It won't be exact, but any GDO dial is fairly vague. The inherent
capacitance of the coil will come into play, so you can decide whether
it's best to have the GDO dial match at the high end or the low end.

Thirty years ago there was an article in "73" about revamping a GDO,
I think he solid-stated it but can't remember, but he didn't have a
coil set either and described the process he went through to give
it a set of coils. I think it was radical surgery though, I seem
to recall that he even changed the jacks used for the coils. He
took the easy way out, providing a jack to feed a frequency counter
so the original dial was relatively unimportant.

Michael VE2BVW

2806. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 02:26:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb4bc4vki1@news.albasani.net>
Source record: 21779
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Michael Black wrote:

> ...
> Michael VE2BVW

So then, start out with the highest frequency coil--this one you should be able to count the turns on.

Then, look at then next, wind it, test it, and adjust turns so that in conforms to the expected frequency coverage of the "next band."

Then, sit down with your calculator and "predict" the next ... adjust your calculations and predict/compute the next ... etc.--repeat as necessary ...

Logic ... it pays off in the long run, is usable across all disciplines ...

Regards,
JS

2807. Re: Final Word on Relativistic Ether

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 02:45:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <zwiBk.1841$eb4.397@flpi147.ffdc.sbc.com>
Source record: 21781

dfinn1@nc.rr.com wrote:
> In your posts you
> have surprisingly chosen to view space as the latter (abstract view)

When someone starts lying about my posts, I classify him
as an unethical SOB and now you are in that classification.
You are the one who said the ether concept is an abstraction.
For the record, I believe the ether is absolutely real and
that we simply do not yet understand its nature.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2808. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 02:46:05 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <3ncbd4lb4ickou31ecaordlnmktv8hrdqj@4ax.com>
Source record: 21780

On Fri, 19 Sep 2008 01:13:20 -0700 (PDT), xray66@earthlink.net wrote:

>I'm trying to create a model for a slim-jim type of jpole in NEC, but
>I'm having a hard time figuring out how the coordinates should go in.
>Can anybody help me with some hints? If I can get where each side
>basically goes in X Y & Z and the feed, I can probably get the rest.
>Or maybe there's a file online somewhere? I wouldn't mind figuring out
>how to do a UHF/VHF log either. Thanks,

Go unto:
<http://mmhamsoft.amateur-radio.ca/mmana/index.htm>
and download MMABA-GAL modeling software. It's free. Included in the
samples is a 145MHz J-Pole antenna as:
\ANT\VHF\J-ant144.mma

For NEC2 output, see utility at:
<http://www.qsl.net/ua3avr/>
which is the same engine used for 4NEC2 (by the same author).

More antenna models at:
<http://dl2kq.de/mmana/4-3.htm>

--
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2809. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 02:49:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb4cni$138$1@news.albasani.net>
Source record: 21782

Jeff Liebermann wrote:
[stuff]

What amazed me, after looking them both over, eznec/mmana-gal, the similarities are greater than their differences ... could the instructions/examples from eznec be useful?

Just a thought,
regards,
JS

2810. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 03:02:57 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <0gdbd45nk1vlvqa6fv9i8p085nstb4c174@4ax.com>
Source record: 21783
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sat, 20 Sep 2008 16:14:21 -0700 (PDT), charrid <richfur@gmail.com>
wrote:

>Would anybody who owns Eico model 710 GDO be willing to supply coil
>data (diameter, length, No. of turns, wire diameter) so that I could
>duplicate the coils?

Yech, tubes. I have several Heathkit grid dip meters, but no Eico.

This may help:
<http://www.qsl.net/n4xy/GDO_EICO.html>
The photo shows one coil, which should give you an idea as to the
general size and construction of the coil.

The photo of the Eico 710-A looks very much like one of my Heathkits
(buried somewhere). Do you have a 710 or a 710-A. There's a huge
difference.

>I bought the coil-less 710 at the fleamarket and
>cannot find the coil set. I am mainly interested in the 2.9-7,5 and
>7.5-18 MHz ranges. Or maybe a close-up photo with a ruler laying next
>to the coils would be enough.
>73, Rich OK8RF

Others have suggested cut-n-try which is probably good enough. As
long as the coil looks roughly like the original, it should work.

However, if you wanna do the math, look at the schematic and figure
out the minimum and maximum capacitance on the variable tuning
capacitor. Be sure to include any trimmers or padding capacitors in
the tuned circuit. You know the lowest and highest frequencies from
the dial. Drag out your abacus and plug the numbers into the usual LC
resonant frequency equation. Solve for a value of L that will be
roughly the same at both the high and low ends of the dial. You
probably won't hit the exact value, but it should be close. Lots of
online calculators for the inductance of solenoid wound coils. No
need for an LRC meter as you can just plug it into the grid dip meter
and count the frequency.

--
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Skype: JeffLiebermann AE6KS 831-336-2558

2811. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 03:11:26 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <7debd41dhjli2g99ck777ns49d1a7mihpc@4ax.com>
Source record: 21784
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sat, 20 Sep 2008 20:02:57 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>This may help:
><http://www.qsl.net/n4xy/GDO_EICO.html>
>The photo shows one coil, which should give you an idea as to the
>general size and construction of the coil.

More photos.
<http://reviews.ebay.com/Eico-710-Grid-Dip-Meter-Coil-Set-protection-packing_W0QQugidZ1000
0000001863194?ssPageName=BUYGD:CAT:-1:SEARCH:5>
Oh-oh. My Heathkit coils do not have ferrite or iron slugs. The Eico
710 coils apparently do. The coil on the left is obviously broken.

Free manual for the Eico 710:
<http://bama.edebris.com/manuals/eico/710/>
I'm too lazy to find a DejaVu decompressor, but I expect there are
some instructions and diagrams of the coils in the manual.

--
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2812. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 03:37:42 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B1FD1D8FA3EFHuckleberrybigvalley@198.186.192.196>
Source record: 21785

>
>>I have also noticed that most of the PGs don't even have an FRN #
>
> What's a PG?

Its the first two letters in the FCC General RadioTelephone Operator
License number.

Ed K7AAT

2813. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 03:43:21 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <frebd49aocm3tldnprb7dpe9ebt719t4mp@4ax.com>
Source record: 21786

On Sat, 20 Sep 2008 19:49:21 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Jeff Liebermann wrote:
>[stuff]
>
>What amazed me, after looking them both over, eznec/mmana-gal, the
>similarities are greater than their differences ... could the
>instructions/examples from eznec be useful?

Yep. 4NEC2 will open .EZ files from EZNEC directly. I'm not very
familiar with MMANA-GAL but it appears that Ari's utility will both
import and export .NEC files.

Any tutorial from any vendor is useful. There's no reason to just use
one modeling program. If you had a workshop, would you use one tool
for every job? Probably not. If you sign in to the free Antennex
"guest room", there's a rather long and detailed NEC2 manual, along
with lots of tutorials and articles from back issues.

However, despite the wealth of tutorials and articles, I find it best
to learn by destroying. I hate to recommend my method because it's
not for everyone, but I like to start with a similar model, and
butcher it so I know how it works and what it does. If I can't figure
out how to do something, I search and read the docs. Not the best
method, but works for me.

I use mostly 4NEC2 because I'm familiar with it and because it
includes a surface, dish, cylinder, etc generator. I sometimes use
the free version of EZNEC, because it's somewhat easier to use. I
also use NEC-Win Synth to build tower and geometric structures:
<http://www.nittany-scientific.com/nws/index.htm>

There are lots of antennas available at various sites to plagerize.
For example:
<http://www.nittany-scientific.com/examples.htm>
<http://www.cebik.com>
<http://www.antennex.com>

Drivel:
Various commercial digital TV antennas:
<http://www.hdtvprimer.com/ANTENNAS/comparing.html>
with Eznec NEC2 files at:
<http://hometown.aol.com/kq6qv/SIMS/>
I'm amazed at how well some of these antennas work over the very wide
TV VHF/UHF range. In the past, I've assumed that much of the metal

work on the typical TV antenna were decorations and that the antenna was at best a marginal proposition. Apparently not, as most of the commercial antennas seem to be rather well designed.

--
Jeff Liebermann jeffl@cruzio.com
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2814. Re: Final Word on Relativistic Ether

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 04:07:52 UTC
From: dfinn1@nc.rr.com
Message-ID: <633e5736-cfd6-42a9-8872-6f8071efe070@a70g2000hsh.googlegroups.com>
Source record: 21787

On Sep 20, 10:45 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> dfi...@nc.rr.com wrote:
> > In your posts you
> > have surprisingly chosen to view space as the latter (abstract view)
>
> When someone starts lying about my posts, I classify him
> as an unethical SOB and now you are in that classification.

No more Mr. Nice Guy huh?

> You are the one who said the ether concept is an abstraction.
> For the record, I believe the ether is absolutely real and
> that we simply do not yet understand its nature.

Phlogiston was real until we understood its nature.

2815. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 04:15:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb4ho5$703$1@news.albasani.net>
Source record: 21788

Jeff Liebermann wrote:
[real stuff]

Uh, Jeff ...

Eznec vs. Mmana-Gal ... be careful--play dumb ... :-)

Regards,
JS

2816. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 04:21:54 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <4thbd4pvpk4m98nce5q3qgqka1qbrfb8no@4ax.com>
Source record: 21789

On 21 Sep 2008 03:37:42 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>>>I have also noticed that most of the PGs don't even have an FRN #
>>
>> What's a PG?

> Its the first two letters in the FCC General RadioTelephone Operator
>License number.
> Ed K7AAT

Thanks. ULS, CORES, FRN numbers, and such started around 1998(?). It
was essentially optional (because the system didn't work) until about
mid 2000, when Congress demanded that all business with government
agencies include an SSI number (social security number). To get an
FRN number, you need to supply an SSI number.

I passed my GROL in Nov 1994, somewhat before FRN numbers were first
issued. Prior to that, I had an FCC 2nd and later 1st RadioTelephone
license with radar endorsement. I didn't want to deal with the ULS
mess so I avoided getting one. I eventually wanted to upgrade from
Technican class to General class[1], and which required an FRN number.
Oh well. Some of my friends and accomplises that obtained GROL
licenses at the same time as me still have not obtained FRN numbers.

[1] I was going to just sign the paperwork for the General class
license as I had passed 5 wpm back in the stone age of ham radio as a
Novice. However, the VE assured me that the price was the same for
the Extra Class license, so I should try taking it anyway. The logic
seemed reasonable except for one problem. I hadn't studied for the
Extra in the slightest. So, I blundered, guessed, snarled, and
muddled my way through the Extra exam, fully expecting to fail
miserably. I had to borrow a calculator. I was amazed when I passed
the Extra by one question. I'm fairly sure I answered all the
technical questions correctly, but missed most of the operating, band
limits, sub-bands, rules, and regs.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2817. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 04:27:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb4ifb$7ti$1@news.albasani.net>
Source record: 21790
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Jeff Liebermann wrote:

> ...
> Others have suggested cut-n-try which is probably good enough. As
> long as the coil looks roughly like the original, it should work.
> ...

Yeah, working as a software engineer and finding I get the most money from convincing those "with money" that I am worth "some of their money" has made me aware of the value of reverse engineering--whether software or hardware--it works!

But, if you have built enough "old box tube xmitters", you can almost guess the dia./turns/and-caps <wink> Heck, bet I could come up with a circuit using the same coils, using a fet, and saving the cost of the filament power! Indeed, if the tube uses an octal socket, in his current GDO, why not replace the tube with a fet(s)?

Regards,
JS

2818. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 04:51:07 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <i6kbd49hmjo51vltiiras5n1ko6o4jpvji@4ax.com>
Source record: 21791
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sat, 20 Sep 2008 21:27:20 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Jeff Liebermann wrote:
>> ...
>> Others have suggested cut-n-try which is probably good enough. As
>> long as the coil looks roughly like the original, it should work.
>> ...

>Yeah, working as a software engineer and finding I get the most money
>from convincing those "with money" that I am worth "some of their money"
>has made me aware of the value of reverse engineering--whether software
>or hardware--it works!

The very first think I did when starting a new product, was to do a
"survey" of the competitions products. If possible, some were
purchased, dissected, reverse engineered, and on one occasion, cloned.
No need to reinvent the wheel when the competition has done it for
you.

>But, if you have built enough "old box tube xmitters", you can almost
>guess the dia./turns/and-caps <wink> Heck, bet I could come up with a
>circuit using the same coils, using a fet, and saving the cost of the
>filament power! Indeed, if the tube uses an octal socket, in his current
>GDO, why not replace the tube with a fet(s)?

Because the typical FET as a much higher transconductance (typically
about 30 millisiemens versus 5 millisiemens) and a much wider
frequency response, that you'll probably spend considerable time
stabilizing the oscillator. It's not easy to build a tunable
oscillator that operates over such a wide frequency range. Also, the
grid and gate currents are quite different. It can be done because
there are FET grid dip oscillators available. However, if you compare
schematics, they are sufficiently different to require a rebuild.

It's also criminal sacrilege to despoil such a vintage boat anchor.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2819. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 05:11:20 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <pblbd4pq8ad7ep80ceq0j7f7fb2q4r9uqa@4ax.com>
Source record: 21792

On Sat, 20 Sep 2008 21:15:01 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Jeff Liebermann wrote:
>[real stuff]
>
>Uh, Jeff ...
>Eznec vs. Mmana-Gal ... be careful--play dumb ... :-)

You left out about a dozen other packages including 4NEC2. I've never played dumb and don't plan to start now. What am I missing? Some kind of religious issues in modeling software? A battle to the death between the fanatics? Conflicting results?

Well, actually.... I did play dumb once. I came face to face with a mountain lion on a hiking trail. Trying to act non-threatening does not come naturally to me.

Incidentally, MMANA-GAL Yahoo Group:
<http://groups.yahoo.com/group/MM-HAMSOFT/>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2820. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 05:43:20 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Z9lBk.16914$wr1.10599@newsfe02.iad>
Source record: 21794

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:4thbd4pvpk4m98nce5q3qgqka1qbrfb8no@4ax.com...

> ... the VE assured me that the price was the same for
> the Extra Class license, so I should try taking it anyway. The logic
> seemed reasonable except for one problem. I hadn't studied for the
> Extra in the slightest. So, I blundered, guessed, snarled, and
> muddled my way through the Extra exam, fully expecting to fail ...

My experience, too. I think if I hadn't known reactance vectors, I would
have failed it. Tip of the hat to ELI the ICEman.

"Sal"
(KD6VKW)

2821. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 10:15:36 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <7649a5a1-f04f-41c3-8d73-0fd9de2210f0@w7g2000hsa.googlegroups.com>
Source record: 21795

On Sep 21, 1:43 am, "Sal M. Onella" <salmone...@food.poisoning.org>
wrote:
> "Jeff Liebermann" <je...@cruzio.com> wrote in message
>
> news:4thbd4pvpk4m98nce5q3qgqka1qbrfb8no@4ax.com...
>
> > ... the VE assured me that the price was the same for
> > the Extra Class license, so I should try taking it anyway. The logic
> > seemed reasonable except for one problem. I hadn't studied for the
> > Extra in the slightest. So, I blundered, guessed, snarled, and
> > muddled my way through the Extra exam, fully expecting to fail ...
>
> My experience, too. I think if I hadn't known reactance vectors, I would
> have failed it. Tip of the hat to ELI the ICEman.
>
> "Sal"
> (KD6VKW)
Oh well I am not listed for my commercial license. I just realized it
had expired when I was working on CBs ooops. Work for the gov now and
dont have to have one but I may take the test fot the general anyway.
I dont know what happened to my origonal, after 5 moves anything could
have.

Jimmie

2822. Re:FCC License

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 12:59:24 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gb5gfe$5qv$1@news.netins.net>
Source record: 21796

The present time on a amateur license is 10 years, with a 2 year period for renewal after that.

To query a license the URL is: http://www.arrl.org/fcc/fcclook.php3

There are also other avenues to go from that URL .

Lots of luck, Rollie

2823. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 13:12:07 UTC
From: Dave <dave@dave.dave>
Message-ID: <48d64827$0$22229$bd467cd0@news.dslextreme.com>
Source record: 21797

JIMMIE wrote:
> On Sep 21, 1:43 am, "Sal M. Onella" <salmone...@food.poisoning.org>
> wrote:
>> "Jeff Liebermann" <je...@cruzio.com> wrote in message
>>
>> news:4thbd4pvpk4m98nce5q3qgqka1qbrfb8no@4ax.com...
>>
>>> ... the VE assured me that the price was the same for
>>> the Extra Class license, so I should try taking it anyway. The logic
>>> seemed reasonable except for one problem. I hadn't studied for the
>>> Extra in the slightest. So, I blundered, guessed, snarled, and
>>> muddled my way through the Extra exam, fully expecting to fail ...
>> My experience, too. I think if I hadn't known reactance vectors, I would
>> have failed it. Tip of the hat to ELI the ICEman.
>>
>> "Sal"
>> (KD6VKW)
> Oh well I am not listed for my commercial license. I just realized it
> had expired when I was working on CBs ooops. Work for the gov now and
> dont have to have one but I may take the test fot the general anyway.
> I dont know what happened to my origonal, after 5 moves anything could
> have.
>
> Jimmie

http://www.w5yi.org/catalog.php?sort=10

2824. Re: Final Word on Relativistic Ether

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 13:27:53 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <qZrBk.868$x%.664@nlpi070.nbdc.sbc.com>
Source record: 21798

dfinn1@nc.rr.com wrote:
> On Sep 20, 10:45 pm, Cecil Moore <nos...@w5dxp.com> wrote:
>> dfi...@nc.rr.com wrote:
>>> In your posts you
>>> have surprisingly chosen to view space as the latter (abstract view)

>> When someone starts lying about my posts, I classify him
>> as an unethical SOB and now you are in that classification.

> No more Mr. Nice Guy huh?

I apologize for the outburst (augmented by wine). One
of my pet peaves is someone trying to engage in mind
fornication using my mind. Please don't do that again.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2825. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 14:38:39 UTC
From: JB <nospam@goofball.net>
Message-ID: <P%sBk.576$pp3.236@trnddc06>
Source record: 21799

>
> Einstein called it "ether" and who am I to argue?
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

In most of science, God is unthinkable. But then, God said he won't do tricks for non-believers. "The fool in his heart says there is no God"

I can't conceive of God being a medium, but perhaps he is all that and much more. There is no "nothingness" Philosophically. Only degrees of scarcity of something that we perceive or expect to be there. Space is predominantly empty of matter but there is some from time to time. Perhaps the stars, planets and other phenomenon are there to keep the space clean. We don't fully know what we don't perceive (damn little enough what we DO perceive) . "Ether" is a supposed medium that facilitates an operational paradigm.

Bottom line is: Not all things must be theoretically proven to be practically utilized. The fact that a theory is practically utilized in a given application, does not infer that theory is infallible. For instance, in the application that at any given instant we are oriented with respect to the tangent of the Earth's surface. So that for the case that we are instantaneously at one point on the Earth, it doesn't matter if the Earth is flat, round, oblong or Spherical, even though it has been proven otherwise. Likewise, to think that an experiment that uses a particular theory and is successful will fully prove that theory over another yet to come is foolish.

So, conclusions based on application of far reaching theories should be held at arms length that we might maintain our objectivity. After all, Einstein and Newton both died before they could achieve a unified theory of the universe. Nor do I expect those still living will either. For now, none of them have been proved infallible.

"FREE SPACE" with respect to antenna theory is what? I thought it was conceptual place so an antenna with a known potential at it's terminals could be evaluated without ground effects. Is there truly a difference for our calculations between outer space and several wavelengths above ground in reasonably dry air?

2826. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 16:19:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <shrcd45pvir6d61un9vq188phgnb53noco@4ax.com>
Source record: 21800

On Sun, 21 Sep 2008 14:38:39 GMT, "JB" <nospam@goofball.net> wrote:

>In most of science, God is unthinkable.
...
>"FREE SPACE" with respect to antenna theory is what? I thought it was
>conceptual place

Two thoughts, both wrong. It takes very little investigation to
confirm their errors.

The greatest proponent of science, accuracy, and religion (thus
confounding the first quote above), Lord Kelvin, offered:
"Do not be afraid of being free thinkers.
If you think strongly enough you will be
forced by science to the belief in God,
which is the foundation of all religion.
You will find science not antagonistic
but helpful to religion."
quoted by
Rev. Professor Henslow, May 1903

Similar quotes from Einstein, Oppenheimer, Feynman... are legion.

>Is there truly a difference for
>our calculations between outer space and several wavelengths above ground in
>reasonably dry air?

This appears to be set up with the word "truth" to always yield a
proof of invalidity. Any standard reference reveals the difference
and is so commonly available as to make one wonder how this question
arrived on the doorstep. Engineering deals not with truths (however
many would like to force fit that term into conversation) but with
practical implementations. Is there a practical difference for our
calculations? No, not unless you have a particular need for accuracy
and precision. Precision is often unnecessary, especially extra
digits stretching beyond the resolution of the original data supplied
to give those computational results. However, accuracy is all, but it
does not demand the nebulous qualifier (in itself a distraction) of
"truth."

You can be accurate to 1 place of resolution, or to 10. Men have been
sent to the gallows without any precision or accuracy of a measurement
and that verdict was weighed on the "truth" of the evidence. Men have
been rescued from the gallows on the basis of parts-per-million
discrepancies that proved their innocence, and "truth" was never
determined, only falsity.

73's
Richard Clark, KB7QHC

2827. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 16:47:54 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <istcd41u699a5te2sv8nlm7blj6c1enkee@4ax.com>
Source record: 21701

On Sun, 21 Sep 2008 14:38:39 GMT, "JB" <nospam@goofball.net> wrote:

>In most of science, God is unthinkable. But then, God said he won't do
>tricks for non-believers. "The fool in his heart says there is no God"

Of course there's at least one god. How else would you explain why my designs work? Science, logic, modeling software, and common sense all suggest that my antennas will never work, yet they do. I credit their success to divine guidance and inspiration and refuse to entertain any other explanations.

For those that believe, you're preaching to the choir.
For those that don't believe, you're wasting your time.
For those that aren't sure, a good sales pitch might work.

>"FREE SPACE" with respect to antenna theory is what?

It's a hypothetical condition, where an uncharacteristic fit of generosity causes the site owner to not charge for antenna space on his tower. I don't think that's happened since biblical times, but miracles are always possible.

Around here, if someone mentions ether, they're probably running a Methylamphetamine lab.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2828. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 17:17:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb5vih$tr4$1@news.albasani.net>
Source record: 21702

Richard Clark wrote:
> On Sun, 21 Sep 2008 14:38:39 GMT, "JB" <nospam@goofball.net> wrote:
>
>> In most of science, God is unthinkable.
> ...
>> "FREE SPACE" with respect to antenna theory is what? I thought it was
>> conceptual place
>
> Two thoughts, both wrong. It takes very little investigation to
> confirm their errors.
>
> The greatest proponent of science, accuracy, and religion (thus
> confounding the first quote above), Lord Kelvin, offered:
> "Do not be afraid of being free thinkers.
> If you think strongly enough you will be
> forced by science to the belief in God,
> which is the foundation of all religion.
> You will find science not antagonistic
> but helpful to religion."
> quoted by
> Rev. Professor Henslow, May 1903
>
> Similar quotes from Einstein, Oppenheimer, Feynman... are legion.
>
>> Is there truly a difference for
>> our calculations between outer space and several wavelengths above ground in
>> reasonably dry air?
>
> This appears to be set up with the word "truth" to always yield a
> proof of invalidity. Any standard reference reveals the difference
> and is so commonly available as to make one wonder how this question
> arrived on the doorstep. Engineering deals not with truths (however
> many would like to force fit that term into conversation) but with
> practical implementations. Is there a practical difference for our
> calculations? No, not unless you have a particular need for accuracy
> and precision. Precision is often unnecessary, especially extra
> digits stretching beyond the resolution of the original data supplied
> to give those computational results. However, accuracy is all, but it
> does not demand the nebulous qualifier (in itself a distraction) of
> "truth."
>
> You can be accurate to 1 place of resolution, or to 10. Men have been
> sent to the gallows without any precision or accuracy of a measurement
> and that verdict was weighed on the "truth" of the evidence. Men have

> been rescued from the gallows on the basis of parts-per-million
> discrepancies that proved their innocence, and "truth" was never
> determined, only falsity.
>
> 73's
> Richard Clark, KB7QHC

Richard:

Well written!

Yes, if one journeys in quest of an equation, a formula, a design parameter, a workable solution--all are within in grasp.

If ones journeys to find "the truth", one finds himself/herself on the path of infinity ...

Regards,
JS

2829. Re: Final Word on Relativistic Ether

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 18:15:25 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <6bwBk.1131$YU2.311@nlpi066.nbdc.sbc.com>
Source record: 21703

Cecil Moore wrote:
> dfinn1@nc.rr.com wrote:
>> On Sep 20, 10:45 pm, Cecil Moore <nos...@w5dxp.com> wrote:
>>> dfi...@nc.rr.com wrote:
>>>> In your posts you
>>>> have surprisingly chosen to view space as the latter (abstract view)
>
>>> When someone starts lying about my posts, I classify him
>>> as an unethical SOB and now you are in that classification.
>
>> No more Mr. Nice Guy huh?
>
> I apologize for the outburst (augmented by wine). One
> of my pet peaves is someone trying to engage in mind
> fornication using my mind. Please don't do that again.

Pot kettle, kettle pot.
73,
Tom Donaly, KA6RUH

2830. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 18:23:55 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <cjwBk.1132$YU2.772@nlpi066.nbdc.sbc.com>
Source record: 21704

Richard Clark wrote:
> On Sun, 21 Sep 2008 14:38:39 GMT, "JB" <nospam@goofball.net> wrote:
>
>> In most of science, God is unthinkable.
> ...
>> "FREE SPACE" with respect to antenna theory is what? I thought it was
>> conceptual place
>
> Two thoughts, both wrong. It takes very little investigation to
> confirm their errors.
>
> The greatest proponent of science, accuracy, and religion (thus
> confounding the first quote above), Lord Kelvin, offered:
> "Do not be afraid of being free thinkers.
> If you think strongly enough you will be
> forced by science to the belief in God,
> which is the foundation of all religion.
> You will find science not antagonistic
> but helpful to religion."
> quoted by
> Rev. Professor Henslow, May 1903
>
> Similar quotes from Einstein, Oppenheimer, Feynman... are legion.
>
>> Is there truly a difference for
>> our calculations between outer space and several wavelengths above ground in
>> reasonably dry air?
>
> This appears to be set up with the word "truth" to always yield a
> proof of invalidity. Any standard reference reveals the difference
> and is so commonly available as to make one wonder how this question
> arrived on the doorstep. Engineering deals not with truths (however
> many would like to force fit that term into conversation) but with
> practical implementations. Is there a practical difference for our
> calculations? No, not unless you have a particular need for accuracy
> and precision. Precision is often unnecessary, especially extra
> digits stretching beyond the resolution of the original data supplied
> to give those computational results. However, accuracy is all, but it
> does not demand the nebulous qualifier (in itself a distraction) of
> "truth."
>
> You can be accurate to 1 place of resolution, or to 10. Men have been
> sent to the gallows without any precision or accuracy of a measurement
> and that verdict was weighed on the "truth" of the evidence. Men have

> been rescued from the gallows on the basis of parts-per-million
> discrepancies that proved their innocence, and "truth" was never
> determined, only falsity.
>
> 73's
> Richard Clark, KB7QHC

The god of Oppenheimer, Feynman and the others is not the god of
Sarah Palin, or even JB, whoever he is. Physicists, as a whole,
love religion, but they're not very good at it.
73,
Tom Donaly, KA6RUH

2831. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 18:28:17 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <6nwBk.1134$YU2.430@nlpi066.nbdc.sbc.com>
Source record: 21705

Jeff Liebermann wrote:
> On Sun, 21 Sep 2008 14:38:39 GMT, "JB" <nospam@goofball.net> wrote:
>
>> In most of science, God is unthinkable. But then, God said he won't do
>> tricks for non-believers. "The fool in his heart says there is no God"
>
> Of course there's at least one god. How else would you explain why my
> designs work? Science, logic, modeling software, and common sense all
> suggest that my antennas will never work, yet they do. I credit their
> success to divine guidance and inspiration and refuse to entertain any
> other explanations.
>
> For those that believe, you're preaching to the choir.
> For those that don't believe, you're wasting your time.
> For those that aren't sure, a good sales pitch might work.
>
>> "FREE SPACE" with respect to antenna theory is what?
>
> It's a hypothetical condition, where an uncharacteristic fit of
> generosity causes the site owner to not charge for antenna space on
> his tower. I don't think that's happened since biblical times, but
> miracles are always possible.
>
> Around here, if someone mentions ether, they're probably running a
> Methylamphetamine lab.
>
>

If there is a god, and He makes your antennas work in spite of His
physical laws, it's only because he feels sorry for you.
73,
Tom Donaly, KA6RUH

2832. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 18:42:25 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gb64ildsi1@registered.motzarella.org>
Source record: 21706

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:4thbd4pvpk4m98nce5q3qgqka1qbrfb8no@4ax.com...
> On 21 Sep 2008 03:37:42 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
> wrote:
>
>>>>I have also noticed that most of the PGs don't even have an FRN #
>>>
>>> What's a PG?
>
>> Its the first two letters in the FCC General RadioTelephone Operator
>>License number.
>> Ed K7AAT
>
> Thanks. ULS, CORES, FRN numbers, and such started around 1998(?). It
> was essentially optional (because the system didn't work) until about
> mid 2000, when Congress demanded that all business with government
> agencies include an SSI number (social security number). To get an
> FRN number, you need to supply an SSI number.
>
> I passed my GROL in Nov 1994, somewhat before FRN numbers were first
> issued. Prior to that, I had an FCC 2nd and later 1st RadioTelephone
> license with radar endorsement. I didn't want to deal with the ULS
> mess so I avoided getting one. I eventually wanted to upgrade from
> Technican class to General class[1], and which required an FRN number.
> Oh well. Some of my friends and accomplises that obtained GROL
> licenses at the same time as me still have not obtained FRN numbers.
>
>
> [1] I was going to just sign the paperwork for the General class
> license as I had passed 5 wpm back in the stone age of ham radio as a
> Novice. However, the VE assured me that the price was the same for
> the Extra Class license, so I should try taking it anyway. The logic
> seemed reasonable except for one problem. I hadn't studied for the
> Extra in the slightest. So, I blundered, guessed, snarled, and
> muddled my way through the Extra exam, fully expecting to fail
> miserably. I had to borrow a calculator. I was amazed when I passed
> the Extra by one question. I'm fairly sure I answered all the
> technical questions correctly, but missed most of the operating, band
> limits, sub-bands, rules, and regs.
>

I took the General Radiotelephone Operator's License exam in 1981, just
after it went into effect. However, they were still giving the old 2nd class

exam, which was mostly about tube technology and which shared nothing in common with the Extra Class amateur exam of the time.

My original license number was PG-3-110. I took the exam for the radar endorsement a few months later and they changed the license number to something else, which slips my mind at the moment.

Ed Cregger

2833. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 18:53:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mu4dd4dkll9cp2n744461uq896heqhtseo@4ax.com>
Source record: 21707

On Sun, 21 Sep 2008 11:23:55 -0700, "Tom Donaly"
<dtdonaly@sbcglobal.net> wrote:

>The god of Oppenheimer, Feynman and the others is not the god of
>Sarah Palin, or even JB, whoever he is. Physicists, as a whole,
>love religion, but they're not very good at it.

Hi Tom,

I think I will amend this statement to no particular affront to you. I would say Physicists as a whole love God, they are secure enough not to have to "prove it," and they find some unfortunate religious zealotry as a curious mix of superstition, bigotry, and vanity. Every scientist who marvels at his or her own limitations in the face of discovery is in awe of creation. Everyone who wants to pigeon hole creation into categories of truth, righteousness, and a means to define morality have been swinging hammers on the crucifix for 2000 years.

They argue with a perverse ferocity like they can't sink that nail deep enough.

I will return to my email with several who prefer to discuss antenna design.

73's
Richard Clark, KB7QHC

2834. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 19:00:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb65l9$5ur$1@news.albasani.net>
Source record: 21708

Tom Donaly wrote:

> ...
> The god of Oppenheimer, Feynman and the others is not the god of
> Sarah Palin, or even JB, whoever he is. Physicists, as a whole,
> love religion, but they're not very good at it.
> 73,
> Tom Donaly, KA6RUH

The most important statement we have on the subject, from one who claimed/claims to be God went something, like:

... always has been, is, always will be ...

Krist, even "he" doesn't know! So, how are those other guys even going to have a clue? LOL

Regards,
JS

2835. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 19:52:35 UTC
From: charrid <richfur@gmail.com>
Message-ID: <53245882-a3fa-4910-b9e3-b7cd0690f21f@a70g2000hsh.googlegroups.com>
Source record: 21709
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sep 21, 5:11 am, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sat, 20 Sep 2008 20:02:57 -0700, Jeff Liebermann <je...@cruzio.com>
> wrote:

> Free manual for the Eico 710:
> <http://bama.edebris.com/manuals/eico/710/>
> I'm too lazy to find a DejaVu decompressor, but I expect there are
> some instructions and diagrams of the coils in the manual.
...
Jeff, thanks very much for your suggestions and links. I have actually already downloaded BAMA manual (Dejavu plugin works great on IrfanView 4.20, saves as pdf) and I will get to work calculating the approximate inductances. The variable C is the only component they don't show the value for, but I'll take a guess, wind a coil and listen for the signal. Then with some trial and error I can probably come up with a couple of coils for the ranges I am interested in. I know the scale won't be accurate, but in this day of digital readouts it's not important.

I am fascinated with the number of GDO's shown on N4XY's site - I remember seeing just Heath, Eico and an old Mullen.

Thanks agn
Rich OK8RF

2836. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 20:03:04 UTC
From: charrid <richfur@gmail.com>
Message-ID: <b3a6d2ae-104f-4cd3-98f7-939aa38f86b7@z72g2000hsb.googlegroups.com>
Source record: 21710
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sep 21, 3:54 am, Michael Black <et...@ncf.ca> wrote:

> The coils are bound to have so many turns that they will be hard to
> count, unless someone actually unwound them.
>
> Open it up, see if you can figure the capacitance of the variable
> capacitor (or maybe there's a schematic somewhere that provides
> that information?), and then use the equations to figure out the
> needed inductance and then the number of turns to make that value
> of inductance. Then you can use any size coil form, just so long
> as you can rig it to fit whatever the GDO is using for the coils
> to plug into. Wind some extra turns, and then remove them if
> necessary (since it's easier to remove than add turns).
>
> It won't be exact, but any GDO dial is fairly vague. The inherent
> capacitance of the coil will come into play, so you can decide whether
> it's best to have the GDO dial match at the high end or the low end.
>
> Thirty years ago there was an article in "73" about revamping a GDO,
> I think he solid-stated it but can't remember, but he didn't have a
> coil set either and described the process he went through to give
> it a set of coils. I think it was radical surgery though, I seem
> to recall that he even changed the jacks used for the coils. He
> took the easy way out, providing a jack to feed a frequency counter
> so the original dial was relatively unimportant.
>
> Michael VE2BVW

I think I have a pretty good idea from various pictures of Eico or
other GDO's what the coils should look like. I want mainly to get the
instrument operational on 80-20m ranges, so there won't be too many
turns. I have the manual but there is no variable cap value - looking
at it and comparing to standard BC band 365pF it can't be more than
50-80 pF per section. So as you say - calculate the inductance, wind a
coil... etc. adjust the winding until I hit the dial on one end.
Sounds like a lot of work for the old clunker, but I have the time and
enjoy this kind of stuff...

73 Rich OK8RF

2837. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 21:03:08 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gb6cqgumj1@registered.motzarella.org>
Source record: 21711

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gb65l9$5ur$1@news.albasani.net...
> Tom Donaly wrote:
>
>> ...
>> The god of Oppenheimer, Feynman and the others is not the god of
>> Sarah Palin, or even JB, whoever he is. Physicists, as a whole,
>> love religion, but they're not very good at it.
>> 73,
>> Tom Donaly, KA6RUH
>
> The most important statement we have on the subject, from one who
> claimed/claims to be God went something, like:
>
> ... always has been, is, always will be ...
>
> Krist, even "he" doesn't know! So, how are those other guys even going to
> have a clue? LOL
>
> Regards,
> JS

I have no problem with acknowledging the existence of God, though I doubt that God often takes the form of George Burns.

On the other hand, it is religion that I detest - as though God would speak with only one man and then depend upon that man to spread His Word accurately throughout Creation. (there - now I can remove my aluminum foil helmet...)

Ed, NM2K

2838. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-21 21:33:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb6ejm$gh7$1@news.albasani.net>
Source record: 21712

Ed Cregger wrote:

> ...
> I have no problem with acknowledging the existence of God, though I doubt
> that God often takes the form of George Burns.
>
> On the other hand, it is religion that I detest - as though God would speak
> with only one man and then depend upon that man to spread His Word
> accurately throughout Creation. (there - now I can remove my aluminum foil
> helmet...)
>
> Ed, NM2K

Ed:

You sound like myself. However, I was raised catholic and was too ugly for any priest to want to molest; I was always checking out the nuns anyway, so you can imagine how desperate I was! But then, that is all a story for another day ... <chuckle>

However, like so many, I jumped on evolution as soon as I found out "it was the intellectual thing to do." However, you know where that road goes--pursued long enough, it is a large circle which leaves you with the possibility of a supreme being or race (Gods and Angels? ... well, what can I say, they'd look like "Gods" to us!) Indeed, evolution makes one take a larger "leap of faith" than alternatives--indeed, IMHO it is just another "religion" to replace another ... but then, that is all a story for another day, also ...

My burning questions:

1) Did God build an ether to be exploited? (and it sure does look like it!)

2) And, if so, what type of antenna to do this would be required? (and, firstly, is there any phenomenon occurring which would indicate an area to explore in pursuit of this/these end(s)?)

Regards,
JS

2839. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 00:15:32 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9undd45rrtfosuvse14uce9kn0ojepi8do@4ax.com>
Source record: 21713
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sun, 21 Sep 2008 12:52:35 -0700 (PDT), charrid <richfur@gmail.com>
wrote:

>On Sep 21, 5:11ï¿½am, Jeff Liebermann <je...@cruzio.com> wrote:
>> On Sat, 20 Sep 2008 20:02:57 -0700, Jeff Liebermann <je...@cruzio.com>
>> wrote:
>
>> Free manual for the Eico 710:
>> <http://bama.edebris.com/manuals/eico/710/>
>> I'm too lazy to find a DejaVu decompressor, but I expect there are
>> some instructions and diagrams of the coils in the manual.

>Jeff, thanks very much for your suggestions and links. I have actually
>already downloaded BAMA manual (Dejavu plugin works great on IrfanView
>4.20, saves as pdf)

Duh. I use Irfanview heavily, but have never bothered to download the
DejaVu plugin. Thanks.

>and I will get to work calculating the approximate
>inductances. The variable C is the only component they don't show the
>value for, but I'll take a guess, wind a coil and listen for the
>signal.

That will work as long as you don't accidentally land on a
sub-harmonic. Methinks a frequency counter might be more useful than
tuning around the bands looking for the signal.

If you have a capitance meter or bridge, it might be possible to
measure the value of the tuning capacitor.

>Then with some trial and error I can probably come up with a
>couple of coils for the ranges I am interested in. I know the scale
>won't be accurate, but in this day of digital readouts it's not
>important.

Chuckle. A few months ago, I won a used HP something universal
counter on eBay because I wanted the extra digits of resolution.
However, that was for period and event counting, not frequency.

>I am fascinated with the number of GDO's shown on N4XY's site - I
>remember seeing just Heath, Eico and an old Mullen.

Search Google for "base dip oscillator" and "gate dip oscillator".
There are a few designers that couldn't find the grid pin on the
semiconductor devices. My Heathkit HD-1250 calls it a "solid-state

dip meter".

I don't know if this will help, but the HD-1250 looks very much like the Eico (other than the tube versus the xistor). Here's a table of coil values for it assembled from various parts of the manual:

MHZ uH
L1 1.6 - 3.4 171 red
L2 3.2 - 6.6 41.1 orn
L3 6.3 - 13 10.2 yel
L4 12.5 - 26 2.62 grn
L5 25 - 51 0.72 blu
L6 48 - 100 0.196 vio
L7 100 - 250 ???? brn

As usual, no value on the tuning capacitor in the manual, but it can be calculated from the above data.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2840. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 00:28:48 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <h0pdd4hft49acrcb578kv4vel9tb0dk1g7@4ax.com>
Source record: 21714

On Sun, 21 Sep 2008 14:33:40 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>1) Did God build an ether to be exploited? (and it sure does look like it!)

If the radio gods had meant for man to understand how such things
work, he wouldn't have made it so damn complicated.

>2) And, if so, what type of antenna to do this would be required? (and,
>firstly, is there any phenomenon occurring which would indicate an area
>to explore in pursuit of this/these end(s)?)

Isotropic antenna. Works equally lousy in all directions for hearing
the big bang background hiss (the voice of creation). It's also
non-denominational, non-polarized, and non-existent. It can't be
seen, found, built, or purchased. Think of it as a miraculous antenna
that only the gods can appreciate and use.

As usual, man has attempted to mimic the gods by attempting to build
an isotropic radiator. It's close, but no miracle antenna.
<http://802.11junk.com/jeffl/antennas/isotropic/index.html>
Argh. The .NEC files have disappeared again. I'll fix (after I'm
done rebuilding an air compressor).

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2841. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 02:59:38 UTC
From: JB <nospam@goofball.net>
Message-ID: <uSDBk.486$UB3.159@trnddc07>
Source record: 21715

>
> I took the General Radiotelephone Operator's License exam in 1981, just
> after it went into effect. However, they were still giving the old 2nd
class
> exam, which was mostly about tube technology and which shared nothing in
> common with the Extra Class amateur exam of the time.
>
I did 2nd Phone in the late 70's and there was tube, transistor, RTL and TTL logic theory, and 'complete the schematic' type questions but less of that and more general types of engineering and circuit theory, AC/DC theory, RF and transmission lines and most of it involving Electronic Math. Trig, Vectors, no Smith charts or Calculus. Very little of it had anything to do with tubes specifically. The rest was FCC parts. It was said at the time, that it was more like the Advanced Ham ticket. I got my Advanced a year or two before, and I agree the technology level was equivalent and it was about 200 questions or so. Later when I did the Extra, (90's) there were questions well beyond the 2nd Phone but only 25 of them! The code test and the noise floor equations made me strain. I wish the bandwidth and modulation questions were on the Technician class test though.

2842. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 04:53:37 UTC
From: richardharrison@webtv.net
Message-ID: <1006-48D724D1-1611@storefull-3252.bay.webtv.net>
Source record: 21716

Jimmie wrote:
"Is there a website that may have this data?"

I got my first class phone ticket in 1949. My house was destroyed recently my tickets and degrees went with it.

Commercial tickets have been converted to non-expiring "General Radiotelephone Operator Licenses". The FCC maintains a list of the commercial licenses it has issued.

When I wrote the FCC requesting a replacement certificate, they responded saying my request had been "dismissed". Then I wrote to The W5YI Group which advertises in QST. They said to send them $20 and within a few days my replacement "General License" arrived from the FCC in the mail. I highly recommend their service! Their address is:
W5YI Group
P.O. Box 565101 Dallas, TX 75356

I had been issued First Class Radiotelephone License No. P1-9-12391 in April 1949.

W5YI Group also got me a new copy of my KB5WZI Amateur License which had also been destroyed. I believe their fee for that was $7.5o. All this is very reasonable considering the hassle of trying to deal directly with the FCC.

Fortunately, my university says it encourages the display of degrees and will glady replace them at no charge.

Best regards, Richard Harrison, KB5WZI

2843. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 05:25:33 UTC
From: charrid <richfur@gmail.com>
Message-ID: <8d48bd12-b495-4ee4-ab6f-b76f014eba25@y21g2000hsf.googlegroups.com>
Source record: 21717
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sep 22, 2:15 am, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 21 Sep 2008 12:52:35 -0700 (PDT), charrid <rich...@gmail.com>
> wrote:
>
> sub-harmonic. Methinks a frequency counter might be more useful than
> tuning around the bands looking for the signal.
>
Which brings me to another one of my boat anchors - GR-1192B freq.
counter which worked fine for 20 years just stopped counting. I am
trying to find a manual on the Manual exchange group but so far no
reply. No BAMA record, either. I know the new counters are cheap and
tenth in size, but the neon display tubes look so nice...

Just got mail from K7ITM offering to supply the Eico coil info. Thanks
for the Heath data.

Rich OK8RF

2844. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 05:29:22 UTC
From: richardharrison@webtv.net
Message-ID: <17102-48D72D32-1575@storefull-3253.bay.webtv.net>
Source record: 21718

Cecil, W5DXP wrote:
"But by 1920, Einstein had reintroduced a physical ether as a necessary condition for the general theory of relativity to be valid."

Recall the high school physics experiment of a clock ticking inside a bell jar. The air is then pumped out. When the air is nearly all gone, the clock ticks become nearly inaudible but you can still clearly see the clock. If ether had been inside the jar it would have been evacuated too and the EM lightwave would have lacked a medium, making sight of the clock disappear along with its sound. It seems likely to me that this experiment indicates that no medium is required for transmission of light despite the need of a medium to transport sound.

Best regards, Richard Harrison, KB5WZI

2845. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 05:32:21 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <r7GBk.1314$yr3.361@nlpi068.nbdc.sbc.com>
Source record: 21719

Richard Harrison wrote:
> Jimmie wrote:
> "Is there a website that may have this data?"
>
> I got my first class phone ticket in 1949. My house was destroyed
> recently my tickets and degrees went with it.
>
> Commercial tickets have been converted to non-expiring "General
> Radiotelephone Operator Licenses". The FCC maintains a list of the
> commercial licenses it has issued.
>
> When I wrote the FCC requesting a replacement certificate, they
> responded saying my request had been "dismissed". Then I wrote to The
> W5YI Group which advertises in QST. They said to send them $20 and
> within a few days my replacement "General License" arrived from the FCC
> in the mail. I highly recommend their service! Their address is:
> W5YI Group
> P.O. Box 565101 Dallas, TX 75356
>
> I had been issued First Class Radiotelephone License No. P1-9-12391 in
> April 1949.
>
> W5YI Group also got me a new copy of my KB5WZI Amateur License which had
> also been destroyed. I believe their fee for that was $7.5o. All this is
> very reasonable considering the hassle of trying to deal directly with
> the FCC.
>
> Fortunately, my university says it encourages the display of degrees and
> will glady replace them at no charge.
>
> Best regards, Richard Harrison, KB5WZI
>
>
>

Richard;

You can also go on line to the FCC website and obtain a copy of your
license for nothing. I have.

Dave WD9BDZ

2846. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 05:37:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb7av8$9ub$1@news.albasani.net>
Source record: 21720

Richard Harrison wrote:
> Cecil, W5DXP wrote:
> "But by 1920, Einstein had reintroduced a physical ether as a necessary
> condition for the general theory of relativity to be valid."
>
> Recall the high school physics experiment of a clock ticking inside a
> bell jar. The air is then pumped out. When the air is nearly all gone,
> the clock ticks become nearly inaudible but you can still clearly see
> the clock. If ether had been inside the jar it would have been evacuated
> too and the EM lightwave would have lacked a medium, making sight of the
> clock disappear along with its sound. It seems likely to me that this
> experiment indicates that no medium is required for transmission of
> light despite the need of a medium to transport sound.
>
> Best regards, Richard Harrison, KB5WZI
>

Ever see a wire bucket that you carry golf balls in, to the driving range?

Now, it works wonderfully on the golf balls, attempt filling it with
water and you find it leaks! Same thing with that bell jar. You simply
can't pump the ether out ...

Indeed, the bell jar, being made of the large molecules of our matter
would appear as a very large screen, or even like a layer of gravel to a
liquid/gas, to the quantum-structure-nature of ether ...

Regards,
JS

2847. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 05:57:17 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gb7c41$s19$1@registered.motzarella.org>
Source record: 21721

"JB" <nospam@goofball.net> wrote in message
news:uSDBk.486$UB3.159@trnddc07...
> >
>> I took the General Radiotelephone Operator's License exam in 1981, just
>> after it went into effect. However, they were still giving the old 2nd
> class
>> exam, which was mostly about tube technology and which shared nothing in
>> common with the Extra Class amateur exam of the time.
>>
> I did 2nd Phone in the late 70's and there was tube, transistor, RTL and
> TTL
> logic theory, and 'complete the schematic' type questions but less of that
> and more general types of engineering and circuit theory, AC/DC theory, RF
> and transmission lines and most of it involving Electronic Math. Trig,
> Vectors, no Smith charts or Calculus. Very little of it had anything to
> do
> with tubes specifically. The rest was FCC parts. It was said at the
> time,
> that it was more like the Advanced Ham ticket. I got my Advanced a year
> or
> two before, and I agree the technology level was equivalent and it was
> about
> 200 questions or so. Later when I did the Extra, (90's) there were
> questions well beyond the 2nd Phone but only 25 of them! The code test
> and
> the noise floor equations made me strain. I wish the bandwidth and
> modulation questions were on the Technician class test though.
>

Yep, the solid state and basic computer theory were there too, but I was surprised that they used a schematic of an RF tube amp for diagnostics purposes. I was sure that they were going to use solid state equipment for diagnosis. I was wrong. As it turned out, tubes are always easier for me to figure out, so it ended up being a plus for me.

The Advanced Class amateur license test was definitely the pinnacle of amateur radio technical testing, but I didn't feel it was up to the 2nd Phone test that I took for the General. In fact, I even found a few mistakes in the Advanced test.

The Extra Class test (I took it in 1985) did include a question or two that required some trig, but I figured out the answer in my head before finishing the equation. It was obvious that the conjugate impedance was going to be

capacitive. There was only one answer with a -j, so it was obvious that that would be the correct answer.

Ed, NM2K

2848. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 06:37:12 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <f3eed451dff5nrm9b8vodcku47i1416pbd@4ax.com>
Source record: 21722
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sun, 21 Sep 2008 22:25:33 -0700 (PDT), charrid <richfur@gmail.com>
wrote:

>On Sep 22, 2:15ï¿½am, Jeff Liebermann <je...@cruzio.com> wrote:
>> On Sun, 21 Sep 2008 12:52:35 -0700 (PDT), charrid <rich...@gmail.com>
>> wrote:
>>
>> sub-harmonic. ï¿½Methinks a frequency counter might be more useful than
>> tuning around the bands looking for the signal.

>Which brings me to another one of my boat anchors - GR-1192B freq.
>counter which worked fine for 20 years just stopped counting.

Nixie tubes. Ah... nostalgia. I've got several boxes with Nixie
tubes (HP5248M, HP5246L, and some home made junk). I think I paid
more for the printed manuals than for the counters and downconverters.
The usual problem with ancient hardware are the electrolytic
cazapitors. If you have an ESR meter, test them to see if they have
"dried out". If everything looks like it's working (display lights up
and digits change when thrashing the buttons), then it might be the
time base oscillator or dividers. Try an external time base
oscillator in case the crystal has quit.

>I am
>trying to find a manual on the Manual exchange group but so far no
>reply. No BAMA record, either. I know the new counters are cheap and
>tenth in size, but the neon display tubes look so nice...

Photo of the counter at bottom of page:
<http://www.k5cm.com/k1ggiFMTMethod.htm>

General Radio morphed into GenRad and was bought by Teradyne. The
test equipment division went to IET Labs:
<http://www.ietlabs.com/Genrad/index.html>
The have a few manuals online:
<http://www.ietlabs.com/pdf/Manuals/index.html>
but not the GR1192B. Send them email as I'm sure they have a printed
copy in the archives that only needs to be scanned. Maybe just the
schematic and block diagram.

I make it a habit of buying or downloading the manual for literally
every piece of test equipment that I use. I find myself repairing the
old equipment all too often:
<http://802.11junk.com/jeffl/pics/home/slides/lab.html>
Note: It's a lab, not a museum.

>Just got mail from K7ITM offering to supply the Eico coil info. Thanks
>for the Heath data.

Cool. One question. Is the frequency range of the Eico the same as
the Heathkit ranges that I listed? I'm curious.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2849. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 08:00:59 UTC
From: charrid <richfur@gmail.com>
Message-ID: <e1f91143-679b-4058-b960-95351b5097f8@d45g2000hsc.googlegroups.com>
Source record: 21723
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Sep 22, 8:37 am, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 21 Sep 2008 22:25:33 -0700 (PDT), charrid <rich...@gmail.com>
> wrote:

> "dried out". If everything looks like it's working (display lights up
> and digits change when thrashing the buttons), then it might be the
> time base oscillator or dividers. Try an external time base
> oscillator in case the crystal has quit.

Power supply was also my first thought, but Nixies light up and if I
try hard, I can change some digits. Time base fault sounds like a
good bet. Thanks for the hint.
>
> Photo of the counter at bottom of page:
> <http://www.k5cm.com/k1ggiFMTMethod.htm>
>
I have already emailed k5cm asking if he has the manual

> The have a few manuals online:
> <http://www.ietlabs.com/pdf/Manuals/index.html>
> but not the GR1192B. Send them email as I'm sure they have a printed
> copy in the archives that only needs to be scanned. Maybe just the
> schematic and block diagram.

I did get to ietlabs site in my first searches. Never thought of
mailing them for a scan, though. I'll give them a try.

> old equipment all too often:
> <http://802.11junk.com/jeffl/pics/home/slides/lab.html>
> Note: It's a lab, not a museum.

I don't think 20-30 year old HP's are at all museum pieces - they are
still in their prime.

> Cool. One question. Is the frequency range of the Eico the same as
> the Heathkit ranges that I listed? I'm curious.

Eico 710 has 8 coils starting below AM BC band:
L1 0.4 - 0.7
L2 0.7-1.38
L3 1.38-2.9
L3 2.9-7.5
L4 7.5-18
L5 18-42
L6 42-100
L7 100-250

Rich, OK8RF

> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

2850. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 11:12:31 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <L4LBk.1093$Ws1.99@nlpi064.nbdc.sbc.com>
Source record: 21724

Richard Harrison wrote:
> It seems likely to me that this
> experiment indicates that no medium is required for transmission of
> light despite the need of a medium to transport sound.

If the vacuum pump was evacuating ether along with
air molecules, the clock would also be evacuated.

An opaque solid is a medium that will pass sound but
not light. A vacuum is a medium that will pass light
but not sound. One cannot evacuate ether using a
vacuum pump.

In that evacuated space in the bottle, two conducting
plates will be pushed together although connected to
nothing. What does the pushing if not something in
the vacuum medium?
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2851. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 11:20:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <xcLBk.1095$Ws1.588@nlpi064.nbdc.sbc.com>
Source record: 21725

John Smith wrote:
> Indeed, the bell jar, being made of the large molecules of our matter
> would appear as a very large screen, or even like a layer of gravel to a
> liquid/gas, to the quantum-structure-nature of ether ...

Consider that the ether may be made out of exotic dark
matter capable of occupying the same space as the glass
in the jar, indeed providing the very structure that
allows the glass to exist in the form that we perceive.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2852. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 14:18:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb89g6ceh1@news.albasani.net>
Source record: 21726

Cecil Moore wrote:
> John Smith wrote:
>> Indeed, the bell jar, being made of the large molecules of our matter
>> would appear as a very large screen, or even like a layer of gravel to
>> a liquid/gas, to the quantum-structure-nature of ether ...
>
> Consider that the ether may be made out of exotic dark
> matter capable of occupying the same space as the glass
> in the jar, indeed providing the very structure that
> allows the glass to exist in the form that we perceive.

Could be, but can be explained without "dark matter" ...

Lead is a very dense material, we use it as shielding against atomic particles. Take a chunk in your hand and contemplate all those molecules of lead you are holding. Then realize if that block of lead were enlarged to scale, to where an atom of that lead were the size of an orange, and you are standing next to one atom--the next closest atom would be about the length of a football field away. This leaves plenty of room for quantum material to pass though easier than wind passes though a chain-link fence ...

Actually, I am far too conservative in this example ... this:

"If a drop of water were enlarged to the size of the earth, each atom in it would be about the size of an orange. Yet most of an atom is empty space through which the electrons whirl. The nucleus itself occupies only one million-billionth of the atom's bulk. "

From here:

http://www.time.com/time/magazine/article/0,9171,792294,00.html

"Our matter", being used as a "bottle" for ether is a "SERIOUS JOKE!"

Regards,
JS

2853. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 14:32:16 UTC
From: JB <nospam@goofball.net>
Message-ID: <Q%NBk.532$Jw.222@nwrddc02.gnilink.net>
Source record: 21727

>
> The Extra Class test (I took it in 1985) did include a question or two
that
> required some trig, but I figured out the answer in my head before
finishing
> the equation. It was obvious that the conjugate impedance was going to be
> capacitive. There was only one answer with a -j, so it was obvious that
that
> would be the correct answer.
>
> Ed, NM2K
>
I picked up on that too. If you didn't know what was going on there, you would be left drudging through a math problem.

The thing about Trig was having to memorize all the substitutions in order to poke the problem into a manageable calculation, or you wind up losing precision. If that happens, you wont have the clear cut answer for the multiple guess.

In some ways I miss tube equipment. Now I have to deal with surface mount technology. Even for a resistor, I risk putting a soldering iron up my nose while squinting through a loupe. I just dread the idea of replacing a chip with 100 legs or more. In the 70's you had to know tubes and everything else too because there was so much transition. Ham Radio magazine was my best friend, and it was an opportunity to learn the discrete versions of complex stuff like synthesizers and various issues that had to be overcome. It's all easier now. If you can figure out what a controller is supposed to do, all you have to do is make sure the rest of the components can comply. But there is so much offshore cheap junk now that almost everything is worthless to fix but cheap to modify. Except for industrial controls and things like that. But now customers are just trained to throw stuff away on a bigger scale. I get the idea that We as American citizens are not allowed to know technology any more.

2854. FS: AT-271 Military Collapsiable Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 14:37:54 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <85OBk.9470$Hw.4085@read1.cgocable.net>
Source record: 21728
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

AT-271 Fishing Pole Antenna. ..Miltary Collapsible Antenna [
Picture 2]

This portable antenna can be used for the top section of a Vertical
Antenna OR Horizontal elements for an Antenna System such as the
Buddipole tm ..... A Great QRP / Portable Antenna weighs only 400
Grams [14 Oz] and measures 104" extended yet only 14" long when folded.
The construction is the same as is used for sectional fishing poles. Each
of the 8 hollow tubular metal sections has a plug one one end and a socket
on the other end. All the sections are connected by a string made of either
a cloth or metal cord. At the bottom of the base element there's a spring
inside the tube to tension the cord. Some units may use an elastic
shock-cord material. This way all the elements are kept in order when
they are disconnected from each other and are held together when assembled
into a 104" [8.6 Ft] long antenna. When the elements are folded or
disassembled the package is only 14 inches long.
The base has a male 3/8-24 thread which is the same as is used on most Ham
Radio and CB antennas. Some sort of spring base could be used when this
antenna is used because the hollow antenna elements will "fold" if too much
force is applied to them.
These units are in Like New Condition.. Sold AS-IS but will not be DOA.
Have access to more...ASK!

$30 USD + Shipping

Tnx for looking....Norm VE3CZI www.rodemi.com

2855. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 14:57:04 UTC
From: Dave <dave@dave.dave>
Message-ID: <48d7b240$0$22184$bd467cd0@news.dslextreme.com>
Source record: 21729

JB wrote:
>
> In some ways I miss tube equipment. Now I have to deal with surface mount
> technology. Even for a resistor, I risk putting a soldering iron up my nose
> while squinting through a loupe. I just dread the idea of replacing a chip
> with 100 legs or more.

These things are the best. They are stereo so you get depth perception.
They are cheap and the optics are very good. I can read the numbers
on parts the size of a grain of salt and I'm 59 years old. I have no
SMT dread.

http://www.mageyes.com/

2856. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 15:44:26 UTC
From: JB <nospam@goofball.net>
Message-ID: <u3PBk.544$Jw.452@nwrddc02.gnilink.net>
Source record: 21730

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:1006-48D724D1-1611@storefull-3252.bay.webtv.net...
> Jimmie wrote:
> "Is there a website that may have this data?"
>
> I got my first class phone ticket in 1949. My house was destroyed
> recently my tickets and degrees went with it.
>
> Commercial tickets have been converted to non-expiring "General
> Radiotelephone Operator Licenses". The FCC maintains a list of the
> commercial licenses it has issued.
>
> When I wrote the FCC requesting a replacement certificate, they
> responded saying my request had been "dismissed". Then I wrote to The
> W5YI Group which advertises in QST. They said to send them $20 and
> within a few days my replacement "General License" arrived from the FCC
> in the mail. I highly recommend their service! Their address is:
> W5YI Group
> P.O. Box 565101 Dallas, TX 75356
>
> I had been issued First Class Radiotelephone License No. P1-9-12391 in
> April 1949.
>
> W5YI Group also got me a new copy of my KB5WZI Amateur License which had
> also been destroyed. I believe their fee for that was $7.5o. All this is
> very reasonable considering the hassle of trying to deal directly with
> the FCC.
>
> Fortunately, my university says it encourages the display of degrees and
> will glady replace them at no charge.
>
> Best regards, Richard Harrison, KB5WZI
>
One place I worked at stole mine right off the wall before firing me
"because they couldn't throw me in jail for anything". I simply reported
the theft to the FCC and they gave me a new certificate with a new number.
Ever since then, I would only display a copy stamped COPY, but I won't even
do that any more because some one might try to use it. Someone tried that
once and got caught. Stupid is trying to send in a bogus application to the
FCC. Some one tried that once and FCC mailed it back to me asking if I knew
anything about it. Ye haw! It's like going into a doctor's office for an
examination and telling them you need the prescription "for a friend". It's
like pulling a gun on a cashier and saying "I don't want to hurt anyone".

2857. Re: Eico GDO coils

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 15:53:35 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <7tefd4pi8ttglvat1ua76ekr2v8or0g294@4ax.com>
Source record: 21731
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Mon, 22 Sep 2008 01:00:59 -0700 (PDT), charrid <richfur@gmail.com>
wrote:

>Power supply was also my first thought, but Nixies light up and if I
>try hard, I can change some digits. Time base fault sounds like a
>good bet. Thanks for the hint.

It's probably a simple divide by 10 divider chain. Should be easy to
troubleshoot. Since it probably doesn't work on any range, it's
probably somewhere between the clock oscillator and the first digit
counter. This should be easy (famous last words).

Incidentally, I bought an HP5334A counter on eBay. When plugged in,
it displayed an error messages that indicated the clock section was
dead. I got a really good price on it, so I decided it was better to
fix than to return. I didn't have a schematic yet, and none could be
found to download. After replacing the clock oscillator and the hex
inverter that was acting as an oscillator, I eventually discovered
that the internal/external toggle switch was open. Sounds simple but
this trivial troubleshooting exercise took about a week.
Moral #1: If it moves, it breaks (especially on old equipment).
Moral #2: Simple problems take forever. Complex problems are easy.
Moral #3: That which is most obviously working, beyond any need of
checking, it usually the problem.

>I did get to ietlabs site in my first searches. Never thought of
>mailing them for a scan, though. I'll give them a try.

It will probably cost you some money, but methinks is worth the
effort.

I'm sitting on a fairly complete collection of Intech marine radio
service manuals from the 1970's. One of my customers has a Canon
Imagerunner 5000 copier and scanner combination that does a totally
impressive job of scanning manuals (hopper feed, de-collating, scan to
PDF, etc). At about 2-3 hours per manual, this is a major project.

>> old equipment all too often:
>> <http://802.11junk.com/jeffl/pics/home/slides/lab.html>
>> Note: ï¿½It's a lab, not a museum.
>
>I don't think 20-30 year old HP's are at all museum pieces - they are
>still in their prime.

That depends on what you're doing. For tinkering and experimentation,
it's good enough. For design projects and consulting, it's

inefficient, insufficient in many ways, and barely adequate. For
example, using a digital camera to obtain a spectrum analyzer image is
rather clumsy with my cardboard hood.

>> Cool. ï¿½One question. ï¿½Is the frequency range of the Eico the same as
>> the Heathkit ranges that I listed? ï¿½I'm curious.
>
>Eico 710 has 8 coils starting below AM BC band:
>L1 0.4 - 0.7
>L2 0.7-1.38
>L3 1.38-2.9
>L3 2.9-7.5
>L4 7.5-18
>L5 18-42
>L6 42-100
>L7 100-250

Thanks. Not even close to the Heathkit. So much for that theory.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2858. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 15:56:01 UTC
From: JB <nospam@goofball.net>
Message-ID: <lePBk.545$Jw.489@nwrddc02.gnilink.net>
Source record: 21732

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:xcLBk.1095$Ws1.588@nlpi064.nbdc.sbc.com...
> John Smith wrote:
> > Indeed, the bell jar, being made of the large molecules of our matter
> > would appear as a very large screen, or even like a layer of gravel to a
> > liquid/gas, to the quantum-structure-nature of ether ...
>
> Consider that the ether may be made out of exotic dark
> matter capable of occupying the same space as the glass
> in the jar, indeed providing the very structure that
> allows the glass to exist in the form that we perceive.
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

Sure, Why not just spray paint the inside of the jar? Or use Houdini's
black cloth. Experiments like that prove that "medium" can only tend to
hinder photons. Hence photons travel best without ether. How does ether
affect the velocity factor of light?

Can't find my ether pump anyway, so we have do these experiments virtually.

2859. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 15:58:54 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gb8fbu$4ej$1@news.jpl.nasa.gov>
Source record: 21734

Dave Heil wrote:
> Art Unwin wrote:
>
>> If you are looking for a University to compare with try Rhode Island
>> I don't believe any University can show antenna results in the past
>> few years that are better than those produced in any other state.
>
> Perhaps it takes a small state to research small antennas.
>
>> What has your State University done that is notable?
>
> It has lost two of its three football games.
>
> Dave K8MN

What about CalTech, a hotbed of physics.. undefeated in football since
1993..

2860. Re: elevator noise part deaux

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 16:00:44 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gb8ffc$4ej$2@news.jpl.nasa.gov>
Source record: 21733

JIMMIE wrote:
> On Sep 11, 2:58 pm, ml <m...@di.net> wrote:
>> hi

>
> Elevator motors are DC, in the old one the DC was supplied by a motor/
> generator combination, The new ones get their DC from a huge SMPS and
> they can be electrically noisy. They can also induce harmonics into
> the electrical system that UPSs dont like at all. It is my
> understanding the elevator rehab project where I work has been put on
> hold for that reason.
>
> Jimmie

Modern elevators use AC induction motors with a variable speed drive.

2861. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 16:08:36 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gb8fu4$da0$1@news.jpl.nasa.gov>
Source record: 21737

Jeff Liebermann wrote:
> On 21 Sep 2008 03:37:42 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
> wrote:
>
>>>> I have also noticed that most of the PGs don't even have an FRN #
>>> What's a PG?
>
>> Its the first two letters in the FCC General RadioTelephone Operator
>> License number.
>> Ed K7AAT
>
> Thanks. ULS, CORES, FRN numbers, and such started around 1998(?). It
> was essentially optional (because the system didn't work) until about
> mid 2000, when Congress demanded that all business with government
> agencies include an SSI number (social security number). To get an
> FRN number, you need to supply an SSI number.
>
> I passed my GROL in Nov 1994, somewhat before FRN numbers were first
> issued. Prior to that, I had an FCC 2nd and later 1st RadioTelephone
> license with radar endorsement. I didn't want to deal with the ULS
> mess so I avoided getting one. I eventually wanted to upgrade from
> Technican class to General class[1], and which required an FRN number.
> Oh well. Some of my friends and accomplises that obtained GROL
> licenses at the same time as me still have not obtained FRN numbers.
>
>
> [1] I was going to just sign the paperwork for the General class
> license as I had passed 5 wpm back in the stone age of ham radio as a
> Novice. However, the VE assured me that the price was the same for
> the Extra Class license, so I should try taking it anyway. The logic
> seemed reasonable except for one problem. I hadn't studied for the
> Extra in the slightest. So, I blundered, guessed, snarled, and
> muddled my way through the Extra exam, fully expecting to fail
> miserably. I had to borrow a calculator. I was amazed when I passed
> the Extra by one question. I'm fairly sure I answered all the
> technical questions correctly, but missed most of the operating, band
> limits, sub-bands, rules, and regs.
>
You've described a key test taking strategy that applies well beyond the
FCC license exams. No licensing authority requires 100% scores, and they
generally specify the distribution of questions among subjects. (this is
true for pilot exams and the professional engineering exams, as well).
One can reasonably take a strategy of spending your study time to get
perfect score on the parts you know and accepting what you get on the

parts you don't. Overall, I believe that the lower "stress level" going into the test knowing that even if you screw up the small number of questions you don't know, you can still "pass", is an overall benefit.

This, is, of course, why you have behind the wheel driving tests, have to have an examiner check ride, or reference letters and proven experience for all those licenses. The folks giving the test KNOW that you can't possibly test everything.

2862. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 16:17:53 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <81gfd49n8uarpc4kns16u2s2r3e4p4epon@4ax.com>
Source record: 21735

On Mon, 22 Sep 2008 15:44:26 GMT, "JB" <nospam@goofball.net> wrote:

>One place I worked at stole mine right off the wall before firing me
>"because they couldn't throw me in jail for anything". I simply reported
>the theft to the FCC and they gave me a new certificate with a new number.

Chuckle. That like that happened to me, twice. I worked for a communications shop where I was the only one with a license. After I left, they continued to use my license number or repair logs for several years. When I worked for a radio manufactory, they made a rubber stamp with my license number and continued to use it for several years after I left.

At one point, I let my license expire because I couldn't find it for a few years after moving. I had to take all 4 elements plus radar endorsement again from scratch. I passed 1, 3 and 4, but messed up from overconfidence on element 2. That meant that I had to do all of it again in a month. This time I studied and passed. To save on gas and parking in downtown San Francisco, a small group of techs and engineers went together. We had all studied the latest semiconductor and radio technology that we worked with every day. However, the test was exactly the same as the one I had taken about 10 years previously. Tubes, dynamotors, Marconi antennas, Faraday shields, and other technology from the stone age. A few of the techs failed the exam because they had never studied or worked with a tube radio.

>Ever since then, I would only display a copy stamped COPY, but I won't even
>do that any more because some one might try to use it. Someone tried that
>once and got caught. Stupid is trying to send in a bogus application to the
>FCC.

In theory, that won't happen with the ULS system and FRN number as long as your password is secure.

>Some one tried that once and FCC mailed it back to me asking if I knew
>anything about it. Ye haw! It's like going into a doctor's office for an
>examination and telling them you need the prescription "for a friend". It's
>like pulling a gun on a cashier and saying "I don't want to hurt anyone".

I haven't had that problem. A friend that runs an avionics shop casually mentioned that about half of the GROL licenses he sees are counterfeits. He says they seem to use random license numbers, which are easy to verify with a ULS web search. Why they bother is beyond my limited imagination.

Incidentally, identity theft, or rather identity borrowing, is why I don't post my resume online. I've had to deal with several attempts

at impersonating me or borrowing my history on job applications. None were financially or professionally detrimental, but the potential is there.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2863. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 16:39:20 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B216238027D9Huckleberrybigvalley@198.186.192.196>
Source record: 21736

But now customers are just
> trained to throw stuff away on a bigger scale. I get the idea that We
> as American citizens are not allowed to know technology any more.
>

Its not the technology... its the economics. Why in the world would a
consumer want to more in labor charges for a sophisticated electronics
product that cost less to replace than repair?

Ed K7AAT

2864. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 17:06:27 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <ba7b2fd6-1688-4b30-a870-3e73f56cf574@25g2000hsx.googlegroups.com>
Source record: 21738

On Sep 22, 10:32 am, "JB" <nos...@goofball.net> wrote:
> > The Extra Class test (I took it in 1985) did include a question or two
> that
> > required some trig, but I figured out the answer in my head before
> finishing
> > the equation. It was obvious that the conjugate impedance was going to be
> > capacitive. There was only one answer with a -j, so it was obvious that
> that
> > would be the correct answer.
>
> > Ed, NM2K
>
> I picked up on that too. If you didn't know what was going on there, you
> would be left drudging through a math problem.
>
> The thing about Trig was having to memorize all the substitutions in order
> to poke the problem into a manageable calculation, or you wind up losing
> precision. If that happens, you wont have the clear cut answer for the
> multiple guess.
>
> In some ways I miss tube equipment. Now I have to deal with surface mount
> technology. Even for a resistor, I risk putting a soldering iron up my nose
> while squinting through a loupe. I just dread the idea of replacing a chip
> with 100 legs or more. In the 70's you had to know tubes and everything
> else too because there was so much transition. Ham Radio magazine was my
> best friend, and it was an opportunity to learn the discrete versions of
> complex stuff like synthesizers and various issues that had to be overcome.
> It's all easier now. If you can figure out what a controller is supposed to
> do, all you have to do is make sure the rest of the components can comply.
> But there is so much offshore cheap junk now that almost everything is
> worthless to fix but cheap to modify. Except for industrial controls and
> things like that. But now customers are just trained to throw stuff away on
> a bigger scale. I get the idea that We as American citizens are not allowed
> to know technology any more.

I had to take a test for the FAA once that the prep material took you
through all kinds of cr stuff that I studied for two months.
When I finally took the BIG test that my job depended on it was ALL
about decibles. The two hour 50 question test took me twenty minutes
and I never picked up my calculator. About all you had to know was 1db
was 20% 3db doubled or halved and every 10db
was 10 times and you pick the multiple guess answer. I remember the
guy giving the test thought I had given up and turned the
test in after only 20 minutes .He certainly was surprised when he

found I ACED it.The people that failed it all knew what they were
doing
They just got bogged down in the crank and grind of the math.

Jimmie

2865. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 17:27:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb8kj0$sf5$1@news.albasani.net>
Source record: 21739

JB wrote:
>> ... How does ether
> affect the velocity factor of light?
>
> Can't find my ether pump anyway, so we have do these experiments virtually.

Yeah, beginning there would be good, baby steps, at first ...

In the same way air affects the speed of sound, it limits its speed.

In some common units:

670,616,629.4 miles per hour.

983,571,056.4 feet per second (roughly one foot per nanosecond.)

186,282.397 miles per second.

I think the particles of a photon pass though the ether unhindered, why?
Now that is part of the whole question, isn't it ... perhaps it does
really "travel" at all ... there is that "odd statement" by Einstein,
motion cannot be held against the ether, for any logical observation.

Ether, apparently, is a true "lossless media" in the propagation of
waves ... well, that is how it appears from observation.

Regards,
JS

2866. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 17:30:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb8koj$sf5$2@news.albasani.net>
Source record: 21740

John Smith wrote:
> ... perhaps it does
> really "travel" at all ...
> Regards,
> JS

Does = doesn't ... but then, you already knew that.

Regards,
JS

2867. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 17:33:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <QCQBk.1958$eb4.656@flpi147.ffdc.sbc.com>
Source record: 21741

JB wrote:
> Hence photons travel best without ether.

Photons cannot travel at all without ether because
the absence of ether means there is nothing through
which to travel. Photons simply cannot travel outside
of the universe into absolute nothingness.

> How does ether affect the velocity factor of light?

The velocity factor of free space ether is 1.0.
The velocity factor of absolute nothing is zero.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2868. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 17:36:22 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <VFQBk.1959$eb4.1365@flpi147.ffdc.sbc.com>
Source record: 21742

John Smith wrote:
> I think the particles of a photon pass though the ether unhindered, why?

Without the ether a photon would certainly be "hindered". :-)
How many photons have you ever known to leave the universe?
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2869. Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 17:52:47 UTC
From: john Wiener <jawod@fuse.net>
Message-ID: <78dc3$48d7da0f$d8c4d0a6$3144@FUSE.NET>
Source record: 21743

Having received some very good advice about the Carolina Windom, I now ask a question to which I THINK I already know the answer.

This particular version of the CW OCF dipole uses 300 ohm twin lead feedline terminated after 33 feet to a 4:1 balun. Richard warned of significant risk of RF on the outer (inner?) braid of the coax.

I've never read of using a 1:1 unun right after a 4:1 balun to minimize RF on the outer coax.

My thinking is that the 4:1 balun acts as a voltage type and will do nothing to ameliorate this. So, I will put some ferrite rings or snap on ferrites just past the 4:1 balun on the coax.

Does this sound like a reasonable solution?

John
AB8O

2870. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 17:58:25 UTC
From: JB <nospam@goofball.net>
Message-ID: <51RBk.651$MN3.499@nwrddc01.gnilink.net>
Source record: 21744

> Photons cannot travel at all without ether because
> the absence of ether means there is nothing through
> which to travel. Photons simply cannot travel outside
> of the universe into absolute nothingness.
>
> > How does ether affect the velocity factor of light?
>
> The velocity factor of free space ether is 1.0.
> The velocity factor of absolute nothing is zero.

So a black cloth is somehow able to displace the Ether?

2871. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 18:16:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb8ndvdk1@news.albasani.net>
Source record: 21745

john Wiener wrote:

> ...
> I've never read of using a 1:1 unun right after a 4:1 balun to minimize
> RF on the outer coax.
>
> My thinking is that the 4:1 balun acts as a voltage type and will do
> nothing to ameliorate this. So, I will put some ferrite rings or snap
> on ferrites just past the 4:1 balun on the coax.
>
>
> Does this sound like a reasonable solution?
>
> John
> AB8O

If you use a 4:1 Ruthroff, it would be a voltage balun ... if you use a 4:1 Guanella it would be a current balun ... the 1:1 current balun is probably more useful behind a Ruthroff ... but hey, once you have tried all these possible combinations, you can speak from experience! <grin>

If going from 300 ohm to 50 ohm, perhaps you would choose a 6:1. Or, just go with the 4:1 now and when you need some diversion, later, try the 6:1 to see what improvments can be had and if the loss in this design is acceptable to you ... etc.

Anyway, in this document is a 6:1 (actually 6.25:1, resulting in 312ohm to 50 ohm) made from two 4:1 baluns (I would think Guanella ununs ... the 4:1 can be made from two 1:1, each wound on the opposite side of toroid core, reversing coil directions on one side. This could also be accomplished with 4 ferrite rods ... a 1:1 balun wound on each rod, two rods combined to make a 4:1 balun, then these "two units" combined to construct the 6.25:1 balun ...

Regards,
JS

2872. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 18:18:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb8nh8cs1@news.albasani.net>
Source record: 21746

John Smith wrote:
[stuff and forgot the URL, as usual :-( ]

The URL for the 6.25:1 ...

http://www.radioelectronicschool.net/files/downloads/ocfdipole.pdf

Regards,
JS

2873. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 18:20:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb8nlbcs2@news.albasani.net>
Source record: 21747

JB wrote:

> ...
> So a black cloth is somehow able to displace the Ether?

No, the ether permeates the black cloth, much the same way as air (a gas), or water (a fluid) would ... surely you have seen these at play! There should be no "leap of faith" necessary there!

... baby step, baby steps ...

Regards,
JS

2874. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 18:36:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <RqudnSt_O9o6eErVnZ2dnUVZ_sbinZ2d@posted.easystreetonline>
Source record: 21748

john Wiener wrote:
> Having received some very good advice about the Carolina Windom, I now
> ask a question to which I THINK I already know the answer.
>
> This particular version of the CW OCF dipole uses 300 ohm twin lead
> feedline terminated after 33 feet to a 4:1 balun. Richard warned of
> significant risk of RF on the outer (inner?) braid of the coax.
>
> I've never read of using a 1:1 unun right after a 4:1 balun to minimize
> RF on the outer coax.
>
> My thinking is that the 4:1 balun acts as a voltage type and will do
> nothing to ameliorate this. So, I will put some ferrite rings or snap
> on ferrites just past the 4:1 balun on the coax.
>
>
> Does this sound like a reasonable solution?

A while back I did some pretty careful measurements of an OCF dipole. I found that ferrites were required at both the feedpoint and at one or more places along the feedline. The ferrites at the feedpoint suppress the conducted common mode current (which is actually forced to exist by the voltage balun). But the asymmetry of the antenna results in common mode current being induced onto the feedline by mutual coupling to the antenna. This isn't a problem in a symmetrical dipole if the feedline is positioned symmetrically relative to the antenna, since the currents induced by the two equal halves cancel. But the OCF dipole can result in quite a lot of induced common mode current.

Ideally, you'd put at least a second bunch of snap on cores about a quarter wavelength from the feedpoint. But one of the main reasons people use OCFs is for multi-band operation. So the thing to do is to place the cores for maximum effectiveness on the band(s) where you have the most trouble -- the common mode current also depends on the feedline length and position, and will vary considerably from band to band even if you do nothing.

My opinion is that users of OCF dipoles are just about always going to have to deal with some amount of common mode current, and the best you can do is reduce it to a level you can tolerate.

Roy Lewallen, W7EL

2875. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 19:04:53 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <XPednWXjCpbccUrVnZ2dnUVZ_hGdnZ2d@comcast.com>
Source record: 21749

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:RqudnSt_O9o6eErVnZ2dnUVZ_sbinZ2d@posted.easystreetonline...
> john Wiener wrote:
>> Having received some very good advice about the Carolina Windom, I now
>> ask a question to which I THINK I already know the answer.
>>
>> This particular version of the CW OCF dipole uses 300 ohm twin lead
>> feedline terminated after 33 feet to a 4:1 balun. Richard warned of
>> significant risk of RF on the outer (inner?) braid of the coax.
>>
>> I've never read of using a 1:1 unun right after a 4:1 balun to minimize
>> RF on the outer coax.
>>
>> My thinking is that the 4:1 balun acts as a voltage type and will do
>> nothing to ameliorate this. So, I will put some ferrite rings or snap on
>> ferrites just past the 4:1 balun on the coax.
>>
>>
>> Does this sound like a reasonable solution?
>
> A while back I did some pretty careful measurements of an OCF dipole. I
> found that ferrites were required at both the feedpoint and at one or more
> places along the feedline. The ferrites at the feedpoint suppress the
> conducted common mode current (which is actually forced to exist by the
> voltage balun). But the asymmetry of the antenna results in common mode
> current being induced onto the feedline by mutual coupling to the antenna.
> This isn't a problem in a symmetrical dipole if the feedline is positioned
> symmetrically relative to the antenna, since the currents induced by the
> two equal halves cancel. But the OCF dipole can result in quite a lot of
> induced common mode current.
>
> Ideally, you'd put at least a second bunch of snap on cores about a
> quarter wavelength from the feedpoint. But one of the main reasons people
> use OCFs is for multi-band operation. So the thing to do is to place the
> cores for maximum effectiveness on the band(s) where you have the most
> trouble -- the common mode current also depends on the feedline length and
> position, and will vary considerably from band to band even if you do
> nothing.
>
> My opinion is that users of OCF dipoles are just about always going to
> have to deal with some amount of common mode current, and the best you can
> do is reduce it to a level you can tolerate.
>
> Roy Lewallen, W7EL

Roy,
What's your opinion on the 4: or 6:1 balun between the 300 Ohm line and the coax? I see no reason whatever to think that the impedance coming off the 300 Ohm line is anywhere near 300 Ohms. Also, where is it written that a 50 Ohm balun will work at, say, 2000 Ohms. The ferrites as you suggest will clearly work if you use enough of them.

The reason for asking this is that a friend is in the process of putting up a 75 m dipole, which he only plans to use on 75 m. Everybody is telling him to feed it with ladder line going to coax through a balun. Why in the world would you do that?

Tam/WB2TT

2876. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 19:05:28 UTC
From: john Wiener <jawod@fuse.net>
Message-ID: <48D7EC78.6040001@fuse.net>
Source record: 21750

john Wiener wrote:
> Having received some very good advice about the Carolina Windom, I now
> ask a question to which I THINK I already know the answer.
>
> This particular version of the CW OCF dipole uses 300 ohm twin lead
> feedline terminated after 33 feet to a 4:1 balun. Richard warned of
> significant risk of RF on the outer (inner?) braid of the coax.
>
> I've never read of using a 1:1 unun right after a 4:1 balun to minimize
> RF on the outer coax.
>
> My thinking is that the 4:1 balun acts as a voltage type and will do
> nothing to ameliorate this. So, I will put some ferrite rings or snap
> on ferrites just past the 4:1 balun on the coax.
>
>
> Does this sound like a reasonable solution?
>
> John
> AB8O
Ouch! Sorry about multiple posts! Not sure what happened there.

2877. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 19:43:20 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <pzSBk.1094$be.701@nlpi061.nbdc.sbc.com>
Source record: 21651

JB wrote:
> So a black cloth is somehow able to displace the Ether?

What a strange irrational conclusion.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2878. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 19:45:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <VBSBk.1095$be.775@nlpi061.nbdc.sbc.com>
Source record: 21652

Roy Lewallen wrote:
> My opinion is that users of OCF dipoles are just about always going to
> have to deal with some amount of common mode current, ...

Isn't the section between the voltage balun and the choke
designed to radiate?
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2879. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 20:03:53 UTC
From: john Wiener <jawod@fuse.net>
Message-ID: <8a04c$48d7fa33$d8c4d0a6$8565@FUSE.NET>
Source record: 21653

Cecil Moore wrote:
> Roy Lewallen wrote:
>> My opinion is that users of OCF dipoles are just about always going to
>> have to deal with some amount of common mode current, ...
>
> Isn't the section between the voltage balun and the choke
> designed to radiate?
Cecil
In the version I am putting up, the 4:1 balun is at the bottom of the
twin lead feedline, so the feedline can radiate.

John
AB8O

2880. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-22 23:40:20 UTC
From: JB <nospam@goofball.net>
Message-ID: <E1WBk.742$MN3.595@nwrddc01.gnilink.net>
Source record: 21654

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:pzSBk.1094$be.701@nlpi061.nbdc.sbc.com...
> JB wrote:
> > So a black cloth is somehow able to displace the Ether?
>
> What a strange irrational conclusion.

Oh but if it can make the clock disappear as easily as sucking out all the
ether...

Gotcha.

2881. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 00:55:24 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Z7XBk.1047$x%.589@nlpi070.nbdc.sbc.com>
Source record: 21655

JB wrote:
> Oh but if it can make the clock disappear as easily as sucking out all the
> ether...

Sorry, I don't recall saying that sucking out all the
ether is even possible, much less easy.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2882. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 00:57:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb9et3tcb1@news.albasani.net>
Source record: 21656

>> JB wrote:
>>> So a black cloth is somehow able to displace the Ether?

> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:pzSBk.1094$be.701@nlpi061.nbdc.sbc.com...
>> What a strange irrational conclusion.

JB wrote:
> Oh but if it can make the clock disappear as easily as sucking out all the
> ether...
>
> Gotcha.

Man, whatever you are on, I'd try it once, in the mountains, on a
weekend, but only if medical science could guarantee there wasn't
permanent brain damage or flashbacks--and it wore off shortly!

Maybe a twelve-step program?; have you considered that?

Regards,
JS

2883. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 01:38:55 UTC
From: JB <nospam@goofball.net>
Message-ID: <PMXBk.807$MN3.273@nwrddc01.gnilink.net>
Source record: 21657

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gb9et3tcb1@news.albasani.net...
> >> JB wrote:
> >>> So a black cloth is somehow able to displace the Ether?
>
>
> > "Cecil Moore" <nospam@w5dxp.com> wrote in message
> > news:pzSBk.1094$be.701@nlpi061.nbdc.sbc.com...
> >> What a strange irrational conclusion.
>
>
> JB wrote:
> > Oh but if it can make the clock disappear as easily as sucking out all
the
> > ether...
> >
> > Gotcha.
>
> Man, whatever you are on, I'd try it once, in the mountains, on a
> weekend, but only if medical science could guarantee there wasn't
> permanent brain damage or flashbacks--and it wore off shortly!
>
> Maybe a twelve-step program?; have you considered that?
>
> Regards,
> JS
Looking for substance?

2884. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 02:04:05 UTC
From: dfinn1@nc.rr.com
Message-ID: <19c74ced-10f4-4155-b2a4-7cffbcb87709@c58g2000hsc.googlegroups.com>
Source record: 21658

On Sep 22, 7:20 am, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith wrote:
> > Indeed, the bell jar, being made of the large molecules of our matter
> > would appear as a very large screen, or even like a layer of gravel to a
> > liquid/gas, to the quantum-structure-nature of ether ...
>
> Consider that the ether may be made out of exotic dark
> matter capable of occupying the same space as the glass
> in the jar, indeed providing the very structure that
> allows the glass to exist in the form that we perceive.

It is possible to consider that as a possible explanation provided that the hypothesis of exotic dark matter can ever be shown to exist physically, which it can't. It can be used hypothetcally as a possible explanation for the alleged expansion of the universe, which originates from observations using our Hubble peep hole, from which can see a only tiny portion of the total volume of the universe, backwards in time. For that hypothesis to be true, of course we must verify that alleged exotic matter, which cannot be observed, has a negative gravitational force relative to physical mass, something not intuitively obvious; this Hubble observation is where the advocates of exotic matter get their most support. And here we are putting the cart one light year ahead of the horse by considering that it is, or may be, the so called ether for light. Other plausible hypotheses such as an alternation of expansion and contraction cycles, possibly as a damped waceform, do not depend on the abstraction of exotic matter at all.

2885. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 02:06:22 UTC
From: dfinn1@nc.rr.com
Message-ID: <5951d191-590e-4b61-b1dd-3a40000c195e@b1g2000hsg.googlegroups.com>
Source record: 21659

On Sep 22, 10:18 am, John Smith <assemblywiz...@gmail.com> wrote:
> Cecil Moore wrote:
> > John Smith wrote:
> >> Indeed, the bell jar, being made of the large molecules of our matter
> >> would appear as a very large screen, or even like a layer of gravel to
> >> a liquid/gas, to the quantum-structure-nature of ether ...
>
> > Consider that the ether may be made out of exotic dark
> > matter capable of occupying the same space as the glass
> > in the jar, indeed providing the very structure that
> > allows the glass to exist in the form that we perceive.
>
> Could be, but can be explained without "dark matter" ...
>
> Lead is a very dense material, we use it as shielding against atomic
> particles. Take a chunk in your hand and contemplate all those
> molecules of lead you are holding. Then realize if that block of lead
> were enlarged to scale, to where an atom of that lead were the size of
> an orange, and you are standing next to one atom--the next closest atom
> would be about the length of a football field away. This leaves plenty
> of room for quantum material to pass though easier than wind passes
> though a chain-link fence ...
>
> Actually, I am far too conservative in this example ... this:
>
> "If a drop of water were enlarged to the size of the earth, each atom in
> it would be about the size of an orange. Yet most of an atom is empty
> space through which the electrons whirl. The nucleus itself occupies
> only one million-billionth of the atom's bulk. "
>
> From here:
>
> http://www.time.com/time/magazine/article/0,9171,792294,00.html
>
> "Our matter", being used as a "bottle" for ether is a "SERIOUS JOKE!"
>
> Regards,
> JS

It is so encouraging to note that our technical gurus gain their
scientific basis from the science writers at time.com. Wikipedia
too ;-)

2886. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 02:09:24 UTC
From: dfinn1@nc.rr.com
Message-ID: <25a21bf2-5ad8-4dd7-899b-2d353c3c4f80@r66g2000hsg.googlegroups.com>
Source record: 21660

On Sep 22, 1:36 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith wrote:
> > I think the particles of a photon pass though the ether unhindered, why?
>
> Without the ether a photon would certainly be "hindered". :-)
> How many photons have you ever known to leave the universe?

That would be the total sum of all photons that have ever passed
beyond the event horizons of all black holes in the universe. That
might turn out to be quite a few photons.

2887. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 02:14:06 UTC
From: dfinn1@nc.rr.com
Message-ID: <96e694b6-b5d7-4543-a1b0-48b4c7526bde@a70g2000hsh.googlegroups.com>
Source record: 21661

On Sep 22, 1:36 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith wrote:
> > I think the particles of a photon pass though the ether unhindered, why?
>
> Without the ether a photon would certainly be "hindered". :-)
> How many photons have you ever known to leave the universe?
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

By the way, do black holes swallow ether which passes beyong the event horizon of a black hole? That doesn't make sense since light *enters* the black holes due to high force. Then the ether must remain intact on both sides of the event horizon. Might Einstein have been talking about the ether of being the FORCE of gravity itself (in our point of reference), which would be an abstract ether, not a physical one?

2888. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 02:16:14 UTC
From: dfinn1@nc.rr.com
Message-ID: <58e02a17-c29a-474e-afdb-bace7e1f4085@8g2000hse.googlegroups.com>
Source record: 21662

On Sep 22, 8:55 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> JB wrote:
> > Oh but if it can make the clock disappear as easily as sucking out all the
> > ether...
>
> Sorry, I don't recall saying that sucking out all the
> ether is even possible, much less easy.
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

It is difficult to suck out an abstraction (at least without imbibing
in the spirits).

2889. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 02:17:54 UTC
From: dfinn1@nc.rr.com
Message-ID: <bded01ea-710d-4cac-a074-fd24362c000b@f63g2000hsf.googlegroups.com>
Source record: 21663

On Sep 22, 9:38 pm, "JB" <nos...@goofball.net> wrote:
> "John Smith" <assemblywiz...@gmail.com> wrote in message
>
> news:gb9et3tcb1@news.albasani.net...
>
>
>
> > >> JB wrote:
> > > >>> So a black cloth is somehow able to displace the Ether?
>
> > > "Cecil Moore" <nos...@w5dxp.com> wrote in message
> > >news:pzSBk.1094$be.701@nlpi061.nbdc.sbc.com...
> > >> What a strange irrational conclusion.
>
> > JB wrote:
> > > Oh but if it can make the clock disappear as easily as sucking out all
> the
> > > ether...
>
> > > Gotcha.
>
> > Man, whatever you are on, I'd try it once, in the mountains, on a
> > weekend, but only if medical science could guarantee there wasn't
> > permanent brain damage or flashbacks--and it wore off shortly!
>
> > Maybe a twelve-step program?; have you considered that?
>
> > Regards,
> > JS
>
> Looking for substance?- Hide quoted text -
>
> - Show quoted text -

Never mind his silly senility eruptions. I think he had one too many
LSD trips in the 60's.

2890. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 03:14:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gb9mv1$4mb$1@news.albasani.net>
Source record: 21664

JB wrote:

>> ...
> Looking for substance?
>

Not a substance then?; My gawd man, then consider mental health!

Regards,
JS

2891. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 03:22:28 UTC
From: JB <nospam@goofball.net>
Message-ID: <UhZBk.831$MN3.429@nwrddc01.gnilink.net>
Source record: 21665

It is difficult to suck out an abstraction (at least without imbibing
in the spirits).

BINGO!

2892. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 03:25:12 UTC
From: JB <nospam@goofball.net>
Message-ID: <skZBk.832$MN3.573@nwrddc01.gnilink.net>
Source record: 21666

> >> ...
> > Looking for substance?
> >
>
> Not a substance then?; My gawd man, then consider mental health!
>
> Regards,
> JS

Man, You're the ones sucking up all the Ether and blowing smoke rings.

2893. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 04:10:27 UTC
From: Dave Heil <k8mn@frontiernet.net>
Message-ID: <W_ZBk.1548$2H2.1343@fe097.usenetserver.com>
Source record: 21667

Jim Lux wrote:
> Dave Heil wrote:
>> Art Unwin wrote:
>>
>>> If you are looking for a University to compare with try Rhode Island
>>> I don't believe any University can show antenna results in the past
>>> few years that are better than those produced in any other state.
>>
>> Perhaps it takes a small state to research small antennas.
>>
>>> What has your State University done that is notable?
>>
>> It has lost two of its three football games.
>>
>> Dave K8MN
>
> What about CalTech, a hotbed of physics.. undefeated in football since
> 1993..

Heh.

We counted too much on Pat White.

Dave K8MN

2894. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 04:11:05 UTC
From: ltdoc@yahoo.com
Message-ID: <caa29e29-5296-46ab-affe-8525ecacb4db@i76g2000hsf.googlegroups.com>
Source record: 21668

Is this OCF dipole a single band antenna or a multiband antenna?
- 'Doc

2895. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 11:13:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <d94Ck.1495$D32.975@flpi146.ffdc.sbc.com>
Source record: 21669

dfinn1@nc.rr.com wrote:
> It is possible to consider that as a possible explanation provided
> that the hypothesis of exotic dark matter can ever be shown to exist
> physically, which it can't.

Sorry, that is incorrect. It has been shown there is more
matter associated with galaxies than we can see. The part
we can see is thought to be about 5% of the universe. Dark
matter possesses conventional gravity and apparently makes
up about 30% of the universe.

> For that hypothesis to be true, of course we must
> verify that alleged exotic matter, which cannot be observed, has a
> negative gravitational force relative to physical mass, ...

Sorry, that is incorrect. The thing thought to be responsible
for the expansion of the universe is Dark Energy causing an
expansion pressure. Dark Energy is thought to account for
65% of the universe.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2896. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 11:14:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <7a4Ck.1496$D32.853@flpi146.ffdc.sbc.com>
Source record: 21670

dfinn1@nc.rr.com wrote:
> It is so encouraging to note that our technical gurus gain their
> scientific basis from the science writers at time.com. Wikipedia
> too ;-)

You are certainly free to prove them wrong.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2897. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 11:18:03 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2d4Ck.1497$D32.63@flpi146.ffdc.sbc.com>
Source record: 21671

dfinn1@nc.rr.com wrote:
> That would be the total sum of all photons that have ever passed
> beyond the event horizons of all black holes in the universe. That
> might turn out to be quite a few photons.

I don't consider black holes to be outside of the universe.
In fact, massive black holes are the opposite of "absolute
nothing". They are so massive, they have collapsed the
structure of space, i.e. the ether.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2898. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 11:22:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <yh4Ck.1498$D32.472@flpi146.ffdc.sbc.com>
Source record: 21672

dfinn1@nc.rr.com wrote:
> By the way, do black holes swallow ether which passes beyond the event
> horizon of a black hole?

Yes, the structure of space collapses along with everything else.

> Might Einstein have been talking
> about the ether of being the FORCE of gravity itself (in our point of
> reference), which would be an abstract ether, not a physical one?

All you have to prove is that gravity can warp an abstraction.
Does gravity warp God?
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2899. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 11:25:31 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2k4Ck.1499$D32.1385@flpi146.ffdc.sbc.com>
Source record: 21673

dfinn1@nc.rr.com wrote:
> It is difficult to suck out an abstraction ...

If not impossible ... and that's an argument in favor
of the reality of ether.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2900. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 11:29:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <6o4Ck.1500$D32.1418@flpi146.ffdc.sbc.com>
Source record: 21674

JB wrote:
> It is difficult to suck out an abstraction (at least without imbibing
> in the spirits).
>
> BINGO!

Bingo indeed! Proving that Einstein's ether could not
be an abstraction.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2901. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 12:16:04 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <H45Ck.820$Ei5.332@flpi143.ffdc.sbc.com>
Source record: 21675

ltdoc@yahoo.com wrote:
> Is this OCF dipole a single band antenna or a multiband antenna?
> - 'Doc

It is alleged to be a multi-band antenna. Assuming that
the standing-wave current is 90 degrees out of phase
with the standing wave voltage, one can actually calculate
an approximation for the feedpoint impedance by dividing
the standing-wave voltage by the standing-wave current at
the feedpoint. With an OCF, the feedpoint impedance will
always be lower than Vmax/Imin and always higher than
Vmin/Imax and thus provide a reasonable SWR for 450 ohm
ladder-line.

The free demo version of EZNEC available from
http://www.eznec.com
will provide a reasonable guess at the feedpoint impedance.

Here are what EZNEC 4.0 says about the
feedpoint impedance of the following:

------------83'----------FP-----47'--------

3.8 MHz, 85.5+j98.5 ohms, SWR(300)= 3.9, SWR(450)= 5.5
7.2 MHz, 177-j181 ohms, SWR(300)= 2.5, SWR(450)= 3
10.125 MHz, 3569-j102 ohms, SWR(300)= 12, SWR(450)= 7.9
14.2 MHz, 96-j357 ohms, SWR(300)= 7.7, SWR(450)= 7.7
18.14 MHz, 797-j911 ohms, SWR(300)= 6.3, SWR(450)= 4.4
21.3 MHz, 933-j1239 ohms, SWR(300)= 8.8, SWR(450)= 6
24.95 MHz, 218-j652 ohms, SWR(300)= 8.5, SWR(450)= 6.7
28.4 MHz, 757+j1019 ohms, SWR(300)= 7.4, SWR(450)= 5.1

As you can see, the myth that this antenna has a 300
ohm feedpoint impedance is just an old wives' tale but
it does have reasonable SWRs when fed with 450 ohm
ladder-line.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2902. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 13:35:02 UTC
From: niceangelbaby <niceangelbaby.31ee3c8@radiobanter.com>
Message-ID: <niceangelbaby.31ee3c8@radiobanter.com>
Source record: 21686

just been browsing and came across www.watchez.org there prices seem to be way lower that standard. All of the 'wris****ches' (http://www.watchesreplica.net/default.htm) | 'mens watch' (http://www.watchesreplica.net/Replica_watches_Rolex_Mens_12.html) | 'womens watches' (http://tinyurl.com/4yz972) |seem to be priced around $200 to $300. Are they fakes? The site seems to look quite legit. 'watches online' (http://www.watchesreplica.net/) | 'swiss watch' (http://www.watchesreplica.net/)

--
niceangelbaby

2903. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 13:41:40 UTC
From: ltdoc@yahoo.com
Message-ID: <f562e1ab-870f-4d41-85da-9613388ab577@r66g2000hsg.googlegroups.com>
Source record: 21676

Cecil,
I sort of thought that this OCF antenna was typically used for a multiband antenna, that's typically the 'idea' behind using them. Keeping that 'thought' in mind, how can you 'optimize' this multiband antenna for one particular band without 'de-optimizing' it for others? That seems sort of going at it from the wrong direction, why not use an antenna that works well for the particular band of interest. Oh, I know that assumes that you can have more than one antenna, which isn't always the case. So having an 'un-optimized' antenna is what you'll end up with in most (if not all) bands except for one. Which is the 'fault' for almost all multiband antennas. Isn't it?
- 'Do

2904. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 16:01:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbb3tmkre1@news.albasani.net>
Source record: 21677

Cecil Moore wrote:
> dfinn1@nc.rr.com wrote:
>> It is so encouraging to note that our technical gurus gain their
>> scientific basis from the science writers at time.com. Wikipedia
>> too ;-)
>
> You are certainly free to prove them wrong.

I like time, I like wiki ... while true anyone can write something for wiki ... and true, you have to know if some child has sneaked on and left some prank ... or not. But, those in charge of wiki have some tricks to manage all of this ...

Regards,
JS

2905. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 16:04:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbb41qkre2@news.albasani.net>
Source record: 21678

Cecil Moore wrote:

>
> All you have to prove is that gravity can warp an abstraction.
> Does gravity warp God?

God IS warped, well, at least his sense of humor ... ;-)

Regards,
JS

2906. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 16:06:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <nu8Ck.1330$YU2.2@nlpi066.nbdc.sbc.com>
Source record: 21679

ltdoc@yahoo.com wrote:
> I sort of thought that this OCF antenna was typically used for a
> multiband antenna, that's typically the 'idea' behind using them.
> Keeping that 'thought' in mind, how can you 'optimize' this multiband
> antenna for one particular band without 'de-optimizing' it for
> others?

Given the SWRs that EZNEC predicts, feeding the OCF
at a current maximum point causes the XMTR (or tuner)
to see the following resistances looking into the
ladder-line.

3.8 MHz, 129 ohms; 7.2 MHz, 120 ohms; 10.125 MHz, 37.5 ohms;
14.2 MHz, 58 ohms; 18.14 MHz, 71 ohms; 21.3 MHz, 51 ohms;
24.95 MHz, 53 ohms; 28.4 MHz, 61 ohms

Let's say you wanted to optimize for 40m. You would
choose a 450 ohm ladder-line length of 67.5 feet and
expect 120 ohms looking into the ladder-line. Use a
tuner or transformer for a perfect match.

> Oh, I know that assumes that you can have more than one
> antenna, which isn't always the case. So having an 'un-optimized'
> antenna is what you'll end up with in most (if not all) bands except
> for one. Which is the 'fault' for almost all multiband antennas.
> Isn't it?

Not for this one: http://www.w5dxp.com/notuner.htm
That antenna system is efficient on all HF bands.
It is fed with 1/2WL of ladder-line on 80m and 3/4WL
of ladder-line on 40m. Also appropriate lengths of
ladder-line on all other HF bands. The ladder-line
length averages around 100 feet.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2907. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 16:25:25 UTC
From: JB <nospam@goofball.net>
Message-ID: <VL8Ck.792$Jw.271@nwrddc02.gnilink.net>
Source record: 21680

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:d94Ck.1495$D32.975@flpi146.ffdc.sbc.com...
> dfinn1@nc.rr.com wrote:
> > It is possible to consider that as a possible explanation provided
> > that the hypothesis of exotic dark matter can ever be shown to exist
> > physically, which it can't.
>
> Sorry, that is incorrect. It has been shown there is more
> matter associated with galaxies than we can see. The part
> we can see is thought to be about 5% of the universe. Dark
> matter possesses conventional gravity and apparently makes
> up about 30% of the universe.
>
> > For that hypothesis to be true, of course we must
> > verify that alleged exotic matter, which cannot be observed, has a
> > negative gravitational force relative to physical mass, ...
>
> Sorry, that is incorrect. The thing thought to be responsible
> for the expansion of the universe is Dark Energy causing an
> expansion pressure. Dark Energy is thought to account for
> 65% of the universe.
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

It's amazing how far into space people will go without even stepping off the planet.

Don't get me wrong, It's good to explore in the best we can, but one thing brings me back to reality. No one of us seems to be able to keep straight in our heads, all of the details of all the theories, observations, problems and their interdependence and conflicts. It seems that every conclusion presented that I can have hope of researching in great enough detail, reveals leaps of faith.

Reminds me a whole lot of the Psychology and Philosophy courses I took to round out my transcripts. All the GREAT GENIUSES in those fields got tunnel vision and went way out on a limb even to the point of developing their own dialect. The lesson learned of all that, was that humanity is so versatile that no one could point to one theory that held up in the broader range of human experience.

What does that leave us with? Tools that can be applied if we know where they can be used, but only if they hold when we put work to them.

The end result though, is that humanity is so versatile

2908. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 17:18:46 UTC
From: JB <nospam@goofball.net>
Message-ID: <Wx9Ck.958$MN3.829@nwrddc01.gnilink.net>
Source record: 21681

<ltdoc@yahoo.com> wrote in message
news:f562e1ab-870f-4d41-85da-9613388ab577@r66g2000hsg.googlegroups.com...
> Cecil,
> I sort of thought that this OCF antenna was typically used for a
> multiband antenna, that's typically the 'idea' behind using them.
> Keeping that 'thought' in mind, how can you 'optimize' this multiband
> antenna for one particular band without 'de-optimizing' it for
> others? That seems sort of going at it from the wrong direction, why
> not use an antenna that works well for the particular band of
> interest. Oh, I know that assumes that you can have more than one
> antenna, which isn't always the case. So having an 'un-optimized'
> antenna is what you'll end up with in most (if not all) bands except
> for one. Which is the 'fault' for almost all multiband antennas.
> Isn't it?
> - 'Do

Seems to me it's not "optimized" for any band, but is just a fudged radiator fed by ladder line, matched with a tuner or maybe a pi-net without too much line loss. You can fiddle with it to your hearts content, but in the end will it load up where you want it to and will you get out? It would be nice to have an antenna analyzer to have some indication of YOUR installation as you fiddle. Obviously you will have trouble using any of the modern internal ATUs.

Years ago, I threw one up but fed it with coax. It didn't work so I rebuilt it as parallel fed Dipoles for 80 and 40m.

Thanks for the NEC output, Cecil.

2909. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 17:23:19 UTC
From: JB <nospam@goofball.net>
Message-ID: <bC9Ck.959$MN3.564@nwrddc01.gnilink.net>
Source record: 21682

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gbb3tmkre1@news.albasani.net...
> Cecil Moore wrote:
> > dfinn1@nc.rr.com wrote:
> >> It is so encouraging to note that our technical gurus gain their
> >> scientific basis from the science writers at time.com. Wikipedia
> >> too ;-)
> >
> > You are certainly free to prove them wrong.
>
> I like time, I like wiki ... while true anyone can write something for
> wiki ... and true, you have to know if some child has sneaked on and
> left some prank ... or not. But, those in charge of wiki have some
> tricks to manage all of this ...
>
> Regards,
> JS

I certainly wouldn't use them in a research paper. Like doing a book report
with Cliff Notes. Like reporting on a review.

2910. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 17:57:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbban9$tl0$1@news.albasani.net>
Source record: 21683

JB wrote:

> ...
> I certainly wouldn't use them in a research paper. Like doing a book report
> with Cliff Notes. Like reporting on a review.
>

I would simply indicate, in a/the footnote, the question of accuracy ...
things have changed, but there was a time when you could trust Time with
the same surety of Walter Cronkite ... but that was before infotainment.

Regards,
JS

2911. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 17:59:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <zKWdncTbwt_qs0TVnZ2dnUVZ_t3inZ2d@posted.easystreetonline>
Source record: 21684

Tam wrote:
>
> Roy,
> What's your opinion on the 4: or 6:1 balun between the 300 Ohm line and
> the coax? I see no reason whatever to think that the impedance coming
> off the 300 Ohm line is anywhere near 300 Ohms. Also, where is it
> written that a 50 Ohm balun will work at, say, 2000 Ohms. The ferrites
> as you suggest will clearly work if you use enough of them.
>
> The reason for asking this is that a friend is in the process of putting
> up a 75 m dipole, which he only plans to use on 75 m. Everybody is
> telling him to feed it with ladder line going to coax through a balun.
> Why in the world would you do that?

As you suspect, the impedances encountered by the transformer on some bands are wildly different than its nominal design impedances. In the one which I carefully measured, the result was no surprise. When the antenna impedance was substantially different from 300 + j0, the transformation ratio wasn't 6:1, and the transformer added series and/or shunt reactance, sometimes a pretty large amount. And this was the case on most bands.

This isn't to say that an OCF dipole can't be fiddled until, radiating feedline and all, it manages to present an acceptable SWR on several bands. But when it does, it's not working at all like predicted by a simplified analysis which ignores the strong feedline coupling and very non-ideal transformer effects.

Roy Lewallen, W7EL

2912. Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 18:01:53 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0618424e-87a1-4e73-9846-f703d19661d9@k37g2000hsf.googlegroups.com>
Source record: 21685

S A s are usefull for antenna hobbyists. Some twenty years ago there
was a DIY S A that used a t v tuner in
Ham Radio. Moving forwards some twenty years and most hams have
computors and there are 2.4 Ghz
spectrum analysers out there as well as audio set ups for computors.
So what is available today for hams
in the HF BANDS? There are a lot of older type audio S A s on E bay
but I haven't heard of anybody modifying thoseand with most having
computors it would seem reasonable to think that there were components
available that could performn between audi and 2.4 Ghz. So has anybody
seen any modern type DIY spectrum analysers
around for sale or kits? I have 141t and other types of SA which now
are considered bulky and I would really like something smaller or say
modify something like a audio setup as a project.
Comments

2913. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 18:13:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbbbk4$ut9$1@news.albasani.net>
Source record: 21687

Roy Lewallen wrote:

> ...
> This isn't to say that an OCF dipole can't be fiddled until, radiating
> feedline and all, it manages to present an acceptable SWR on several
> bands. But when it does, it's not working at all like predicted by a
> simplified analysis which ignores the strong feedline coupling and very
> non-ideal transformer effects.
>
> Roy Lewallen, W7EL

I have switched my balun designs to the one in this URL, Figure 4 -
Improved 4:1 Current Balun, page 3:

http://home.earthlink.net/~christrask/Trask4to1Balun.pdf

Can be used balanced, or forced to unun fashion ... bandwidth becomes
increased (and, it "just works better for me!")

But, what works for you is the most important, always ...

Regards,
JS

2914. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 18:20:18 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <EraCk.41352$PK.21369@newsfe04.iad>
Source record: 21688

Art,

Funny that you should ask, because the October 2008 QST (just arrived a few days ago) has a computer-based DIY spectrum analyzer project. Doesn't look too difficult: a couple of dozen parts and a software program that's downloadable from the ARRL web site.

-larry
K8UT
"Art Unwin" <ArthurUnwin@gmail.com> wrote in message news:0618424e-87a1-4e73-9846-f703d19661d9@k37g2000hsf.googlegroups.com...
>S A s are usefull for antenna hobbyists. Some twenty years ago there
> was a DIY S A that used a t v tuner in
> Ham Radio. Moving forwards some twenty years and most hams have
> computors and there are 2.4 Ghz
> spectrum analysers out there as well as audio set ups for computors.
> So what is available today for hams
> in the HF BANDS? There are a lot of older type audio S A s on E bay
> but I haven't heard of anybody modifying thoseand with most having
> computors it would seem reasonable to think that there were components
> available that could performn between audi and 2.4 Ghz. So has anybody
> seen any modern type DIY spectrum analysers
> around for sale or kits? I have 141t and other types of SA which now
> are considered bulky and I would really like something smaller or say
> modify something like a audio setup as a project.
> Comments

2915. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 18:33:51 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gbbcqe$d4p$1@news.jpl.nasa.gov>
Source record: 21690

Larry Gauthier (K8UT) wrote:
> Art,
>
> Funny that you should ask, because the October 2008 QST (just arrived a few
> days ago) has a computer-based DIY spectrum analyzer project. Doesn't look
> too difficult: a couple of dozen parts and a software program that's
> downloadable from the ARRL web site.
>
> -larry
> K8UT
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:0618424e-87a1-4e73-9846-f703d19661d9@k37g2000hsf.googlegroups.com...
>> S A s are usefull for antenna hobbyists. Some twenty years ago there
>> was a DIY S A that used a t v tuner in
>> Ham Radio. Moving forwards some twenty years and most hams have
>> computors and there are 2.4 Ghz
>> spectrum analysers out there as well as audio set ups for computors.
>> So what is available today for hams
>> in the HF BANDS? There are a lot of older type audio S A s on E bay
>> but I haven't heard of anybody modifying thoseand with most having
>> computors it would seem reasonable to think that there were components
>> available that could performn between audi and 2.4 Ghz. So has anybody
>> seen any modern type DIY spectrum analysers
>> around for sale or kits? I have 141t and other types of SA which now
>> are considered bulky and I would really like something smaller or say
>> modify something like a audio setup as a project.
>> Comments
>
>

These days, the scanning receiver part isn't the hard part. It's
calibration and user interface.

For instance a Icom PCR1000 makes a fine HF,VHF,UHF spectrum analyzer,
although the resolution BW steps are limited and sweep speeds are limited.

What you get with a "real" spectrum analyzer is a fairly intuitive user
interface (with knobs!), well characterized and consistent RF
performance over a wide variety of operating conditions, and
calibrateability (i.e. stable and repeatable operation)

It's sort of like the difference between a real oscilloscope and a sound
card in a PC with an oscilloscope program. The real scope probably has
wider applicability, more options arranged in a systematic way, etc.
But for some applications, the soundcard is just fine.

2916. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 18:54:26 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e5548cc2-e6be-40d8-8ebc-540970f28319@y21g2000hsf.googlegroups.com>
Source record: 21689

On Sep 23, 1:01 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> S A s are usefull for antenna hobbyists. Some twenty years ago there
> was a DIY S A that used a t v tuner in
> Ham Radio. Moving forwards some twenty years and most hams have
> computors and there are 2.4 Ghz
> spectrum analysers out there as well as audio set ups for computors.
> So what is available today for hams
> in the HF BANDS? There are a lot of older type audio S A s on E bay
> but I haven't heard of anybody modifying thoseand with most having
> computors it would seem reasonable to think that there were components
> available that could performn between audi and 2.4 Ghz. So has anybody
> seen any modern type DIY spectrum analysers
> around for sale or kits? I have 141t and other types of SA which now
> are considered bulky and I would really like something smaller or say
> modify something like a audio setup as a project.
> Comments

THANK YOU. I will have to hit the library to read that. How
fortunate !
Regards
Art

2917. A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:06:20 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbbiao$346$1@news.service.uci.edu>
Source record: 21691

Cycle 24 has begun (from the Times of India).

http://sohowww.nascom.nasa.gov/data/realtime/realtime-update.html

ac6xg

2918. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:23:53 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <bejid4tu6mt897h5mm7i1m2vhme8qn940u@4ax.com>
Source record: 21692

On Tue, 23 Sep 2008 11:01:53 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I would really like something smaller or say
>modify something like a audio setup as a project.

Audio spectrum analyzer (free):
<http://www.sillanumsoft.org>
I use this one on my laptop for audio generating and testing. Try to
get a 96Khz sound card or dongle as the typical internal laptop sound
card is really marginal. No RF, no antenas, but good for audio.

Look into SDR (software defined radio) projects. Most of them will
also act as a spectrum analyzer. For covering bands above 30MHz, use
a mixer and a signal generator:
<http://www.rfspace.com/SDR-14.html>
I really don't know much about these but they look interesting.

Now, if you have a sizeable bank account, one of the various Anritsu
hand held spectrum analyzers are really nice:
<http://www.us.anritsu.com/products/ARO/North/Eng/Spectrum-Analyzers.aspx?lc=Eng&cc=US&rc=
ARO&cat=1&cat2=2&cat3=5&cat4=0>

There are also a large number of hand-help CATV spectrum analyzer
available if you want portability. I've only played with a few, so I
can't offer any useful recommendations. They usually don't have
sufficient resolution to seperate HF stations.

Incidentally, in order to use a spectrum analyzer for antenna testing,
you'll need a directional coupler (or VSWR bridge) and an RF sweep
generator.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2919. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:26:29 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ThcCk.1119$x%.1063@nlpi070.nbdc.sbc.com>
Source record: 21693

JB wrote:
> The end result though, is that humanity is so versatile

Human knowledge is expanding exponentially. The
more we know, the more we know that we don't know.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2920. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:30:59 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <0ckid4loo4mif6uv9u7ss9iupfqaq2flem@4ax.com>
Source record: 21694

On Tue, 23 Sep 2008 13:06:20 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Cycle 24 has begun (from the Times of India).
>http://sohowww.nascom.nasa.gov/data/realtime/realtime-update.html
>ac6xg

Where? I don't see any spots.
<http://sohowww.nascom.nasa.gov/data/realtime/mdi_igr/1024/latest.html>
<http://sohowww.nascom.nasa.gov/data/LATEST/current_mdi_igr.mpg>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2921. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:32:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <DIcCk.872$Ei5.8@flpi143.ffdc.sbc.com>
Source record: 21695

JB wrote:
> Thanks for the NEC output, Cecil.

I showed how to optimize an OCF for a single band, e.g.
40m. If the 50/120 ohm transformer is link coupled, it will
cause a common-mode current node at the transformer on 40m.
Any antenna system can be optimized if one knows what they
are doing.

For instance, a shunt 1000 pf cap at the twinlead to coax
junction will optimize a G5RV for 75m.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2922. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:33:10 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <bjkid4patfr26vkhcip1bhrkr90hhkt67u@4ax.com>
Source record: 21696

On Tue, 23 Sep 2008 13:23:53 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>Now, if you have a sizeable bank account, one of the various Anritsu
>hand held spectrum analyzers are really nice:
><http://www.us.anritsu.com/products/ARO/North/Eng/Spectrum-Analyzers.aspx?lc=Eng&cc=US&rc
=ARO&cat=1&cat2=2&cat3=5&cat4=0>

Sorry. Wrong URL. For handheld SA's, see:
<http://www.us.anritsu.com/products/ARO/North/Eng/Handheld-Spectrum-Analyzer---Spectrum-Ma
ster.aspx?lc=Eng&cc=US&rc=ARO&cat=1&cat2=2&cat3=3&cat4=0>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2923. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:34:55 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e118a6ef-020c-4a23-b262-39a70566f6df@i76g2000hsf.googlegroups.com>
Source record: 21697

On Sep 23, 1:33 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Larry Gauthier (K8UT) wrote:
> > Art,
>
> > Funny that you should ask, because the October 2008 QST (just arrived a few
> > days ago) has a computer-based DIY spectrum analyzer project. Doesn't look
> > too difficult: a couple of dozen parts and a software program that's
> > downloadable from the ARRL web site.
>
> > -larry
> > K8UT
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >news:0618424e-87a1-4e73-9846-f703d19661d9@k37g2000hsf.googlegroups.com...
> >> S A s are usefull for antenna hobbyists. Some twenty years ago there
> >> was a DIY S A that used a t v tuner in
> >> Ham Radio. Moving forwards some twenty years and most hams have
> >> computors and there are 2.4 Ghz
> >> spectrum analysers out there as well as audio set ups for computors.
> >> So what is available today for hams
> >> in the HF BANDS? There are a lot of older type audio S A s on E bay
> >> but I haven't heard of anybody modifying thoseand with most having
> >> computors it would seem reasonable to think that there were components
> >> available that could performn between audi and 2.4 Ghz. So has anybody
> >> seen any modern type DIY spectrum analysers
> >> around for sale or kits? I have 141t and other types of SA which now
> >> are considered bulky and I would really like something smaller or say
> >> modify something like a audio setup as a project.
> >> Comments
>
> These days, the scanning receiver part isn't the hard part. It's
> calibration and user interface.
>
> For instance a Icom PCR1000 makes a fine HF,VHF,UHF spectrum analyzer,
> although the resolution BW steps are limited and sweep speeds are limited.
>
> What you get with a "real" spectrum analyzer is a fairly intuitive user
> interface (with knobs!), well characterized and consistent RF
> performance over a wide variety of operating conditions, and
> calibrateability (i.e. stable and repeatable operation)
>
> It's sort of like the difference between a real oscilloscope and a sound
> card in a PC with an oscilloscope program. The real scope probably has
> wider applicability, more options arranged in a systematic way, etc.
> But for some applications, the soundcard is just fine.

I have seen spectrum analysers the size of a hand held volt meter,
cost around 2 to 3 K
that tells me that the science is there and the chips are there. When
I see kids jumping their fingers all over the place with their hand
games
they have found a way around the knobs and wh
istles and bells so us old folks had better change up a gear. I just
want to see the shape of my transmission signal plus an idea what
bands are busy and which ones are not. For accuracy I can put a signal
on that of the SA and read out the frequency
on my radio. I do not want to replay my work years all over again!
Regards
Art

2924. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:43:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <owcCk.875$Ei5.566@flpi143.ffdc.sbc.com>
Source record: 21698

Roy Lewallen wrote:
> This isn't to say that an OCF dipole can't be fiddled until, radiating
> feedline and all, it manages to present an acceptable SWR on several
> bands.

I bought the 300 ohm feedpoint myth when I was at Texas A&M
in 1958 when I didn't know any better. I had an OCF fed with
300 ohm twinlead fed through a 6:1 air-core Heathkit balun
driven by a DX-40. The results were amazing to me at the
time. Now I know the pi-net output of the DX-40 would achieve
a match to almost anything and I should have been using a 1:1
balun. The Heathkit balun didn't have much loss and the 300
ohm twinlead didn't have much loss. I have no idea what the
actual impedances were, but losses were minimized and the
system successfully worked the world at the height of the
most active sunspot cycle in recorded history.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2925. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:46:13 UTC
From: Christen Fihl <look_at_HSPascal.fihl.net@nospam.plz>
Message-ID: <48d95596$0$15887$edfadb0f@dtext01.news.tele.dk>
Source record: 21699

> I have seen spectrum analysers the size of a hand held volt meter,
> cost around 2 to 3 K

I got myself a 7GHz Spectran for small money. With its PC software it
looks amazing.
http://spectran.com/HandHeld_SpectrumAnalyzer.shtml
(or Germany: http://www.aaronia.de/Spektrumanalysator.htm)

Christen

2926. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 20:51:43 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <yFcCk.1121$x%.325@nlpi070.nbdc.sbc.com>
Source record: 21700

Jim Kelley wrote:
> Cycle 24 has begun

Guess I need to get my full wavelength 10m rotatable
dipole in the air, huh? I've been waiting for another
cycle like 1958 when I could work the world on a coat-
hanger hanging off my DX-40.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2927. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 21:09:33 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbbm2e$5c0$1@news.service.uci.edu>
Source record: 21601

Jeff Liebermann wrote:
> On Tue, 23 Sep 2008 13:06:20 -0700, Jim Kelley <jwkelley@uci.edu>
> wrote:
>
>> Cycle 24 has begun (from the Times of India).
>> http://sohowww.nascom.nasa.gov/data/realtime/realtime-update.html
>> ac6xg
>
> Where? I don't see any spots.
> <http://sohowww.nascom.nasa.gov/data/realtime/mdi_igr/1024/latest.html>
> <http://sohowww.nascom.nasa.gov/data/LATEST/current_mdi_igr.mpg>

You have to defocus your eyes and stare at it for a while. It looks
like an airplane. :-)

http://www.spaceweather.com/images2008/22sep08/midi_lab.jpg?PHPSESSID=0g9vn4l7l0peoll6uoo8
vkg257

ac6xg

2928. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 21:54:38 UTC
From: Dave <noone@nowhere.com>
Message-ID: <yAdCk.856$Jw.509@nwrddc02.gnilink.net>
Source record: 21602

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:gbbiao$346$1@news.service.uci.edu...
> Cycle 24 has begun (from the Times of India).
>
> http://sohowww.nascom.nasa.gov/data/realtime/realtime-update.html
>
> ac6xg

spots? Spots?!? SPOTS?!?!?! we don't need no stinking spots!

besides those probably will spew more of art's magical mystery particles and bury my ferromagnetic material antennas under piles of weak force static neutrinos. or maybe it will give us something more fun to talk about?

2929. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 21:58:17 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ZDdCk.857$Jw.213@nwrddc02.gnilink.net>
Source record: 21603

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:0618424e-87a1-4e73-9846-f703d19661d9@k37g2000hsf.googlegroups.com...
>S A s are usefull for antenna hobbyists.

maybe you should hook one up to your magical neutrino antenna and see if you
can measure the weak force tilt frequency in your drunken vertical.

2930. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 22:52:36 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <2daeeb7e-6c85-4649-ac37-351af0ee8b33@p31g2000prf.googlegroups.com>
Source record: 21604

On Sep 23, 11:33 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Larry Gauthier (K8UT) wrote:
> > Art,
>
> > Funny that you should ask, because the October 2008 QST (just arrived a few
> > days ago) has a computer-based DIY spectrum analyzer project. Doesn't look
> > too difficult: a couple of dozen parts and a software program that's
> > downloadable from the ARRL web site.
>
> > -larry
> > K8UT
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >news:0618424e-87a1-4e73-9846-f703d19661d9@k37g2000hsf.googlegroups.com...
> >> S A s are usefull for antenna hobbyists. Some twenty years ago there
> >> was a DIY S A that used a t v tuner in
> >> Ham Radio. Moving forwards some twenty years and most hams have
> >> computors and there are 2.4 Ghz
> >> spectrum analysers out there as well as audio set ups for computors.
> >> So what is available today for hams
> >> in the HF BANDS? There are a lot of older type audio S A s on E bay
> >> but I haven't heard of anybody modifying thoseand with most having
> >> computors it would seem reasonable to think that there were components
> >> available that could performn between audi and 2.4 Ghz. So has anybody
> >> seen any modern type DIY spectrum analysers
> >> around for sale or kits? I have 141t and other types of SA which now
> >> are considered bulky and I would really like something smaller or say
> >> modify something like a audio setup as a project.
> >> Comments
>
> These days, the scanning receiver part isn't the hard part. It's
> calibration and user interface.
>
> For instance a Icom PCR1000 makes a fine HF,VHF,UHF spectrum analyzer,
> although the resolution BW steps are limited and sweep speeds are limited.
>
> What you get with a "real" spectrum analyzer is a fairly intuitive user
> interface (with knobs!), well characterized and consistent RF
> performance over a wide variety of operating conditions, and
> calibrateability (i.e. stable and repeatable operation)
>
> It's sort of like the difference between a real oscilloscope and a sound
> card in a PC with an oscilloscope program. The real scope probably has
> wider applicability, more options arranged in a systematic way, etc.
> But for some applications, the soundcard is just fine.

Adding a bit to Jim's good comments... just because spectrum analysis can be done with fewer and smaller parts than you needed a few years ago doesn't mean you can get really good performance in a tiny package. It's still pretty tricky to keep residuals, spurs and distortion very low while providing the amplitude and frequency stability that Jim mentions. These days, low phase noise is also a big benefit, since RBW can be very low.

To me, one of the biggest advances in spectral analysis in the past few years is the ability to get very decent dynamic range while digitizing a significant bandwidth, meaning that you can look at a whole bunch of signals all at the same time, and not miss transient events because you were scanning a different range when the event occurred. A side benefit is that a properly done digitizer has extremely good linearity: you can accurately measure amplitude over a wide range of signal levels. It's quite possible to digitize the whole HF range with very respectable dynamic range; the display then becomes a matter of digital signal processing--and there are chips capable of keeping up with the high data rate while providing narrow frequency resolution over large chunks of, or even the whole, digitized bandwidth. Digitization also makes keeping phase noise low relatively easy, if you don't have to also do analog frequency conversion--and even there, if you can do the analog conversion in only relatively large frequency steps, it's a help.

Cheers,
Tom

2931. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 23:06:01 UTC
From: JB <nospam@goofball.net>
Message-ID: <tDeCk.1036$MN3.949@nwrddc01.gnilink.net>
Source record: 21605

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:DlcCk.872$Ei5.8@flpi143.ffdc.sbc.com...
> JB wrote:
> > Thanks for the NEC output, Cecil.
>
> I showed how to optimize an OCF for a single band, e.g.
> 40m. If the 50/120 ohm transformer is link coupled, it will
> cause a common-mode current node at the transformer on 40m.
> Any antenna system can be optimized if one knows what they
> are doing.
>
> For instance, a shunt 1000 pf cap at the twinlead to coax
> junction will optimize a G5RV for 75m.

Of course but I'm too lazy to run the numbers if it isn't my project. My favorite single band wire antenna is the Dipole. How is OCF an improvement? I also liked my Inverted L made out of a homebrew 9' bug catcher mobile antenna with 25' horizontal clip on extension for 40/80 and clip on shunt caps at the mobile mount. Works well in the campground.

Keeping the antenna matched to the coax DOES make a difference, considering coax losses.

2932. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-23 23:12:47 UTC
From: JB <nospam@goofball.net>
Message-ID: <PJeCk.1037$MN3.45@nwrddc01.gnilink.net>
Source record: 21606

> things have changed, but there was a time when you could trust Time with
> the same surety of Walter Cronkite ... but that was before infotainment.
>
> Regards,
> JS

That has really hurt my trust in a big way. To the point I question nearly everything but what I have proved for myself. Just like in a courtroom, if they lie about one thing, you can't trust them on anything.

2933. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 00:40:28 UTC
From: xray66@earthlink.net
Message-ID: <62643fce-c0af-40b2-879e-38aabb1b4184@j22g2000hsf.googlegroups.com>
Source record: 21607

Thanks for the help... I'm actually using cocoaNEC for OSX, so
unfortunately I can't use those files. Otherwise that would probably
be a big help. I know if I could just see one example of each, I could
adjust the rest myself.

2934. Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 02:03:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2878dc0f-df75-4efe-93bc-2632b3d5373d@m36g2000hse.googlegroups.com>
Source record: 21608

Presumably the nulls between lobes on a radiation pattern
are a result of radiation cancellation. IF this is true then it means
we have not harnessed
all the radiation available. What are your thoughts about that Dave?
Can you relate the number of nulls in a radiation pattern with the
number
of elements in a planar array? You are the expert aren't you?
Art

2935. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 02:09:10 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7718c9a0-0ae9-4002-a22e-6d011794f174@i76g2000hsf.googlegroups.com>
Source record: 21609

On Sep 21, 12:11 am, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sat, 20 Sep 2008 21:15:01 -0700, John Smith
>
> <assemblywiz...@gmail.com> wrote:
> >Jeff Liebermann wrote:
> >[real stuff]
>
> >Uh, Jeff ...
> >Eznec vs. Mmana-Gal ... be careful--play dumb ... :-)
>
> You left out about a dozen other packages including 4NEC2. I've never
> played dumb and don't plan to start now. What am I missing? Some
> kind of religious issues in modeling software? A battle to the death
> between the fanatics? Conflicting results?
>
> Well, actually.... I did play dumb once. I came face to face with a
> mountain lion on a hiking trail. Trying to act non-threatening does
> not come naturally to me.
>

> Incidentally, MMANA-GAL Yahoo Group:
> <http://groups.yahoo.com/group/MM-HAMSOFT/>

Does this have unlimited segments and variableswith it's optimizer?

>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

2936. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 02:56:31 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <C%hCk.604$CI1.587@newsfe01.iad>
Source record: 21610

Art, with your knowledge of antenna theory I'm surprised you'd ask this question. You should know that whenever energy is taken from one direction it is directed in another--none is lost due to cancellation. If you integrate all the energy radiated in all directions from a given antenna system (neglecting losses due to attenuation) it will be the same whatever the arrangement of the radiating system when fed with the same power.

Walt, W2DU

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:2878dc0f-df75-4efe-93bc-2632b3d5373d@m36g2000hse.googlegroups.com...
> Presumably the nulls between lobes on a radiation pattern
> are a result of radiation cancellation. IF this is true then it means
> we have not harnessed
> all the radiation available. What are your thoughts about that Dave?
> Can you relate the number of nulls in a radiation pattern with the
> number
> of elements in a planar array? You are the expert aren't you?
> Art

2937. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 03:10:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ociCk.881$Rx.510@flpi144.ffdc.sbc.com>
Source record: 21611

Art Unwin wrote:
> Presumably the nulls between lobes on a radiation pattern
> are a result of radiation cancellation.

Radiation cancellation = destructive interference.

|destructive interference| = |constructive interference|

constructive interference = gain
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2938. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 03:26:34 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c3a83261-48b7-4181-af1d-d35afe15b441@d1g2000hsg.googlegroups.com>
Source record: 21612

On Sep 23, 9:56 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> Art, with your knowledge of antenna theory I'm surprised you'd ask this
> question. You should know that whenever energy is taken from one direction it is
> directed in another--none is lost due to cancellation. If you integrate all the
> energy radiated in all directions from a given antenna system (neglecting losses
> due to attenuation) it will be the same whatever the arrangement of the
> radiating system when fed with the same power.
>
> Walt, W2DU
>
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:2878dc0f-df75-4efe-93bc-2632b3d5373d@m36g2000hse.googlegroups.com...
>
> > Presumably the nulls between lobes on a radiation pattern
> > are a result of radiation cancellation. IF this is true then it means
> > we have not harnessed
> > all the radiation available. What are your thoughts about that Dave?
> > Can you relate the number of nulls in a radiation pattern with the
> > number
> > of elements in a planar array? You are the expert aren't you?
> > Art

David has a habit of turning everything upside down and in the absence
of comment usually reserved for me
I have to assume that David is correct in every thing he states
because of the silence of others. So I ask a question
which is upside down on the assumption that David will turn it around.
You must remember that I see electrons of the same polarity which
cannot collide
so you shouldn't be surprized at any thing I say. Reading today a book
on gravity I read a statement that if a moving particle has a magnetic
field
then one can apply the title of radiation as both a particle and a
wave! No wonder everybody is screwed up on this group. As far as
cancellation is concerned that refers to direction where another
vector at right angles takes it's place per Newton. There is a big
difference between cancellation and destruction the latter does not
exist per Newton. You can put that in a book and call it revision 2.

2939. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 04:09:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbcei5$4p8$1@news.albasani.net>
Source record: 21613

JB wrote:

> ...
> That has really hurt my trust in a big way. To the point I question nearly
> everything but what I have proved for myself. Just like in a courtroom, if
> they lie about one thing, you can't trust them on anything.

True, very true ...

Indeed, makes voting, faith in public servants such as the president, my senators and congressmen very, very difficult ...

I know brother, I know ... but I still have a bit of faith in Einstein ... <contemplative-look>

Last jury trial I was a juror on, I certainly questioned the sanity of the prosecutor! The "question(s)", in my mind, about the "public pretender" I could understand, more ... I am sure, you get my drift ...

Warm regards,
JS

2940. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 04:12:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbceob$4o1$1@news.albasani.net>
Source record: 21614

JB wrote:

> ...
>
> Of course but I'm too lazy to run the numbers if it isn't my project. My
> favorite single band wire antenna is the Dipole. How is OCF an improvement?
> I also liked my Inverted L made out of a homebrew 9' bug catcher mobile
> antenna with 25' horizontal clip on extension for 40/80 and clip on shunt
> caps at the mobile mount. Works well in the campground.
>
> Keeping the antenna matched to the coax DOES make a difference, considering
> coax losses.
>

A "one size fits all" antenna is still VERY MUCH a pipe dream ... in my
humble opinion (or, IMHO ...)

Regards,
JS

2941. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 04:49:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <15926bf5-2021-4b6b-81c7-34774863c5f3@y38g2000hsy.googlegroups.com>
Source record: 21615

On Sep 23, 10:10 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Art Unwin wrote:
> > Presumably the nulls between lobes on a radiation pattern
> > are a result of radiation cancellation.
>
> Radiation cancellation = destructive interference.
>
> |destructive interference| = |constructive interference|
>
> constructive interference = gain
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

Cecil
I do not view Newtons law that way at all
First of all," energy cannot be created or destroyed " which puts"
destructive" as an obsolete word
When Newton espoused his action and reaction law he had equilibrium
very much in mind
His law refers to an "action" as opposed to a "force" so when he
refered to an action it was to the neutralization of force
which in his thinking was stabalization or equilibrium . He then went
on to talk about an equal and opposite reaction.
He was referring to a similar action at right angles to the line of
the first action. Thus, if you pull a piece of rubber thinning or
"necking" occurrs because of the "reaction" required for
stabalization. In a helicoptor you have a big rotor on top that is an
"action", the reaction that Newton talks about is the other action
needed for stabalization which is the rear rotor that is at right
angles to the main rotator. Newton looked at things as three
dimensional and not as a single plain of freedom as with two colliding
forces. He was very specific in stating "action" and not the term
"forces" the same fashion as Maxwell and others refer to a static
field and a dynamic field. From my mind destructive interference
refers to a frictional action that is visible to the eye.
It is these mangling of words in the different sciences that allow
people to thinks that all sciences have their own laws without
connection to a Universal Law which by necessity must be founded on
equilibrium. In our Universe you cannot have a immovable contact
unless there is a interlocking or frictional force. In other words,
two forces cannot travel in a straight line towards each other. Both
force paths are curvacious with respect to the Universe such that the

impact is always one of deflection. But then Cecil you knew all that didn't you !
Different subject Einstein viewed ether as unthinkable because of equilibrium which is the foundation of boundary theory where all forces within the boundary equals the forces outside the arbritary boundary. Einstein realized that if the forces were not equal or in equilibrium the field must change from a static to a dynamic field where implosion is the only way to re establish equilibrium. Plain common sence don't you think?
Best regards
Art Unwin KB9MZ
Best regards
Art

2942. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 04:52:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbch3a$794$1@news.albasani.net>
Source record: 21616

Cecil Moore wrote:

> ...
> Radiation cancellation = destructive interference.
>
> |destructive interference| = |constructive interference|
>
> constructive interference = gain

Waves either add in force (hammering power), or subtract (hammers against the "next hammer blow" coming) ...

What would be a "simplistic model" to convey what is in "your minds eye?" And, hope the above few words projects the "correct picture."

Regards,
JS

2943. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 05:02:10 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <oRjCk.30284$wr1.14056@newsfe02.iad>
Source record: 21617

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:gbbiao$346$1@news.service.uci.edu...
> Cycle 24 has begun (from the Times of India).
>
> http://sohowww.nascom.nasa.gov/data/realtime/realtime-update.html
>
> ac6xg

Weren't spots 981 and 990 counted as Cycle 24? They were just little burps,
but they were true Cycle 24, I think.

I find http://www.solarcycle24.com/ interesting. Have not tested it for
accuracy, authenticity, etc. (I'm not smart enough.)

2944. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 05:08:28 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <bbijd4dsi4tr1q41pcrve0k9pbmh1mh21v@4ax.com>
Source record: 21618

On Tue, 23 Sep 2008 17:40:28 -0700 (PDT), xray66@earthlink.net wrote:

>Thanks for the help... I'm actually using cocoaNEC for OSX, so
>unfortunately I can't use those files. Otherwise that would probably
>be a big help. I know if I could just see one example of each, I could
>adjust the rest myself.

No problem. We'll do it differently and easier. Here's the NEC2 file
for a 145MHz JPole for stolen from the 4NEC2 samples.
<http://802.11junk.com/jeffl/crud/J-ant.nec>

I just discovered that the conversion program from .MMA to .NEC will
generate a perfectly usable .OUT file, but not a .NEC input file. I'm
probably doing something wrong, but I don't have time to debug it
right now.

Note to self: Make an index of .NEC files. It's becoming difficult
to find specific antennas.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2945. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 05:35:33 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <lqijd456kn7707hgc4j1tesi1r5l5ia9te@4ax.com>
Source record: 21619

On Tue, 23 Sep 2008 19:09:10 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>> Incidentally, MMANA-GAL Yahoo Group:
>> <http://groups.yahoo.com/group/MM-HAMSOFT/>

>Does this have unlimited segments and variableswith it's optimizer?

I couldn't find any documentation as to the program limits. As I understand it, MMANA-GAL has a stripped down NEC2 engine. 4NEC2 and EZNEC use the full NEC2 engine from Lawrence Livermore Labs. I'm not sure what you're building but allow me to offer a clue. I recently threw together a model of a truly ugly tower with about 8000 segments including about 2000 pattern lines for various grids and reflectors. After about 14 hours running, my PIII/933MHz finally spewed out a result (that told me that I goofed and had to make corrections). I dragged home a P4/2.8GHz with hyperthreading, which took about 8 hours to run. This was getting ridiculous, so I dragged the program and model to a customers office, and ran it overnight on his P4 2.8GHz dual core, 4GB RAM, 1333MHz FSB, SATA2 drive, etc. It doesn't get much better. It ran in 3 hours.

The optimizer isn't much better. It will automagically tweak dimensions to meet a pre-defined set of criteria. If you set the final criteria too close to perfection, you may get an answer after the next ice age.

Anyway, I suggest you use a machine with lots of horsepower and start with EZNEC, 4NEC2, NEC-WIN, MMANA-GAL, or other modeling program using some of the sample files included with each program. Once you have figured out how to manipulate and modify those, you can step up to more complexicated models (such has the giant mess I stupidly created by throwing every piece of metal on the tower into the model).

--
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2946. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 05:42:52 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <lhkjd4da2saub4guhfuf7jb0ej0rpqor37@4ax.com>
Source record: 21620

On Tue, 23 Sep 2008 14:09:33 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Jeff Liebermann wrote:
>> On Tue, 23 Sep 2008 13:06:20 -0700, Jim Kelley <jwkelley@uci.edu>
>> wrote:
>>
>>> Cycle 24 has begun (from the Times of India).
>>> http://sohowww.nascom.nasa.gov/data/realtime/realtime-update.html
>>> ac6xg
>>
>> Where? I don't see any spots.
>> <http://sohowww.nascom.nasa.gov/data/realtime/mdi_igr/1024/latest.html>
>> <http://sohowww.nascom.nasa.gov/data/LATEST/current_mdi_igr.mpg>

>You have to defocus your eyes and stare at it for a while. It looks
>like an airplane. :-)

Without my glasses, everything looks like an airplane.

>http://www.spaceweather.com/images2008/22sep08/midi_lab.jpg?PHPSESSID=0g9vn4l7l0peoll6uoo
8vkg257

That's not a sunspot. More like a sundot. I wonder if there's a
minimum size to be considered a sunspot?

Sunspot 1002 was there for about that last 2 weeks, but now seems to
have disappeared.
<http://www.solarcycle24.com/index2.htm>
<http://www.solarcycle24.com/sc24.htm>

--
Jeff Liebermann jeffl@cruzio.com
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2947. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 05:50:04 UTC
From: xray66@earthlink.net
Message-ID: <eedb4e6a-5582-472b-8c25-5836e028e9d0@d45g2000hsc.googlegroups.com>
Source record: 21621

Thanks for the effort Jeff, but for some reason it doesn't seem to be compatible. It won't open as an NEC file and I also tried giving it just an NC tag. The closest I can get is importing it as a card deck, but it says it has errors, and when I look at the code, it looks totally different from other formulas that do work in the app.

Art, it does have variables... I don't know if the segments are unlimited. It seems to work great with the included files. Normally I'm pretty good at this stuff. I can do my own html and some other code stuff, but I'm just having difficulty getting a grasp on this for some reason. I did find a tutorial for NEC and read the whole thing, but it didn't help much. I guess I'm not great with the scientific stuff.

Dave

2948. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 06:09:28 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <bdljd4th0spihtuo59323uijrtlf9q7hkc@4ax.com>
Source record: 21622

On Tue, 23 Sep 2008 22:50:04 -0700 (PDT), xray66@earthlink.net wrote:

>Thanks for the effort Jeff, but for some reason it doesn't seem to be
>compatible.

Can you read the .NEC file as a text file with an editor? I might
have tossed in a few extra carriage returns, word wrapped it, or
something equally stupid. Maybe some extra characters at the
beginning or end?

>It won't open as an NEC file and I also tried giving it
>just an NC tag. The closest I can get is importing it as a card deck,
>but it says it has errors, and when I look at the code, it looks
>totally different from other formulas that do work in the app.

An NEC file is a card deck. I have a Mac Cube with OS/X sitting in
the office. When I have time (which means after Sunday), I'll see if
I can feed it to cocoaNEC and see what breaks.

>I'm pretty good at this stuff. I can do my own html and some other
>code stuff, but I'm just having difficulty getting a grasp on this for
>some reason. I did find a tutorial for NEC and read the whole thing,
>but it didn't help much. I guess I'm not great with the scientific
>stuff.

NEC user guide and manuals:
<http://www.nec2.org>

EZNEC 5 manual:
<http://www.eznec.com/ez50manual.html>

Basic Antenna Modeling by L.B. Cebik:
<http://www.nittany-scientific.com/book/index_beg.htm>

Advanced Antenna Modeling by L.B. Cebik:
<http://www.nittany-scientific.com/book/index_inter.htm>

Antennex Guest Room:
<http://www.antennex.com/guests.html>
Get a login and password. Lots of goodies inside including plenty of
tech articles, CD's full of past issues, etc.

ARRL Antenna Modeling page with plenty of documents and links at the
bottom of the page:
<http://www2.arrl.org/tis/info/HTML/antenna-modeling/index.html>

NEC misc programs, docs, examples, whatever. Somewhat old:
<http://www.si-list.net/swindex.html>

There's probably more but that should keep you occupied for a while.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2949. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 06:12:06 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9emjd49j1h0edd60nvonohvugip6p3fgaq@4ax.com>
Source record: 21623

On Tue, 23 Sep 2008 22:50:04 -0700 (PDT), xray66@earthlink.net wrote:

>Thanks for the effort Jeff, but for some reason it doesn't seem to be
>compatible.

Ok, if all else fails, we use brute force.

-------- cut here ------------

```
CM J-antenna 144MHz
CE

sy H=7.12 ' Height above ground

SY l1=0.47, la=H+l1
SY l2=1.483, lb=H+l2

GW 1 20 0.0 0.0 la 0.0 0.0 lb .003
GW 2 10 0.0 0.0 la 0.0 0.0 H .003

SY d=0.0354, dd=H-d
GW 3 1 0.0 0.0 H 0.0 0.0 dd .003
GW 4 1 0.0 0.0 dd 0.0 .01 dd .003
GW 5 1 0.0 .01 dd 0.0 .01 H .003
GW 6 10 0.0 .01 H 0.0 .01 la .003
GW 7 1 0.0 0.0 H 0.0 .01 H .003
GE 1

EK
LD 5 0 0 0 25000000
GN 2 0 0 0 13 0.005 0.0 0.0
EX 0 7 1 0 1.0 0.0
FR 0 1 0 0 145 1
EN
```

-------- cut here ------------

What can go wrong, go wrong, go wrong, go wrong....

--
Jeff Liebermann jeffl@cruzio.com
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2950. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 06:28:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbcmml$dv9$1@news.albasani.net>
Source record: 21624

Jeff Liebermann wrote:

>
> Without my glasses, everything looks like an airplane.
>
> That's not a sunspot. More like a sundot. I wonder if there's a
> minimum size to be considered a sunspot?
>
> Sunspot 1002 was there for about that last 2 weeks, but now seems to
> have disappeared.
> <http://www.solarcycle24.com/index2.htm>
> <http://www.solarcycle24.com/sc24.htm>
>

WAIT!

Let me scan the 10m band ... uh, yeah, it must be a "sun dot." But
then, I don't have have the magnifiers on ...

Regards,
JS

2951. Do you know where is Guild Wars gold Store

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 06:38:06 UTC
From: tibiagold <tibiagoldz@gmail.com>
Message-ID: <cc03ef5a-da74-49f7-a593-3f91371dbfa0@z11g2000prl.googlegroups.com>
Source record: 21625

Be a professional Guild Wars gold Store, We supply the Guild Wars Gold
all Campaigns.[URL="http://www.guildwarsgoldmoney.com"]Guild Wars Gold
(gw gold)[/URL]
(guildwarsgoldmoney.com) with Low Price, Instant Delivery, 24/7
Service are on sale! Buy cheap Guild Wars Gold from
[URL="http://www.guildwarsgoldmoney.com"]guildwarsgoldmoney[/URL].com
right now!
Cheap rs gold and [URL="http://www.rs15min.com"]rs power leveling[/URL]
(rs15min.com) are hot selling with fast delivery, 24/7 online support.
And you could find free runescape guide, runescape cheat at www.rs15min.com

2952. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 07:25:20 UTC
From: <>
Message-ID: <mlqjd4169ai9sbr5s4q1i5081ql48to3mj@4ax.com>
Source record: 21626

On Tue, 23 Sep 2008 11:01:53 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>S A s are usefull for antenna hobbyists. Some twenty years ago there
>was a DIY S A that used a t v tuner in
>Ham Radio. Moving forwards some twenty years and most hams have
>computors and there are 2.4 Ghz
>spectrum analysers out there as well as audio set ups for computors.
>So what is available today for hams
>in the HF BANDS? There are a lot of older type audio S A s on E bay
>but I haven't heard of anybody modifying thoseand with most having
>computors it would seem reasonable to think that there were components
>available that could performn between audi and 2.4 Ghz. So has anybody
>seen any modern type DIY spectrum analysers
>around for sale or kits? I have 141t and other types of SA which now
>are considered bulky and I would really like something smaller or say
>modify something like a audio setup as a project.
>Comments

To work with an SA on antennas you will need either a
"noise generator" (modern method) or a tracking generator
(old method) which can control the SA.

better go for a scalar analyzer or if you can afford it,
get a vector analyzer

w.

2953. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 10:45:22 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gbd5o8$vt7$1@aioe.org>
Source record: 21627

"Art Unwin" wrote
> Presumably the nulls between lobes on a radiation pattern
> are a result of radiation cancellation. IF this is true then it means
> we have not harnessed all the radiation available.

It is true, but that doesn't mean or prove that any of the TOTAL radiation has been "lost." It has merely been re-directed to produce some maximum value in one or more directions, and some minimum value in others.

Think of squeezing an inflated balloon. No matter what is its final shape, the volume of air inside the balloon remains constant.

Below is a link showing this, as applies to an antenna. The area within the directional pattern is the same as if the pattern was omnidirectional.

http://i62.photobucket.com/albums/h85/rfry-100/PatternGain.gif

RF

2954. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 11:24:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <jrpCk.908$W06.150@flpi148.ffdc.sbc.com>
Source record: 21628

Art Unwin wrote:
> There is a big
> difference between cancellation and destruction the latter does not
> exist per Newton. You can put that in a book and call it revision 2.

Maybe these web pages can "shed some light" on this subject.:-)

www.mellesgriot.com/products/optics/oc_2_1.htm

micro.magnet.fsu.edu/primer/java/scienceopticsu/interference/waveinteractions/index.html

When field/wave cancellation occurs, the energy must go somewhere.
In the absence of a load to dissipate it, the FSU web page says it
is "redistributed to regions that permit constructive interference".

If the relative phases of the two superposed fields are greater
than 90 degrees to 180 degrees apart, the resulting interference
is destructive.

If the relative phases of the two superposed fields are less
than 90 degrees, the resulting interference is constructive.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2955. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 11:44:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <FKpCk.909$W06.109@flpi148.ffdc.sbc.com>
Source record: 21629

Art Unwin wrote:
> First of all," energy cannot be created or destroyed " which puts"
> destructive" as an obsolete word

Many words are used in a non-literal sense. Superposition
resulting in destructive interference doesn't mean that
energy has been literally destroyed, just that it has
been "redistributed to regions that permit constructive
interference" (FSU web page).
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2956. Calculating the propagation loss with google maps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 14:04:46 UTC
From: covermap <covermap@gmail.com>
Message-ID: <0eeb13a7-ca07-4004-a9d9-832a7f3ed3b8@e53g2000hsa.googlegroups.com>
Source record: 21630

Hi, it is my webpage:

http://www.covermap.es

Covermap is an application that allows the calculation of propagation
loss of a particular antenna defined by the user.
In covermap you have the ability to see the extension of the radio
antenna (coverage mode), the different coverage cells of positioned
antennas (cellular mode) and get the loss in decibels on a particular
point with respect to the antenna (point to point mode).

2957. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 14:29:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8462e4f0-552d-4978-823f-eba996f5340c@79g2000hsk.googlegroups.com>
Source record: 21631

On Sep 23, 4:58 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:0618424e-87a1-4e73-9846-f703d19661d9@k37g2000hsf.googlegroups.com...
>
> >S A s are usefull for antenna hobbyists.
>
> maybe you should hook one up to your magical neutrino antenna and see if you
> can measure the weak force tilt frequency in your drunken vertical.

David
You have stated that you have the smaller AO program (limited in
pulses) but as
yet you have not proved to anybody that you know how to use it !.
If you insert dimensions for a vertical radiator where none of the
dimensions for XY and Z
are repeatable then the program gives you picture of the weak force
and it's angular direction
.Not only that my friend, it also shows that with the use of this
vector (the weak force remember)
it shows what the position the radiator must take up for maximum
gain !. Drunken vertical indeed!
On the other hand you can continue the mistaken idea that
intercoupling of radiators provides the same
gains as Maxwell who includes the weak force in his calculations for
absolute accuracy.
Remember what I have told you " A radiator can be any size, shape or
elevation as long as it is in equilibrium"
This is contrary to what the experts say that a radiator MUST be
straight, which is absurd.
But then you rely on absurdities.
Your friend
Art

2958. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 15:14:51 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <bKudnXJ5c7DxxEfVnZ2dnUVZ_oDinZ2d@comcast.com>
Source record: 21632

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gbceob$4o1$1@news.albasani.net...
> JB wrote:
>
>> ...
>>
>> Of course but I'm too lazy to run the numbers if it isn't my project. My
>> favorite single band wire antenna is the Dipole. How is OCF an
>> improvement?
>> I also liked my Inverted L made out of a homebrew 9' bug catcher mobile
>> antenna with 25' horizontal clip on extension for 40/80 and clip on
>> shunt
>> caps at the mobile mount. Works well in the campground.
>>
>> Keeping the antenna matched to the coax DOES make a difference,
>> considering
>> coax losses.
>>
>
> A "one size fits all" antenna is still VERY MUCH a pipe dream ... in my
> humble opinion (or, IMHO ...)
>
> Regards,
> JS

At least the "one size" will be very large. I once saw a truly monumental
commercial or military log periodic.

Tam/WB2TT

2959. Re: Carolina Windom revisited: 4 to 1 balun does nothing to choke RF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 15:14:55 UTC
From: JB <nospam@goofball.net>
Message-ID: <PPsCk.1177$MN3.667@nwrddc01.gnilink.net>
Source record: 21633

> > I also liked my Inverted L made out of a homebrew 9' bug catcher mobile
> > antenna with 25' horizontal clip on extension for 40/80 and clip on
shunt
> > caps at the mobile mount. Works well in the campground.
> >
> > Keeping the antenna matched to the coax DOES make a difference,
considering
> > coax losses.
> >
>
> A "one size fits all" antenna is still VERY MUCH a pipe dream ... in my
> humble opinion (or, IMHO ...)
>
> Regards,
> JS

Then there are the discones and LPDAs where size matters.

The bug catcher worked well and still does despite many repairs, 15-40 m by itself. 40 and 80 with the extension. It's a modified hamstick with 4" dia. by 8" hand wound #14 coil in the center with scrap plastic forms. There must be an unwritten law that says only the ugliest projects will work. It was a pipe dream of flea clips, but the goal was to do all matching on the antenna.

I used it mobile with a 365 pf broadcast variable on the mount and a remote operator into the cab. Add a little series XsubL with a flea clip, matched out with the cap to raise the impedance at the mount. The coil would self resonate so 12 and 17 wouldn't work (perhaps a longer stepped pitch later). Shorting around the coil got me 10m back. I would tune for min SWR (actually ALC) and the difference between not heard with an OK SWR and heard well after a fine tuning was repeatable over and over. Even with as little as 15' of RG8x. Worked a lot of DX on the commute back and forth to school. Had no time to do it any where else.

2960. KC8QJP and N8WWM Glory Hole Party - KC8QJP will be offering discount tax consulting through the hole while doug is on his knees

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 15:46:33 UTC
From: N8WWM <mrbindwell@n8wwm.com>
Message-ID: <gbdnk4$h08$1@news.tornevall.net>
Source record: 21634
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave

"Leland C Scott" <lelandcscott@14mile.com> wrote in message
news:48d51447$1@news.x-privat.org...
> http://img529.imageshack.us/my.php?image=n8dontbeadickheadwd9.jpg
> "n8wwm mrbindwell (fatboy)"
>
Pick up some crisco on your way over tonight, KC8QJP needs a good
slathering on her hind quarters.

She's also getting ready to start her tax return posts again like she does
every year. You remember those..

http://tinyurl.com/46teqq

She says she wants to add some pics of her and me to them this year.

2961. Re: Clarifying Space, "Ether" and Nothingness

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 15:52:47 UTC
From: JB <nospam@goofball.net>
Message-ID: <jntCk.1183$MN3.909@nwrddc01.gnilink.net>
Source record: 21635

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gbcei5$4p8$1@news.albasani.net...
> JB wrote:
>
> > ...
> > That has really hurt my trust in a big way. To the point I question
nearly
> > everything but what I have proved for myself. Just like in a courtroom,
if
> > they lie about one thing, you can't trust them on anything.
>
> True, very true ...
>
> Indeed, makes voting, faith in public servants such as the president, my
> senators and congressmen very, very difficult ...
>
> I know brother, I know ... but I still have a bit of faith in Einstein
> ... <contemplative-look>
>
> Last jury trial I was a juror on, I certainly questioned the sanity of
> the prosecutor! The "question(s)", in my mind, about the "public
> pretender" I could understand, more ... I am sure, you get my drift ...
>
> Warm regards,
> JS
>

It's shocking how much evidence disappears that doesn't promote someone's
career. It is common knowledge (even a widespread joke) that the public
defender is only equipped to get your bail reduced. The private criminal
attorney however, is well equipped to bleed you out.

The whole system seems to be so jaded and sadistic, that they actually have
more fun screwing the easy meat with something to lose. It doesn't have
much of an impact on the hardened criminals, who are their "good customers",
but scare the hell out of them.

After 9/11, the emphasis has been on terrorists that come over and attack.
I guess the terrorists that live here now are someone else's responsibility.

2962. Re: KC8QJP and N8WWM Glory Hole Party - KC8QJP will be offering discount tax consulting through the hole while doug is on his knees

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 16:00:33 UTC
From: chickenhawk <chickenhawk@dugslappa.com>
Message-ID: <LutCk.765$Ur4.307@fe115.usenetserver.com>
Source record: 21636
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave

"N8WWM" <mrbindwell@n8wwm.com> wrote in message
news:gbdnk4$h08$1@news.tornevall.net...
>
> "Leland C Scott" <lelandcscott@14mile.com> wrote in message
> news:48d51447$1@news.x-privat.org...
>> http://img529.imageshack.us/my.php?image=n8dontbeadickheadwd9.jpg
>> "n8wwm mrbindwell (fatboy)"
>>
> Pick up some crisco on your way over tonight, KC8QJP needs a good
> slathering on her hind quarters.
>
> She's also getting ready to start her tax return posts again like she does
> every year. You remember those..
>
> http://tinyurl.com/46teqq
>
> She says she wants to add some pics of her and me to them this year.
>
>
>
tell her not to do it doug bi crisco kathy has already served jail time for
her accounting fraud.

2963. Re: Calculating the propagation loss with google maps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 16:24:29 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <o8pkd41j367r117kj7gpilvhilbj15opb2@4ax.com>
Source record: 21637

On Wed, 24 Sep 2008 07:04:46 -0700 (PDT), covermap
<covermap@gmail.com> wrote:

>Hi, it is my webpage:
> http://www.covermap.es
>
>Covermap is an application that allows the calculation of propagation
>loss of a particular antenna defined by the user.
>In covermap you have the ability to see the extension of the radio
>antenna (coverage mode), the different coverage cells of positioned
>antennas (cellular mode) and get the loss in decibels on a particular
>point with respect to the antenna (point to point mode).

Nice, but are you using a flat earth model? I plugged in my local zip
code (95060) location, leaving the rest of the values at your
defaults, and ended up with a rather crude coverage map of what I
would get if there were no mountains in the way. I reduced the
antenna height to your minimum of 1.5m, and got something a little
better, but still looking like a very flat earth.

I was hoping to be able to produce something like this:
<http://802.11junk.com/cellular/jeffl/SVLY-PGE/>
as generated by Radio-Mobile software.

Also, if you switch back and forth between "cellular mode" and
"coverage mode", you lose the coverage data from the previous
calculations.

When done, the coverage map is covered up with a balloon with the
aerial number and lat long. Nice but there's no way to get rid of it
without also restarting the program with a new aerial. Also, the term
"new aerial" should really be "new location". The aerials apparently
increment for each new plot, but there's no obvious way to retreive
previous locations or manipulate the count.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2964. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 17:39:47 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gbdu13$o0n$1@news.jpl.nasa.gov>
Source record: 21638

Jeff Liebermann wrote:
>
> I couldn't find any documentation as to the program limits. As I
> understand it, MMANA-GAL has a stripped down NEC2 engine. 4NEC2 and
> EZNEC use the full NEC2 engine from Lawrence Livermore Labs. I'm not
> sure what you're building but allow me to offer a clue. I recently
> threw together a model of a truly ugly tower with about 8000 segments
> including about 2000 pattern lines for various grids and reflectors.
> After about 14 hours running, my PIII/933MHz finally spewed out a
> result (that told me that I goofed and had to make corrections). I
> dragged home a P4/2.8GHz with hyperthreading, which took about 8 hours
> to run. This was getting ridiculous, so I dragged the program and
> model to a customers office, and ran it overnight on his P4 2.8GHz
> dual core, 4GB RAM, 1333MHz FSB, SATA2 drive, etc. It doesn't get
> much better. It ran in 3 hours.
>

If your optimization is just changing a small part of the overall
structure (e.g. the position of an antenna on the tower), then you
should be looking at the Write Greens Function and Read Greens Function
cards.
http://www.nec2.org/part_3/ngf.html

This is how they do things like analyze antenna placement on a ship or ISS.

2965. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 17:45:01 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gbduas$r0l$1@news.jpl.nasa.gov>
Source record: 21640

xray66@earthlink.net wrote:
> Thanks for the effort Jeff, but for some reason it doesn't seem to be
> compatible. It won't open as an NEC file and I also tried giving it
> just an NC tag. The closest I can get is importing it as a card deck,
> but it says it has errors, and when I look at the code, it looks
> totally different from other formulas that do work in the app.
>
> Art, it does have variables... I don't know if the segments are
> unlimited. It seems to work great with the included files. Normally
> I'm pretty good at this stuff. I can do my own html and some other
> code stuff, but I'm just having difficulty getting a grasp on this for
> some reason. I did find a tutorial for NEC and read the whole thing,
> but it didn't help much. I guess I'm not great with the scientific
> stuff.
>

NEC takes some getting used to, and, the tutorials that come with it are aimed at computational electromagnetics folks, who already understand how NEC works under the hood, and are really looking at "how do I put my problem into a form for THIS particular code".

There's some pretty common "tricks of the trade" used with NEC, like using a network to create a current source (4nec2 does this for you automatically).

Mostly, though, it's just slogging through it the first few months until you get your mind wrapped around the conceptual model.

Start with something fairly simple (but non trivial).. like a multiband dipole or a 3 element Yagi with just wires (i.e. don't start out trying to model the U-bolts and stuff).

A dipole is nice to fool with, because you can put a wire in under it to represent a tower, for instance, and see what effect it has on the pattern. Likewise, you can do something like model your rain gutters or the feedline as a single wire, and see how much current is induced in them.

2966. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 17:46:34 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gbdudp$r0l$2@news.jpl.nasa.gov>
Source record: 21639

hwabnig@ .- --- -. dotat wrote:
> On Tue, 23 Sep 2008 11:01:53 -0700 (PDT), Art Unwin
> <ArthurUnwin@gmail.com> wrote:
>
>> S A s are usefull for antenna hobbyists. Some twenty years ago there
>> was a DIY S A that used a t v tuner in
>> Ham Radio. Moving forwards some twenty years and most hams have
>> computors and there are 2.4 Ghz
>> spectrum analysers out there as well as audio set ups for computors.
>> So what is available today for hams
>> in the HF BANDS? There are a lot of older type audio S A s on E bay
>> but I haven't heard of anybody modifying thoseand with most having
>> computors it would seem reasonable to think that there were components
>> available that could performn between audi and 2.4 Ghz. So has anybody
>> seen any modern type DIY spectrum analysers
>> around for sale or kits? I have 141t and other types of SA which now
>> are considered bulky and I would really like something smaller or say
>> modify something like a audio setup as a project.
>> Comments
>
> To work with an SA on antennas you will need either a
> "noise generator" (modern method) or a tracking generator
> (old method) which can control the SA.
>
> better go for a scalar analyzer or if you can afford it,
> get a vector analyzer

Like the TAPR TenTec VNA.. very nice piece of gear, but does have a
broadband detector, so it won't work as a spectrum analyzer, nor is it
going to work well in a RF dense environment.

2967. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 18:44:26 UTC
From: xray66@earthlink.net
Message-ID: <e5ad112b-c68a-4eb9-a3c3-d63542819352@k30g2000hse.googlegroups.com>
Source record: 21641

It just keeps saying each line in that formula has a syntax error.
Hmm.

Well, I'll start reading all of that stuff... Maybe it will sink in.

2968. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 20:33:28 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <db7206f7-9e20-4901-87e8-e3024b9f07c9@73g2000hsx.googlegroups.com>
Source record: 21642

On Sep 24, 5:45 am, "Richard Fry" <r...@adams.net> wrote:
> "Art Unwin" wrote> Presumably the nulls between lobes on a radiation pattern
> > are a result of radiation cancellation. IF this is true then it means
> > we have not harnessed all the radiation available.
>
> __________
>
> It is true, but that doesn't mean or prove that any of the TOTAL radiation
> has been "lost."   It has merely been re-directed to produce some maximum
> value in one or more directions, and some minimum value in others.
>
> Think of squeezing an inflated balloon. No matter what is its final shape,
> the volume of air inside the balloon remains constant.
>
> Below is a link showing this, as applies to an antenna. The area within the
> directional pattern is the same as if the pattern was omnidirectional.
>
> http://i62.photobucket.com/albums/h85/rfry-100/PatternGain.gif
>
> RF

All quite true ,But my reasoning on harvesting is to provide for
maximum return or use.
For a Yagi the radio amateur is interested in the main lobe and it's
xyz coverage.
All the rest is considered "wasted" or providing unwanted interference
If I did not create the nulls between lobes my time of use is then
doubled instead of wasted.
The beam that I am interested in is one that has a single lobe which
I can control in
terms of elevation and beam depth where I am not knocked out because
of radiation
nulls, which is the case for all planar arrays.
Just another reason to focus on equilibrium for radiation formation.
where one can obtain
gain with a single lobe but with a usable lobe width and depth and
uninterupted propagation..
But then, all is known about antennas and if it were possible as the
experts state or
we would have been using such antennas years ago !!!!!
Or as another person stated we don't need a different
type of beam radiation as we already have one!!!!
So by all means crush any and all ideas of change

2969. Re: Calculating the propagation loss with google maps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 20:47:16 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <oHxCk.1110$Jw.486@nwrddc02.gnilink.net>
Source record: 21643

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:o8pkd41j367r117kj7gpilvhilbj15opb2@4ax.com...
> On Wed, 24 Sep 2008 07:04:46 -0700 (PDT), covermap
> <covermap@gmail.com> wrote:
>
>>Hi, it is my webpage:
>> http://www.covermap.es
>>
>>Covermap is an application that allows the calculation of propagation
>>loss of a particular antenna defined by the user.
>>In covermap you have the ability to see the extension of the radio
>>antenna (coverage mode), the different coverage cells of positioned
>>antennas (cellular mode) and get the loss in decibels on a particular
>>point with respect to the antenna (point to point mode).
>
> Nice, but are you using a flat earth model? I plugged in my local zip
> code (95060) location, leaving the rest of the values at your
> defaults, and ended up with a rather crude coverage map of what I
> would get if there were no mountains in the way. I reduced the
> antenna height to your minimum of 1.5m, and got something a little
> better, but still looking like a very flat earth.
>
> I was hoping to be able to produce something like this:
> <http://802.11junk.com/cellular/jeffl/SVLY-PGE/>
> as generated by Radio-Mobile software.
>
> Also, if you switch back and forth between "cellular mode" and
> "coverage mode", you lose the coverage data from the previous
> calculations.
>
> When done, the coverage map is covered up with a balloon with the
> aerial number and lat long. Nice but there's no way to get rid of it
> without also restarting the program with a new aerial. Also, the term
> "new aerial" should really be "new location". The aerials apparently
> increment for each new plot, but there's no obvious way to retreive
> previous locations or manipulate the count.
>
> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558
-
IIRC a quick flat earth estimate is the square root of 2, times the square

root of the antenna height in feet. That gives an estimate of the coverage radius in miles. :)

2970. Re: "zzzzzzzzzzzzzzzzzzzzzzzzz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 21:49:57 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <da3db83f-2207-4a4c-88d5-ab21708fef32@73g2000hsx.googlegroups.com>
Source record: 21644

```
On Sep 15, 6:00 pm, John Smith <assemblywizz...@gmail.com> wrote:
> On Sep 15, 3:59 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
>
>
> > John Smith wrote:
> > > Richard Clark wrote:
>
> > >> ...
> > >> Those so interested may, of course, wire me for files.
>
> > >> 73's
> > >> Richard Clark, KB7QHC
>
> > > When I was a kid (about 11 and making the "change over"), I hooked a
> > > neon oscillator to an rf-step-xfrmr with a full wave bridge "detector",
> > > to a VERY long wire antenna (very well insulated by egg insulators) and
> > > it would pulse (flash) the neon bulb every so often ... gave me big kick
> > > at the time ...
> > >> ...
> > > Regards,
> > > JS
>
> > Hmmm, just in case any "youngsters" are around and wish to duplicate
> > "the experiment", change "detector" to voltage-multiplier-circuit ... if
> > you need, google it.
>
> > Regards,
> > JS- Hide quoted text -
>
> > - Show quoted text -- Hide quoted text -
>
> - Show quoted text -
```

2971. Re: zzzzzzzzzzzzzzzzzzzzzzzz

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 21:51:27 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <6d139c7d-69f8-4af1-b238-c34eaf118552@f36g2000hsa.googlegroups.com>
Source record: 21645
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

On Sep 15, 6:03 pm, John Smith <assemblywizz...@gmail.com> wrote:
> On Sep 15, 5:53 pm, "Richard Knoppow" <dickb...@ix.netcom.com> wrote:
>
>
>
> > "Webmaster" <webmas...@hamradiolicense.net> wrote in message
>
> >news:KYlzk.8857$PK.494@newsfe04.iad...
>
> > > Test Preparation Software
>
> > > Pass your US FCC ham radio license test with ease. Our
> > > test preparation
> > > software serves as a training aid to help amateurs and
> > > prospective amateurs pass the
> > > VEC's administered test. When you can consistently pass
> > > the test given by our test
> > > preparation software, you will almost certainly pass an
> > > actual test.
>
> > > Our ham radio license test preparation software uses the
> > > latest officially
> > > released VEC's approved question pools. The program breaks
> > > the test into
> > > different sub-element. Integrated into the software are
> > > illustrations and
> > > Part 97 rules pertaining to the current question. The
> > > program tracks the
> > > progress of the tests taken. Once you have mastered each
> > > sub-element you are
> > > ready for the official test.
>
> > > Visit our web site athttp://www.hamradiolicense.netfor
> > > more information
>
> >   Note that QRZ.com andhttp://www.kb0mga.net/exams/ has
> > tracking tests available on line for free as do a couple of
> > other sites. Probably the best of the license manuals are
> > those published by the ARRL. Not free but relatively
> > inexpensive. The ARRL books have good explanations of the
> > theory so that you don't have to rely on simple wrote
> > memory. Note that the questions on the above web sites are
> > the ACTUAL questions which are found on the tests although

> > the particular set you get is random.
>
> > --
>
> > --
> > Richard Knoppow
> > Los Angeles
> > WB6KBL
> > dickb...@ix.netcom.com- Hide quoted text -
>
> > - Show quoted text -- Hide quoted text -
>
> - Show quoted text -

2972. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-24 22:15:54 UTC
From: Dave <noone@nowhere.com>
Message-ID: <u_yCk.1129$Jw.981@nwrddc02.gnilink.net>
Source record: 21646

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:8462e4f0-552d-4978-823f-eba996f5340c@79g2000hsk.googlegroups.com...
> Maxwell who includes the weak force in his calculations for
> absolute accuracy.

until you point out the term in his equations that specifies the weak force
you are just handwaving.

2973. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 01:29:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <e6pld4dhaq13ufspc002chk57h7rvg7dk1@4ax.com>
Source record: 21647

On Wed, 24 Sep 2008 10:39:47 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>If your optimization is just changing a small part of the overall
>structure (e.g. the position of an antenna on the tower), then you
>should be looking at the Write Greens Function and Read Greens Function
>cards.
>http://www.nec2.org/part_3/ngf.html
>
>This is how they do things like analyze antenna placement on a ship or ISS.

Thanks. I haven't done much with the optimizer beyond tinkering to
see how it works. I've never tried the NGF feature, but it certainly
looks interesting. Looking at the above page, I'm instantly lost.
However, I'll be taking yet another medical vacation shortly, so I'll
have plenty of time to RTFM.

Incidentally, the tower in question is at a friends radio site. It's
loaded with a mixture of commercial, FM translator, and ham systems.
There was almost no planning in the tower antenna arrangement. The 2
ton gorilla in the mix are 3ea 250 watt 900MHz paging xmitters, that
are causing problems with the other users. I can't touch their
antennas because they pay the bulk of the bills. There are also some
nulls that need to be moved to placate some of the customers. I'm
trying to first model, and later optimize the location of the other
antennas. So far, simple solutions like vertical isolation and
positioning antennas on opposite sides of the tower from the paging
antennas look promising. Sorry, no photos as the owner wants me to
keep the location secret.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

2974. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 02:34:29 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <u2sld4dpgvn57v0e2m8hfp6bd92intshtn@4ax.com>
Source record: 21648

On Wed, 24 Sep 2008 11:44:26 -0700 (PDT), xray66@earthlink.net wrote:

>It just keeps saying each line in that formula has a syntax error.
>Hmm.

Yep. I just got the same error (after wasting 30 mins doing updates).

"Syntax Error in external declaration: identifier CM"

CocoaNEC can't even parts a CM (comment) declaration. Something is
wrong. I found the examples for CocoaNEC at:
<http://homepage.mac.com/chen/w7ay/Manuals/cocoaNEC/Manual/examples.html>
which work as expected. I figured out that it wants to import a .NEC
files as a "spreadsheet". However, when I try that with the Jpole
file, I get "Cannot open xxxxx. File may have moved or been deleted".
After that, CocoaNEC "quits unexpectedly" and wants to know if it
should stay dead or restart. Lovely mess. I'll work on it some more
later tonite or this weekend. I may even RTFM.

Incidentally, my Mac G4 Cube only has 384MB of RAM, which may be the
problem.
<http://en.wikipedia.org/wiki/Mac_Cube>

>Well, I'll start reading all of that stuff... Maybe it will sink in.

Not if you can't run a simple model with CocoaNEC. Have you
considered switching to the dark side and getting a PC? I haven't
tried running 4NEC2 or EZNEC under Bootcamp or one of the Windoze
emulators on OS/X but that might be worth a try.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

2975. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 03:13:41 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <fovld4139v0jprr2ijkl5pdqf58aokvk72@4ax.com>
Source record: 21649

On Wed, 24 Sep 2008 19:34:29 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>>It just keeps saying each line in that formula has a syntax error.
>>Hmm.

I broke down and read the documentation.
File -> Import Card Deck
Load the Jpole.NEC file. It shows up correctly in the "card view" but
fails to appear in the "element inspector" and "spreadsheet view".

When I try to run it anyway, it complains with:
"NEC-2 error. Possible wire element that touches z=0".
No clue which card (line) it hates.

I'm going to give up in disgust for tonite.
Y're on your own for now.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

2976. How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 05:39:23 UTC
From: Penang <kalambong@gmail.com>
Message-ID: <8eb6f12c-45d1-4420-9460-73a463e8419b@a19g2000pra.googlegroups.com>
Source record: 21650

My background isn't on antenna making, in fact, my training is in Chemical engineering, not physics.

But lately I've spent a lot of times consuming materials I dig from the Net about antennas, in the effect to learn how to make an excellent (effective?) wifi antenna.

Specifically, my interest is in the "broadcast" type of antenna ... trying to find a way to "extend" the range of a typical wifi basestation using antennas alone (maybe with the help of MIMO antennas), without "range repeaters" or whatnots.

My brain is now fully clogged, and I'm having difficulties digesting all the stuffs that I've gotten.

So I desperately need you help.

Is there a place (a forum, a website, a tutorial, and whatnots) where one can learn about antennas, without having one's brain clogged up, like mine right now?

What's your suggestion / opinion on how to construct an excellent (pair) of MIMO antenna for wifi (802.11 b/g/n) ?

Thank you all !

2977. Re: Help with slim jim nec model

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 06:49:22 UTC
From: xray66@earthlink.net
Message-ID: <09e28cba-895b-49f3-a4df-f17d886d2d9e@m73g2000hsh.googlegroups.com>
Source record: 21551

On Sep 24, 8:13 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Wed, 24 Sep 2008 19:34:29 -0700, Jeff Liebermann <je...@cruzio.com>
> wrote:
>
> >>It just keeps saying each line in that formula has a syntax error.
> >>Hmm.
>
> I broke down and read the documentation.
> File -> Import Card Deck
> Load the Jpole.NEC file. It shows up correctly in the "card view" but
> fails to appear in the "element inspector" and "spreadsheet view".
>
> When I try to run it anyway, it complains with:
> "NEC-2 error. Possible wire element that touches z=0".
> No clue which card (line) it hates.

Thanks for all the effort... With the exception of the app quitting, I
had all the exact same things happen. I could run XP on here, but it's
not worth it just for this. Seems like starting from scratch may be
the only way to go with this app. I'll keep at it.

2978. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 08:05:07 UTC
From: <>
Message-ID: <qqgmd49cho16oe0e4km13b92bhq8psbba8@4ax.com>
Source record: 21552

On Wed, 24 Sep 2008 22:39:23 -0700 (PDT), Penang <kalambong@gmail.com>
wrote:

>My background isn't on antenna making, in fact, my training is in
>Chemical engineering, not physics.
>
>But lately I've spent a lot of times consuming materials I dig from
>the Net about antennas, in the effect to learn how to make an
>excellent (effective?) wifi antenna.
>
>Specifically, my interest is in the "broadcast" type of antenna ...
>trying to find a way to "extend" the range of a typical wifi
>basestation using antennas alone (maybe with the help of MIMO
>antennas), without "range repeaters" or whatnots.
>
>My brain is now fully clogged, and I'm having difficulties digesting
>all the stuffs that I've gotten.
>
>So I desperately need you help.
>
>Is there a place (a forum, a website, a tutorial, and whatnots) where
>one can learn about antennas, without having one's brain clogged up,
>like mine right now?
>
>What's your suggestion / opinion on how to construct an excellent
>(pair) of MIMO antenna for wifi (802.11 b/g/n) ?
>
>Thank you all !
Yeah, you are welcome.

98% of all WIFI antenna tutorials on the www are bad,
unuseable or simply blatantly wrong. Their objects
(avoid calling them "antennas") have the functionality
of a bare piece of wire, which works also.

So I made a 100% WIFI antenna to have an object for a tutorial.
But it is not one of the broadcast type you requested,
I made a 10 turn 2,4 GHz helix with bandpass stub.

I just moved over to grab the camera for a quickie,
the antenna dropped down to the floor, the tripod
fell over my coffee and the cat jumped into my apple pie.

My scalar analyzer failed last week and is on repair,
so I cannot make the proofing screenshots: 50 Ohms over
the whole WLAN channels 1 to 13 with an SWR < 1,5

(and the stub prevents overload by cellular & TV).

Why is everything that complicated?

w.

2979. Re: Calculating the propagation loss with google maps

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 08:44:28 UTC
From: covermap <covermap@gmail.com>
Message-ID: <05b6a502-9d76-4b13-af1d-3b75fd18e37b@d1g2000hsg.googlegroups.com>
Source record: 21553

Hi Jeff. Covermap is specially thinking for a high antennas (>12 meters). When you do click on some point in the map (with zoom) the application calculates the coverage area in consideration of the terrain elevations.
If you want to position one antenna in the same point that the last antenna, you should to change some parameter and automatically appear a “recalculate” button.

I recommended the help section. In this section there are demo videos and other data like the propagation loss model of the application.

http://www.covermap.es/faq.html

2980. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 10:21:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <la6dnVamm9iD-0bVnZ2dnUVZ_qTinZ2d@posted.easystreetonline>
Source record: 21554

hwabnig@ .- --- -. dotat wrote:
> Yeah, you are welcome.
>
> 98% of all WIFI antenna tutorials on the www are bad,
> unuseable or simply blatantly wrong. Their objects
> (avoid calling them "antennas") have the functionality
> of a bare piece of wire, which works also.
>
> So I made a 100% WIFI antenna to have an object for a tutorial.
> But it is not one of the broadcast type you requested,
> I made a 10 turn 2,4 GHz helix with bandpass stub.
>
> I just moved over to grab the camera for a quickie,
> the antenna dropped down to the floor, the tripod
> fell over my coffee and the cat jumped into my apple pie.
>
> My scalar analyzer failed last week and is on repair,
> so I cannot make the proofing screenshots: 50 Ohms over
> the whole WLAN channels 1 to 13 with an SWR < 1,5
> (and the stub prevents overload by cellular & TV).
>
> Why is everything that complicated?
>
> w.

Because there IS a God, and She has a twisted sense of humor.

Roy Lewallen, W7EL

2981. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 11:24:11 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mhc84eaec.fsf@persaunet.uninett.no>
Source record: 21555

Roy Lewallen <w7el@eznec.com> writes:

> hwabnig@ .- --- -. dotat wrote:
>> Yeah, you are welcome.
>>
>> 98% of all WIFI antenna tutorials on the www are bad, unuseable or
>> simply blatantly wrong. Their objects
>> (avoid calling them "antennas") have the functionality
>> of a bare piece of wire, which works also.
>>
>> So I made a 100% WIFI antenna to have an object for a tutorial.
>> But it is not one of the broadcast type you requested,
>> I made a 10 turn 2,4 GHz helix with bandpass stub.
>>
>> I just moved over to grab the camera for a quickie,
>> the antenna dropped down to the floor, the tripod
>> fell over my coffee and the cat jumped into my apple pie.
>>
>> My scalar analyzer failed last week and is on repair,
>> so I cannot make the proofing screenshots: 50 Ohms over
>> the whole WLAN channels 1 to 13 with an SWR < 1,5
>> (and the stub prevents overload by cellular & TV).
>>
>> Why is everything that complicated?
>>
>> w.
>
> Because there IS a God, and She has a twisted sense of humor.

A glance at modern physics is enough to convince you of that.

2982. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 11:43:08 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <c3asq5-bfa.ln1@p400bob.personal.cox.net>
Source record: 21557

Starting with one or two basics;

- Keep the losses down
- Channel as much of the radiation as possible in the direction you need it

Losses in this sense more come from coax runs and connectors. Keep the run short, dont use joiners and if possible mount the WiFi box close to the antenna. You have to also allow for obstructive losses like trees and buildings. The other path loss is from errant reflections. Moounting the antenna high up in the clear resolves many of these issues.

Radiating in the right direction isnt rocket science in theory. The average "omnidirectional" antenna is actually "all directions" only parallel to the ground. ie you dont waste radiation skyward or warming the dirt! In terms of distance covered though an omni of this kind wont be as good as employing an antenna that "beams" in one direction. Consider this as a kind of flashlight with reflector and you'll get the right idea. In terms of time/construction/distance investment you'll do a lot better with this kind of antenna than an omni, elthough you will need to point them in the right direction. Which one you choose depends on its intended use.

You have probably figured out that the antenna gain figure (in dB) is the measure that is used to determine how much better one antenna is over another. It is a log comparison of the desired radiation direction "strength" vs that of an antenna that radiates eqaully in all directions. An omni however will almost always have a lower gain than a "beam" type antenna. 9 and 12 dB are some fairly high omni gains but "beam" gains can go 15-30dB. The higher the number the greater the range in the desired direction.

So my view.. If you intend one site being fixed and the other movable then you'll at least need an omni at the base site. If you only want a point to point link then a "beam" variety at each end is the way to go. I wouldnt go for "best" but engineer the path/strength requirements to determine the antenna gain needed. If I was making the antennas I'd probably use end fire helixes as they seem to be most forgiving in construction errors vs best gain.

You might want to tell us your end application, distance to cover, movement of sites and so on so we can suggest something a little more finite.

Cheers Bob

Penang wrote:

>
> What's your suggestion / opinion on how to construct an excellent
> (pair) of MIMO antenna for wifi (802.11 b/g/n) ?
>
> Thank you all !

2983. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 11:52:13 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <PXKCk.986$W06.979@flpi148.ffdc.sbc.com>
Source record: 21556

Jim Kelley wrote:
> Cycle 24 has begun (from the Times of India).
>
> http://sohowww.nascom.nasa.gov/data/realtime/realtime-update.html

http://www.breitbart.com/article.php?id=080924193222.3r9aw25a&show_article=1
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2984. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 13:52:23 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <io4nd455ln82sfmshj1mqlkljbbhr6bs99@4ax.com>
Source record: 21558

On Wed, 24 Sep 2008 22:39:23 -0700 (PDT), Penang <kalambong@gmail.com>
wrote:

>Specifically, my interest is in the "broadcast" type of antenna ...
>trying to find a way to "extend" the range of a typical wifi
>basestation using antennas alone (maybe with the help of MIMO
>antennas), without "range repeaters" or whatnots.

Broadcast implies one way transmissions. Wi-Fi is bi-directional.

The common terms are "range extender" or "repeater". These normally
refer to store and forward transmitter/receivers use to extend range
by retransmitting the data. This is roughly how a MESH network
operates. There are some severe limits and compromises to using such
repeaters, none of which have anything to do with the antenna. Ask if
you need details.

>My brain is now fully clogged, and I'm having difficulties digesting
>all the stuffs that I've gotten.

One must suffer before enlightenment. You're doing fine.

>Is there a place (a forum, a website, a tutorial, and whatnots) where
>one can learn about antennas, without having one's brain clogged up,
>like mine right now?

No. Brain damage is a known side effect and complication resulting
from trying to digest the entire field of antenna design all at once.
Just reading some of the posting in this newsgroup should adequately
demonstrate the extent of the damage. I suggest you approach antenna
design in the same manner as eating a loaf of bread. It's done one
slice at a time. If you try to shove the entire loaf down your throat
at once, you'll choke.

>What's your suggestion / opinion on how to construct an excellent
>(pair) of MIMO antenna for wifi (802.11 b/g/n) ?

I suggest you give up immediately and read about how MIMO works.
External MIMO antennas are a problem.

There are two basic types of MIMO. One is called "beam forming",
which uses an elaborate and flat array of internal antennas to
customize the antenna pattern. Major lobes are pointed in the
direction of users. Nulls are pointed in the direction of
interference. The key point is that antennas are internal and
therefore external antennas have no place to plug in.

The other type is called "spatial diversity". It uses multiple antennas and multiple receivers to combine reflective signal paths. In theory, each path is independent and carry an independent data stream. Combining these paths results in enhanced speeds. Note that this form of MIMO is all about speed, not range.

It is possible to attach external antennas to a spatial diversity type MIMO system. However, there are limitations. You can't just install 3 directional antennas pointed in 3 different directions. Pointed in opposing directions, the antennas will simply not pickup any reflections. If there are any long path reflections, the delays will probably be excessive and the data deemed useless. Attaching a single antenna to a MIMO spatial diversity type router will function, but only at 802.11g speeds. Without the time delayed reflections, there's no MIMO speeds.

Anyway, I don't have any suggestions on how to construct an excellent antenna. You haven't specified what you're trying to accomplish, what you have to work with, what is your operating environment, and what problem you're trying to solve. Different types of antennas are designed to solve different problems. Without a clue as to the problem and limitations, it's rather difficult to select a suitable antenna.

Hint: Forget about using "N" or MIMO with external antennas. Unless you're trying to move video, 802.11g speeds are good enough.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2985. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 15:05:45 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbgb0g$1c5$1@news.service.uci.edu>
Source record: 21560

Cecil Moore wrote:
> http://www.breitbart.com/article.php?id=080924193222.3r9aw25a&show_article=1

Roger. Yes, this is the one I saw:

http://science.nasa.gov/headlines/y2008/23sep_solarwind.htm?list1112475

You can subscribe and they email blurbs to you once or twice a week. We
may be in for some global cooling (and poor condx).

73, ac6xg

2986. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 15:37:11 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <HeOCk.1324$Jw.1200@nwrddc02.gnilink.net>
Source record: 21559

"Penang" <kalambong@gmail.com> wrote in message
news:8eb6f12c-45d1-4420-9460-73a463e8419b@a19g2000pra.googlegroups.com...
> My background isn't on antenna making, in fact, my training is in
> Chemical engineering, not physics.
>
> But lately I've spent a lot of times consuming materials I dig from
> the Net about antennas, in the effect to learn how to make an
> excellent (effective?) wifi antenna.
>
> Specifically, my interest is in the "broadcast" type of antenna ...
> trying to find a way to "extend" the range of a typical wifi
> basestation using antennas alone (maybe with the help of MIMO
> antennas), without "range repeaters" or whatnots.
>
> My brain is now fully clogged, and I'm having difficulties digesting
> all the stuffs that I've gotten.
>
> So I desperately need you help.
>
> Is there a place (a forum, a website, a tutorial, and whatnots) where
> one can learn about antennas, without having one's brain clogged up,
> like mine right now?
>
> What's your suggestion / opinion on how to construct an excellent
> (pair) of MIMO antenna for wifi (802.11 b/g/n) ?
>
> Thank you all !

Hi Penang

Do you wish to broadcast to all azimuth directions? The antenna design is highly dependent on the angle over which you want to 'extend wifi'. I suggest you read some of Trevor Marshal's writing (Google his name)

I strongle recxommend that you use [router, bridge] at the antenna and use CAT 5 to connect to your computer.

Jerry KD6JDJ

2987. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 16:00:20 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <RyOCk.40646$vX2.5898@bignews6.bellsouth.net>
Source record: 21561

"Jeff Liebermann" wrote:
> No. Brain damage is a known side effect and complication resulting
> from trying to digest the entire field of antenna design all at once.
> Just reading some of the posting in this newsgroup should adequately
> demonstrate the extent of the damage. I suggest you approach antenna
> design in the same manner as eating a loaf of bread. It's done one
> slice at a time. If you try to shove the entire loaf down your throat
> at once, you'll choke.

Reading one or two posts from Art will evoke chortles and guffaws, but
when taken in large, sustained doses, will make your head hurt.

Mike W5CHR
Memphis Tenn

2988. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 16:06:30 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <696f8a99-da6f-4e06-8ec8-2387994674e5@8g2000hse.googlegroups.com>
Source record: 21562

On Sep 25, 10:05 am, Jim Kelley <jwkel...@uci.edu> wrote:
> Cecil Moore wrote:
> >http://www.breitbart.com/article.php?id=080924193222.3r9aw25a&show_ar...
>
> Roger. Yes, this is the one I saw:
>
> http://science.nasa.gov/headlines/y2008/23sep_solarwind.htm?list1112475
>
> You can subscribe and they email blurbs to you once or twice a week. We
> may be in for some global cooling (and poor condx).
>
> 73, ac6xg

I would really like to know about the North Pole's movement.
It too has a cyclic motion and the last I heard was that the North
Pole had reached Siberia
and showed no signs yet of returning. Is the Earth going to respond to
the lack of
cyclic motion the same as the Sun? Last time that happened it was
credited of
ridding the world of it's monsters,
Can this forcast the end of this newsgroup as we to have more than
our share monsters that we can deal with.
Art

2989. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 16:34:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbgej9$2av$1@news.albasani.net>
Source record: 21563

hwabnig@ .- --- -. dotat wrote:

> Yeah, you are welcome.
>
> 98% of all WIFI antenna tutorials on the www are bad,
> unuseable or simply blatantly wrong. Their objects
> (avoid calling them "antennas") have the functionality
> of a bare piece of wire, which works also.
>
> So I made a 100% WIFI antenna to have an object for a tutorial.
> But it is not one of the broadcast type you requested,
> I made a 10 turn 2,4 GHz helix with bandpass stub.
>
> I just moved over to grab the camera for a quickie,
> the antenna dropped down to the floor, the tripod
> fell over my coffee and the cat jumped into my apple pie.
>
> My scalar analyzer failed last week and is on repair,
> so I cannot make the proofing screenshots: 50 Ohms over
> the whole WLAN channels 1 to 13 with an SWR < 1,5
> (and the stub prevents overload by cellular & TV).
>
> Why is everything that complicated?
>
> w.

Yeah, sounds like a good start for a comic book series; successful ones
have been created on less--I suppose ...

Regards,
JS

2990. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 16:51:59 UTC
From: JB <nospam@goofball.net>
Message-ID: <PkPCk.1348$Jw.880@nwrddc02.gnilink.net>
Source record: 21564

"Penang" <kalambong@gmail.com> wrote in message
news:8eb6f12c-45d1-4420-9460-73a463e8419b@a19g2000pra.googlegroups.com...
> My background isn't on antenna making, in fact, my training is in
> Chemical engineering, not physics.
>
> But lately I've spent a lot of times consuming materials I dig from
> the Net about antennas, in the effect to learn how to make an
> excellent (effective?) wifi antenna.
>
> Specifically, my interest is in the "broadcast" type of antenna ...
> trying to find a way to "extend" the range of a typical wifi
> basestation using antennas alone (maybe with the help of MIMO
> antennas), without "range repeaters" or whatnots.
>
> My brain is now fully clogged, and I'm having difficulties digesting
> all the stuffs that I've gotten.
>
> So I desperately need you help.
>
> Is there a place (a forum, a website, a tutorial, and whatnots) where
> one can learn about antennas, without having one's brain clogged up,
> like mine right now?
>
> What's your suggestion / opinion on how to construct an excellent
> (pair) of MIMO antenna for wifi (802.11 b/g/n) ?
>
> Thank you all !

Often gain type antennas already came with the unit. The problem is in putting the antenna where it will do some good. The other problem is in losing signal getting it from the AP to the antenna. You can easily lose any gain from a good antenna in the cable and connectors. On the other hand it is worth that just to be able to put the antenna where it will do some good. If it is any consolation, Cat5/6 is cheaper and faster than the AP itself. Still it is a pain to have to climb and do acrobatics just to push a reset button. There are excellent base station type antennas, hardware and feedline that can certainly optimize a signal for blocks away, but they are expensive and must be properly planned and executed to avoid wasting it all.

This isn't amateur radio so it really isn't on topic. It sounds to me like a business opportunity.
http://infotech.awardspace.com/

2991. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 16:58:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbgg09$468$1@news.albasani.net>
Source record: 21565

Penang wrote:

> ...
> Specifically, my interest is in the "broadcast" type of antenna ...
> trying to find a way to "extend" the range of a typical wifi
> basestation using antennas alone (maybe with the help of MIMO
> antennas), without "range repeaters" or whatnots.
> ...
> Thank you all !

Much research is going on and designs/parameters advanced. These two papers represent the direction this is taking:

http://ceta.mit.edu/pierl/pierl01/10.07111810.pdf
http://www.ece.uci.edu/~ayanoglu/MIMO_MRAA_IEEEAWPL.pdf

However, the DLM (Distributed Load Monopole) antenna by Robert Vincent is an excellent design for such applications.

However, since size is not a major consideration in my external wifi antennas, a conventional 1/2 or 5/8 wave end fed design is what I have implemented, with a gamma feed ...

I use a biquad with a parabolic reflector (from a direct TV sat. antenna) for directional antenna implementations ...

I am following the KISS method (or, Keep It Simple Stupid! -- NO insult intended ...)

Regards,
JS

2992. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 17:08:48 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b41a1699-1ca8-4e11-b6f7-572559559991@k37g2000hsf.googlegroups.com>
Source record: 21566

On Sep 25, 11:06 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Sep 25, 10:05 am, Jim Kelley <jwkel...@uci.edu> wrote:
>
> > Cecil Moore wrote:
> > >http://www.breitbart.com/article.php?id=080924193222.3r9aw25a&show_ar...
>
> > Roger. Yes, this is the one I saw:
>
> >http://science.nasa.gov/headlines/y2008/23sep_solarwind.htm?list1112475
>
> > You can subscribe and they email blurbs to you once or twice a week. We
> > may be in for some global cooling (and poor condx).
>
> > 73, ac6xg
>
> I would really like to know about the North Pole's movement.
> It too has a cyclic motion and the last I heard was that the North
> Pole had reached Siberia
> and showed no signs yet of returning. Is the Earth going to respond to
> the lack of
> cyclic motion the same as the Sun? Last time that happened it was
> credited of
> ridding the world of it's monsters,
> Can this forcast the end of this newsgroup as we to have more than
> our share monsters that we can deal with.
> Art

Sorry. Didn't mean to call some of you monsters.! Aged dynasaures
is much more appropriate
Art

2993. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 17:14:46 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbgip2$5q7$1@news.service.uci.edu>
Source record: 21571

Cecil Moore wrote:
> Jim Kelley wrote:
>> We may be in for some global cooling ...
>
> Al Gore doesn't seem to realize that the temperatures
> peaked 8000 years ago and we are headed for another
> ice age as we speak.

> http://en.wikipedia.org/wiki/Image:Ice_Age_Temperature.png

> Al Gore is even urging civil disobedience to prevent
> coal-fired generation plants from going on line. Isn't
> civil disobedience illegal?
>
>> http://blogs.nature.com/news/thegreatbeyond/2008/09/gore_urges_civil_disobedience.html

Maybe it's the only way he can think of to try to get his speaker's fee
up over $200,000 like Jerry Seinfeld. :-)

73, ac6xg

2994. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 17:17:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hIPCk.1375$as4.987@nlpi069.nbdc.sbc.com>
Source record: 21567

Jim Kelley wrote:
> We may be in for some global cooling ...

Al Gore doesn't seem to realize that the temperatures
peaked 8000 years ago and we are headed for another
ice age as we speak.

http://en.wikipedia.org/wiki/Image:Ice_Age_Temperature.png

Al Gore is even urging civil disobedience to prevent
coal-fired generation plants from going on line. Isn't
civil disobedience illegal?

> http://blogs.nature.com/news/thegreatbeyond/2008/09/gore_urges_civil_disobedience.html
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2995. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 17:17:05 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbgitg$5q7$2@news.service.uci.edu>
Source record: 21570

Cecil Moore wrote:
> Art Unwin wrote:
>> I would really like to know about the North Pole's movement.
>> It too has a cyclic motion and the last I heard was that the North
>> Pole had reached Siberia
>> and showed no signs yet of returning. Is the Earth going to respond to
>> the lack of cyclic motion the same as the Sun?
>
> http://ddig.wordpress.com/2008/06/05/earths-due-for-magnetic-pole-reversal/
>
> "The magnetic poles wander around the vicinity of the geographic
> poles all the time ï¿½ the north magnetic pole currently resides
> in the Canadian Arctic. However, at relatively regular intervals
> throughout the 4.5 billion year history of the planet, the magnetic
> poles have flipped completely. A few thousand years before a reversal,
> the magnetic field gradually gets weaker; something which could cause
> problems for inhabitants of the planet."

Now if we could only get it to oscillate at 50/60 Hz........;-)

73, ac6xg

2996. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 17:22:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <HNPCk.990$hc1.94@flpi150.ffdc.sbc.com>
Source record: 21568

Art Unwin wrote:
> I would really like to know about the North Pole's movement.
> It too has a cyclic motion and the last I heard was that the North
> Pole had reached Siberia
> and showed no signs yet of returning. Is the Earth going to respond to
> the lack of cyclic motion the same as the Sun?

http://ddig.wordpress.com/2008/06/05/earths-due-for-magnetic-pole-reversal/

"The magnetic poles wander around the vicinity of the geographic
poles all the time ï¿½ the north magnetic pole currently resides
in the Canadian Arctic. However, at relatively regular intervals
throughout the 4.5 billion year history of the planet, the magnetic
poles have flipped completely. A few thousand years before a reversal,
the magnetic field gradually gets weaker; something which could cause
problems for inhabitants of the planet."
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

2997. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 17:29:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <19071f35-f7b2-45ec-9289-d85e86dae56b@d1g2000hsg.googlegroups.com>
Source record: 21569

On Sep 24, 5:15 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:8462e4f0-552d-4978-823f-eba996f5340c@79g2000hsk.googlegroups.com...
>
> > > Maxwell who includes the weak force in his calculations for
> > > absolute accuracy.
>
> until you point out the term in his equations that specifies the weak force
> you are just handwaving.

David, you just have to be a leader in this. Total reliance on books
or even on wilkapedia
is for the birdes. It is upto you what rock you build your reputation
on.
Going to school only brings you up to date with other peoples
thinking so that
when you leave you don't have to reinvent the wheel. For the
increasing number
of head woblers that are join ing the hobby that is understandable but
for those who sought
education as a means of just making money is really stealing from the
next generation.
Education is meant for the advancement of the human race where
continued scientific
approaches after school was meant to correct the errors of the past
to strengthen the rock
for the next generation to build upon. Denial of progress or the
effort to prevent change is just theft
so that the children have to follow the selfish efforts of their
elders. Change will come with respect to antennas
tho probably after you have gone. You may posses the direction at the
present time of a generation but soon you will be gone
and the human spirit formerly chained by their elders will re emerge
in disbelief of their elders folly who while dwelling in a garbage
can felt safe from intruders, learned to ignore the smell that became
associated with them feeling that they had won the conquest of change
prevention
Your final place of rest will be in a hill amoung friends but without
a voice.
Art

2998. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 18:43:26 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <8bmnd41ik73bt5q07b952vg2iogfc1no55@4ax.com>
Source record: 21572

On Thu, 25 Sep 2008 11:00:20 -0500, "Mike Lucas" <w5chr@bellsouth.net>
wrote:
>"Jeff Liebermann" wrote:
>> No. Brain damage is a known side effect and complication resulting
>> from trying to digest the entire field of antenna design all at once.
>> Just reading some of the posting in this newsgroup should adequately
>> demonstrate the extent of the damage. I suggest you approach antenna
>> design in the same manner as eating a loaf of bread. It's done one
>> slice at a time. If you try to shove the entire loaf down your throat
>> at once, you'll choke.

> Reading one or two posts from Art will evoke chortles and guffaws, but
>when taken in large, sustained doses, will make your head hurt.

I was trying to be diplomatic and subtle. Apparently, I failed.

On another mailing list, I once had someone telling me that I'm wrong
because 90% of the universe is dark matter or dark energy. Since
these are total unknowns, 90% of everything is therefore unknown.
Therefore, 90% of my analysis must also be wrong. I rather like the
logic.

However, I was serious about taking it slowly on learning about
antennas. To really understand how they work and what they, it takes
far too many diverse diciplines (Maxwell's Eqn, modeling, propagation,
topography, material science, construction techniques, impedance
matching, surface geometry, etc) to absorb it all at once. Also, some
hands on experience is always useful.

It's like trying to recover an intelligent signal out of gaussian
white noise. Despite the best efforts of all involved, the noise
usually wins.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2999. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 18:51:50 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <f9nnd4hnqj44kuhuujkrj294vui3roo78d@4ax.com>
Source record: 21573

On Thu, 25 Sep 2008 10:29:08 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Your final place of rest will be in a hill amoung friends but without
>a voice.
>Art

While visiting a cemetery in Smog Angeles, I saw several monuments
that included a recording of the deceased saying a few last words.
Push the button and it plays the recording. That was many years ago,
and I suspect they've gotten better with video clips and LCD displays.
Maybe the next step will be a 3d hologram. You may be dead, but you
can still annoy the relatives.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3000. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 19:05:58 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <siRCk.1587$YU2.507@nlpi066.nbdc.sbc.com>
Source record: 21574

Jim Kelley wrote:
> Now if we could only get it to oscillate at 50/60 Hz........;-)

Thus driving the migratory birds crazy. :-)

I once picked up some free magnetism by orienting an
iron rod N/S and hitting it with a hammer. Could I
have been the cause of the weakening?
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3001. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 19:10:53 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <3nRCk.1589$YU2.454@nlpi066.nbdc.sbc.com>
Source record: 21575

Jeff Liebermann wrote:
> It's like trying to recover an intelligent signal out of gaussian
> white noise. Despite the best efforts of all involved, the noise
> usually wins.

If I listen to white noise when I'm inebriated, I can hear
Willie Nelson singing, "You Were Always On My Mind". :-)
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3002. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 19:15:18 UTC
From: richardharrison@webtv.net
Message-ID: <8093-48DBE346-2574@storefull-3251.bay.webtv.net>
Source record: 21576

Art wrote:
"So by all means crush any an all ideas of change."

In antennas and masers size matters. Diamagnetic materials matter more in masers than in common antennas.

Keep searching for a highly focused beam from a tiny spot or speck. When you succeed, patent it and you may become secure in your fame and fortune.

Best regards, Richard Harrison, KB5WZI

3003. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 20:19:26 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gbgroe$p8$1@news.jpl.nasa.gov>
Source record: 21577

Jim Kelley wrote:
> Cecil Moore wrote:
>> Art Unwin wrote:
>>> I would really like to know about the North Pole's movement.
>>> It too has a cyclic motion and the last I heard was that the North
>>> Pole had reached Siberia
>>> and showed no signs yet of returning. Is the Earth going to respond to
>>> the lack of cyclic motion the same as the Sun?
>>
>> http://ddig.wordpress.com/2008/06/05/earths-due-for-magnetic-pole-reversal/
>>
>>
>> "The magnetic poles wander around the vicinity of the geographic
>> poles all the time ï¿½ the north magnetic pole currently resides
>> in the Canadian Arctic. However, at relatively regular intervals
>> throughout the 4.5 billion year history of the planet, the magnetic
>> poles have flipped completely. A few thousand years before a reversal,
>> the magnetic field gradually gets weaker; something which could cause
>> problems for inhabitants of the planet."
>
> Now if we could only get it to oscillate at 50/60 Hz........;-)
>
> 73, ac6xg

The magnetic north pole being in (or close to) Canada, the Canadians
have a quasi-proprietary interest, and they have one of the better websites:
http://gsc.nrcan.gc.ca/geomag/nmp/northpole_e.php

http://gsc.nrcan.gc.ca/geomag/nmp/long_mvt_nmp_e.php has a map showing
the movement. Indeed, one prediction shows that in 2050 it will be off
the Siberian coast.

Interesting also how it moves around 85km a day, in a diurnal variation.

Among other things:
Many authors have pointed out that the dipole part of the magnetic field
has been weakening during historic times, and that if the present trend
continues, the dipole field will go to zero in roughly 1500 years. Some
people take this to mean that we are entering a reversal.

3004. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 21:01:47 UTC
From: nm5k@wt.net
Message-ID: <1b216624-e5ea-47d3-8946-374ead7327a3@r15g2000prd.googlegroups.com>
Source record: 21578

On Sep 24, 3:33 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

> But then, all is known about antennas and if it were possible as the
> experts state or
> we would have been using such antennas years ago !!!!!

This might even include you if you were to actually try using one.
But, then the parade would come to an end, as you would see
that there is no free lunch.

> Or as another person stated we don't need a different
> type of beam radiation as we already have one!!!!
> So by all means crush any and all ideas of change

I know you hate yagi antennas, but did it ever occur to you
that the nulls are an advantage to many operators when
receiving. Heck, I bet just as many people use directional
antennas for the receive qualities as they do for any
directional gain. Whacking about 20 db off a west
coast kilowatt can come in mighty handy when you
are trying to hear weak DX in Africa.
Of course, with an equal opportunity dummy load, the
null will be in all directions.
So not only are you screwed as far as directional gain
vs an efficient antenna, you also lack the directional qualities
which many have great use for when receiving.
I suspect your invention using this "new science" will be a
flop at the box office.
Reboot and try again.

3005. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 21:48:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <95bd870b-3c90-43ee-8156-66741d557c9f@k30g2000hse.googlegroups.com>
Source record: 21579

On Sep 25, 2:15 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "So by all means crush any an all ideas of change."
>
> In antennas and masers size matters. Diamagnetic materials matter more
> in masers than in common antennas.

It was not long ago that we had an antenna design so why should we
need another
No you have come out with an epistle that size matters. Truely the
thoughts of an older woman.
Richard by not learning how to use a computer you are living as much
in the past as McCain.
If you had given a reasion for such a statement you would have my
attention but you give nothing
and so I have nothing to add

>
> Keep searching for a highly focused beam from a tiny spot or speck. When
> you succeed, patent it and you may become secure in your fame and
> fortune.
>
> Best regards, Richard Harrison, KB5WZI

3006. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 21:59:18 UTC
From: nm5k@wt.net
Message-ID: <3320ce32-72e1-4985-8d41-50655464e232@w39g2000prb.googlegroups.com>
Source record: 21580

On Sep 17, 4:37 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> Could well be but I have no alternative and am going my own way. Why
> should this disturb others?

Because you insist what you say is true without any proof given.
Not to mention that you refuse to even define how you apply
equilibrium
to your "new science" antenna theory.
And now you think you should rewrite perfectly good antenna theory as
it has been known for quite a few years. Again, without any real
proof,
or even coherent logic applied.

But even worse, you think you have all the answers, and that everyone
else here is either brain dead, senile, fell off a turnip truck last
night,
or they bark at the moon while chasing spiders across the lawn of the
Glendale assisted living center, which BTW is how I often envision you
after reading about 492 lines of your equilibribric/neutrino theory.
But otherwise, disturb not do you.

3007. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 22:06:52 UTC
From: Dave <noone@nowhere.com>
Message-ID: <0YTCk.1503$MN3.341@nwrddc01.gnilink.net>
Source record: 21581

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:gbgroe$p8$1@news.jpl.nasa.gov...
> Jim Kelley wrote:
>> Cecil Moore wrote:
>>> Art Unwin wrote:
>>>> I would really like to know about the North Pole's movement.
>>>> It too has a cyclic motion and the last I heard was that the North
>>>> Pole had reached Siberia
>>>> and showed no signs yet of returning. Is the Earth going to respond to
>>>> the lack of cyclic motion the same as the Sun?
>>>
>>> http://ddig.wordpress.com/2008/06/05/earths-due-for-magnetic-pole-reversal/
>>>
>>> "The magnetic poles wander around the vicinity of the geographic
>>> poles all the time the north magnetic pole currently resides
>>> in the Canadian Arctic. However, at relatively regular intervals
>>> throughout the 4.5 billion year history of the planet, the magnetic
>>> poles have flipped completely. A few thousand years before a reversal,
>>> the magnetic field gradually gets weaker; something which could cause
>>> problems for inhabitants of the planet."
>>
>> Now if we could only get it to oscillate at 50/60 Hz.....;-)
>>
>> 73, ac6xg
>
> The magnetic north pole being in (or close to) Canada, the Canadians have
> a quasi-proprietary interest, and they have one of the better websites:
> http://gsc.nrcan.gc.ca/geomag/nmp/northpole_e.php
>
> http://gsc.nrcan.gc.ca/geomag/nmp/long_mvt_nmp_e.php has a map showing the
> movement. Indeed, one prediction shows that in 2050 it will be off the
> Siberian coast.
>
> Interesting also how it moves around 85km a day, in a diurnal variation.
>

OH! OH! PROOF OF THE DIAMAGNETIC STATIC NEUTRINO FLUX!!! what else could cause it to fluctuate like that every day! ART MUST BE RIGHT!! Either that or i've already had one too many tonight.

3008. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 22:36:32 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gbh3ppunl1@registered.motzarella.org>
Source record: 21582

<nm5k@wt.net> wrote in message
news:3320ce32-72e1-4985-8d41-50655464e232@w39g2000prb.googlegroups.com...
On Sep 17, 4:37 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> Could well be but I have no alternative and am going my own way. Why
> should this disturb others?

Because you insist what you say is true without any proof given.
Not to mention that you refuse to even define how you apply
equilibrium
to your "new science" antenna theory.
And now you think you should rewrite perfectly good antenna theory as
it has been known for quite a few years. Again, without any real
proof,
or even coherent logic applied.

But even worse, you think you have all the answers, and that everyone
else here is either brain dead, senile, fell off a turnip truck last
night,
or they bark at the moon while chasing spiders across the lawn of the
Glendale assisted living center, which BTW is how I often envision you
after reading about 492 lines of your equilibribric/neutrino theory.
But otherwise, disturb not do you.

All you have said so far about Art is that he is opinionated and that he has
a personality. <G>

Ed, NM2K

3009. Re: Equilibrium and Ham examinations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 22:42:17 UTC
From: Dave <noone@nowhere.com>
Message-ID: <dtUCk.1436$Jw.535@nwrddc02.gnilink.net>
Source record: 21583

"Ed Cregger" <ecregger@bellsouff.net> wrote in message
news:gbh3ppunl1@registered.motzarella.org...

> All you have said so far about Art is that he is opinionated and that he
> has a personality. <G>

and those are his good traits.

3010. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 22:46:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbh4ck$s9p$1@news.albasani.net>
Source record: 21584

Art Unwin wrote:

> ...
> It was not long ago that we had an antenna design so why should we
> need another
> No you have come out with an epistle that size matters. Truely the
> thoughts of an older woman.
> ...

Actually, I suspect that what you say may hold deeper truths than some realize, perhaps even than you realize ...

If the ether exists in a form some have imagined, if it is possible to couple efficiently to this ether, then a one-inch antenna should be on the same level of effectiveness as a one-hundred foot one.

The "if(s)" is the problem ... and directly relates to that little problem of proof which has been requested ...

Regards,
JS

3011. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 22:59:10 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbh7ijhnf1@news.service.uci.edu>
Source record: 21591

Jim Lux wrote:
> The magnetic north pole being in (or close to) Canada, the Canadians
> have a quasi-proprietary interest, and they have one of the better
> websites:
> http://gsc.nrcan.gc.ca/geomag/nmp/northpole_e.php

> http://gsc.nrcan.gc.ca/geomag/nmp/long_mvt_nmp_e.php has a map showing
> the movement. Indeed, one prediction shows that in 2050 it will be off
> the Siberian coast.
>
> Interesting also how it moves around 85km a day, in a diurnal variation.

Yes. Perhaps that relates to what Art was asking about.

> Among other things:
> Many authors have pointed out that the dipole part of the magnetic field
> has been weakening during historic times, and that if the present trend
> continues, the dipole field will go to zero in roughly 1500 years. Some
> people take this to mean that we are entering a reversal.

Maybe Al Gore should look into this. Cheryl Crow could do a college tour.

Good links, Jim. Thanks.

ac6xg

3012. G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 23:06:15 UTC
From: Howard Kowall <hkowall@shaw.ca>
Message-ID: <IPUCk.396$1f.231@newsfe07.iad>
Source record: 21585

Looking to buy a G5RV for 80 and 40 mtrs and maybe able to tune other bands
lots of diff brands of this antenna
can anyone suggest a manufacture
or maybe another alternative
thanx
howard

3013. Re: Radiation lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 23:17:31 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f8d15631-07d1-4077-b157-f2aa7466fcc6@a19g2000pra.googlegroups.com>
Source record: 21586

On Sep 25, 5:46 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > It was not long ago that we had an antenna design so why should we
> > need another
> > No you have come out with an epistle that size matters. Truely the
> > thoughts of an older woman.
>
> > ...
>
> Actually, I suspect that what you say may hold deeper truths than some
> realize, perhaps even than you realize ...
>
> If the ether exists in a form some have imagined, if it is possible to
> couple efficiently to this ether, then a one-inch antenna should be on
> the same level of effectiveness as a one-hundred foot one.
>
> The "if(s)" is the problem ... and directly relates to that little
> problem of proof which has been requested ...
>
> Regards,
> JS

If one is in continual denial why would one want his aproval?
If ones reputation is based on the number of senior moments he has
each day
why would one need his aproval? If one is in continual denial then
truth has no meaning
and thus he is errelavent.

3014. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 23:27:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ce7od4pqkf72b2h26l5nnap5302uv7agjq@4ax.com>
Source record: 21587

On Thu, 25 Sep 2008 18:06:15 -0500, "Howard Kowall" <hkowall@shaw.ca>
wrote:
>or maybe another alternative

Hi Howard,

Build a dipole, and with the money you save, invest in a tuner.

73's
Richard Clark, KB7QHC

3015. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 23:32:41 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <vcVCk.1537$be.896@nlpi061.nbdc.sbc.com>
Source record: 21588

Howard Kowall wrote:
> Looking to buy a G5RV for 80 and 40 mtrs and maybe able to tune other bands
> lots of diff brands of this antenna can anyone suggest a manufacture
> or maybe another alternative

The G5RV is a 4-band antenna, 80m, 40m, 20m, and 12m. If
you care about the other 4 bands, don't go with a G5RV.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3016. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 23:33:11 UTC
From: Howard Kowall <hkowall@shaw.ca>
Message-ID: <%cVCk.744$1f.479@newsfe07.iad>
Source record: 21589

yes i have built a dipole and it works good with the manual tuner
BUT now my new rig has a built in tuner and of course it wont tune it
the dipole i built was cut for 3.747mhz and works great without a tuner
but with the auto tuner it wont tune anyware but 80mtrs
is there a magic number for a dipole to make it tunable on 80 and 40
thanx
howard

"Howard Kowall" <hkowall@shaw.ca> wrote in message
news:IPUCk.396$1f.231@newsfe07.iad...
> Looking to buy a G5RV for 80 and 40 mtrs and maybe able to tune other
> bands
> lots of diff brands of this antenna
> can anyone suggest a manufacture
> or maybe another alternative
> thanx
> howard
>
>

3017. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 23:38:17 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gbh7de$nt1$1@news.netins.net>
Source record: 21590

If by searching the web you haven't found a good wifi antenna you should look again as there are lots that will work. If you're wanting to go into business against the major carriers as your equals or competitors, then go back to school for a little longer.....

3018. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-25 23:55:15 UTC
From: Danny Richardson <>
Message-ID: <159od4hmd707659nehomvr0v0tep9vf49u@4ax.com>
Source record: 21592

On Thu, 25 Sep 2008 18:33:11 -0500, "Howard Kowall" <hkowall@shaw.ca>
wrote:

>yes i have built a dipole and it works good with the manual tuner
>BUT now my new rig has a built in tuner and of course it wont tune it
>the dipole i built was cut for 3.747mhz and works great without a tuner
>but with the auto tuner it wont tune anyware but 80mtrs
>is there a magic number for a dipole to make it tunable on 80 and 40
>thanx
>howard

Howard,

Before you go sailing off into space on the GRV check this out.

http://www.degendesigns.com/Downloads/TheEasyWay.PDF

Danny, k6mhe

3019. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 00:37:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0c9od4dhct1ee7muo85n1jl0ju8ppq9e8d@4ax.com>
Source record: 21593

On Thu, 25 Sep 2008 15:59:10 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>> people take this to mean that we are entering a reversal.
>
>Maybe Al Gore should look into this. Cheryl Crow could do a college tour.

Polar reversals are now the patent of the Republican party when the
White House tells us the private finance market can't do the job as
well as the government. [If all those companies are slipping into the
big sleep, then the Grand Old Party must have welded the greater fool
model into their platform for this dumpster diving orgy.]

The new compassionate conservative model of unemployment compensation:

1. Have you been indicted this week, such that it keeps you from
seeking work? Skip to #4 if so, but only if you are white,
married, Christian and live in the Hampsteads or can show
mortgages for 5 residences located in no fewer than two states and
one foreign capitol.

2. Have you sought a CEO position this week?

3. List three Board Directors you have contacted this week.

4. If you have satisfactorily answered these questions, pick up
$10million from the public trough and check with us next week.

Remember, unemployment compensation is NOT an entitlement, it is your
special right for having achieved such success in your field of
endeavor. Without your highly productive skills America would be
weaker in the eyes of the world. We know that $10million is a pale
compensation compared to the value you have provided to democracy, but
in these times many have to set aside personal needs for the sake of
keeping the titans of the financial market like PayDayLoans solvent.
Your patience and magnanimity means a lot for the millions of
under-employed that rely on this company.

73's
Richard Clark, KB7QHC

3020. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 01:03:24 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d8209222-3513-48c8-953b-a3f2d5722768@n38g2000prl.googlegroups.com>
Source record: 21594

On Sep 25, 5:06 pm, "Dave" <no...@nowhere.com> wrote:
> "Jim Lux" <james.p....@jpl.nasa.gov> wrote in message
>
> news:gbgroe$p8$1@news.jpl.nasa.gov...
>
>
>
> > Jim Kelley wrote:
> >> Cecil Moore wrote:
> >>> Art Unwin wrote:
> >>>> I would really like to know about the North Pole's movement.
> >>>> It too has a cyclic motion and the last I heard was that the North
> >>>> Pole had reached Siberia
> >>>> and showed no signs yet of returning. Is the Earth going to respond to
> >>>> the lack of cyclic motion the same as the Sun?
>
> >>>http://ddig.wordpress.com/2008/06/05/earths-due-for-magnetic-pole-rev...
>
> >>> "The magnetic poles wander around the vicinity of the geographic
> >>> poles all the time – the north magnetic pole currently resides
> >>> in the Canadian Arctic. However, at relatively regular intervals
> >>> throughout the 4.5 billion year history of the planet, the magnetic
> >>> poles have flipped completely. A few thousand years before a reversal,
> >>> the magnetic field gradually gets weaker; something which could cause
> >>> problems for inhabitants of the planet."
>
> >> Now if we could only get it to oscillate at 50/60 Hz........;-)
>
> >> 73, ac6xg
>
> > The magnetic north pole being in (or close to) Canada, the Canadians have
> > a quasi-proprietary interest, and they have one of the better websites:
> >http://gsc.nrcan.gc.ca/geomag/nmp/northpole_e.php
>
> >http://gsc.nrcan.gc.ca/geomag/nmp/long_mvt_nmp_e.phphas a map showing the
> > movement. Indeed, one prediction shows that in 2050 it will be off the
> > Siberian coast.
>
> > Interesting also how it moves around 85km a day, in a diurnal variation.
>
> OH! OH! PROOF OF THE DIAMAGNETIC STATIC NEUTRINO FLUX!!! what else could
> cause it to fluctuate like that every day! ART MUST BE RIGHT!! Either that
> or i've already had one too many tonight.

Possibly, but it didn't produce change! You must drink alot if we
can't tell if you have stopped drinking
Stop drinking and you then may understand equilibrium

3021. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 01:04:55 UTC
From: ltdoc@yahoo.com
Message-ID: <720c91b4-c7f0-4200-920c-5e4da681867c@r15g2000prh.googlegroups.com>
Source record: 21595

No magic numbers, sorry 'bout that. Try hanging a 40 meter dipole
from the same feed point as the 80 meter, fed with the same feed
line. Tune/trim for use near the 40 meter frequency you want, then
use that tuner. The same thing will work for any other band you want
to add to it, and will certainly be better than a 'G5RV'.
- 'Doc

3022. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 01:25:44 UTC
From: JB <nospam@goofball.net>
Message-ID: <sSWCk.1552$MN3.377@nwrddc01.gnilink.net>
Source record: 21596

"Penang" <kalambong@gmail.com> wrote in message
news:8eb6f12c-45d1-4420-9460-73a463e8419b@a19g2000pra.googlegroups.com...
> My background isn't on antenna making, in fact, my training is in
> Chemical engineering, not physics.
>
> But lately I've spent a lot of times consuming materials I dig from
> the Net about antennas, in the effect to learn how to make an
> excellent (effective?) wifi antenna.
>
> Specifically, my interest is in the "broadcast" type of antenna ...
> trying to find a way to "extend" the range of a typical wifi
> basestation using antennas alone (maybe with the help of MIMO
> antennas), without "range repeaters" or whatnots.
>
> My brain is now fully clogged, and I'm having difficulties digesting
> all the stuffs that I've gotten.
>
> So I desperately need you help.
>
> Is there a place (a forum, a website, a tutorial, and whatnots) where
> one can learn about antennas, without having one's brain clogged up,
> like mine right now?
>
> What's your suggestion / opinion on how to construct an excellent
> (pair) of MIMO antenna for wifi (802.11 b/g/n) ?
>
> Thank you all !

Often gain type antennas already come with the unit. The problem is in putting the antenna where it will do some good. The other problem is in losing signal getting it from the AP to the antenna. You can easily lose any gain from a good antenna in the cable and connectors. On the other hand it is worth that just to be able to put the antenna where it will do some good. If it is any consolation, Cat5/6 is cheaper and faster than the AP itself. Still it is a pain to have to climb and do acrobatics just to push a reset button. There are excellent base station type antennas, hardware and feedline that can certainly optimize a signal for blocks away, but they are expensive and must be properly planned and executed to avoid wasting it all. There are all kinds of network issues to consider too.

This isn't amateur radio so it really isn't on topic. It sounds to me like a business opportunity.
http://infotech.awardspace.com/

3023. Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 01:27:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <27a34116-78d4-45ec-8bf4-8e5273555f5c@c36g2000prc.googlegroups.com>
Source record: 21597

When modelling antennas and also building them it is obvious that
maximum gain comes about when resistance aproaches zero. Soooooooo
common sence says that the best antenna gain comes about when the anti
resonant point can be easily fed, wellllll thats how my antennas work.
Unfortunatelly, the antenna was resonant on top band
but with a very low resistance so I have to start all over again. The
noise level did increase by 7 S units where modelling showed 9 dbi
gain ! Maybe I should use two radiators instead of the single one. O
well, I have to make changes so the anti resonance point is available
at top band. David, IT IS a topsy turvy world
so I am not available to listenning to the wobbly heads on the radio.
Oh shame for shame
Art

3024. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 02:36:43 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <96iod4l14jsrd2182tqm23d10g5093rd35@4ax.com>
Source record: 21598

On Fri, 26 Sep 2008 01:25:44 GMT, "JB" <nospam@goofball.net> wrote:

>If it is any consolation, Cat5/6 is cheaper and faster than the AP
>itself.

Sorta. I guess you haven't bought any CAT6 lately. I just blew $170
for a 1000ft roll of CAT6 at Home Depot. Add in, wall plates, RJ45
jacks, and jumpers, and I can probably buy 4 or 5 wireless routers for
the price.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3025. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 02:44:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbhib5$b5s$1@news.albasani.net>
Source record: 21599

Jeff Liebermann wrote:

>
> Sorta. I guess you haven't bought any CAT6 lately. I just blew $170
> for a 1000ft roll of CAT6 at Home Depot. Add in, wall plates, RJ45
> jacks, and jumpers, and I can probably buy 4 or 5 wireless routers for
> the price.

Cat vs. WiFi?

Isn't that kinda like comparing a hardwired phone with a cell? One I
can do without, the other I can't ...

Regards,
JS

3026. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 02:53:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbhis6bjn1@news.albasani.net>
Source record: 21600

Danny Richardson wrote:

> ...
> Howard,
>
> Before you go sailing off into space on the GRV check this out.
>
> http://www.degendesigns.com/Downloads/TheEasyWay.PDF
>
> Danny, k6mhe

Now that paper is an odd mix of fact and fantasy ... first time I have
ever seen that particular brand of obsfucation ...

Regards,
JS

3027. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 03:01:58 UTC
From: nm5k@wt.net
Message-ID: <ba98c51c-8c31-4e95-a97f-f6e9b2826869@s9g2000prg.googlegroups.com>
Source record: 21501

On Sep 25, 8:27 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> When modelling antennas and also building them it is obvious that
> maximum gain comes about when resistance aproaches zero.

Delusions of grandeur induced by a modeling program... :/
Just wait till you try to feed power to these marvels of technology
you have conjured. :(

3028. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 03:17:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <28817c5c-f4f4-4a5f-b592-cc28e2c36160@w1g2000prk.googlegroups.com>
Source record: 21502

On Sep 25, 5:59 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Jim Lux wrote:
> > The magnetic north pole being in (or close to) Canada, the Canadians
> > have a quasi-proprietary interest, and they have one of the better
> > websites:
> >http://gsc.nrcan.gc.ca/geomag/nmp/northpole_e.php
> >http://gsc.nrcan.gc.ca/geomag/nmp/long_mvt_nmp_e.phphas a map showing
> > the movement. Indeed, one prediction shows that in 2050 it will be off
> > the Siberian coast.
>
> > Interesting also how it moves around 85km a day, in a diurnal variation.
>
> Yes. Perhaps that relates to what Art was asking about.
>
> > Among other things:
> > Many authors have pointed out that the dipole part of the magnetic field
> > has been weakening during historic times, and that if the present trend
> > continues, the dipole field will go to zero in roughly 1500 years. Some
> > people take this to mean that we are entering a reversal.
>
> Maybe Al Gore should look into this. Cheryl Crow could do a college tour.
>
> Good links, Jim. Thanks.
>
> ac6xg

Yes that is what I was talking about,With the poles of the Sun showing
no evidence of continuing its rotation
and where the poles of the Earth are accelerating instead of slowing
it could easily be seen as a tranfer of momentum or inertia.
If the Sun becomes passive and the Earth rotates on a eleven year
cycle. then a ice age could appear in the next 11 years!
11 years is starkly different to the 1000s of years that scientists
usually talk about. If the pole continuese this accelleration what is
there to stop it?
Let's hope the Sun shows some activity so I can test my antenna using
the "strong force" instead of the "weak force" and really shake this
group up.
Art

3029. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 04:47:47 UTC
From: dfinn1@nc.rr.com
Message-ID: <6d744aff-8e6e-48b3-a406-36575a79f753@k30g2000hse.googlegroups.com>
Source record: 21503

On Sep 25, 7:06 pm, "Howard Kowall" <hkow...@shaw.ca> wrote:
> Looking to buy a G5RV for 80 and 40 mtrs and maybe able to tune other bands
> lots of diff brands of this antenna
> can anyone suggest a manufacture
> or maybe another alternative
> thanx
> howard

I have found with my G5RV that I still need to 'tune' so that my
transceiver doesn't throttle back in power due to approx. 3:1 SWR on
40/80/20 (and maybe 12). I can also tune 15, 17 and 10. However, as
mentioned elsewhere, it is only good on 80/40/20/12. The SWR on 10
without a tuner is very high and 10 with a tuner is still unusable
(also G5RV is ng for 17m).

3030. Re: Spectrum analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 05:15:03 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <wd_Ck.25456$Il.6834@newsfe09.iad>
Source record: 21504

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:f9nnd4hnqj44kuhuujkrj294vui3roo78d@4ax.com...

>
> While visiting a cemetery in Smog Angeles, I saw several monuments
> that included a recording of the deceased saying a few last words.
> Push the button and it plays the recording. That was many years ago,
> and I suspect they've gotten better with video clips and LCD displays.
> Maybe the next step will be a 3d hologram. You may be dead, but you
> can still annoy the relatives.

I remember Bill Cosby and the "Don't I look like myself?" routine about a
tape playing beside a casket. Funny stuff.

3031. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 05:59:44 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <qT_Ck.32521$wr1.32214@newsfe02.iad>
Source record: 21505

"Howard Kowall" <hkowall@shaw.ca> wrote in message
news:%cVCk.744$1f.479@newsfe07.iad...
> yes i have built a dipole and it works good with the manual tuner
> BUT now my new rig has a built in tuner and of course it wont tune it
> the dipole i built was cut for 3.747mhz and works great without a tuner
> but with the auto tuner it wont tune anyware but 80mtrs
> is there a magic number for a dipole to make it tunable on 80 and 40
> thanx
> howard

I am the only one I know who is doing this, so it may be a risky practice:
tandem tuners.

I have an autotuner in my Kenwood TS-870 and I feed some antennas through an
MFJ tuner set on "BYPASS," usually. If I encounter a situation where the
internal autotuner balks, I flip the selector to the "TUNED" side and get it
close by quickly and casually peaking the received noise (or sigs). Then I
give the autotuner another crack at it and always seems to get a match. The
coax runs are all short and I seem to be getting away with it.

I am putting up more and better antennas ASAP, but there are still some
freqs I can't cover properly, so I cover them improperly :-)

3032. Re:G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 06:36:05 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gbhvso$a68$1@news.netins.net>
Source record: 21506

Here's a site which has a G5RV fix that may give you what you want or a least explain why it doesn't work so good.

http://www.w8ji.com/g5rv_facts.htm

3033. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 08:14:07 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1md4ire33k.fsf@persaunet.uninett.no>
Source record: 21507

Penang <kalambong@gmail.com> writes:

> What's your suggestion / opinion on how to construct an excellent
> (pair) of MIMO antenna for wifi (802.11 b/g/n) ?

Not MIMO, but many weird looking, but mostly sound, ideas here:

http://usbwifi.orconhosting.net.nz/

"Make 2.4GHz parabolic mesh dishes from cheap but sturdy Chinese
cookware scoops & a USB WiFi adaptor"

By placing the wi-fi adaptor in the antenna, you don't lose radio power in
cables and connectors. You have to be careful about waterproofing,
though.

Jon

3034. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 09:34:49 UTC
From: Penang <kalambong@gmail.com>
Message-ID: <e356c14e-8521-4380-b54e-3bb67d052b3e@a18g2000pra.googlegroups.com>
Source record: 21508

On Sep 25, 7:43 pm, Bob Bob <bob3b...@suddenlink.net> wrote:
> Starting with one or two basics;
>
> - Keep the losses down
> - Channel as much of the radiation as possible in the direction you need it
>
> Losses in this sense more come from coax runs and connectors. Keep the
> run short, dont use joiners and if possible mount the WiFi box close to
> the antenna. You have to also allow for obstructive losses like trees
> and buildings. The other path loss is from errant reflections. Moounting
> the antenna high up in the clear resolves many of these issues.
>
> Radiating in the right direction isnt rocket science in theory. The
> average "omnidirectional" antenna is actually "all directions" only
> parallel to the ground. ie you dont waste radiation skyward or warming
> the dirt! In terms of distance covered though an omni of this kind wont
> be as good as employing an antenna that "beams" in one direction.
> Consider this as a kind of flashlight with reflector and you'll get the
> right idea. In terms of time/construction/distance investment you'll do
> a lot better with this kind of antenna than an omni, elthough you will
> need to point them in the right direction. Which one you choose depends
> on its intended use.
>
> You have probably figured out that the antenna gain figure (in dB) is
> the measure that is used to determine how much better one antenna is
> over another. It is a log comparison of the desired radiation direction
> "strength" vs that of an antenna that radiates eqaully in all
> directions. An omni however will almost always have a lower gain than a
> "beam" type antenna. 9 and 12 dB are some fairly high omni gains but
> "beam" gains can go 15-30dB. The higher the number the greater the range
> in the desired direction.
>
> So my view.. If you intend one site being fixed and the other movable
> then you'll at least need an omni at the base site. If you only want a
> point to point link then a "beam" variety at each end is the way to go.
> I wouldnt go for "best" but engineer the path/strength requirements to
> determine the antenna gain needed. If I was making the antennas I'd
> probably use end fire helixes as they seem to be most forgiving in
> construction errors vs best gain.
>
> You might want to tell us your end application, distance to cover,
> movement of sites and so on so we can suggest something a little more
> finite.

First of all, thanks to all for the many wonderful suggestions !!

It's for a community-type wifi network, and I'm cracking my head
trying to figure out a way to make the basestations' broadcast cover a
wider area.

I am reading all your suggestions right now and am trying as hard as
possible to digest them all. :)

Thanks again !!

>
> Cheers Bob
>
> Penang wrote:
>
> > What's your suggestion / opinion on how to construct an excellent
> > (pair) of MIMO antenna for wifi (802.11 b/g/n) ?
>
> > Thank you all !

3035. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 09:45:59 UTC
From: Penang <kalambong@gmail.com>
Message-ID: <d3576788-56b0-4a4c-a471-7da65870e498@i20g2000prf.googlegroups.com>
Source record: 21509

On Sep 25, 9:52 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Wed, 24 Sep 2008 22:39:23 -0700 (PDT), Penang <kalamb...@gmail.com>
> wrote:
>
> >Specifically, my interest is in the "broadcast" type of antenna ...
> >trying to find a way to "extend" the range of a typical wifi
> >basestation using antennas alone (maybe with the help of MIMO
> >antennas), without "range repeaters" or whatnots.
>
> Broadcast implies one way transmissions. Wi-Fi is bi-directional.
>
> The common terms are "range extender" or "repeater". These normally
> refer to store and forward transmitter/receivers use to extend range
> by retransmitting the data. This is roughly how a MESH network
> operates. There are some severe limits and compromises to using such
> repeaters, none of which have anything to do with the antenna. Ask if
> you need details.
>
> >My brain is now fully clogged, and I'm having difficulties digesting
> >all the stuffs that I've gotten.
>
> One must suffer before enlightenment. You're doing fine.
>
> >Is there a place (a forum, a website, a tutorial, and whatnots) where
> >one can learn about antennas, without having one's brain clogged up,
> >like mine right now?
>
> No. Brain damage is a known side effect and complication resulting
> from trying to digest the entire field of antenna design all at once.
> Just reading some of the posting in this newsgroup should adequately
> demonstrate the extent of the damage. I suggest you approach antenna
> design in the same manner as eating a loaf of bread. It's done one
> slice at a time. If you try to shove the entire loaf down your throat
> at once, you'll choke.
>
> >What's your suggestion / opinion on how to construct an excellent
> >(pair) of MIMO antenna for wifi (802.11 b/g/n) ?
>
> I suggest you give up immediately and read about how MIMO works.
> External MIMO antennas are a problem.
>
> There are two basic types of MIMO. One is called "beam forming",
> which uses an elaborate and flat array of internal antennas to
> customize the antenna pattern. Major lobes are pointed in the

> direction of users. Nulls are pointed in the direction of
> interference. The key point is that antennas are internal and
> therefore external antennas have no place to plug in.
>
> The other type is called "spatial diversity". It uses multiple
> antennas and multiple receivers to combine reflective signal paths. In
> theory, each path is independent and carry an independent data stream.
> Combining these paths results in enhanced speeds. Note that this form
> of MIMO is all about speed, not range.
>
> It is possible to attach external antennas to a spatial diversity type
> MIMO system. However, there are limitations. You can't just install
> 3 directional antennas pointed in 3 different directions. Pointed in
> opposing directions, the antennas will simply not pickup any
> reflections. If there are any long path reflections, the delays will
> probably be excessive and the data deemed useless. Attaching a single
> antenna to a MIMO spatial diversity type router will function, but
> only at 802.11g speeds. Without the time delayed reflections, there's
> no MIMO speeds.
>
> Anyway, I don't have any suggestions on how to construct an excellent
> antenna. You haven't specified what you're trying to accomplish, what
> you have to work with, what is your operating environment, and what
> problem you're trying to solve. Different types of antennas are
> designed to solve different problems. Without a clue as to the
> problem and limitations, it's rather difficult to select a suitable
> antenna.
>
> Hint: Forget about using "N" or MIMO with external antennas. Unless
> you're trying to move video, 802.11g speeds are good enough.

Since I'm toying with a community-type of wifi network, there are
walls, and foliage, and topologies (hills and valleys) that are
effecting the way the waves work. That is why I am trying to read as
much as possible, while experimenting with an array of weird looking
antennas and putting them in various spots to try out.

The longest (world record?) for a wifi transmission is somewhere at
the 147KM, someone in South America did that. I ain't gonna try to
break it, but would be more than happy -- in fact jumping in hoops !!
-- if I can find a way to make antennas that can successfully spread
the signal. 1 or even 2 miles away.

I'd be reading up the excellent points you and so many others have
given me here, and will try to tinker a bit here and there even more.

Thanks again !!

>
> --
> Jeff Liebermann je...@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com

> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

3036. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 11:19:45 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <kdfpd4lqjiih11p04ukni588581nvrbrt8@4ax.com>
Source record: 21510

On Fri, 26 Sep 2008 02:45:59 -0700 (PDT), Penang <kalambong@gmail.com>
wrote:

>Since I'm toying with a community-type of wifi network, there are
>walls, and foliage, and topologies (hills and valleys) that are
>effecting the way the waves work.

2.4GHz wireless does not go through hills. If you plan to have
coverage in the valleys, you'll need to have a radio somewhere in the
valley. NLOS (non line of sight) radio can be made to work, but
cannot be made to stay working. It may work for a while. Then,
something is moved, and it stops working. If you want to fill in
holes, look into wireless mesh networks.
<http://www.open-mesh.com>
<http://meraki.com>

I suggest you look into sector antennas, specifically AMOS or Franklin
antennas. These are quite suitable for covering a wide flat area.
Depending on construction, the horizontal beamwidth is anywhere
between 90 and 150 degrees, with a vertical beamwidth of approximately
10 degrees. The idea is to send most of the RF toward the horizon,
and not into the air or into the ground. Gain varies from 8dBi to
perhaps 15dBi depending on type and construction.

Articles on the AMOS antenna design at:
<http://www.qsl.net/yu1aw/invertamos.pdf>
<http://www.qsl.net/yu1aw/amos_article.pdf>

AMOS and Franklin type antennas:
<http://pe2er.nl/wifisector/>
<http://yu1aw.ba-karlsruhe.de/ANT.htm>
<http://yu1aw.ba-karlsruhe.de/vhf_ant.htm>
<http://www.qsl.net/yu1aw/vhf_ant.htm>
<http://www.brest-wireless.net/gallery/AntenneAmos>
<http://www.brest-wireless.net/wiki/materiel:amos>

You'll find that there's much more to running a WISP (wireless
internet service provider) than antennas and radios. If you plan to
grow the business, you'll find that it's exactly the same as a wire
line ISP, except you have a basically unreliable method of delivery.
One leaky microwave oven will trash connectivity for a very wide area.
Like a wire line ISP, you'll need a backhaul, billing, support,
installation, service, and troubleshooting. The usual oversight is
that wire line ISP's don't make much money from connectivity. They
make their money with secondary services such as web hosting. If
customers bring their own equipment, you'll need some way to

troubleshoot *THEIR* problems and possibly charge for fixing *THEIR*
computer. You could supply the radio equipment to the customers which
will put you in the equipment leasing business. Plenty to think about
but the one that usually causes problems for startup WISP's is "who is
going to answer the phone when the customer calls to report an outage
at 2AM?" Start reading about the WISP business here:
<http://www.bbwexchange.com/wireless_internet_access/>
<http://www.bbwexchange.com/howto/>

Good luck.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3037. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 11:30:11 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <4ntuq5-2pd.ln1@p400bob.personal.cox.net>
Source record: 21511

Okay well the answer is relatively simple.

"Height is might". Antenna system should be as high as possible, clear of path obstructions and provide gain in the direction of interest. For equal coverage in all directions this generally means a vertical collinear design. The idea is to have a very small angle vertical pattern as close to horizontal as possible. (ie radiates most of its power to the horizon)

In my experience, end fed (ie at the bottom) collinear systems (especially home made ones) tend to have current imbalances in the elements such that the lower ones get slightly more than the upper ones. the result is that the pattern skews undesirably upwards at a slight angle. You also get less gain per unit length using systems that feed from one element to the next rather than (say) a number of dipoles fed directly in parallel. There is an optimum spacing between elements for best gain that is difficult to get in element to element systems.

Of course 2.4GHz antennas are harder to size accurately and test equipment can really drain the hip pocket!

If I was doing it for a community system I wouldnt bother doing antenna construction as such. I'd probably go and buy maybe 4 of a well known base design of moderate gain and stack them for gain. These may end up being in panels rather than simple verticals. Keep in mind though what you are trying to achieve and best bang for your buck. Doubling your antenna size gives best case an extra 3dB (often less) of gain. In a free space model the extra distance covered is double the distance for every 6 dB. This initially sounds good but once you are no longer line of sight, that gain is nothing compared to the losses. I dont know the 2.4GHz numbers off hand but the range numbers might be something like 5km, then 5.1km with an extra 6dB. Of course those users that have a signal already will get a slightly stronger one and thus may get a higher data rate but there will be a point where more gain and a different system design is better. Using multiple channels and WAP repeaters or bridges/links although likely bringing the bandwidth down will give you greater coverage albeit sometimes at the tradeoff of speed.

I dont have any modeling stuff for 2.4GHz networks as such. You tend to need a lot of obstructive rather than terrain data information. You can however take some photos and hand enter some near field terrain info to look like buildings. Have a look at "Radiomobile" as a prediction tool. As far as I remember it is GPL software that you will find other users have used for WiFi networks. You can see the effects of gain and height very easily and it will give you a lot of go/nogo help for particular areas you want to supply access from.

Apologies for the length!

Bob

Penang wrote:

>
> It's for a community-type wifi network, and I'm cracking my head
> trying to figure out a way to make the basestations' broadcast cover a
> wider area.
>
> I am reading all your suggestions right now and am trying as hard as
> possible to digest them all. :)

3038. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 12:49:59 UTC
From: Rectifier <redgranite_2000@yahoo.com>
Message-ID: <Z-idnSOJleXqR0HVnZ2dnUVZ_gKdnZ2d@pghconnect.com>
Source record: 21512

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:27a34116-78d4-45ec-8bf4-8e5273555f5c@c36g2000prc.googlegroups.com...
> When modelling antennas and also building them it is obvious that
> maximum gain comes about when resistance aproaches zero. Soooooooo
> common sence says that the best antenna gain comes about when the anti
> resonant point can be easily fed, wellllll thats how my antennas work.
> Unfortunatelly, the antenna was resonant on top band
> but with a very low resistance so I have to start all over again. The
> noise level did increase by 7 S units where modelling showed 9 dbi
> gain ! Maybe I should use two radiators instead of the single one. O
> well, I have to make changes so the anti resonance point is available
> at top band. David, IT IS a topsy turvy world
> so I am not available to listenning to the wobbly heads on the radio.
> Oh shame for shame
> Art

Uh, resistance? Are you talking about DC resistance? What about impedence?

You also stated, "Unfortunatelly, the antenna was resonant on top band but with a very low resistance so I have to start all over again" after saying, "maximum gain comes about when resistance aproaches zero." Which is it? Is your low resistance good nor not?

3039. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 13:15:36 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <cmkpd4511tslje2hpd4sm98d2eoqjprovj@4ax.com>
Source record: 21513

On Fri, 26 Sep 2008 06:30:11 -0500, Bob Bob <bob3bob3@suddenlink.net>
wrote:

>Okay well the answer is relatively simple.

Nothing in antenna design is simple. Mind if I disagree with a few
details?

>"Height is might". Antenna system should be as high as possible, clear
>of path obstructions and provide gain in the direction of interest.

I beg to differ, having established one (failed) WISP a few years ago.
The higher you place the antenna, the more interference from other
2.4GHz users you'll receive. The license free bands are really
polluted. Once you get high enough to get adequate coverage of the
client radios, any additional height is counterproductive as it only
increases interference pickup.

Clear of path obstructions is correct, but difficult to accomplish.
The most common screwup is insufficient Fresnel Zone clearance,
especially when it hits the ground. For example, let's pretend our
WISP is running out if his house to a similar client radio, both with
rooftop antennas. That would be about 7 meters off the ground.

Quiz: At 2.4GHz how far away can these they be before an 80% Fresnel
zone hits the ground?

Answer:
<http://www.terabeam.com/support/calculations/fresnel-zone.php>
Plugging in various ranges until I get a 7 meter Fresnel Zone radius,
I get about 2.5km range. Any further and the antenna at one (or both)
ends will need to be elevated.

>For
>equal coverage in all directions this generally means a vertical
>collinear design. The idea is to have a very small angle vertical
>pattern as close to horizontal as possible. (ie radiates most of its
>power to the horizon)

I again beg to differ. Vertical collinear antennas suck for WISP
service. Lots of problem. On omnis with sufficiently high gain, the
extremely narrow vertical radiation pattern, and the apparently
incurable uptllted pattern, results in sending the RF to various
useless directions. There are antennas with a few degrees of
downtilt, but my testing shows that they still have uptilt when
mounted on a tower outrigger.

In my never humble opinion, the proper antenna for WISP service is a
90 or 120 degree sector antenna. These offer a solution to the uptilt
problem in that they can be pointed downward without having most of
your RF go into the sky on the backside. See photo at:
<http://www.qsl.net/yu1aw/3InvAmosa7.JPG>
These are 3 antennas, connected to 3 different access points. However,
the 3 antennas could just as easily be run by a single access point,
by using a combiner/splitter, yielding plenty of gain with the
advantage of downtilt.

>In my experience, end fed (ie at the bottom) collinear systems
>(especially home made ones) tend to have current imbalances in the
>elements such that the lower ones get slightly more than the upper ones.
>the result is that the pattern skews undesirably upwards at a slight
>angle. You also get less gain per unit length using systems that feed
>from one element to the next rather than (say) a number of dipoles fed
>directly in parallel. There is an optimum spacing between elements for
>best gain that is difficult to get in element to element systems.

Yep. However, it's not an "imbalance" that causes the problem. End
fed vertical collinear antennas belch half of the RF from the first
1/2 wave dipole near the connector. 1/4th or half of what's left
comes out next half wave section. 1/8 of the RF from the next section
and so on ad infinitum. what that means is that there's not much RF
left by the time the you get to the tip of the antenna. It's for this
reason that I like to mount my end fed omnis upside down on the tower
outrigger. This is often vetoed by the tower aesthetics committee but
when I get my way, it works very nicely.

Incidentally, the uptilt problem is mostly solved by some commercial
omni antennas with a center fed collinear dipole arrangement inside
the fiberglass tube. This is common at VHF/UHF frequencies but I
haven't seen it at 2.4GHz.

>Of course 2.4GHz antennas are harder to size accurately and test
>equipment can really drain the hip pocket!

Bah. The stuff costs money but there's no need to buy state of the
art hardware. A good RF sweep generator, direction coupler, diode
detector, general purpose oscilloscope, marker generator, and a mess
of coax cables, adapters, and terminators, are usually sufficient:
<http://802.11junk.com/jeffl/pics/home/slides/BL-shop5.html>
The HP8620A sweep generator is fine (but my 2-4GHz plug needs work).
There are two Wiltron 610D sweep generators behind the pile. I don't
recall what I paid for all the sweepers, but it wasn't huge.

The real key to sweeping the antenna is in the directional coupler or
VSWR bridge. Good ones are expensive and easy to destroy. So, build
your own for just 2.4Ghz:
<http://pe2er.nl/wifiswr/>

>If I was doing it for a community system I wouldnt bother doing antenna
>construction as such.

Maybe. Commercial sector antennas are somewhat expensive.
<http://www.superpass.com/2400-2483M.html>
It's a marginal proposition to build your own for just the base
stations. However, if I were supplying client radios for the
customers, I would certainly consider rolling my own to save a few
dollars per install.

>I dont know the
>2.4GHz numbers off hand but the range numbers might be something like
>5km, then 5.1km with an extra 6dB. Of course those users that have a
>signal already will get a slightly stronger one and thus may get a
>higher data rate but there will be a point where more gain and a
>different system design is better. Using multiple channels and WAP
>repeaters or bridges/links although likely bringing the bandwidth down
>will give you greater coverage albeit sometimes at the tradeoff of speed.

Using repeaters (range extenders) or mesh networks also has the
disadvantage of hogging air time. With a single channel store and
forward repeater, it takes twice the air time to move a single packet
between link endpoints. That's not a big deal in an isolated client,
but with a heavily used and high access point, it can easily be
considered a form of interference. Wireless is a shared medium. If
there are packets flying through the air because of repeaters, they
will reduce the available air time rather rapidly. Such repeaters
also have a lousy delivery success rate, resulting in retransmissions,
which reduce the available air time even more.

Speed is also an issue, but for a non-obvious reason. In such a
shared environment, you want each transmission to occupy as little air
time as possible. That means you have to send your data as fast as
possible. Signal strength and maximum speed are directly related (all
else being equal). The last thing you need is a customer stuck at the
minimum 1Mbit/sec and monopolizing a disproportionate amount of air
time. I setup mine to do 802.11g OFDM modes only and to ignore all
802.11b speeds. That gives me a 6Mbit/sec minimum OFDM speed, which
uses approx 6 times less air time than 1Mbit/sec. It also changed
having all the beacons and broadcasts from 1Mbit/sec to 6Mbits/sec.
When possible, I like to use fixed data rates, typically 12Mbits/sec
or more.

>I dont have any modeling stuff for 2.4GHz networks as such. You tend to
>need a lot of obstructive rather than terrain data information. You can
>however take some photos and hand enter some near field terrain info to
>look like buildings. Have a look at "Radiomobile" as a prediction tool.
>As far as I remember it is GPL software that you will find other users
>have used for WiFi networks. You can see the effects of gain and height
>very easily and it will give you a lot of go/nogo help for particular
>areas you want to supply access from.

Yep. Great program. I use it often:
<http://www.cplus.org/rmw/english1.html>
However, it's only as good as the topographic data. Most commonly
available (for the US) are the SRTM v2 data at 1 arc second (30

meters). That's good enough for doing general topography (mountains and valleys) but not good enough for doing urban canyons and small neighborhood WLAN's. Data for the rest of the world varies by country, but most of it seems to be 10 times less resolution.

>Apologies for the length!

I won't apologize for my length. I'm partial to details and explanations over the all too common one-line quips and cute remarks devoid of any useful content.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3040. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 14:51:11 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <a7f1fca3-2666-4e08-897d-23693866aacf@26g2000hsk.googlegroups.com>
Source record: 21514

On Sep 25, 6:59 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Jim Lux wrote:
> > The magnetic north pole being in (or close to) Canada, the Canadians
> > have a quasi-proprietary interest, and they have one of the better
> > websites:
> >http://gsc.nrcan.gc.ca/geomag/nmp/northpole_e.php
> >http://gsc.nrcan.gc.ca/geomag/nmp/long_mvt_nmp_e.phphas a map showing
> > the movement. Indeed, one prediction shows that in 2050 it will be off
> > the Siberian coast.
>
> > Interesting also how it moves around 85km a day, in a diurnal variation.
>
> Yes. Perhaps that relates to what Art was asking about.
>
> > Among other things:
> > Many authors have pointed out that the dipole part of the magnetic field
> > has been weakening during historic times, and that if the present trend
> > continues, the dipole field will go to zero in roughly 1500 years. Some
> > people take this to mean that we are entering a reversal.
>
> Maybe Al Gore should look into this. Cheryl Crow could do a college tour.
>
> Good links, Jim. Thanks.
>
> ac6xg

Anyone notice the movement of the poles matches up pretty well with Al
Gores "hockey stick graph".

Jimmie

3041. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 14:58:41 UTC
From: JB <nospam@goofball.net>
Message-ID: <BM6Dk.25$kI6.24@nwrddc01.gnilink.net>
Source record: 21515

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gbhib5$b5s$1@news.albasani.net...
> Jeff Liebermann wrote:
>
> >
> > Sorta. I guess you haven't bought any CAT6 lately. I just blew $170
> > for a 1000ft roll of CAT6 at Home Depot. Add in, wall plates, RJ45
> > jacks, and jumpers, and I can probably buy 4 or 5 wireless routers for
> > the price.
>
> Cat vs. WiFi?
>
> Isn't that kinda like comparing a hardwired phone with a cell? One I
> can do without, the other I can't ...
>
> Regards,
> JS
>
You both missed the point. What are you going to do with 4 or 5 wireless routers stacked on top of a 8 port switch? I was talking about losses of cat6 vs. expensive infrastructure. I hope nobody was thinking that 1000' of hardline and connectors would be cheaper.

Really though, Jeff stated earlier that there is more to it than radios and antennas. We had a community WISP out here. About as much headache as running a cable company. If you are setting up for an IT show or if money is no object, no problem. If you are trying to make a little money, I hope there is a lot of dissatisfaction with the other ISPs in town. The one here got bought out by major players and everyone went away.

What does he mean by community? A small town? A campus? A truck stop? Unless it's a truck stop or food court, you will probably need a constellation of AP's and all the network and coverage optimizing and diagnostics to go with that.

Looking for advise here will probably give you a bigger headache What you need is 4 or 5 bright stars to build out and run it for you.

3042. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 15:16:47 UTC
From: JB <nospam@goofball.net>
Message-ID: <z17Dk.27$kI6.0@nwrddc01.gnilink.net>
Source record: 21516

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gbhis6bjn1@news.albasani.net...
> Danny Richardson wrote:
>
> > ...
> > Howard,
> >
> > Before you go sailing off into space on the GRV check this out.
> >
> > http://www.degendesigns.com/Downloads/TheEasyWay.PDF
> >
> > Danny, k6mhe
>
> Now that paper is an odd mix of fact and fantasy ... first time I have
> ever seen that particular brand of obsfucation ...
>
> Regards,
> JS
>
I had a hard time separating what he actually thought from what he was
complaining about.

I find that even if go to great pains to be extremely clear and eliminate
all distractions from a document, and write for a 6th grade reading level,
only 10% will actually get it. Some will cling to a word that has special
meaning to them and go on a wild tangent and some will only get 3 or 4 words
out of it, throw away the context and quote those words.

3043. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 15:21:21 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <67630994-e9b3-4b5d-8462-3a5123615e35@m36g2000hse.googlegroups.com>
Source record: 21517

On Sep 26, 7:49 am, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:27a34116-78d4-45ec-8bf4-8e5273555f5c@c36g2000prc.googlegroups.com...
>
> > When modelling antennas and also building them it is obvious that
> > maximum gain comes about when resistance aproaches zero. Soooooooo
> > common sence says that the best antenna gain comes about when the anti
> > resonant point can be easily fed, wellllll thats how my antennas work.
> > Unfortunatelly, the antenna was resonant on top band
> > but with a very low resistance so I have to start all over again. The
> > noise level did increase by 7 S units where modelling showed 9 dbi
> > gain ! Maybe I should use two radiators instead of the single one. O
> > well, I have to make changes so the anti resonance point is available
> > at top band. David, IT IS a topsy turvy world
> > so I am not available to listenning to the wobbly heads on the radio.
> > Oh shame for shame
> > Art
>
> Uh, resistance? Are you talking about DC resistance? What about impedence?
>
> You also stated, "Unfortunatelly, the antenna was resonant on top band but
> with a very low resistance so I have to start all over again" after saying,
> "maximum gain comes about when resistance aproaches zero." Which is it? Is
> your low resistance good nor not?

I feed antennas with a resistive feads without reactance, when it
becomes an impedance I retune or should I say the radio retunes
the antenna to make it resistive
to make it resistive

3044. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 15:24:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbiurr$n1$1@news.albasani.net>
Source record: 21518

JB wrote:

>> ...
> You both missed the point. What are you going to do with 4 or 5 wireless
> routers stacked on top of a 8 port switch? I was talking about losses of
> cat6 vs. expensive infrastructure. I hope nobody was thinking that 1000' of
> hardline and connectors would be cheaper.
> ...

No, I don't think so. THE POINT is that the guy asked about particular antennas. NOT for my advise on his plans, his love life, his Taro Card reading, etc.

Now we are clear out here where you are advising him what is possible, what equipment he should use, etc. What might be impossible. What well be too expensive. That he might find he may have to make adjustments to his original plan/design, etc.

I simply assume he can either handle it, or find these things out on the way and have some interesting fun in solving the problems ...

I just don't see the same shoebox you do ...

Regards,
JS

3045. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 15:49:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b6e1b310-1885-48d1-b5fc-e3197391f7d4@25g2000hsx.googlegroups.com>
Source record: 21519

On Sep 26, 7:49 am, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:27a34116-78d4-45ec-8bf4-8e5273555f5c@c36g2000prc.googlegroups.com...
>
> > When modelling antennas and also building them it is obvious that
> > maximum gain comes about when resistance aproaches zero. Soooooooo
> > common sence says that the best antenna gain comes about when the anti
> > resonant point can be easily fed, wellllll thats how my antennas work.
> > Unfortunatelly, the antenna was resonant on top band
> > but with a very low resistance so I have to start all over again. The
> > noise level did increase by 7 S units where modelling showed 9 dbi
> > gain ! Maybe I should use two radiators instead of the single one. O
> > well, I have to make changes so the anti resonance point is available
> > at top band. David, IT IS a topsy turvy world
> > so I am not available to listenning to the wobbly heads on the radio.
> > Oh shame for shame
> > Art
>
> Uh, resistance? Are you talking about DC resistance? What about impedence?
>
> You also stated, "Unfortunatelly, the antenna was resonant on top band but
> with a very low resistance so I have to start all over again" after saying,
> "maximum gain comes about when resistance aproaches zero." Which is it? Is
> your low resistance good nor not?

No. I have difficulty in feeding near zero resistances. I opt to feed
high resistive loads without regard
to SWR I just do not want a reactive load for transmitting. For
receiving the low resistance or even impedance
really is of no concernl. When I design a antenna say for top band I
want the near zero resitive load point to be about
the low end of the broadcast band which allows for coverage of all the
top band but makes the 80 metre band centered around the zero mark!.
The beam that I am building is not aimed at small volume but of a 4
foot antenna of ultra lightness so I can use a a pan and tilt
mechanism as used with CCD cameras. By the way this particular antenna
is an attempt to make one continous lobe for 180 degrees of a narrow
width without nulls. If this is successfull I will then place a dish
reflector(probably about 3 to 6 ft diameter depending on weight)
behind it and call it a day for the winter.
I promised to make a antenna for somebody so this continual testing
game just has to come to a halt
Regards

Art
I understand your reluctance to move away from the term impedance but
I prefer to refer to resistance in the absence of reactance.

3046. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 15:52:07 UTC
From: JB <nospam@goofball.net>
Message-ID: <Hy7Dk.15$Dk4.13@nwrddc02.gnilink.net>
Source record: 21520

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:67630994-e9b3-4b5d-8462-3a5123615e35@m36g2000hse.googlegroups.com...
On Sep 26, 7:49 am, "Rectifier" <redgranite_2...@yahoo.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:27a34116-78d4-45ec-8bf4-8e5273555f5c@c36g2000prc.googlegroups.com...
>
> > When modelling antennas and also building them it is obvious that
> > maximum gain comes about when resistance aproaches zero. Soooooooo
> > common sence says that the best antenna gain comes about when the anti
> > resonant point can be easily fed, wellllll thats how my antennas work.
> > Unfortunatelly, the antenna was resonant on top band
> > but with a very low resistance so I have to start all over again. The
> > noise level did increase by 7 S units where modelling showed 9 dbi
> > gain ! Maybe I should use two radiators instead of the single one. O
> > well, I have to make changes so the anti resonance point is available
> > at top band. David, IT IS a topsy turvy world
> > so I am not available to listenning to the wobbly heads on the radio.
> > Oh shame for shame
> > Art
>
> Uh, resistance? Are you talking about DC resistance? What about impedence?
>
> You also stated, "Unfortunatelly, the antenna was resonant on top band but
> with a very low resistance so I have to start all over again" after
saying,
> "maximum gain comes about when resistance aproaches zero." Which is it? Is
> your low resistance good nor not?

I feed antennas with a resistive feads without reactance, when it
becomes an impedance I retune or should I say the radio retunes
the antenna to make it resistive
to make it resistive

OK Art. I hate to put it this way, but you really need to take a course or
two to get on the same page and be understood in these subjects. Even a few
nights with the ARRL Handbook may help bridge the gap.

For instance. With Lumped Constants, when inductive reactance and
capacitive reactance are equal, the circuit is in resonance. Any series
resistance in the circuit will become a significant load and result in loss.
In an antenna, there will be a characteristic impedance of the feed point.
Although it may include the loss resistance, other factors determine that
impedance. Since there are nodes of high and low impedance on the antenna,
the feed point may be modified or relocated for different impedance. Also

because of the nodes, there will be high and low currents along the antenna. Where the current is high, the losses in the resistance will be greater and most greatly affect the Q.

3047. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 16:15:20 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <98b2a6e2-8371-4368-9457-76fc27cb3f1a@l42g2000hsc.googlegroups.com>
Source record: 21521

On Sep 26, 10:52 am, "JB" <nos...@goofball.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:67630994-e9b3-4b5d-8462-3a5123615e35@m36g2000hse.googlegroups.com...
> On Sep 26, 7:49 am, "Rectifier" <redgranite_2...@yahoo.com> wrote:
>
>
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >news:27a34116-78d4-45ec-8bf4-8e5273555f5c@c36g2000prc.googlegroups.com...
>
> > > When modelling antennas and also building them it is obvious that
> > > maximum gain comes about when resistance aproaches zero. Soooooooo
> > > common sence says that the best antenna gain comes about when the anti
> > > resonant point can be easily fed, wellllll thats how my antennas work.
> > > Unfortunatelly, the antenna was resonant on top band
> > > but with a very low resistance so I have to start all over again. The
> > > noise level did increase by 7 S units where modelling showed 9 dbi
> > > gain ! Maybe I should use two radiators instead of the single one. O
> > > well, I have to make changes so the anti resonance point is available
> > > at top band. David, IT IS a topsy turvy world
> > > so I am not available to listenning to the wobbly heads on the radio.
> > > Oh shame for shame
> > > Art
>
> > Uh, resistance? Are you talking about DC resistance? What about impedence?
>
> > You also stated, "Unfortunatelly, the antenna was resonant on top band but
> > with a very low resistance so I have to start all over again" after
> saying,
> > "maximum gain comes about when resistance aproaches zero." Which is it? Is
> > your low resistance good nor not?
>
> I feed antennas with a resistive feads without reactance, when it
> becomes an impedance I retune or should I say the radio retunes
> the antenna to make it resistive
> to make it resistive
>
> OK Art. I hate to put it this way, but you really need to take a course or
> two to get on the same page and be understood in these subjects. Even a few
> nights with the ARRL Handbook may help bridge the gap.
>
> For instance. With Lumped Constants, when inductive reactance and

> capacitive reactance are equal, the circuit is in resonance. Any series
> resistance in the circuit will become a significant load and result in loss.
> In an antenna, there will be a characteristic impedance of the feed point.
> Although it may include the loss resistance, other factors determine that
> impedance. Since there are nodes of high and low impedance on the antenna,
> the feed point may be modified or relocated for different impedance. Also
> because of the nodes, there will be high and low currents along the antenna.
> Where the current is high, the losses in the resistance will be greater and
> most greatly affect the Q.

I do not have any lumped constants. Maxwell's laws do not include
lumped loads only
distributed loads and my antennas revolve solely around the laws of
Maxwell which
being based on equilibrium includes all four forces of the standard
model
I have no problem with your suggestion, it is that I am just to busy
at what I do.
True ,you can feed at any point but there are penalties with that
aproach which I don't want to mess with,
I prefer to have continual tuning or adjustment at the antenna. Just a
reminder but my design is not
focussed around a planar form that concentrates on inter coupling of
radiators .
Best regards no offence taken
Art

3048. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 16:44:55 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <ge8Dk.49376$XB4.49319@bignews9.bellsouth.net>
Source record: 21522

"Art Unwin" wrote:
>I do not have any lumped constants. Maxwell's laws do not include
>lumped loads only distributed loads and my antennas revolve solely
>around the laws of Maxwell which being based on equilibrium
>includes all four forces of the standard model

Art:
Of course you have lumped elements in your "antenna". You have
a shoebox full of wire, fashoned into contra-wound coils. Also, the
tuning device you described is a variometer, again replete with COILS.
These coils constitute "lumped constants", as you call them.
Mistakes like this show that your equilibrium is tilted.

Mike W5CHR
Memphis Tenn

3049. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 17:08:03 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9n3qd4tf9bnf5pc80rdd0b8quuls83gbtm@4ax.com>
Source record: 21523

On Thu, 25 Sep 2008 19:44:50 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Jeff Liebermann wrote:
>> Sorta. I guess you haven't bought any CAT6 lately. I just blew $170
>> for a 1000ft roll of CAT6 at Home Depot. Add in, wall plates, RJ45
>> jacks, and jumpers, and I can probably buy 4 or 5 wireless routers for
>> the price.
>
>Cat vs. WiFi?

Sure. We had a neighborhood LAN/WLAN for many years. It started out
as a neighborhood bootleg satellite TV and CATV distribution system in
the 1970's. Over the years, conduit, fiber, RG-6/u, CAT5, and
wireless were added. It does some TV, internet, VoIP, bungler alarm,
intercom, neighborhood watch, surveillance, and gaming[1]. I built
most of it myself. At it's height, we had about 15 houses wired into
the system (all sharing one DSL line). Health issues and general
laziness are limiting my ability and time to do installs, repairs,
troubleshooting, and cable chewing squirrel abatement. The price and
availability of DSL and cable had made it easy for individual owners
to get their own services. Due to the dense Redwood, Oak, and Douglas
Fir forest, wireless was rather problematic between some houses. So,
I resorted to horizontal drilling under the road, conduit, and lots of
scrap CAT5. There was no problem running 900ft between switched ports
as long as I kept the line protocol to 10baseT HDX.

The roll of CAT6 I previously mentioned is for rewiring a clients
office for all gigabit ethernet. Pricewise, is still cheaper than
fiber at gigabit rates.

>Isn't that kinda like comparing a hardwired phone with a cell? One I
>can do without, the other I can't ...

Maybe. The CTIA notes that 15% or more of cell phone use the cell
phone as their sole means of voice communications. (That's wrong
because they only consider if they do NOT also have a conventional
POTS line and ignore VoIP over broadband). Still, it's a growing
number that have elected to consider cellular as essential. Like all
analogies, the wired versus wi-fi will fall apart if you dig deep
enough. Still, there are sufficient similarities in function where
they can be considered alternatives.

I have a customer with a mostly wireless office. Everything from
desktop to 4 line phones are wireless. That's because the ancient
Victorian nightmare of a building they're in has no place to run CAT5

except the OUTSIDE of the building:
<http://802.11junk.com/jeffl/pics/drivel/slides/SCZ%20Victorian%20wiring%20mess.html>
The cost of running surface conduit either inside or outside was
prohibitive, so they went wireless.

I'm drifting off topic here, so let me get back to the original
"community" network. Running copper or fiber is an option if the
community is small enough, the local authorities are cooperative, and
density is high enough to avoid long runs. It's been done in small
towns and planned communities many times. It's far more cost
effective than wireless, mostly because wireless does not scale very
well. The same high density systems that work so well with wired
networking, cause interference and capacity issues with wireless. On
the negative side, copper has become so valuable, that running it in
3rd world countries has become a futile exercise. It will be stolen
as soon as it's installed. That's one reason that wireless phone
penetration in 3rd world countries tends to be very high, the
alternatives just don't work.

There's lots more to wired versus wireless, but this is not the time
or place to discuss them. If the "community" is huge, and copper is
not an alternative, then use Wi-Max, not Wi-Fi. If the community is
like my miniature neighborhood LAN/WLAN, use whatever his handy
including Wi-Fi.

[1] Just before its demise, my biggest problem was a bumper crop of
12-14 year olds, turning the system into a big chat room and gaming
network.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3050. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 17:24:47 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <os5qd4p1krbgn9jeb54r1vsalnob4sdlqb@4ax.com>
Source record: 21524

On Fri, 26 Sep 2008 15:16:47 GMT, "JB" <nospam@goofball.net> wrote:

>I had a hard time separating what he actually thought from what he was
>complaining about.

I have yet to read what problem he's trying to solve. There has to be
a reason for all that effort.

>I find that even if go to great pains to be extremely clear and eliminate
>all distractions from a document, and write for a 6th grade reading level,
>only 10% will actually get it. Some will cling to a word that has special
>meaning to them and go on a wild tangent and some will only get 3 or 4 words
>out of it, throw away the context and quote those words.

I think a 10 year old level is more appropriate. It's roughly what TV
shows try to target.

Topic drift is a problem, but boilplate solutons are what drive the
technical newgroups and mailing lists. Whenever someone asks a
question, the vocal experts are usually first to misinterpret the
question and provide their favorite boilerplate answer. In my case,
it doesn't matter what antenna problem you're having, a computer model
will provide the answer. Lots of other approaches (careful
measurement, ignore VSWR and use a field strength meter, etc) that
vary with the person providing the analysis and boilerplate. OF
course, the answer never completely solves the original problem, so
the discussion drifts off into optimizing the computer model, instead
of fixing the antenna problem. My guess is about 3 back and forth
postings and the original topic is lost. Kinda like this posting.

Anyway, I've never used or built a G5RV, know nothing about the
antenna type, and propose building a computer model of the antenna,
supporting structure, and nearby buildings, that will solve any
problem with a G5RV, including operating it on bands for which it was
never designed.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3051. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 17:30:36 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <80915cad-2b12-4860-b438-3eac88e9a550@8g2000hse.googlegroups.com>
Source record: 21525

On Sep 26, 11:44 am, "Mike Lucas" <w5...@bellsouth.net> wrote:
> "Art Unwin" wrote:
> >I do not have any lumped constants. Maxwell's laws do not include
> >lumped loads only distributed loads and my antennas revolve solely
> >around the laws of Maxwell which being based on equilibrium
> >includes all four forces of the standard model
>
> Art:
>   Of course you have lumped elements in your "antenna". You have
> a shoebox full of wire, fashoned into contra-wound coils. Also, the
> tuning device you described is a variometer, again replete with COILS.
> These coils constitute "lumped constants", as you call them.
> Mistakes like this show that your equilibrium is tilted.
>
> Mike W5CHR
> Memphis Tenn

If you say so
Rectifier
I am having a rethink on where to feed it aproach. Have to sleep on it
I will keep hold of that antenna but I am working on the winter one at
the moment
Regards
Art

3052. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 17:37:35 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbjami$16f$1@news.service.uci.edu>
Source record: 21527

Richard Clark wrote:

> Polar reversals are now the patent of the Republican party when the
> White House tells us the private finance market can't do the job as
> well as the government.

We seem to have touched a nerve. :-)

ac6xg

3053. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 17:54:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9r7qd4lo1ov0563m08k0vlbp2p2s43bjg2@4ax.com>
Source record: 21526

On Thu, 25 Sep 2008 17:37:51 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>>> people take this to mean that we are entering a reversal.
>>
>>Maybe Al Gore should look into this. Cheryl Crow could do a college tour.
>
>Polar reversals are now the patent of the Republican party

What a difference less than 12 hours makes when the Republican party
now claims both poles to the solution to the financial market crisis.

McCain is screwed either way (but in all honesty, at that grand table
in the White Hovel he was already the turkey center piece); wonder
what his vice-muffin, Sara Lee, would do? Carve?

73's
Richard Clark, KB7QHC

3054. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 19:40:23 UTC
From: JB <nospam@goofball.net>
Message-ID: <HUaDk.63$Dk4.7@nwrddc02.gnilink.net>
Source record: 21528

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:80915cad-2b12-4860-b438-3eac88e9a550@8g2000hse.googlegroups.com...
On Sep 26, 11:44 am, "Mike Lucas" <w5...@bellsouth.net> wrote:
> "Art Unwin" wrote:
> >I do not have any lumped constants. Maxwell's laws do not include
> >lumped loads only distributed loads and my antennas revolve solely
> >around the laws of Maxwell which being based on equilibrium
> >includes all four forces of the standard model
>
> Art:
> Of course you have lumped elements in your "antenna". You have
> a shoebox full of wire, fashoned into contra-wound coils. Also, the
> tuning device you described is a variometer, again replete with COILS.
> These coils constitute "lumped constants", as you call them.
> Mistakes like this show that your equilibrium is tilted.
>
> Mike W5CHR
> Memphis Tenn

-If you say so
-Rectifier
-I am having a rethink on where to feed it aproach. Have to sleep on it
-I will keep hold of that antenna but I am working on the winter one at
-the moment
-Regards
-Art

I merely used Lumped Constants as an example to describe the relationship between Inductive and Capacitive reactance, resistance, then to go on and show how it is differently applied to antennas and impedance. Where to feed it is exactly the point in providing a transition between the feedline and antenna. For example: Lumped Constants in an antenna tuner not only adjust reactance by providing the conjugate reactance to whatever is presented at its input terminals, but also adjusts impedance, akin to adjusting where the current minima and maxima will be in relation to the tuner's output terminals. There are a great many ways to physically do that, either by linear loading, lumped constants, transmission lines, transitions, transformers. Look into the feed methods used for Yagis.

3055. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 20:16:06 UTC
From: Dave <noone@nowhere.com>
Message-ID: <aqbDk.70$Dk4.32@nwrddc02.gnilink.net>
Source record: 21529

"JB" <nospam@goofball.net> wrote in message
news:HUaDk.63$Dk4.7@nwrddc02.gnilink.net...
> Look into the feed methods used for Yagis.
>

now you've done it... now you will be on art's hit list. anything to do with the infamous 1 dimensional yagi antenna is the root of all evil that holds us hostage to old ways and prevents us from following in art's divine footsteps. after all, his 3d optimized diamagnetic anti-gravity static netrino tilted shoebox full of wire in front of a 3' reflector would outperform any yagi design on any band! Of course he still hasn't figured out how my 3d antenna made out of ferromagnetic materials could possibly radiate without his jumping static netrinos all over it.

3056. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 20:23:31 UTC
From: richardharrison@webtv.net
Message-ID: <1006-48DD44C3-3121@storefull-3252.bay.webtv.net>
Source record: 21530

Art Unwin wrote:
"When modelling antennas and also building them it is obvious that
maximum gain comes about when resistance approaches zero."

Terman says that is true of so called super-gain antenns and results in
losses in trying to feed them.

On page 907 of his 1955 opus, "Electronic and Radio Engineering" Terman
wrote:
"The Yagi antenna of Fig.23-39, and the corner reflector, represent
about the best that can be achieved in a practical way with respect to
directive gain in a compact antenna array."

When Art proves with numbers that he has bested Terman`s statement I
sure want to hear about it.

Best regards, Richard Harrison, KB5WZI

3057. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 20:30:46 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbjl7l$77n$1@news.service.uci.edu>
Source record: 21537

Richard Clark wrote:
> On Fri, 26 Sep 2008 10:37:35 -0700, Jim Kelley <jwkelley@uci.edu>
> wrote:
>
>> Richard Clark wrote:
>>
>>> Polar reversals are now the patent of the Republican party when the
>>> White House tells us the private finance market can't do the job as
>>> well as the government.
>> We seem to have touched a nerve. :-)
>
> That's what Galvani said about the frog's leg.

Yes, but I don't think he wasn't referring to you. Was he?

73, AC6XG :-)

3058. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 20:52:20 UTC
From: richardharrison@webtv.net
Message-ID: <1007-48DD4B84-605@storefull-3252.bay.webtv.net>
Source record: 21531

Richard Clark wrote:
"----wonder what his vice-muffin, Sara Lee, would do? Carve?"

Careful. Remember "Nobody doesn`t like Sara Lee!"

Best regards, Richard Harrison, KB5WZI

3059. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 21:09:36 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c6b9723a-31b9-4ca7-af6d-db98f2648984@25g2000hsx.googlegroups.com>
Source record: 21532

On Sep 26, 3:16 pm, "Dave" <no...@nowhere.com> wrote:
> "JB" <nos...@goofball.net> wrote in message
>
> news:HUaDk.63$Dk4.7@nwrddc02.gnilink.net...
>
> > Look into the feed methods used for Yagis.
>
> now you've done it... now you will be on art's hit list. anything to do
> with the infamous 1 dimensional yagi antenna is the root of all evil that
> holds us hostage to old ways and prevents us from following in art's divine
> footsteps. after all, his 3d optimized diamagnetic anti-gravity static
> netrino tilted shoebox full of wire in front of a 3' reflector would
> outperform any yagi design on any band! Of course he still hasn't figured
> out how my 3d antenna made out of ferromagnetic materials could possibly
> radiate without his jumping static netrinos all over it.

David I have used Yagi's for decades. Nothing wrong with them, they
harfest more than 90%
of radiation available and are directive and very easy to make. What I
am pursueing is a different aproach to radiation
in an effort to make smaller and efficient antennas without resorting
to fractional wavelength.
It should not matter to you if I succeed or not. We have had many
years of the Yagi without much improvement so I am turning antennas on
its head
and starting again from where the Masters put their ideas together.
Maxwell just played with numbers and equations supplied to him by the
forerunners
he just wasn't interested in equilibrium he was interested in the
interplay of numbers only. It is our good luck that all the
forerunners included the consequences of equilibrium in all their
functions so whether Maxwell was interested or not the equilibrium
format was included whether he understood that or not. Now you and
everybody else knows that computor programs were built solely around
Maxwells laws with the condition of equilibrium. Whether you like it
or not the program had to be extended so it was of use to amateurs who
used intercoupling of elements as a short cut to approximations of
radiation which foirtunatelly are quite good such that we have become
lazy in poursueing the laws of the Universe on the assumption that
there is no such
thing as a Universal law. I believe there is a universal law and I
will not be detered from that search from the likes of you who
apparently solved all the laws of nature before I started. If nyou got
there then so can I

Have a happy week end and for goodness sake quit the drinking and
savore the World as it is
Regards
Arti

3060. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 21:14:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e6jqd49te3rvmf3d217m1okeco0i6n88n5@4ax.com>
Source record: 21534

On Fri, 26 Sep 2008 10:37:35 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Richard Clark wrote:
>
>> Polar reversals are now the patent of the Republican party when the
>> White House tells us the private finance market can't do the job as
>> well as the government.
>
>We seem to have touched a nerve. :-)

That's what Galvani said about the frog's leg. Republicans merely polished the science of that jerk-reflex and both sides of the same party are tugging hard on our wallet - not just touching. And in the middle of it all, McCain sat through the crisis meeting like he had suffered a brain aneurysm.

At least he got to nominate his own night-nurse to change the silver drool cup this evening. Our first presidential candidate on life-support.... Sara Jane may try an experiment with silver and copper forks on him to get him to twitch for the cameras - if she can find any nerve, that is.

73's
Richard Clark, KB7QHC

3061. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 21:15:16 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ebcd21f3-c43a-45b3-acfc-d9fc168d6bfa@25g2000hsx.googlegroups.com>
Source record: 21533

On Sep 26, 3:23 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art Unwin wrote:
>
> "When modelling antennas and also building them it is obvious that
> maximum gain comes about when resistance approaches zero."
>
> Terman says that is true of so called super-gain antenns and results in
> losses in trying to feed them.
>
> On page 907 of his 1955 opus, "Electronic and Radio Engineering" Terman
> wrote:
> "The Yagi antenna of Fig.23-39, and the corner reflector, represent
> about the best that can be achieved in a practical way with respect to
> directive gain in a compact antenna array."
>
> When Art proves with numbers that he has bested Terman`s statement I
> sure want to hear about it.
>
> Best regards, Richard Harrison, KB5WZI

Read the statement carefully. It is his opinion not a given fact and
he was very clear about that
and now he is dead! He cannot keep up with the advances of science
such that he can refine his past thinking

3062. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 21:37:17 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7071332c-3add-4744-bbe8-6300ab2244fe@c65g2000hsa.googlegroups.com>
Source record: 21535

On Sep 26, 2:40 pm, "JB" <nos...@goofball.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:80915cad-2b12-4860-b438-3eac88e9a550@8g2000hse.googlegroups.com...
> On Sep 26, 11:44 am, "Mike Lucas" <w5...@bellsouth.net> wrote:
>
> > "Art Unwin" wrote:
> > >I do not have any lumped constants. Maxwell's laws do not include
> > >lumped loads only distributed loads and my antennas revolve solely
> > >around the laws of Maxwell which being based on equilibrium
> > >includes all four forces of the standard model
>
> > Art:
> > Of course you have lumped elements in your "antenna". You have
> > a shoebox full of wire, fashoned into contra-wound coils. Also, the
> > tuning device you described is a variometer, again replete with COILS.
> > These coils constitute "lumped constants", as you call them.
> > Mistakes like this show that your equilibrium is tilted.
>
> > Mike W5CHR
> > Memphis Tenn
>
> -If you say so
> -Rectifier
> -I am having a rethink on where to feed it aproach. Have to sleep on it
> -I will keep hold of that antenna but I am working on the winter one at
> -the moment
> -Regards
> -Art
>
> I merely used Lumped Constants as an example to describe the relationship
> between Inductive and Capacitive reactance, resistance, then to go on and
> show how it is differently applied to antennas and impedance. Where to feed
> it is exactly the point in providing a transition between the feedline and
> antenna. For example: Lumped Constants in an antenna tuner not only adjust
> reactance by providing the conjugate reactance to whatever is presented at
> its input terminals, but also adjusts impedance, akin to adjusting where the
> current minima and maxima will be in relation to the tuner's output
> terminals. There are a great many ways to physically do that, either by
> linear loading, lumped constants, transmission lines, transitions,
> transformers. Look into the feed methods used for Yagis.

Mike I am not a total newby to antennas. I understand them in my own
way very well.I obviously have a problem in communication

I am changing the dimensional structure purely to get the anti
resonant point at the center of the top band instead of the standard
resonant point
which is too low to realistically to use. Now the antiresonant point
will be between 100 and 200 ohms resistive which allows me to feed it
directly from a 50 ohm transmission line (3/4 andrews) with negligable
losses as the mismatch is resistive. Past work and experimental
results lead me to belive I have a beam for top band with approx 9/10
dbi gain when a reflector is not used. Now who in the World would
throw away the thought of such a antenna because
of the silly aproach of old timers who consider all is known otherwise
they would have changed things a long while ago? The design with all
info will eventually appear on my page. Up to now I have tried to
share everything but old timers on retirement close their minds and
cannot abide change.
If I see from past postings that a dialog could be rewarding I will
respond but they are few and far between. There has not been one
person on this newsgroup over the last few years who is able to look
at a Gaussian field with an applied time varient field and a radiator
and mathematically prove that the results are the same as Maxwell.
True the units are different between Gauss and Maxwell but to deny the
mathematical equivalence without doing the math is unconciousable
Art
Regards
Art

3063. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 21:42:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbjkvi$q7q$1@news.albasani.net>
Source record: 21536

JB wrote:

> ...
> I feed antennas with a resistive feads without reactance, when it
> becomes an impedance I retune or should I say the radio retunes
> the antenna to make it resistive
> to make it resistive
>> ...

Oh yeah, me too!

I like to through in some lossy L or a bit of lossy C, then provide the opposite j to cancel ... wonderful ... however, there are other alternatives.

Regards,
JS

3064. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 21:54:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbjlna$r1s$1@news.albasani.net>
Source record: 21538

John Smith wrote:

> ...
> I like to through in some lossy L or a bit of lossy C, then provide the
>> ...
> Regards,
> JS

Oh yeah, too, through = throw; but then, you already knew that ... I
just make those mistakes/typos to keep me humble ... <grin>

Regards,
JS

3065. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 22:13:07 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gbjmptiku1@aioe.org>
Source record: 21539

"Art Unwin" wrote
>... Now the antiresonant point will be between 100 and 200 ohms
>resistive which allows me to feed it directly from a 50 ohm
>transmission line (3/4 andrews) with negligable losses as
>the mismatch is resistive.

Art -

An antenna with an input impedance of 150 + j 0 ohms has a reflection coefficient of 0.5 (50%), a return loss of 6.02 dB, and an SWR of 3:1 to a 50 ohm source. Probably not many transmitters would be happy with that magnitude of load mismatch.

Do you maintain that the losses defined by these parameters are negligible to amateur radio operators?

RF

3066. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 23:07:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0ppqd4h8r39d5vq71g7ua4ua7tg9hnrfn6@4ax.com>
Source record: 21540

On Fri, 26 Sep 2008 13:30:46 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>>> We seem to have touched a nerve. :-)
>>
>> That's what Galvani said about the frog's leg.
>
>Yes, but I don't think he wasn't referring to you. Was he?

Consider, we've see two twitches from you as well - and comedy needs a
straight man, Thanx. McCain could work too, if it weren't for the
rigor mortis.

73's
Richard Clark, KB7QHC

3067. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 23:24:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j3rqd4136lt4rnif7iimd3q7jvs11202j1@4ax.com>
Source record: 21542

On Fri, 26 Sep 2008 15:52:20 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Careful. Remember "Nobody doesn`t like Sara Lee!"

Paired up with a 110 year old Pillsbury Dough Boy without any yeast?
That won't raise any bread on Wall Street.... ;-(

73's
Richard Clark, KB7QHC

3068. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 23:24:48 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ac9f11e0-a8fa-4c38-ad31-9e8f3d90f4cd@79g2000hsk.googlegroups.com>
Source record: 21541

On Sep 26, 5:13 pm, "Richard Fry" <r...@adams.net> wrote:
> "Art Unwin" wrote>... Now the antiresonant point will be between 100 and 200 ohms
> >resistive which allows me to feed it directly from a 50 ohm
> >transmission line (3/4 andrews) with negligable losses as
> >the mismatch is resistive.
>
> __________
>
> Art -
>
> An antenna with an input impedance of 150 + j 0 ohms has a reflection
> coefficient of 0.5 (50%), a return loss of 6.02 dB, and an SWR of 3:1 to a
> 50 ohm source. Probably not many transmitters would be happy with that
> magnitude of load mismatch.
>
> Do you maintain that the losses defined by these parameters are negligible
> to amateur radio operators?
>
> RF

Not when you are in the experimental mode. My output are tubular
and while I am experimenting I am loath to add a transformer.
Must admit I am very surprized at the losses you calculated.
I would have thought it have been about half of that but then I should
have looked it up
instead of relying on the 3/4 andrews keeping things down. For
recording the resistance and capacitance
over a few megerhertz I aam comfortable with what I am doing since
things will change when I take it off the 50 gallon plastic drum.

3069. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-26 23:51:49 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <156b4142-9461-4c5f-b787-1c2b944be4e9@b1g2000hsg.googlegroups.com>
Source record: 21543

On Sep 26, 3:16 pm, "Dave" <no...@nowhere.com> wrote:
> "JB" <nos...@goofball.net> wrote in message
>
> news:HUaDk.63$Dk4.7@nwrddc02.gnilink.net...
>
> > Look into the feed methods used for Yagis.
>
> now you've done it... now you will be on art's hit list. anything to do
> with the infamous 1 dimensional yagi antenna is the root of all evil that
> holds us hostage to old ways and prevents us from following in art's divine
> footsteps. after all, his 3d optimized diamagnetic anti-gravity static
> netrino tilted shoebox full of wire in front of a 3' reflector would
> outperform any yagi design on any band! Of course he still hasn't figured
> out how my 3d antenna made out of ferromagnetic materials could possibly
> radiate without his jumping static netrinos all over it.

David
If a radiator is ferromagnetic it will still create eddy currents but
on a smaller scale than with diamagnetic material as well as the
material being lossier because of the hysteresis. The bottom line is
that the eddy current becomes swamped by the initiating current and
the same goes for the magnetic fields.
Keep the above in mind and then review a tank circuit to see the
implications of the above, I am sure you will be surprised if you are
familiar with the
attributes that a tank circuit has beyond the slosh back and forth.
You should look up wilkpedia for aluminum scrap metal sorting to see
the different
projection angles (levitation) of the different materials being
sorted into the separate containers. Move beyond non magnetic
stainless steel and the elevation angles change very quickly. As far
as neutrinuos goes you would have to look very hard for a material
that would absorb a non bound free electron I believe it is less than
5% of the materials on Earth that would interfere with the placement
of a free electron which would put it somewhere below 1/2% in termns
of volume. Remember the less the ratio of eddy current the less force
available for spin which would cut out all DXing. Put that bottle down
and get that brain of yours back in order. Why not watch the debate
with a cup of hot tea?
Art
of the Earths volume.
Art

3070. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 00:27:38 UTC
From: Dave <noone@nowhere.com>
Message-ID: <_5fDk.125$Dk4.44@nwrddc02.gnilink.net>
Source record: 21544

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:156b4142-9461-4c5f-b787-1c2b944be4e9@b1g2000hsg.googlegroups.com...
>Remember the less the ratio of eddy current the less force
>available for spin which would cut out all DXing.

tell that to the europeans we are running on 80m rtty right now with the
ferromagnetic antenna!

>Why not watch the debate with a cup of hot tea?

now that stuff will rot your brain, this whole election thing can't be over
too soon for me!

3071. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 04:56:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbked7$l4f$1@news.albasani.net>
Source record: 21545

Art Unwin wrote:

>
> Not when you are in the experimental mode. My output are tubular
> and while I am experimenting I am loath to add a transformer.
> Must admit I am very surprized at the losses you calculated.
> I would have thought it have been about half of that but then I should
> have looked it up
> instead of relying on the 3/4 andrews keeping things down. For
> recording the resistance and capacitance
> over a few megerhertz I aam comfortable with what I am doing since
> things will change when I take it off the 50 gallon plastic drum.

Actually, that is "A WHOLE BUNCH OF TEXT TO CONVEY NOTHING WORTHWHILE",
however, you already know that ...

Regards,
JS

3072. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 04:59:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbkej5$l4f$2@news.albasani.net>
Source record: 21546

Richard Clark wrote:
> On Fri, 26 Sep 2008 15:52:20 -0500, richardharrison@webtv.net (Richard
> Harrison) wrote:
>
>> Careful. Remember "Nobody doesn`t like Sara Lee!"
>
> Paired up with a 110 year old Pillsbury Dough Boy without any yeast?
> That won't raise any bread on Wall Street.... ;-(
>
> 73's
> Richard Clark, KB7QHC

Remember when a 1 oz. gold piece, worth about $20 bucks during the gold rush, would buy a nice suit?

Guess, what? That same 1 oz. of gold would still buy a nice suit today!
-- Does that tell you anything? <grin>

I mean, ever hear of the term, "Being hit over the head with a frying pan?" ROFLOL

Regards,
JS

3073. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 14:05:41 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <W4rDk.1917$yr3.1146@nlpi068.nbdc.sbc.com>
Source record: 21547

John Smith wrote:
> Remember when a 1 oz. gold piece, worth about $20 bucks during the gold
> rush, would buy a nice suit?
>
> Guess, what? That same 1 oz. of gold would still buy a nice suit today!
> -- Does that tell you anything? <grin>

4500% inflation?
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3074. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 14:57:06 UTC
From: JB <nospam@goofball.net>
Message-ID: <6RrDk.256$Dk4.96@nwrddc02.gnilink.net>
Source record: 21548

Beginning to sound like a Red Green show.
>
> Actually, that is "A WHOLE BUNCH OF TEXT TO CONVEY NOTHING WORTHWHILE",
> however, you already know that ...

3075. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 15:41:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gblk74$38u$1@news.albasani.net>
Source record: 21549

Cecil Moore wrote:

> ...
> 4500% inflation?

That, and you have to ask yourself the question, "What am I doing with these dollars stuck in a bank, while they start up the presses to print a trillion(s) worthless bucks?

How much value will the dollar lose?; And, will I be able to fit enough dollars in a wheelbarrow to buy a suit? :-(

Regards,
JS

3076. techshield patch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 15:50:34 UTC
From: - HAL9000 <gumpy@mail.org>
Message-ID: <19lsd4dn8glc2o7ir7eu7f491eum88uk8j@4ax.com>
Source record: 21550

Has anyone given thought to converting attic "techshield" insulation
to a HDTV suitable antenna? I have a roof dormer (vertical section)
that faces the desired reception direction.

I am thinking a UHF patch antenna and a VHF patch antenna and then
combining the two - traditionally.

Ideas?

3077. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 16:28:32 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <RatDk.56$lt2.18@fe097.usenetserver.com>
Source record: 21451

Cecil Moore wrote:
> John Smith wrote:
>> Remember when a 1 oz. gold piece, worth about $20 bucks during the
>> gold rush, would buy a nice suit?
>>
>> Guess, what? That same 1 oz. of gold would still buy a nice suit
>> today! -- Does that tell you anything? <grin>
>
> 4500% inflation?

No, about 5.5 percent. Gold hasn't been at $20/oz since the mid 1930's.

3078. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 16:43:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <1ptDk.1129$hc1.99@flpi150.ffdc.sbc.com>
Source record: 21452

gwatts wrote:
> Cecil Moore wrote:
>> 4500% inflation?
>
> No, about 5.5 percent. Gold hasn't been at $20/oz since the mid 1930's.

I didn't say per year. 4500% inflation is what has happened
to this country during my lifetime. Bush 43 is one of the
worst offenders and "we ain't seen nothing yet".
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3079. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 16:44:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <dqtDk.1130$hc1.1032@flpi150.ffdc.sbc.com>
Source record: 21453

John Smith wrote:
> How much value will the dollar lose?

I suspect if they were all still in silver certificates,
you might not be in all that bad of shape.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3080. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 16:53:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gblof4$7jk$1@news.albasani.net>
Source record: 21454

Cecil Moore wrote:
> gwatts wrote:
>> ...
>> No, about 5.5 percent. Gold hasn't been at $20/oz since the mid 1930's.
>
> I didn't say per year. 4500% inflation is what has happened
> to this country during my lifetime. Bush 43 is one of the
> worst offenders and "we ain't seen nothing yet".

Or, to summarize:

Evil forebodes what these ill winds blow?

Regards,
JS

3081. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 16:58:10 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <CCtDk.896$0i1.548@fe109.usenetserver.com>
Source record: 21455

Cecil Moore wrote:
> gwatts wrote:
>> Cecil Moore wrote:
>>> 4500% inflation?
>>
>> No, about 5.5 percent. Gold hasn't been at $20/oz since the mid 1930's.
>
> I didn't say per year.

No, you didn't say 'per' anything. The word 'Inflation,' without any qualifiers, implies 'per year.' Per your lifetime is an ambiguous reference and more so since apparently you're not dead yet.

3082. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 17:02:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gblovu$885$1@news.albasani.net>
Source record: 21456

gwatts wrote:
> Cecil Moore wrote:
>> gwatts wrote:
>> ...
>>> No, about 5.5 percent. Gold hasn't been at $20/oz since the mid 1930's.
>>
>> I didn't say per year.
>
> No, you didn't say 'per' anything. The word 'Inflation,' without any
> qualifiers, implies 'per year.' Per your lifetime is an ambiguous
> reference and more so since apparently you're not dead yet.

So, someone missed the implied meaning?

How about, "Accumulated inflation over the intervening years?"

Regards,
JS

3083. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 17:13:11 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <48de67d3.1883747435@news.virginmedia.com>
Source record: 21457

On Thu, 25 Sep 2008 18:33:11 -0500, "Howard Kowall" <hkowall@shaw.ca>
wrote:

>yes i have built a dipole and it works good with the manual tuner
>BUT now my new rig has a built in tuner and of course it wont tune it
>the dipole i built was cut for 3.747mhz and works great without a tuner
>but with the auto tuner it wont tune anyware but 80mtrs
>is there a magic number for a dipole to make it tunable on 80 and 40

A popular antennas over here in the UK is a centre fed doublet,
80 to 100 Foot top with 450 ladder line feeder into your ATU. You
will need a balun near the shack end if your ATU is coax only input.
This makes feeder access into the shack easier than balanced feeder
coming in. DX Engineering makes excellent baluns for this purpose.
This antenna will work all HF bands, 80m and up.

At the moment I have an 80m inverted V dipole and a 40 metre one fed
with the same RG213 coax (about 60 feet of the stuff). These antennas
work worldwide DX very nicely, even though the apex is only up at 32
feet. NO atu needed :-)./ However I'm shortly going to erect the
doublet described abovce so that I can work all the WARC bands as
well. I already have a 3 el beam for 10/15/20m.

73

Peter G3PHO

3084. Re: techshield patch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 17:23:58 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <grpsd49euuf80uolq0su5nbdv9mftoennv@4ax.com>
Source record: 21458

On Sat, 27 Sep 2008 10:50:34 -0500, - HAL9000 <gumpy@mail.org> wrote:

>Has anyone given thought to converting attic "techshield" insulation
>to a HDTV suitable antenna? I have a roof dormer (vertical section)
>that faces the desired reception direction.
>
>I am thinking a UHF patch antenna and a VHF patch antenna and then
>combining the two - traditionally.

Yes, I've used the stuff for patch antennas at 2.4GHz. It has a very convenient aluminum foil layer on both sides. It works fairly well with various foam dielectrics being useful well into the microwave region. I'm still not sure of the electrical characteristics of the varous insulating foam boards. I did best (so far) using common Styrofoam, glue, and aluminum foil. Also common stationary store sign board material. Lots of foam board types out there:
<http://www.rigidfoammachining.com/rigid-foams.html>
The hard part is figuring out which type of foam your favorite insulation uses and what the manufactory has added. I found one brand that has some kind of anti-static conductive additive added to prevent the foam board from turning into a big capacitor and zapping the installer. Kinda marginal for an antenna. Be careful and do some measuring.

However, you're not going to do well with HDTV and patch antennas. Unless you're building a single channel TV antenna, the patch antenna is just too narrow band to be useful. It's also difficult to build complex structures on home insulating foam. The patch size will be rather huge to cover the lower VHF frequencies.

Good idea for a fairly narrow band patch antenna, but HDTV is the wrong application.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3085. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 17:31:28 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <Q5uDk.2205$T65.75@edtnps82>
Source record: 21459

"Richard Fry" <rfry@adams.net> wrote in message
news:gbjmptiku1@aioe.org...
> "Art Unwin" wrote
>>... Now the antiresonant point will be between 100 and 200 ohms
>>resistive which allows me to feed it directly from a 50 ohm
>>transmission line (3/4 andrews) with negligable losses as
>>the mismatch is resistive.
> ----------
>
> Art -
>
> An antenna with an input impedance of 150 + j 0 ohms has a reflection
> coefficient of 0.5 (50%), a return loss of 6.02 dB, and an SWR of 3:1 to a
> 50 ohm source. Probably not many transmitters would be happy with that
> magnitude of load mismatch.
>
> Do you maintain that the losses defined by these parameters are negligible
> to amateur radio operators?
>
> RF

In fact the losses are very low. 1000 ft of 7/8 hardline at 1.9 MHz has a total loss of 0.68 db when terminated in 150 ohms. The total loss includes 0.26 db due to a the VSWR load of 3:1. Data from: "TLW, Transmission Line Program for Windows", version 2.02.

73,

Frank

3086. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 17:56:13 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <BruDk.1136$Ei5.355@flpi143.ffdc.sbc.com>
Source record: 21460

gwatts wrote:
> Cecil Moore wrote:
>> I didn't say per year.
>
> No, you didn't say 'per' anything.

If no time is specified, it is the change between then
(T0) and now (T1). At T0, when I was born, gold was worth
$27 an ounce. As of today, T1, I haven' died yet and gold
is worth $880 an ounce. According to my TI-34 that's
3259.259259259259259259259259925 percent.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3087. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 18:45:01 UTC
From: nm5k@wt.net
Message-ID: <4b55454f-9816-4368-bf5c-5dc225a7c189@v39g2000pro.googlegroups.com>
Source record: 21461

On Sep 27, 12:31 pm, "Frank" <frank...@nospam.telus.net> wrote:
> "Richard Fry" <r...@adams.net> wrote in message
>
> news:gbjmptiku1@aioe.org...
>
>
>
> > "Art Unwin" wrote
> >>... Now the antiresonant point will be between 100 and 200 ohms
> >>resistive which allows me to feed it directly from a 50 ohm
> >>transmission line (3/4 andrews) with negligable losses as
> >>the mismatch is resistive.
> > _____
>
> > Art -
>
> > An antenna with an input impedance of 150 + j 0 ohms has a reflection
> > coefficient of 0.5 (50%), a return loss of 6.02 dB, and an SWR of 3:1 to a
> > 50 ohm source. Probably not many transmitters would be happy with that
> > magnitude of load mismatch.
>
> > Do you maintain that the losses defined by these parameters are negligible
> > to amateur radio operators?
>
> > RF
>
> In fact the losses are very low. 1000 ft of 7/8 hardline at 1.9 MHz has a
> total loss of 0.68 db when terminated in 150 ohms. The total loss includes
> 0.26 db due to a the VSWR load of 3:1. Data from: "TLW, Transmission Line
> Program for Windows", version 2.02.
>
> 73,
>
> Frank

Feed line losses maybe, but total system loss will probably be
overwhelming.
Or at least to someone like me who likes to actually radiate most of
the
power I feed to an antenna.
The feed losses feeding a dummy load at 1.8 mhz are likely to be
quite
low also. Doesn't mean I would want to use it as an antenna though.
In one of his posts, he even goes as far as to claim appx 9 dbi gain

from his very small vs wavelength device.
This is appx equal to the gain of a FULL SIZE 3 element NBS yagi.
The only thing I keep observing here is a full load of horse hockey
that keeps emanating from a certain delirious old fart now living in
Illinois.
9dbi gain on 160m with a radiator the size of two shoe boxes,
consisting
of loads of wound 22 gauge wire. I don't know how many feet, but
probably in the hundreds anyway.. Can we spell some serious loss?
In some posts he seems to infer that he is now winding it on some
plastic barrel or garbage can, but I wouldn't expect a drastic
increase
in performance, considering the frequency being used.
I won't mention that in other breaths he takes, he claims no real
gain, but basically an omnidirectional antenna.
The wind changes direction depending who he wants to listen.
This is some good stuff. The comedy channel is missing the boat.
Heck, the feeder losses are really not much of an issue being
at 1.8 mhz, the loss of most any decent coax is very low.
Nearly ladder line performance.. You could be 10/1 SWR and
it wouldn't kill you as long as the radio didn't shut down.
In his case, the coax probably radiates more than the antenna. :(
His antenna is not a whole lot different than someone using an
Isotron. And in the case of that small antenna, it's not unusual for
the coax cable to do a good bulk of the actual radiating.
At least the people that make the Isotron have the common
decency not to proclaim some miraculous discovery of science,
and/or claim 9 dbi gain from their dinky antenna on 1.8 mhz.
So I don't heckle them like I do Art.
If Art did likewise, he'd never hear a peep out of me.
But we all know Art is not going to follow that plan... :/

3088. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 19:08:09 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c8c6da9e-9929-44d3-9af4-9cd96cc15774@m45g2000hsb.googlegroups.com>
Source record: 21462

On Sep 27, 12:31 pm, "Frank" <frank...@nospam.telus.net> wrote:
> "Richard Fry" <r...@adams.net> wrote in message
>
> news:gbjmptiku1@aioe.org...
>
>
>
> > "Art Unwin" wrote
> >>... Now the antiresonant point will be between 100 and 200 ohms
> >>resistive which allows me to feed it directly from a 50 ohm
> >>transmission line (3/4 andrews) with negligable losses as
> >>the mismatch is resistive.
> > _____
>
> > Art -
>
> > An antenna with an input impedance of 150 + j 0 ohms has a reflection
> > coefficient of 0.5 (50%), a return loss of 6.02 dB, and an SWR of 3:1 to a
> > 50 ohm source. Probably not many transmitters would be happy with that
> > magnitude of load mismatch.
>
> > Do you maintain that the losses defined by these parameters are negligible
> > to amateur radio operators?
>
> > RF
>
> In fact the losses are very low. 1000 ft of 7/8 hardline at 1.9 MHz has a
> total loss of 0.68 db when terminated in 150 ohms. The total loss includes
> 0.26 db due to a the VSWR load of 3:1. Data from: "TLW, Transmission Line
> Program for Windows", version 2.02.
>
> 73,
>
> Frank

Thats more like it Frank. Thank you for the follow uArt

3089. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 19:11:23 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <wzvDk.640$aS.214@fe089.usenetserver.com>
Source record: 21463

Cecil Moore wrote:
> gwatts wrote:
>> Cecil Moore wrote:
>>> I didn't say per year.
>>
>> No, you didn't say 'per' anything.
>
> If no time is specified, it is the change between then
> (T0) and now (T1).

Not if the term in question has a widely accepted definition within the
field of its common use, in this case economics and banking, where the
widely agreed time period for specifying 'inflation' in percent is one year.

3090. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 19:15:07 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <0DvDk.641$aS.357@fe089.usenetserver.com>
Source record: 21464

Cecil Moore wrote:
> ...when I was born, gold was worth
> $27 an ounce. As of today, T1, I haven' died yet and gold
> is worth $880 an ounce. According to my TI-34 that's
> 3259.259259259259259259259259925 percent.

You should read up on significant digits instead of manufacturing false precision.

3091. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 19:15:50 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <80718895-b442-4633-b35f-3ebc8758e4e2@s50g2000hsb.googlegroups.com>
Source record: 21465

On Sep 27, 12:56 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> gwatts wrote:
> > Cecil Moore wrote:
> >> I didn't say per year.
>
> > No, you didn't say 'per' anything.
>
> If no time is specified, it is the change between then
> (T0) and now (T1). At T0, when I was born, gold was worth
> $27 an ounce. As of today, T1, I haven' died yet and gold
> is worth $880 an ounce. According to my TI-34 that's
> 3259.259259259259259259259259259 percent.
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

I don't believe that to b e strictly true. When we were on the gold
standard it was kept pretty level.
When we went off the gold standard gold shot up over night but I do
not believe the price of gold
has shot shot up a lot since then. I suspect copper was a better deal
at least up to a few days ago

3092. Re: Small Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 19:18:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbm0u8hfa1@news.albasani.net>
Source record: 21466

Rollie wrote:
> In what area are you refering to when wanting a small antenna.
> ...
> Lots of luck,
>

I stumbled upon this most interesting .PDF file and loaded it up to a
website of mine:

http://assemblywizard.fr33webhost.com/v1p1comp%20All%20sorts%20of%20small%20antennas%20better%20by%20heuristics%20.pdf

I like "his style" -- antennas which would put a bent-up coat-hanger,
suffering the damage of laying on a freeway for a month, to shame!

Regards,
JS

3093. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 20:18:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbm4dolgd1@news.albasani.net>
Source record: 21468

Cecil Moore wrote:
> John Smith wrote:
>> How much value will the dollar lose?
>
> I suspect if they were all still in silver certificates,
> you might not be in all that bad of shape.

Silver is difficult to purchase at this point ...

A few days ago, there was not an oz. to be had, which anyone wished to part with ... indeed, a friend of mine in the markets claims the middle east has sucked up great quantities, and quietly, recently ...

Regards,
JS

3094. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 20:23:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbm4otmig1@news.albasani.net>
Source record: 21469

Ralph Mowery wrote:

> ...
> Unless it is for the collector value, the silver certificates have not been
> backed by silver for a very long time. Not sure of the date, but probably
> 20 or 30 years or more ago.
>
>

I have 281 of these in a small safe, I was not aware of that ... I will
have to look at that, got a link/URL?

I just took it for granted you could trust the govt. on such a serious
promissory note ("Silver IOU"), broken promises do not instill trust and
respect. I suppose the gold notes are just as worthless then?

But then, for some reason, such is not as shocking as it would have been
a few decades ago ... :-(

Regards,
JS

3095. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 20:30:28 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <EJwDk.2213$T65.2160@edtnps82>
Source record: 21470

>Feed line losses maybe, but total system loss will probably be
>overwhelming.
>Or at least to someone like me who likes to actually radiate most of
>the
>power I feed to an antenna.
>The feed losses feeding a dummy load at 1.8 mhz are likely to be
>quite
>low also.
>Doesn't mean I would want to use it as an antenna though.
>In one of his posts, he even goes as far as to claim appx 9 dbi gain
>from his very small vs wavelength device.
>This is appx equal to the gain of a FULL SIZE 3 element NBS yagi.
>The only thing I keep observing here is a full load of horse hockey
>that keeps emanating from a certain delirious old fart now living in
>Illinois.
>9dbi gain on 160m with a radiator the size of two shoe boxes,
>consisting
>of loads of wound 22 gauge wire. I don't know how many feet, but
>probably in the hundreds anyway.. Can we spell some serious loss?
>In some posts he seems to infer that he is now winding it on some
>plastic barrel or garbage can, but I wouldn't expect a drastic
>increase
>in performance, considering the frequency being used.
>I won't mention that in other breaths he takes, he claims no real
>gain, but basically an omnidirectional antenna.
>The wind changes direction depending who he wants to listen.
>This is some good stuff. The comedy channel is missing the boat.
>Heck, the feeder losses are really not much of an issue being
>at 1.8 mhz, the loss of most any decent coax is very low.
>Nearly ladder line performance.. You could be 10/1 SWR and
>it wouldn't kill you as long as the radio didn't shut down.
>In his case, the coax probably radiates more than the antenna. :(
>His antenna is not a whole lot different than someone using an
>Isotron. And in the case of that small antenna, it's not unusual for
>the coax cable to do a good bulk of the actual radiating.
>At least the people that make the Isotron have the common
>decency not to proclaim some miraculous discovery of science,
>and/or claim 9 dbi gain from their dinky antenna on 1.8 mhz.
>So I don't heckle them like I do Art.
>If Art did likewise, he'd never hear a peep out of me.
>But we all know Art is not going to follow that plan... :/

Feedline loss is what I was considering. As for the ultra
compact antenna losses are likely to be very high. The

problem with such structures is that they are impossible
to model accurately with any NEC based program.

73, Frank

3096. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 21:06:02 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <H9qdndfchOFCDEPVnZ2dnUVZ_v7inZ2d@earthlink.com>
Source record: 21467

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:dqtDk.1130$hc1.1032@flpi150.ffdc.sbc.com...
> John Smith wrote:
>> How much value will the dollar lose?
>
> I suspect if they were all still in silver certificates,
> you might not be in all that bad of shape.
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

Unless it is for the collector value, the silver certificates have not been
backed by silver for a very long time. Not sure of the date, but probably
20 or 30 years or more ago.

3097. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 21:15:06 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <ipj2r5-io7.ln1@mail.specsol.com>
Source record: 21471

Cecil Moore <nospam@w5dxp.com> wrote:
> John Smith wrote:
>> How much value will the dollar lose?
>
> I suspect if they were all still in silver certificates,
> you might not be in all that bad of shape.

How do you suspect that when a $1 silver certificates was exchangeable
for $1 worth of silver?

Unless you did the exchange a REALLY long time ago, the transaction
is break even.

--
Jim Pennino

Remove .spam.sux to reply.

3098. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 21:55:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbma3s$sk2$1@news.albasani.net>
Source record: 21472

jimp@specsol.spam.sux.com wrote:
> Cecil Moore <nospam@w5dxp.com> wrote:
>> ...

>
> How do you suspect that when a $1 silver certificates was exchangeable
> for $1 worth of silver?
>
> Unless you did the exchange a REALLY long time ago, the transaction
> is break even.
>
>

I think he was simply pointing out that something still backs the
"worth" of a "silver certificate" (well, if it still existed, in reality.)

Since our currently issued dollar has nothing behind it than our
production, possibility of producing, and labor ... and with a
frightening amount of that having "gone over seas", it is virtually
worthless ...

However, no one realizes this, well, seems to realize this.

Or, to summarize this:

The dollar is worthless and only those who have replaced these with real
objects/matter of value have any real wealth.

Indeed, money has become a religion, only those who can make a leap of
faith as to it having real worth are believers ... at least here in the USA.

Regards,
JS

3099. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 22:45:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <fbp2r5-3l8.ln1@mail.specsol.com>
Source record: 21473

John Smith <assemblywizard@gmail.com> wrote:
> jimp@specsol.spam.sux.com wrote:
>> Cecil Moore <nospam@w5dxp.com> wrote:
>>> ...
>
>>
>> How do you suspect that when a $1 silver certificates was exchangeable
>> for $1 worth of silver?
>>
>> Unless you did the exchange a REALLY long time ago, the transaction
>> is break even.
>>
>>
>
> I think he was simply pointing out that something still backs the
> "worth" of a "silver certificate" (well, if it still existed, in reality.)
>
> Since our currently issued dollar has nothing behind it than our
> production, possibility of producing, and labor ... and with a
> frightening amount of that having "gone over seas", it is virtually
> worthless ...
>
> However, no one realizes this, well, seems to realize this.
>
> Or, to summarize this:
>
> The dollar is worthless and only those who have replaced these with real
> objects/matter of value have any real wealth.
>
> Indeed, money has become a religion, only those who can make a leap of
> faith as to it having real worth are believers ... at least here in the USA.
>
> Regards,
> JS

The "worth" of any medium of exchange is whatever the "worth" is
perceived to be, whether it be cash, checks, certificates of deposit,
stock certificates, money orders, bonds, gold bars, silver bars, or
shiny beads.

About the only medium of exchange that had any intrinsic value was salt.

The "value" of real objects is also whatever it is perceived to be; I
don't think my house is worth $500,000, but the housing market does.

Look up supply and demand and then tell me why diamonds are so "valuable"
and why no one is paid in salt anymore.

None of this is unique to the US, it is the way the economy works in
the modern world.

--
Jim Pennino

Remove .spam.sux to reply.

3100. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 22:47:12 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <gbmd5r$q6h$1@aioe.org>
Source record: 21474

"Art Unwin" wrote

>Thats more like it Frank. Thank you for the follow uArt (sic)

Frank & Art -

Note that my post upon which you both commented was based on a SYSTEM evaluation, and was not restricted to the performance of a coaxial cable having a given mismatch condition, used between the transmitter output terminals and the antenna input terminals.

Also note that few, if any, transmitters can safely deliver their rated r-f output power into a load SWR of 3:!.

This is true no matter what is the power rating of the transmission line type used in an antenna SYSTEM with a 3:1 SWR.

RF

3101. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 22:50:04 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B2759D547220nonenowhere@61.9.191.5>
Source record: 21475

microwaves@blueyonder.co.uk (Peter) wrote in news:48de67d3.1883747435
@news.virginmedia.com:

> A popular antennas over here in the UK is a centre fed doublet,
> 80 to 100 Foot top with 450 ladder line feeder into your ATU. You
> will need a balun near the shack end if your ATU is coax only input.
> This makes feeder access into the shack easier than balanced feeder
> coming in. DX Engineering makes excellent baluns for this purpose.
> This antenna will work all HF bands, 80m and up.

Modelling suggests that the efficiency of such an antenna degrades quickly
for dipole lengths less than about 35% of a wavelength.

80' is 28% of a wavelength at 3.5MHz.

Owen

3102. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 23:01:37 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <mXyDk.1667$ZP4.1449@nlpi067.nbdc.sbc.com>
Source record: 21476

Art Unwin wrote:
> When we went off the gold standard gold shot up over night but I do
> not believe the price of gold has shot shot up a lot since then.

Here's a chart of gold prices since 1975.

http://www.kitco.com/scripts/hist_charts/yearly_graphs.plx

Seems to me it "shot up" from '76-'79 and '05-'08. I rolled
my IRA over into gold because of the Y2K scare. :-)
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3103. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 23:06:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <M%yDk.1668$ZP4.1331@nlpi067.nbdc.sbc.com>
Source record: 21478

John Smith wrote:
> Silver is difficult to purchase at this point ...

How much do you need? http://www.kitcosilver.com/
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3104. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 23:14:25 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <m7zDk.1162$hc1.989@flpi150.ffdc.sbc.com>
Source record: 21479

jimp@specsol.spam.sux.com wrote:
> Unless you did the exchange a REALLY long time ago, the transaction
> is break even.

Un-circulated $1 sliver certificates are worth a
minimum of about $5 each - some lots more.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3105. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 23:16:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <F9zDk.1163$hc1.403@flpi150.ffdc.sbc.com>
Source record: 21480

jimp@specsol.spam.sux.com wrote:
> The "worth" of any medium of exchange is whatever the "worth" is
> perceived to be, whether it be cash, checks, certificates of deposit,
> stock certificates, money orders, bonds, gold bars, silver bars, or
> shiny beads.

Gold is worth its weight in gold. :-)
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3106. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 23:20:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <9dzDk.1164$hc1.329@flpi150.ffdc.sbc.com>
Source record: 21481

Owen Duffy wrote:
> Modelling suggests that the efficiency of such an antenna degrades quickly
> for dipole lengths less than about 35% of a wavelength.

Walter Maxwell agrees. In "Reflections", he suggests the
minimum length for a dipole should be 3/8WL.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3107. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 23:51:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbmgt9$3i0$1@news.albasani.net>
Source record: 21482

jimp@specsol.spam.sux.com wrote:

>> ...
>> The dollar is worthless and only those who have replaced these with real
>> objects/matter of value have any real wealth.
>> ...
>> Regards,
>> JS

>
> The "worth" of any medium of exchange is whatever the "worth" is
> perceived to be, whether it be cash, checks, certificates of deposit,
> stock certificates, money orders, bonds, gold bars, silver bars, or
> shiny beads.
>
> About the only medium of exchange that had any intrinsic value was salt.
>
> The "value" of real objects is also whatever it is perceived to be; I
> don't think my house is worth $500,000, but the housing market does.
>
> Look up supply and demand and then tell me why diamonds are so "valuable"
> and why no one is paid in salt anymore.
>
> None of this is unique to the US, it is the way the economy works in
> the modern world.

In the portion of my post, top, what didn't you understand?

Diamonds, valuable? Are you truly an idiot man? As I have pointed out,
in the past, diamonds are worth about $5 bucks a carrot; now, that is
still a bit expensive to pave your driveway with, but none the less
worthless when compared to what people (like you) THINK they are worth.

See the following and wakeup!:
http://www.wired.com/wired/archive/11.09/diamond.html
http://www.apollodiamond.com/
http://www.gemesis.com/

Diamonds are what the next wafers of microprocessors and chips will be
built on ... without a doubt, they will be cheaper in the future than
they are today, but still worthless, virtually ...

And yes, like I have pointed out, idiots who think the dollar is worth a
dollar abound! And, just ignore them starting up the presses and
printing worthless dollars ... I just wish I had a press and was allowed
such freedom! ROFLOL

Regards,
JS

3108. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-27 23:53:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbmh2e$3i0$2@news.albasani.net>
Source record: 21483

Cecil Moore wrote:

> ...
> Gold is worth its weight in gold. :-)

Actually, weighed on jimp@specsol.spam.sux.com gold scale, it is worth
magnitudes more! ROFLOL

Regards,
JS

3109. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 00:04:13 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <HcOdnZSUL9k8JkPVnZ2dnUVZ_rzinZ2d@earthlink.com>
Source record: 21477

<jimp@specsol.spam.sux.com> wrote in message
news:fbp2r5-3l8.ln1@mail.specsol.com...
>>>
>> I think he was simply pointing out that something still backs the
>> "worth" of a "silver certificate" (well, if it still existed, in
>> reality.)
>>
>> Since our currently issued dollar has nothing behind it than our
>> production, possibility of producing, and labor ... and with a
>> frightening amount of that having "gone over seas", it is virtually
>> worthless ...
>>
>> However, no one realizes this, well, seems to realize this.
>>
>> Or, to summarize this:
>>
>> The dollar is worthless and only those who have replaced these with real
>> objects/matter of value have any real wealth.
>>
>> Indeed, money has become a religion, only those who can make a leap of
>> faith as to it having real worth are believers ... at least here in the
>> USA.
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>> Regards,
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> The "worth" of any medium of exchange is whatever the "worth" is
> perceived to be, whether it be cash, checks, certificates of deposit,
> stock certificates, money orders, bonds, gold bars, silver bars, or
> shiny beads.
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> don't think my house is worth $500,000, but the housing market does.
>
> Look up supply and demand and then tell me why diamonds are so "valuable"
> and why no one is paid in salt anymore.
>
> None of this is unique to the US, it is the way the economy works in
> the modern world.
>

I was trying to point out that you can no longer go the the bank or whatever and exchange your paper silver certificiate for silver backed by the government.

YOu are correct , paper or other objects that have no use are only worth what others will pay. I have read of used stamps going for atleast a million dollars. They are of no use at all that I can think of, but to a collector as there are only one or two known to exist that one is worth whatever you can get for it, nothing to millions.

3110. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 01:34:05 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <48dedf05$0$60069$8046368a@newsreader.iphouse.net>
Source record: 21484

nm5k@wt.net wrote:
> On Sep 27, 12:31 pm, "Frank" <frank...@nospam.telus.net> wrote:
>> "Richard Fry" <r...@adams.net> wrote in message
>>
>> news:gbjmptiku1@aioe.org...
>>
>>
>>
>>> "Art Unwin" wrote
>>>> ... Now the antiresonant point will be between 100 and 200 ohms
>>>> resistive which allows me to feed it directly from a 50 ohm
>>>> transmission line (3/4 andrews) with negligable losses as
>>>> the mismatch is resistive.
>>> __________
>>> Art -
>>> An antenna with an input impedance of 150 + j 0 ohms has a reflection
>>> coefficient of 0.5 (50%), a return loss of 6.02 dB, and an SWR of 3:1 to a
>>> 50 ohm source. Probably not many transmitters would be happy with that
>>> magnitude of load mismatch.
>>> Do you maintain that the losses defined by these parameters are negligible
>>> to amateur radio operators?
>>> RF
>> In fact the losses are very low. 1000 ft of 7/8 hardline at 1.9 MHz has a
>> total loss of 0.68 db when terminated in 150 ohms. The total loss includes
>> 0.26 db due to a the VSWR load of 3:1. Data from: "TLW, Transmission Line
>> Program for Windows", version 2.02.
>>
>> 73,
>>
>> Frank
>
> Feed line losses maybe, but total system loss will probably be
> overwhelming.
> Or at least to someone like me who likes to actually radiate most of
> the
> power I feed to an antenna.
> The feed losses feeding a dummy load at 1.8 mhz are likely to be
> quite
> low also. Doesn't mean I would want to use it as an antenna though.
> In one of his posts, he even goes as far as to claim appx 9 dbi gain
> from his very small vs wavelength device.
> This is appx equal to the gain of a FULL SIZE 3 element NBS yagi.
> The only thing I keep observing here is a full load of horse hockey
> that keeps emanating from a certain delirious old fart now living in

> Illinois.
> 9dbi gain on 160m with a radiator the size of two shoe boxes,
> consisting
> of loads of wound 22 gauge wire. I don't know how many feet, but
> probably in the hundreds anyway.. Can we spell some serious loss?
> In some posts he seems to infer that he is now winding it on some
> plastic barrel or garbage can, but I wouldn't expect a drastic
> increase
> in performance, considering the frequency being used.
> I won't mention that in other breaths he takes, he claims no real
> gain, but basically an omnidirectional antenna.
> The wind changes direction depending who he wants to listen.
> This is some good stuff. The comedy channel is missing the boat.
> Heck, the feeder losses are really not much of an issue being
> at 1.8 mhz, the loss of most any decent coax is very low.
> Nearly ladder line performance.. You could be 10/1 SWR and
> it wouldn't kill you as long as the radio didn't shut down.
> In his case, the coax probably radiates more than the antenna. :(
> His antenna is not a whole lot different than someone using an
> Isotron. And in the case of that small antenna, it's not unusual for
> the coax cable to do a good bulk of the actual radiating.
> At least the people that make the Isotron have the common
> decency not to proclaim some miraculous discovery of science,
> and/or claim 9 dbi gain from their dinky antenna on 1.8 mhz.
> So I don't heckle them like I do Art.
> If Art did likewise, he'd never hear a peep out of me.
> But we all know Art is not going to follow that plan... :/
>

He also stated he would possibly be putting a 6 foot or so dish behind
his antenna to add gain. Wonder at what frequency he expects that to
work? I think it was in the 80m or 40m range. Hmm.

tom
K0TAR

3111. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 03:12:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbmsno$dj0$1@news.albasani.net>
Source record: 21485

John Smith wrote:
[his normal chit]

> Regards,
> JS
>

Let me expound upon all this ...

If you pay $5,000-$10,000, or-more for a diamond, then you go to sell the diamond--would you expect to get close to what you paid?

Do you realize in such places as china they are using this technology and injecting "flaws" (purposeful ones to hide the fact they are man-made) into the diamonds, and they are as-good-as-natural? Duh, this means the market will eventually be flooded with this stuff as "cheap as sand!"

Only a fool would invest in diamonds, if you have 'em, dump 'em before EVERYONE finds out! And, remember, you heard it here first--if you feel generous, ship me a 10% "consultation fee." ROFLOL

The only good use for diamonds are industrial ones, anyway ...

Regards,
JS

3112. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 03:35:00 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <f4a3r5-d9b.ln1@mail.specsol.com>
Source record: 21487

John Smith <assemblywizard@gmail.com> wrote:
> John Smith wrote:
> [his normal chit]
>
>> Regards,
>> JS
>>
>
> Let me expound upon all this ...
>
> If you pay $5,000-$10,000, or-more for a diamond, then you go to sell
> the diamond--would you expect to get close to what you paid?

Unless you are in the business, you will be buying at retail prices
and selling at wholesale prices, just like anything else.

--
Jim Pennino

Remove .spam.sux to reply.

3113. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 03:35:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <4fa3r5-d9b.ln1@mail.specsol.com>
Source record: 21486

John Smith <assemblywizard@gmail.com> wrote:

> Diamonds, valuable? Are you truly an idiot man? As I have pointed out,
> in the past, diamonds are worth about $5 bucks a carrot; now, that is
> still a bit expensive to pave your driveway with, but none the less
> worthless when compared to what people (like you) THINK they are worth.

Send me all your gem quality, 2 carat and up, certified, blue diamonds
and I'll pay you $10 a carat.

For carrots, I'm only willing to go $0.29/lb.

--
Jim Pennino

Remove .spam.sux to reply.

3114. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 03:37:42 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <a_CDk.2341$Pv5.771@edtnps83>
Source record: 21488

> Note that my post upon which you both commented was based on a SYSTEM
> evaluation, and was not restricted to the performance of a coaxial cable
> having a given mismatch condition, used between the transmitter output
> terminals and the antenna input terminals.
>
> Also note that few, if any, transmitters can safely deliver their rated
> r-f output power into a load SWR of 3:!.
>
> This is true no matter what is the power rating of the transmission line
> type used in an antenna SYSTEM with a 3:1 SWR.
>
> RF

You are probably correct concerning a 3:1 SWR. Transmitters
usually have to meet full output into a 2:1 SWR, all phases, with no
sign of oscillation. In this case I had assumed that a matching network
would be used between the PA and coaxial input.

Frank

3115. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 03:42:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbmuemese1@news.albasani.net>
Source record: 21489

jimp@specsol.spam.sux.com wrote:

>
> Unless you are in the business, you will be buying at retail prices
> and selling at wholesale prices, just like anything else.
>

Unless you are an IDIOT, you will NOT be buying a retail and wholesale
"MANIPULATED PRICES", and especially not those of yesterday!

I am sorry, you WILL NOT handle anyones financial security!

Regards,
JS

3116. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 03:44:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbmuj6ese2@news.albasani.net>
Source record: 21490

jimp@specsol.spam.sux.com wrote:

>
> Send me all your gem quality, 2 carat and up, certified, blue diamonds
> and I'll pay you $10 a carat.
>
> For carrots, I'm only willing to go $0.29/lb.
>
>

I just love guys like you, it is why, sometimes, ripping people off is easier than "taking-candy-from-a-baby", only problem? Sometimes it makes me feel guilty. :-(

But then, remember what Barnum said! And, if they ask for it twice, or more, don't they deserve it? <evil grin>

Regards,
JS

3117. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 03:46:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbmuniese3@news.albasani.net>
Source record: 21491

Frank wrote:

>
> You are probably correct concerning a 3:1 SWR. Transmitters
> usually have to meet full output into a 2:1 SWR, all phases, with no
> sign of oscillation. In this case I had assumed that a matching network
> would be used between the PA and coaxial input.
>
> Frank
>
>

Everything I have ever ran can handle 2:1 quite nicely, with
transistors, I worry about exceeding that ... or, how big is your
heatsink/fan?

Regards,
JS

3118. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 04:46:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbn26q$il6$1@news.albasani.net>
Source record: 21492

John Smith wrote:
> jimp@specsol.spam.sux.com wrote:
>
>>
>> Unless you are in the business, you will be buying at retail prices
>> and selling at wholesale prices, just like anything else.
>
> Unless you are an IDIOT, you will NOT be buying a retail and wholesale
> "MANIPULATED PRICES", and especially not those of yesterday!
>
> I am sorry, you WILL NOT handle anyones financial security!
>
> Regards,
> JS

And, let me expound upon this to the point of rationality ...

Take a court punishment, enacted under the law, as defined by our forefathers ... under fair and just/unjust doctrine ...

A transient, a poor person, etc, they would be meted out a $10 dollar fine, a worker--perhaps a $50 dollar fine? A doctor--perhaps a $100 dollar fine? Bill Gates--perhaps a $100,000 dollar fine?

You get my drift? It is fairness, trust, respect, etc. which has vanished ... and with it, a fairness in our financial institution(s) ...

It is why respect for the system is either gone, or will be in the near future. Do you really want to live in a world like that? Would in not be sane to take control of our "public servants", before we suffer?

Regards,
JS

3119. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 05:45:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <36i3r5-rec.ln1@mail.specsol.com>
Source record: 21493

John Smith <assemblywizard@gmail.com> wrote:
> jimp@specsol.spam.sux.com wrote:
>
>>
>> Send me all your gem quality, 2 carat and up, certified, blue diamonds
>> and I'll pay you $10 a carat.
>>
>> For carrots, I'm only willing to go $0.29/lb.
>>
>>
>
> I just love guys like you, it is why, sometimes, ripping people off is
> easier than "taking-candy-from-a-baby", only problem? Sometimes it
> makes me feel guilty. :-(

When do you plan to ship me the diamonds at $10 a carat you say are
only worth $5?

--
Jim Pennino

Remove .spam.sux to reply.

3120. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 05:55:00 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <69i3r5-rec.ln1@mail.specsol.com>
Source record: 21494

John Smith <assemblywizard@gmail.com> wrote:
> jimp@specsol.spam.sux.com wrote:
>
>>
>> Unless you are in the business, you will be buying at retail prices
>> and selling at wholesale prices, just like anything else.
>>
>
> Unless you are an IDIOT, you will NOT be buying a retail and wholesale
> "MANIPULATED PRICES", and especially not those of yesterday!

So, since you are such an expert, please let us all know how to go
to the store and get the wholesale price on a six-pack.

--
Jim Pennino

Remove .spam.sux to reply.

3121. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 05:56:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbn6agmmd1@news.albasani.net>
Source record: 21495

jimp@specsol.spam.sux.com wrote:

>
>
> When do you plan to ship me the diamonds at $10 a carat you say are
> only worth $5?

Brother, I am only telling you the cost of manufacture, indeed,
providing proof!

Now if you want to buy one of my turds for $10, $100, $1000, more ...
I'd hardly stop you ... make me an offer! ROFLOL

Regards,
JS

3122. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 05:59:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbn6frmmd2@news.albasani.net>
Source record: 21496

jimp@specsol.spam.sux.com wrote:

> ...
> So, since you are such an expert, please let us all know how to go
> to the store and get the wholesale price on a six-pack.
>
>

Damn man! Ever been to a flea market where they are asking $100.00 and
you offer 'em $20 ... krist, you have to have the courage to let 'em
take it home, find another sucker, or let you buy it!

Damn, where were you born?

Regards,
JS

3123. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 06:06:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbn6u1ndq1@news.albasani.net>
Source record: 21497

John Smith wrote:
> jimp@specsol.spam.sux.com wrote:
>
>>
>>
>> When do you plan to ship me the diamonds at $10 a carat you say are
>> only worth $5?
>
> Brother, I am only telling you the cost of manufacture, indeed,
> providing proof!
>
> Now if you want to buy one of my turds for $10, $100, $1000, more ...
> I'd hardly stop you ... make me an offer! ROFLOL
>
> Regards,
> JS
>

That is too simple, you are honestly confused ... let me go into great detail ...

DO NOT be a MOTIVATED BUYER ... DO NOT GO AFTER WHAT THE MARKET IS HOT AT ... etc., etc.

Or, to summarize, DON'T GO TO THE GROCERY STORE WHEN YOU ARE HUNGRY ... go before, contemplating your future needs ...

But when you don't need it, go for fun. Go and find "one" ready to haggle, a MOTIVATED SELLER!

My gawd man, who instructed you on the art of capitalism?

Regards,
JS

3124. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 06:09:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbn737$nd5$1@news.albasani.net>
Source record: 21498

John Smith wrote:
> jimp@specsol.spam.sux.com wrote:
>
>>
>>
>> When do you plan to ship me the diamonds at $10 a carat you say are
>> only worth $5?
>
> Brother, I am only telling you the cost of manufacture, indeed,
> providing proof!
>
> Now if you want to buy one of my turds for $10, $100, $1000, more ...
> I'd hardly stop you ... make me an offer! ROFLOL
>
> Regards,
> JS
>

3125. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 06:12:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbn794$nd5$2@news.albasani.net>
Source record: 21499

John Smith wrote:

> Now if you want to buy one of my turds for $10, $100, $1000, more ...
> I'd hardly stop you ... make me an offer! ROFLOL
>
> Regards,
> JS
>

Oh yeah, by the way, actually one of my turds has value! Jealous?

Well, I'll share a secret with you, it has a fertilizer value. Now,
that value may be 0.00000000000000000000000001 cent--but it does have
REAL VALUE, get a trillion of 'em and you got some money ... AND, a
motivated buyer! ROFLOL

Regards,
JS

3126. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 06:15:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbn7el$nd5$3@news.albasani.net>
Source record: 21500

jimp@specsol.spam.sux.com wrote:

>
> When do you plan to ship me the diamonds at $10 a carat you say are
> only worth $5?
>
>

By-the-way, and I am hardly ever "THIS BLUNT", I am quite surprised
someone as stupid as you could ever pass the test and get a novice
license, I am quite impressed! ROFLOL

Regards,
JS

3127. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 06:35:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <4tk3r5-vtc.ln1@mail.specsol.com>
Source record: 21401

John Smith <assemblywizard@gmail.com> wrote:
> jimp@specsol.spam.sux.com wrote:
>
>> ...
>> So, since you are such an expert, please let us all know how to go
>> to the store and get the wholesale price on a six-pack.
>>
>>
>
> Damn man! Ever been to a flea market where they are asking $100.00 and
> you offer 'em $20 ... krist, you have to have the courage to let 'em
> take it home, find another sucker, or let you buy it!

Sure, but what has that to do with buying stuff from the store?

I don't do recycled beer.

--
Jim Pennino

Remove .spam.sux to reply.

3128. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 06:35:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <n3l3r5-vtc.ln1@mail.specsol.com>
Source record: 21402

John Smith <assemblywizard@gmail.com> wrote:

> Now if you want to buy one of my turds for $10, $100, $1000, more ...
> I'd hardly stop you ... make me an offer! ROFLOL

No need as it appears you are flinging them about for free and calling
them usenet postings.

--
Jim Pennino

Remove .spam.sux to reply.

3129. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 06:40:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbn8sf$p8j$1@news.albasani.net>
Source record: 21403

jimp@specsol.spam.sux.com wrote:

>
> Sure, but what has that to do with buying stuff from the store?
>
> I don't do recycled beer.
>

Ever heard the term, "What the market will bear (or, beer, in the case of responding to that last part of your post/remark <grin> and ;-))

Or, when idiots are buying at super-inflated prices, stand in the background, wait your time ... I just made an offer to buy back my last home from the bank for ~40% of what I sold it to "the sucker" at--I am waiting to hear back ... wife does not like the present habitat ... and frankly, I don't like the "antenna situation" ...

Regards,
JS

3130. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 06:41:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbn8vj$p64$1@news.albasani.net>
Source record: 21404

jimp@specsol.spam.sux.com wrote:
> John Smith <assemblywizard@gmail.com> wrote:
>
>> Now if you want to buy one of my turds for $10, $100, $1000, more ...
>> I'd hardly stop you ... make me an offer! ROFLOL
>
> No need as it appears you are flinging them about for free and calling
> them usenet postings.
>

Hmmm, no sale then?

Don't worry, the next one is only around the corner--according to Barnum
<wink.> LOL

Regards,
JS

3131. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 07:09:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbnakcqmu1@news.albasani.net>
Source record: 21405

Cecil Moore wrote:
> John Smith wrote:
>> Silver is difficult to purchase at this point ...
>
> How much do you need? http://www.kitcosilver.com/

OK, I am going to bed ... but, just spoke to "my man" ...

There are certificates of silver ... and then there is REAL silver
(i.e., the metal you hold in your hand ... not a promissory note.)

Investigate the differences ...

Regards,
JS

3132. Re: techshield patch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 07:13:24 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <q8GDk.38$A05.28@newsfe08.iad>
Source record: 21406

"- HAL9000" <gumpy@mail.org> wrote in message
news:19lsd4dn8glc2o7ir7eu7f491eum88uk8j@4ax.com...
> Has anyone given thought to converting attic "techshield" insulation
> to a HDTV suitable antenna? I have a roof dormer (vertical section)
> that faces the desired reception direction.
>
> I am thinking a UHF patch antenna and a VHF patch antenna and then
> combining the two - traditionally.
>
> Ideas?

I have one patch antenna. I made it from online plans for 1.58 GHz -- a GPS antenna for my old Garmin handheld. With a short length of coax attached, I secure the patch antenna to the luggage rack and not worry whether the Garmin is near a window. (Newer units are more sensitive -- no need.)

The patch antenna is not very directional, a good thing for GPS, since you want a view of the whole sky but maybe not such a good thing for TV reception unless you want a non-directional antenna. I think the patch antenna is circular polarized. You'll lose 3 dB using it for linear polarization.

Sure, it might work for UHF TV but it doesn't seem like the ideal.

3133. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 08:44:04 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gbng4o$6ec$1@registered.motzarella.org>
Source record: 21407

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gbn8vj$p64$1@news.albasani.net...
> jimp@specsol.spam.sux.com wrote:
>> John Smith <assemblywizard@gmail.com> wrote:
>>
>>> Now if you want to buy one of my turds for $10, $100, $1000, more ...
>>> I'd hardly stop you ... make me an offer! ROFLOL
>>
>> No need as it appears you are flinging them about for free and calling
>> them usenet postings.
>>
>
> Hmmm, no sale then?
>
> Don't worry, the next one is only around the corner--according to Barnum
> <wink.> LOL
>
> Regards,
> JS

And we wonder why usenet is being dropped by one ISP after another? It is behavior such as this that keeps folks away in sufficient numbers as to not make usenet worth the expense.

Nothing stinks more than pissing contests. Only a moron would be amused by this juvenile banter and they don't have a clue as to how to access usenet, or what it was for, when it was available.

Ed, NM2K

3134. Re: 1.2 ghz ver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 08:52:20 UTC
From: ml <m@di.net>
Message-ID: <m-6B3227.04522028092008@news.optonline.net>
Source record: 21408

In article <gapa76cmu1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> ml wrote:
> > hi
> >
> > maybe i am having a bad google day, can't seem to locate any
> > amateur usa, verticle antennas for this band
> >
> > anyone know of any places that might be selling them?
> >
> >
> > i need a omnidirectional plan ol' verticle antenna for around
> > local repeaters
> >
> >
> > thanks
>
> You don't have need of multi-band capabilities?
>
>
> http://www.universal-radio.com/catalog/hamantm/2218.html
>
> Regards,
> JS

definately not multiband, and i should have been more specific iwas
looking fr a roof mounted antenna not mobile

thanks thou i see lots of mobile antennas not many base

3135. Re: techshield patch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 13:16:43 UTC
From: Dave <dave@dave.dave>
Message-ID: <0tLDk.72$7h7.14@newsfe06.iad>
Source record: 21409

Sal M. Onella wrote:
> "- HAL9000" <gumpy@mail.org> wrote in message
> news:19lsd4dn8glc2o7ir7eu7f491eum88uk8j@4ax.com...
>> Has anyone given thought to converting attic "techshield" insulation
>> to a HDTV suitable antenna? I have a roof dormer (vertical section)
>> that faces the desired reception direction.
>>
>> I am thinking a UHF patch antenna and a VHF patch antenna and then
>> combining the two - traditionally.
>>
>> Ideas?
>
>
> I have one patch antenna. I made it from online plans for 1.58 GHz -- a GPS
> antenna for my old Garmin handheld. With a short length of coax attached, I
> secure the patch antenna to the luggage rack and not worry whether the
> Garmin is near a window. (Newer units are more sensitive -- no need.)
>
> The patch antenna is not very directional, a good thing for GPS, since you
> want a view of the whole sky but maybe not such a good thing for TV
> reception unless you want a non-directional antenna. I think the patch
> antenna is circular polarized. You'll lose 3 dB using it for linear
> polarization.
>
> Sure, it might work for UHF TV but it doesn't seem like the ideal.
>
>

You'd have better luck making a collinear quad out of coat hangers.

(It's fun actually talking about antennas instead of BS...)

3136. Re: 1.2 ghz ver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 13:19:18 UTC
From: Dave <dave@dave.dave>
Message-ID: <qvLDk.73$7h7.64@newsfe06.iad>
Source record: 21410

ml wrote:
> In article <gapa76cmu1@news.albasani.net>,
> John Smith <assemblywizard@gmail.com> wrote:
>
>> ml wrote:
>>> hi
>>>
>>> maybe i am having a bad google day, can't seem to locate any
>>> amateur usa, verticle antennas for this band
>>>
>>> anyone know of any places that might be selling them?
>>>
>>>
>>> i need a omnidirectional plan ol' verticle antenna for around
>>> local repeaters
>>>
>>>
>>> thanks
>> You don't have need of multi-band capabilities?
>>
>>
>> http://www.universal-radio.com/catalog/hamantm/2218.html
>>
>> Regards,
>> JS
>
> definately not multiband, and i should have been more specific iwas
> looking fr a roof mounted antenna not mobile
>
>
> thanks thou i see lots of mobile antennas not many base

I have one of these. I can hit a repeater over 10 miles away on 6
Meters, using a 5 Watt HT and 100' of RG-58.

3137. Re: 1.2 ghz ver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 13:19:46 UTC
From: Dave <dave@dave.dave>
Message-ID: <SvLDk.74$7h7.3@newsfe06.iad>
Source record: 21411

```
Dave wrote:
> ml wrote:
>> In article <gapa76$cmu$1@news.albasani.net>,
>> John Smith <assemblywizard@gmail.com> wrote:
>>
>>> ml wrote:
>>>> hi
>>>>
>>>> maybe i am having a bad google day, can't seem to locate any
>>>> amateur usa, verticle antennas for this band
>>>>
>>>> anyone know of any places that might be selling them?
>>>>
>>>>
>>>> i need a omnidirectional plan ol' verticle antenna for around
>>>> local repeaters
>>>>
>>>>
>>>> thanks
>>> You don't have need of multi-band capabilities?
>>>
>>>
>>> http://www.universal-radio.com/catalog/hamantm/2218.html
>>>
>>> Regards,
>>> JS
>>
>> definately not multiband, and i should have been more specific
>> iwas looking fr a roof mounted antenna not mobile
>>
>>
>> thanks thou i see lots of mobile antennas not many base
>
> I have one of these. I can hit a repeater over 10 miles away on 6
> Meters, using a 5 Watt HT and 100' of RG-58.

http://www.universal-radio.com/catalog/scanants/1205.html
```

3138. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 14:27:19 UTC
From: JB <nospam@goofball.net>
Message-ID: <bvMDk.519$Dk4.181@nwrddc02.gnilink.net>
Source record: 21412

Many out there don't
"John Smith" <assemblywizard@gmail.com> wrote in message
news:gbmuniese3@news.albasani.net...
> Frank wrote:
>
> >
> > You are probably correct concerning a 3:1 SWR. Transmitters
> > usually have to meet full output into a 2:1 SWR, all phases, with no
> > sign of oscillation. In this case I had assumed that a matching network
> > would be used between the PA and coaxial input.
> >
> > Frank
> >
> >
>
> Everything I have ever ran can handle 2:1 quite nicely, with
> transistors, I worry about exceeding that ... or, how big is your
> heatsink/fan?
>
> Regards,
> JS

If you put a FSM out and start fiddling, you find that some radios don't do their best above 1.5:1 and many start shutting back past 2:1 and the internal tuners are only spec'd at being able to match 3:1 or better. Even after that, there is sufficient loss, that your 100 watt radio is now an 80 watt radio. It may be a neat portable feature, but since you have to get the antenna down below 3:1 anyway. Might just as well do it right from the beginning or at least get a big tuner. We didn't worry about these things with the Pi-net tuning.

3139. Re: 1.2 ghz ver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 14:35:19 UTC
From: JB <nospam@goofball.net>
Message-ID: <HCMDk.520$Dk4.45@nwrddc02.gnilink.net>
Source record: 21413

"Dave" <dave@dave.dave> wrote in message news:SvLDk.74$7h7.3@newsfe06.iad...
> Dave wrote:
> > ml wrote:
> >> In article <gapa76cmu1@news.albasani.net>,
> >> John Smith <assemblywizard@gmail.com> wrote:
> >>
> >>> ml wrote:
> >>>> hi
> >>>>
> >>>> maybe i am having a bad google day, can't seem to locate any
> >>>> amateur usa, verticle antennas for this band
> >>>>
> >>>> anyone know of any places that might be selling them?
> >>>>
> >>>>
> >>>> i need a omnidirectional plan ol' verticle antenna for around
> >>>> local repeaters
> >>>>
> >>>>
> >>>> thanks
> >>> You don't have need of multi-band capabilities?
> >>>
> >>>
> >>> http://www.universal-radio.com/catalog/hamantm/2218.html
> >>>
> >>> Regards,
> >>> JS
> >>
> >> definately not multiband, and i should have been more specific
> >> iwas looking fr a roof mounted antenna not mobile
> >>
> >>
> >> thanks thou i see lots of mobile antennas not many base
> >
> > I have one of these. I can hit a repeater over 10 miles away on 6
> > Meters, using a 5 Watt HT and 100' of RG-58.
>
> http://www.universal-radio.com/catalog/scanants/1205.html

There are several discones out there by Diamond, Icom and others. Do work fine 1.2 and VHF/UHF and everything in between too. Good to have for the first outside antenna. There are gain omnis and yagis out there too. Best to use the best coax you can get, even hardline if you can afford the connectors. If you can keep the length down to 30' or less you will be way

ahead.

3140. wbc400 vs cnt400

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 14:46:01 UTC
From: ml <m@di.net>
Message-ID: <m-9E7673.10460128092008@news.optonline.net>
Source record: 21414

hi

in laymans terms does anyone know the practical differences
between these two cables from same firm?

the loss seems about the same,

some company i bought some cnt400 from sent me wbc which i am
not familiar with trying to see if i got ripped

thanks

3141. Re: wbc400 vs cnt400

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 15:35:20 UTC
From: JB <nospam@goofball.net>
Message-ID: <YuNDk.541$Dk4.398@nwrddc02.gnilink.net>
Source record: 21415

They are comparable. CommScope, Inc. wbc400
Yours may be a little more flexible. Same size, connector, loss per foot,
material.
like Times lmr400
like Andrew cnt400
Quality? You be the judge, you don't get the cool Andrew logo.

It seems that CommScope bought or merged with Andrew:
http://www.commscope.com/andrew/eng/solutions/wiress_infra/

Make sure it never gets water inside. Use a RG213 pigtail around the rotor.

"ml" <m@di.net> wrote in message
news:m-9E7673.10460128092008@news.optonline.net...
> hi
>
> in laymans terms does anyone know the practical differences
> between these two cables from same firm?
>
>
> the loss seems about the same,
>
> some company i bought some cnt400 from sent me wbc which i am
> not familiar with trying to see if i got ripped
>
>
> thanks

3142. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 15:37:57 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4003cd9c-ba95-4945-8802-4c75d4ff5a8d@u65g2000hsc.googlegroups.com>
Source record: 21416

On Sep 28, 9:27 am, "JB" <nos...@goofball.net> wrote:
> Many out there don't"John Smith" <assemblywiz...@gmail.com> wrote in message
>
> news:gbmuniese3@news.albasani.net...
>
>
>
> > Frank wrote:
>
> > > You are probably correct concerning a 3:1 SWR. Transmitters
> > > usually have to meet full output into a 2:1 SWR, all phases, with no
> > > sign of oscillation. In this case I had assumed that a matching network
> > > would be used between the PA and coaxial input.
>
> > > Frank
>
> > Everything I have ever ran can handle 2:1 quite nicely, with
> > transistors, I worry about exceeding that ... or, how big is your
> > heatsink/fan?
>
> > Regards,
> > JS
>
> If you put a FSM out and start fiddling, you find that some radios don't do
> their best above 1.5:1 and many start shutting back past 2:1 and the
> internal tuners are only spec'd at being able to match 3:1 or better. Even
> after that, there is sufficient loss, that your 100 watt radio is now an 80
> watt radio. It may be a neat portable feature, but since you have to get
> the antenna down below 3:1 anyway. Might just as well do it right from the
> beginning or at least get a big tuner. We didn't worry about these things
> with the Pi-net tuning.
JB
Things are gettung side tracked here. When I am experimenting I
measure capacitance, inductance
and resistance against frequency where the totally resistive ponts are
of interest.
The standard resonant points will be low resistance and the
anti resonance points can range from 50 ohms to 300 ohms and I plot
these against frequency,.
So a poster took issue with the 300 oghms with the suggestion that I
advocated the use of 300 ohms
connected to 50 ohms for transmission. That was a comment to bait and
people started to bite at it
especially when it was mentioned that 3/4 of the power would be lost.

When all the data is compiled it then becomes useful
with respect to antenna design. For measuring purposes it is only
important that the anti resonant pont is resistive since there are so
many factors that
t
can change the ohmic value in its final environment. It is then that
you become concerned about the matching
The poster mentioned a" system "in his evaluation which has no
relavence to the project at hand, he only posted
for baiting purposes and frankly his supplied figures was just a hoax
or just a plain error that had no connection
to the post I made.
Art

3143. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 16:22:08 UTC
From: JB <nospam@goofball.net>
Message-ID: <QaODk.496$kI6.480@nwrddc01.gnilink.net>
Source record: 21417

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:4003cd9c-ba95-4945-8802-4c75d4ff5a8d@u65g2000hsc.googlegroups.com...
On Sep 28, 9:27 am, "JB" <nos...@goofball.net> wrote:
> Many out there don't"John Smith" <assemblywiz...@gmail.com> wrote in
message
>
> news:gbmuniese3@news.albasani.net...
>
>
>
> > Frank wrote:
>
> > > You are probably correct concerning a 3:1 SWR. Transmitters
> > > usually have to meet full output into a 2:1 SWR, all phases, with no
> > > sign of oscillation. In this case I had assumed that a matching
network
> > > would be used between the PA and coaxial input.
>
> > > Frank
>
> > Everything I have ever ran can handle 2:1 quite nicely, with
> > transistors, I worry about exceeding that ... or, how big is your
> > heatsink/fan?
>
> > Regards,
> > JS
>
> If you put a FSM out and start fiddling, you find that some radios don't
do
> their best above 1.5:1 and many start shutting back past 2:1 and the
> internal tuners are only spec'd at being able to match 3:1 or better. Even
> after that, there is sufficient loss, that your 100 watt radio is now an
80
> watt radio. It may be a neat portable feature, but since you have to get
> the antenna down below 3:1 anyway. Might just as well do it right from the
> beginning or at least get a big tuner. We didn't worry about these things
> with the Pi-net tuning.
JB
Things are gettung side tracked here. When I am experimenting I
measure capacitance, inductance
and resistance against frequency where the totally resistive ponts are
of interest.
The standard resonant points will be low resistance and the
anti resonance points can range from 50 ohms to 300 ohms and I plot

these against frequency,.
So a poster took issue with the 300 oghms with the suggestion that I
advocated the use of 300 ohms
connected to 50 ohms for transmission. That was a comment to bait and
people started to bite at it
especially when it was mentioned that 3/4 of the power would be lost.
When all the data is compiled it then becomes useful
with respect to antenna design. For measuring purposes it is only
important that the anti resonant pont is resistive since there are so
many factors that
t
can change the ohmic value in its final environment. It is then that
you become concerned about the matching
The poster mentioned a" system "in his evaluation which has no
relavence to the project at hand, he only posted
for baiting purposes and frankly his supplied figures was just a hoax
or just a plain error that had no connection
to the post I made.
Art

How are you determining the resistance values of a theoretical antenna? Are you using known resistance of various materials and assuming various resistive losses?

Or are you using resistive terminations?

3144. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 16:27:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbob9e$5p6$1@news.albasani.net>
Source record: 21418

Jim Higgins wrote:

> ...
> Manufactured diamonds are easily spotted with the proper equipment,
> stuff even large jewelry stores don't have... x-ray fluorescence for
> one... not that it matters since the real thing has no more intrinsic
> value. I'd say that close to 90% (SWAG) of the so-called value of
> diamonds is perceived value.
>
> There's a darn good chance that the cost to manufacture a high quality
> diamond exceeds the cost of mining the equivalent one, but they're
> cheaper to the consumer because those who manufacture them don't
> manage the supply like the market for natural diamonds is managed...
> that and they've convinced the market that the "real thing" is better.
>
>
>> Only a fool would invest in diamonds, if you have 'em, dump 'em before
>> EVERYONE finds out! And, remember, you heard it here first--if you feel
>> generous, ship me a 10% "consultation fee." ROFLOL
> ...

You DID NOT read the article by Wired, I can tell ... NO, these "manufactured diamonds" cannot be told apart from those occurring in nature, by ANY JEWELER ... other than they SHOULD bear a laser engraved number upon them.

To tell the difference, they must be placed under an electron microscope ... and the only "difference" that will be seen is that THEY ARE TOO PERFECT--ABSOLUTELY NO FLAWS, THAT IS IT! GET IT RIGHT--THEY ARE REAL!

China is creating them complete--no laser mark and with FLAWS ... place 'em under an electron microscope and you can't tell the difference. The reason?, duh, they ARE REAL. (anyway, just buy a BIG manufactured one and have it cut down to remove the mark--however, it will still be more perfect than any found in nature)

Exceed the cost of mining the "natural ones?" Naaa, you can't even mine 'em at $5 bucks a carrot ...

I repeat, only a fool would buy a natural diamond ... you can find the manufactured ones in better jewelery stores ... they are about 1/3 of the cost of natural ones, at this time ... however, I just negotiated the price to ~%25 ... however, I still got burned, the wife just had to have it though. :-(

Regards,
JS

3145. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 16:29:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbobcm$5ob$1@news.albasani.net>
Source record: 21419

Ed Cregger wrote:

> ...
> And we wonder why usenet is being dropped by one ISP after another? It is
> behavior such as this that keeps folks away in sufficient numbers as to not
> make usenet worth the expense.
>
> Nothing stinks more than pissing contests. Only a moron would be amused by
> this juvenile banter and they don't have a clue as to how to access usenet,
> or what it was for, when it was available.
>
> Ed, NM2K
>
>

Quit pissing all over yourself and bitching like an old nag ... just go over to the moderated group, they don't allow such--yanno? And, enjoy yourself ...

GOODBYE! <grin>

Regards,
JS

3146. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 16:33:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbobjv$5ob$2@news.albasani.net>
Source record: 21420

JB wrote:

>> ...
> after that, there is sufficient loss, that your 100 watt radio is now an 80
> watt radio. It may be a neat portable feature, but since you have to get
> the antenna down below 3:1 anyway. Might just as well do it right from the
> beginning or at least get a big tuner. We didn't worry about these things
> with the Pi-net tuning.
> ...

100 to 80? That ain't even worth sweating, they guy on the other end
will hardly notice ... however, the SWR causing that will cause a
noticeable difference in your received signal from him ...

Regards,
JS

3147. Re: wbc400 vs cnt400

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 16:38:41 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <8dbvd4dea97fe4e8tbvjc5oajnn4in83rg@4ax.com>
Source record: 21421

On Sun, 28 Sep 2008 15:35:20 GMT, "JB" <nospam@goofball.net> wrote:

>It seems that CommScope bought or merged with Andrew:
>http://www.commscope.com/andrew/eng/solutions/wiress_infra/

CommScope bought Andrew for $2.65 billion in Dec 2007:
<http://www.commscope.com/company/eng/aboutus/news/financial_news/1203953_11983.html>
for $13.50 per share in cash plus 0.031543 shares (about $1.50) in
CommScope stock.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3148. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 16:48:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbocha$6rb$1@news.albasani.net>
Source record: 21422

jimp@specsol.spam.sux.com wrote:

> ...
> Sure, but what has that to do with buying stuff from the store?
>
> I don't do recycled beer.
>

Actually, there are material harder than diamond ... this makes diamond,
actually, less appealing for even industrial uses:

http://24carat.co.uk/harderthandiamondframe.html

Making your question even more valid, i.e. the part, "Sure, but what has
that to do with buying stuff from the store?" So, consider it answered!

Regards,
JS

3149. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 17:06:43 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <s7dvd4lc300rs3ljcf681kmu2s0865k35h@4ax.com>
Source record: 21423

On Sun, 28 Sep 2008 09:27:22 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>I repeat, only a fool would buy a natural diamond ... you can find the
>manufactured ones in better jewelery stores ... they are about 1/3 of
>the cost of natural ones, at this time

Even cheaper, you can make your own diamonds in your microwave oven:
<http://hypography.com/forums/chemistry/804-make-diamond-out-of-your-microwave.html>
The main ingredients are charcoal briquettes and peanut butter.
Hmmm... they seem to have left out the requisite plama torch.
Let us know how the diamond smells, err... looks.
--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3150. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 17:20:26 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f3c2f517-b5d0-4e4d-9874-915b62c9ee23@8g2000hse.googlegroups.com>
Source record: 21424

On Sep 28, 11:22 am, "JB" <nos...@goofball.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:4003cd9c-ba95-4945-8802-4c75d4ff5a8d@u65g2000hsc.googlegroups.com...
> On Sep 28, 9:27 am, "JB" <nos...@goofball.net> wrote:
>
> > Many out there don't"John Smith" <assemblywiz...@gmail.com> wrote in
> message
>
> >news:gbmuniese3@news.albasani.net...
>
> > > Frank wrote:
>
> > > > You are probably correct concerning a 3:1 SWR. Transmitters
> > > > usually have to meet full output into a 2:1 SWR, all phases, with no
> > > > sign of oscillation. In this case I had assumed that a matching
> network
> > > > would be used between the PA and coaxial input.
>
> > > > Frank
>
> > > Everything I have ever ran can handle 2:1 quite nicely, with
> > > transistors, I worry about exceeding that ... or, how big is your
> > > heatsink/fan?
>
> > > Regards,
> > > JS
>
> > If you put a FSM out and start fiddling, you find that some radios don't
> do
> > their best above 1.5:1 and many start shutting back past 2:1 and the
> > internal tuners are only spec'd at being able to match 3:1 or better. Even
> > after that, there is sufficient loss, that your 100 watt radio is now an
> 80
> > watt radio. It may be a neat portable feature, but since you have to get
> > the antenna down below 3:1 anyway. Might just as well do it right from the
> > beginning or at least get a big tuner. We didn't worry about these things
> > with the Pi-net tuning.
>
> JB
> Things are gettung side tracked here. When I am experimenting I
> measure capacitance, inductance
> and resistance against frequency where the totally resistive ponts are
> of interest.

> The standard resonant points will be low resistance and the
> anti resonance points can range from 50 ohms to 300 ohms and I plot
> these against frequency,.
> So a poster took issue with the 300 oghms with the suggestion that I
> advocated the use of 300 ohms
> connected to 50 ohms for transmission. That was a comment to bait and
> people started to bite at it
> especially when it was mentioned that 3/4 of the power would be lost.
> When all the data is compiled it then becomes useful
> with respect to antenna design. For measuring purposes it is only
> important that the anti resonant pont is resistive since there are so
> many factors that
> t
> can change the ohmic value in its final environment. It is then that
> you become concerned about the matching
> The poster mentioned a" system "in his evaluation which has no
> relavence to the project at hand, he only posted
> for baiting purposes and frankly his supplied figures was just a hoax
> or just a plain error that had no connection
> to the post I made.
> Art
>
> How are you determining the resistance values of a theoretical antenna? Are
> you using known resistance of various materials and assuming various
> resistive losses?
>
> Or are you using resistive terminations?

I make an antenna and with a MFJ 259 I record the measurements over 30
MegerhzArt

3151. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 17:21:35 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1ab75c35-8429-4cd8-bca4-9232fed4882d@z66g2000hsc.googlegroups.com>
Source record: 21425

On Sep 28, 11:33 am, John Smith <assemblywiz...@gmail.com> wrote:
> JB wrote:
>
> >> ...
>
> > after that, there is sufficient loss, that your 100 watt radio is now an 80
> > watt radio. It may be a neat portable feature, but since you have to get
> > the antenna down below 3:1 anyway. Might just as well do it right from the
> > beginning or at least get a big tuner. We didn't worry about these things
> > with the Pi-net tuning.
> > ...
>
> 100 to 80? That ain't even worth sweating, they guy on the other end
> will hardly notice ... however, the SWR causing that will cause a
> noticeable difference in your received signal from him ...
>
> Regards,
> JS

You think so?
Art

3152. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 17:38:35 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <viPDk.2321$T65.1035@edtnps82>
Source record: 21426

> Things are gettung side tracked here. When I am experimenting I
> measure capacitance, inductance
> and resistance against frequency where the totally resistive ponts are
> of interest.
> The standard resonant points will be low resistance and the
> anti resonance points can range from 50 ohms to 300 ohms and I plot
> these against frequency,.
> So a poster took issue with the 300 oghms with the suggestion that I
> advocated the use of 300 ohms
> connected to 50 ohms for transmission. That was a comment to bait and
> people started to bite at it
> especially when it was mentioned that 3/4 of the power would be lost.
> When all the data is compiled it then becomes useful
> with respect to antenna design. For measuring purposes it is only
> important that the anti resonant pont is resistive since there are so
> many factors that
> t
> can change the ohmic value in its final environment. It is then that
> you become concerned about the matching
> The poster mentioned a" system "in his evaluation which has no
> relavence to the project at hand, he only posted
> for baiting purposes and frankly his supplied figures was just a hoax
> or just a plain error that had no connection
> to the post I made.
> Art
>
> How are you determining the resistance values of a theoretical antenna?
> Are
> you using known resistance of various materials and assuming various
> resistive losses?
>
> Or are you using resistive terminations?

I make an antenna and with a MFJ 259 I record the measurements over 30
MegerhzArt

3153. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 17:47:00 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <oqPDk.2324$T65.738@edtnps82>
Source record: 21427

> Things are gettung side tracked here. When I am experimenting I
> measure capacitance, inductance
> and resistance against frequency where the totally resistive ponts are
> of interest.
> The standard resonant points will be low resistance and the
> anti resonance points can range from 50 ohms to 300 ohms and I plot
> these against frequency,.
> So a poster took issue with the 300 oghms with the suggestion that I
> advocated the use of 300 ohms
> connected to 50 ohms for transmission. That was a comment to bait and
> people started to bite at it
> especially when it was mentioned that 3/4 of the power would be lost.
> When all the data is compiled it then becomes useful
> with respect to antenna design. For measuring purposes it is only
> important that the anti resonant pont is resistive since there are so
> many factors that
> t
> can change the ohmic value in its final environment. It is then that
> you become concerned about the matching
> The poster mentioned a" system "in his evaluation which has no
> relavence to the project at hand, he only posted
> for baiting purposes and frankly his supplied figures was just a hoax
> or just a plain error that had no connection
> to the post I made.
> Art
>
> How are you determining the resistance values of a theoretical antenna?
> Are
> you using known resistance of various materials and assuming various
> resistive losses?
>
> Or are you using resistive terminations?

>I make an antenna and with a MFJ 259 I record the measurements over 30
>MegerhzArt

Oops, sorry for the double posting. Anti resonance for a free
space dipole is typically in the range of 7000 ohms. The
MFJ 259 is only accurate over a limited range of 5 - 500 ohms
so any measurements of anti-resonance is highly questionable.

73,

Frank

3154. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 18:38:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gboj02$f1u$1@news.albasani.net>
Source record: 21428

Jeff Liebermann wrote:
> On Sun, 28 Sep 2008 09:27:22 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> I repeat, only a fool would buy a natural diamond ... you can find the
>> manufactured ones in better jewelery stores ... they are about 1/3 of
>> the cost of natural ones, at this time
>
> Even cheaper, you can make your own diamonds in your microwave oven:
> <http://hypography.com/forums/chemistry/804-make-diamond-out-of-your-microwave.html>
> The main ingredients are charcoal briquettes and peanut butter.
> Hmmm... they seem to have left out the requisite plama torch.
> Let us know how the diamond smells, err... looks.

Damn things taste like they have sand in 'em ... it grits on my teeth
too! ROFLOL

Regards,
JS

3155. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 18:48:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbojhk$f1u$2@news.albasani.net>
Source record: 21429

Art Unwin wrote:
> On Sep 28, 11:33 am, John Smith <assemblywiz...@gmail.com> wrote:
>> JB wrote:
>>
>> >> ...
>>
>>> after that, there is sufficient loss, that your 100 watt radio is now an 80
>>> watt radio. It may be a neat portable feature, but since you have to get
>>> the antenna down below 3:1 anyway. Might just as well do it right from the
>>> beginning or at least get a big tuner. We didn't worry about these things
>>> with the Pi-net tuning.
>>> ...
>> 100 to 80? That ain't even worth sweating, they guy on the other end
>> will hardly notice ... however, the SWR causing that will cause a
>> noticeable difference in your received signal from him ...
>>
>> Regards,
>> JS
>
> You think so?
> Art

Yeah, I do ...

Cut power to 25% and the other guy will see (if his s-meter is accurate)
a drop to half the reading ... at 80% power, little difference, other
than if you were just above noise floor in the first place ... however,
"tweaking" an antenna to perfect match/design criteria has always proved
to we worth the effort ... and especially to my ears--but my s-meter
also ...

Regards,
JS

3156. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 18:55:26 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <yqQDk.2334$T65.2101@edtnps82>
Source record: 21431

> Oops, sorry for the double posting. Anti resonance for a free
> space dipole is typically in the range of 7000 ohms. The
> MFJ 259 is only accurate over a limited range of 5 - 500 ohms
> so any measurements of anti-resonance is highly questionable.

According to:
http://ham.srsab.se/ww/temp/test_MFJ269.pdf
ARRL lab measures the range of the MFJ 269 is 6 to 400
ohms. Not sure what the difference is between this and
the MFJ 259.

Frank

3157. 2MTR/ 440 DIPLEXER

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 18:55:27 UTC
From: justme <jbleaux@gmail.com>
Message-ID: <27l9g1.jkt.17.2@news.alt.net>
Source record: 21430

WANTED for running both bands on one antenna.

tnx

3158. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 19:03:52 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <eb3fb67c-a4fb-4dc3-a401-8acd67a1d4db@k7g2000hsd.googlegroups.com>
Source record: 21432

On Sep 28, 1:55 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > Oops, sorry for the double posting. Anti resonance for a free
> > space dipole is typically in the range of 7000 ohms. The
> > MFJ 259 is only accurate over a limited range of 5 - 500 ohms
> > so any measurements of anti-resonance is highly questionable.
>
> According to:http://ham.srsab.se/ww/temp/test_MFJ269.pdf
> ARRL lab measures the range of the MFJ 269 is 6 to 400
> ohms. Not sure what the difference is between this and
> the MFJ 259.
>
> Frank

The anti resonant points are well within the MFJ 259 specifications
stated above

3159. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 19:05:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbokie$gu8$1@news.albasani.net>
Source record: 21433

Art Unwin wrote:

> ...
> You think so?
> Art

Actually, I will go out on a limb over this point.

I have always found that a mis-matched, or "out of specs", antenna will continue to "ring the ether" a bit more efficiently than it will "pluck a signal from the ether."

I have simply grown to accept this from actual hands-on experience ... your mileage may vary ... and, of course, a poor antenna will continue to be poor even when perfectly matched and within original design specs.

Regards,
JS

3160. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 19:12:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <bedd5438-bb24-4b8c-8d19-d62779926a9d@26g2000hsk.googlegroups.com>
Source record: 21434

On Sep 28, 2:05 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > You think so?
> > Art
>
> Actually, I will go out on a limb over this point.
>
> I have always found that a mis-matched, or "out of specs", antenna will
> continue to "ring the ether" a bit more efficiently than it will "pluck
> a signal from the ether."
>
> I have simply grown to accept this from actual hands-on experience ...
> your mileage may vary ... and, of course, a poor antenna will continue
> to be poor even when perfectly matched and within original design specs.
>
> Regards,
> JS

John, do you really think you can calibrate an S meter by ear if the S
levels were scrambled ?

3161. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 19:19:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbold0$hl1$1@news.albasani.net>
Source record: 21435

Art Unwin wrote:

> ...
> John, do you really think you can calibrate an S meter by ear if the S
> levels were scrambled ?

Absolutely not ... you simply asking that question forces me evaluate
your sanity ...

However, when I ran rigs with NO s-meter, my ear served well enough ...

Regards,
JS

3162. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 19:38:09 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <B2RDk.2345$T65.1479@edtnps82>
Source record: 21436

> According to:http://ham.srsab.se/ww/temp/test_MFJ269.pdf
> ARRL lab measures the range of the MFJ 269 is 6 to 400
> ohms. Not sure what the difference is between this and
> the MFJ 259.
>
> Frank

>The anti resonant points are well within the MFJ 259 specifications
>stated above.

The results you are measuring are certainly within the range of the
MFJ 259. As an example: a 493 ft dipole, 50 ft above an average
ground shows anti-resonance, at 1.9 MHz, and is 15,000 ohms.

Frank

3163. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 19:48:43 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <llkvd41jmb0ftp8abuo3ue7om7cvr93d48@4ax.com>
Source record: 21437

On Sun, 28 Sep 2008 11:48:18 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Cut power to 25% and the other guy will see (if his s-meter is accurate)
>a drop to half the reading ... at 80% power, little difference, other
>than if you were just above noise floor in the first place ... however,
>"tweaking" an antenna to perfect match/design criteria has always proved
>to we worth the effort ... and especially to my ears--but my s-meter
>also ...

I think you mean guess-meter:
<http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/SMeterBlues.htm>
S-meters are notoriously inaccurate.

We have an Icom PCR-1000 remote receiver setup on a local mountain top
run by HRD (Ham Radio Deluxe) software. It's quite handy for tuning
and adjusting antennas and generating a polar plot for HF yagi's and
quad's. There are substantial site errors in doing it this way, but
it's still better than a field stength meter, or the traditional
"how's my signal" report.

I designed the 150w PEP power amplifier section for the Intech M3600
HF marine radio. Using VMOS xsistors, I was able to demonstrate
unconditional stability, at rated power, with any non-resonant load up
to about 8:1 VSWR. Above that the current went up a bit too high for
the 12 ohm load, and Vce climbed for the 400 ohm load. I might have
done better but didn't want to destroy the test radio. The radio was
specified to operate up to a 2:1 VSWR at full power and would reduce
power when the threshold reflected power was detected. Although I
demonstrated that it was possible to operate quite nicely up to 8:1
VSWR, without power reduction, nobody wanted to add that to the data
sheet for fear that someone would actually use it that way.

My guess(tm) is that most modern HF radios can also safely operate
into high VSWR loads, but suspect that manufacturers are also hesitant
to guarantee such operation. Most manufacturers don't even specify a
maximum VSWR and simply reduce power if excessive reverse power
(usually 2:1 at full power) is detected.

Disclaimer: If you trash your radio trying this without monitoring
the Pout, PA temperature, PA xsistor voltage/current, and checking for
oscillations on a spectrum analyzer, don't blame me.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com

Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3164. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 19:57:41 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <7IRDk.1771$Ws1.1209@nlpi064.nbdc.sbc.com>
Source record: 21438

John Smith wrote:
> they ARE REAL.

Big deal. If I compress my pencil lead enough, I get
the same results. :-)
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3165. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 20:02:45 UTC
From: dfinn1@nc.rr.com
Message-ID: <d3a07141-71c3-4927-8117-5c0c352853d8@l42g2000hsc.googlegroups.com>
Source record: 21439

On Sep 26, 7:24 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Fri, 26 Sep 2008 15:52:20 -0500, richardharri...@webtv.net (Richard
>
> Harrison) wrote:
> >Careful. Remember "Nobody doesn`t like Sara Lee!"
>
> Paired up with a 110 year old Pillsbury Dough Boy without any yeast?
> That won't raise any bread on Wall Street.... ;-(
>
> 73's
> Richard Clark, KB7QHC

Good one Richard.

3166. Re: A Sunspot

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 20:05:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gboo2qkio1@news.albasani.net>
Source record: 21440

Cecil Moore wrote:
> John Smith wrote:
>> they ARE REAL.
>
> Big deal. If I compress my pencil lead enough, I get
> the same results. :-)

Been using that exercise machine again ... I can tell!

Now comes the claim you can do it with your bare hands! LOL

Warm regards,
JS

3167. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 20:07:11 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2uRDk.1772$Ws1.1079@nlpi064.nbdc.sbc.com>
Source record: 21441

John Smith wrote:
> However, when I ran rigs with NO s-meter, my ear served well enough ...

Indeed, the 1-9 Signal Strength system was in operation
before S-meters were in standard use, dating back to the
very early 20th century. The "x dB over S9" came later.

Even when I got my first ham license in the early 50's,
the RF gain control used for CW rendered the S-meter
reading invalid.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3168. Re: FCC license

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 21:19:19 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <40tvd4hf5b9rffj3bhcmctdptrqdv6i7ol@4ax.com>
Source record: 21442

On Mon, 22 Sep 2008 09:08:36 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>Jeff Liebermann wrote:
>> On 21 Sep 2008 03:37:42 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
>> wrote:
>>
>>>>>> I have also noticed that most of the PGs don't even have an FRN #
>>>> What's a PG?
>>
>>> Its the first two letters in the FCC General RadioTelephone Operator
>>> License number.
>>> Ed K7AAT
>>
>> Thanks. ULS, CORES, FRN numbers, and such started around 1998(?). It
>> was essentially optional (because the system didn't work) until about
>> mid 2000, when Congress demanded that all business with government
>> agencies include an SSI number (social security number). To get an
>> FRN number, you need to supply an SSI number.
>>
>> I passed my GROL in Nov 1994, somewhat before FRN numbers were first
>> issued. Prior to that, I had an FCC 2nd and later 1st RadioTelephone
>> license with radar endorsement. I didn't want to deal with the ULS
>> mess so I avoided getting one. I eventually wanted to upgrade from
>> Technican class to General class[1], and which required an FRN number.
>> Oh well. Some of my friends and accomplises that obtained GROL
>> licenses at the same time as me still have not obtained FRN numbers.
>>
>>
>> [1] I was going to just sign the paperwork for the General class
>> license as I had passed 5 wpm back in the stone age of ham radio as a
>> Novice. However, the VE assured me that the price was the same for
>> the Extra Class license, so I should try taking it anyway. The logic
>> seemed reasonable except for one problem. I hadn't studied for the
>> Extra in the slightest. So, I blundered, guessed, snarled, and
>> muddled my way through the Extra exam, fully expecting to fail
>> miserably. I had to borrow a calculator. I was amazed when I passed
>> the Extra by one question. I'm fairly sure I answered all the
>> technical questions correctly, but missed most of the operating, band
>> limits, sub-bands, rules, and regs.
>>
>You've described a key test taking strategy that applies well beyond the
>FCC license exams. No licensing authority requires 100% scores, and they
>generally specify the distribution of questions among subjects. (this is

>true for pilot exams and the professional engineering exams, as well).
>One can reasonably take a strategy of spending your study time to get
>perfect score on the parts you know and accepting what you get on the
>parts you don't. Overall, I believe that the lower "stress level" going
>into the test knowing that even if you screw up the small number of
>questions you don't know, you can still "pass", is an overall benefit.
>
>This, is, of course, why you have behind the wheel driving tests, have
>to have an examiner check ride, or reference letters and proven
>experience for all those licenses. The folks giving the test KNOW that
>you can't possibly test everything.

That reminds me on how i advised coworkers on test taking strategy for
the PE exam. Don't waste time on areas that you know well, nor in
areas where you are really weak. Study the areas that you kind of
know. That is the best chance to improve your score. It works by
track record.

3169. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 21:47:16 UTC
From: JB <nospam@goofball.net>
Message-ID: <EXSDk.575$kI6.73@nwrddc01.gnilink.net>
Source record: 21443

> Actually, I will go out on a limb over this point.
>
> I have always found that a mis-matched, or "out of specs", antenna will
> continue to "ring the ether" a bit more efficiently than it will "pluck
> a signal from the ether."

Concur.
RX level can be even more noticeable on high Q antennas off-resonance as you would expect.

Now add the line loss. Also, reflections don't seem to matter much with CW and SSB but can have an effect on some digital modes and certainly television.

With solid state PAs, not all are created equal, and shutback often errs on the side of keeping warranty costs down. Stability is in the reach of most modern ones now. The current can be dealt with if you can get the heat out of the junction to a point. But the voltage rise is the killer.

Also be aware that any transmission line will be significant in your measurements at the rig end.

The MFJ can see anti-resonance if it doesn't get confused on other oddities such as coax length or connector humps, reflections. It can get pretty dicey when you sweep because all these things jump out at you when the load is out of resonance and or mismatches anywhere on the line. Not to mention the harmonics in the unit when you are looking at high impedances.

3170. Re: wbc400 vs cnt400

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 22:07:10 UTC
From: ml <m@di.net>
Message-ID: <m-04F9D8.18071028092008@news.optonline.net>
Source record: 21444

In article <m-9E7673.10460128092008@news.optonline.net>, ml <m@di.net>
wrote:

> hi
>
> in laymans terms does anyone know the practical differences
> between these two cables from same firm?
>
>
> the loss seems about the same,
>
> some company i bought some cnt400 from sent me wbc which i am
> not familiar with trying to see if i got ripped
>
>
> thanks

thanks for the responces so far appreciate it, but --

the info posted was mostly in my original question/post....

so if anyone might happen to know the differences beyound whats
listed here i'd love to know and be greatful

i am guessing that if they are from same company but have different
part numbers there has to be some difference ??

tnx

3171. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-28 23:18:39 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <AhUDk.1224$W06.647@flpi148.ffdc.sbc.com>
Source record: 21445

Frank wrote:
>> Oops, sorry for the double posting. Anti resonance for a free
>> space dipole is typically in the range of 7000 ohms. The
>> MFJ 259 is only accurate over a limited range of 5 - 500 ohms
>> so any measurements of anti-resonance is highly questionable.
>
> According to:
> http://ham.srsab.se/ww/temp/test_MFJ269.pdf
> ARRL lab measures the range of the MFJ 269 is 6 to 400
> ohms. Not sure what the difference is between this and
> the MFJ 259.
>
> Frank
>
>
The 269 has the 440mhz band.

Dave WD9BDZ

3172. Re: wbc400 vs cnt400

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 01:42:59 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <UjWDk.41804$Ep1.1405@bignews2.bellsouth.net>
Source record: 21446

JB answered your question.

"ml" <m@di.net> wrote in message
news:m-04F9D8.18071028092008@news.optonline.net...
> In article <m-9E7673.10460128092008@news.optonline.net>, ml <m@di.net>
> wrote:
>
>> hi
>>
>> in laymans terms does anyone know the practical differences
>> between these two cables from same firm?
>>
>>
>> the loss seems about the same,
>>
>> some company i bought some cnt400 from sent me wbc which i am
>> not familiar with trying to see if i got ripped
>>
>>
>> thanks
>
> thanks for the responces so far appreciate it, but --
>
> the info posted was mostly in my original question/post....
>
>
> so if anyone might happen to know the differences beyound whats
> listed here i'd love to know and be greatful
>
>
> i am guessing that if they are from same company but have different
> part numbers there has to be some difference ??
>
>
>
> tnx

3173. Re: wbc400 vs cnt400

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 02:21:22 UTC
From: JB <nospam@goofball.net>
Message-ID: <CYWDk.702$Dk4.452@nwrddc02.gnilink.net>
Source record: 21447

"ml" <m@di.net> wrote in message
news:m-04F9D8.18071028092008@news.optonline.net...
> In article <m-9E7673.10460128092008@news.optonline.net>, ml <m@di.net>
> wrote:
>
> > hi
> >
> > in laymans terms does anyone know the practical differences
> > between these two cables from same firm?
> >
> >
> > the loss seems about the same,
> >
> > some company i bought some cnt400 from sent me wbc which i am
> > not familiar with trying to see if i got ripped
> >
> >
> > thanks
>
> thanks for the responces so far appreciate it, but --
>
> the info posted was mostly in my original question/post....
>
>
> so if anyone might happen to know the differences beyound whats
> listed here i'd love to know and be greatful
>
>
> i am guessing that if they are from same company but have different
> part numbers there has to be some difference ??
>
It would seem the Andrew part # was dropped because of the duplication, or
one was a rebrand of the other. A quick google will turn up specs for both.
The wbc is spec'd ever so slightly better at 900 but may have just been from
rounding. I haven't bought either lately. You have the cable in hand
though, let me know if it meets it's own specs in testing. Have you used
either before? There are good reasons for choosing the right cable for the
job.

3174. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 03:02:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbpgff$is1$1@news.albasani.net>
Source record: 21448

Penang wrote:

> ...
> So I desperately need you help.
> ...

Here is one guys construction attempt ...

http://www.findmorecollectibles.com/wifi.html

Just a general USB (dongle type) wifi adapter could be substituted for
the specific one he uses, the hole in the can adjusted for it ...

Regards,
JS

3175. Re: How to make an excellent wifi (802.11 b/g/n) antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 04:29:50 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <dvl0e45ob0or4i2pvm3rubg3h18inliktv@4ax.com>
Source record: 21449

On Sun, 28 Sep 2008 20:02:03 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Here is one guys construction attempt ...
>http://www.findmorecollectibles.com/wifi.html
>Just a general USB (dongle type) wifi adapter could be substituted for
>the specific one he uses, the hole in the can adjusted for it ...

Yech. 19.5dBi maximum gain from a 0.6 meter dish at 2.4GHz. Most
such construction efforts end up with about 12-14dBi:
<http://groups.google.com/group/alt.internet.wireless/msg/95865cfd18b0f102>

Pick a do-it-thyself wi-fi antenna, any antenna:
<http://www.dxzone.com/catalog/Antennas/WiFi/>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3176. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 05:21:49 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <%BZDk.587$595.345@newsfe01.iad>
Source record: 21450

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:llkvd41jmb0ftp8abuo3ue7om7cvr93d48@4ax.com...

>
> My guess(tm) is that most modern HF radios can also safely operate
> into high VSWR loads, but suspect that manufacturers are also hesitant
> to guarantee such operation. Most manufacturers don't even specify a
> maximum VSWR and simply reduce power if excessive reverse power
> (usually 2:1 at full power) is detected.

That sounds right..

I have two HF radios, (Kenwood TS-120, TS-870) and I often observe the
forward power climbing as I manually tune and reduce the reflected power.
At first glance, this would seem to indicate the rig had previously
throttled back its output in response to the consequences of a mismatch.

I never intentionally tune at anything more than a few watts, so perhaps the
protection circuits operate at less than full power, too. The autotuner in
the TS-870 uses about 10 watts.

3177. Re: 2MTR/ 440 DIPLEXER

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 05:29:45 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <rJZDk.588$595.87@newsfe01.iad>
Source record: 21351

"justme" <jbleaux@gmail.com> wrote in message
news:27l9g1.jkt.17.2@news.alt.net...
> WANTED for running both bands on one antenna.
>
> tnx
>
>

http://www.rfparts.com/diamond/Product_Catalog/plexers.html

A couple of these will suit your needs.

3178. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 12:18:31 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <sI3Ek.2039$c45.514@nlpi065.nbdc.sbc.com>
Source record: 21352

Sal M. Onella wrote:
> I have two HF radios, (Kenwood TS-120, TS-870) and I often observe the
> forward power climbing as I manually tune and reduce the reflected power.

This is normal operation not necessarily associated with
foldback. As the tuner is tuned closer to a Z0-match,
more and more reflected power is redistributed back
toward the antenna. Although not often done, one could
conceivably tune the system by monitoring the forward
power on the antenna side of the tuner and tuning for
a maximum. It's a conservation of energy thing. Maximum
forward power to the antenna = minimum reflected power
toward the source. Who says the tuner has no effect at
the antenna?
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3179. Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 13:25:08 UTC
From: Howard Kowall <hkowall@shaw.ca>
Message-ID: <UG4Ek.42$ex3.13@newsfe02.iad>
Source record: 21353

Hello All

Well after all the comments made and doing some research on the G5RV(I guess it has it place) I have decide to try something new and hopefully better.Here it is, the Mystery Antenna,I had all the parts at home, so it did not cost any money at this point.
Built it last night took about 1.5 hrs to build,including making my own center insulators and end insulators.Here is the link to the site,I am sure allot of you in this group know about it and looking forward to your comments.Will let you all know how it works,and some of the readings I get from it.
http://w5gi.com/mysteryantenna.htm

thanx all
Howard
VE4ISP
ps. thanx to all that commented on my G5RV post

3180. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 14:28:20 UTC
From: Edwin Johnson <edwinljohnson@bellsouth.net>
Message-ID: <8C5Ek.42341$vX2.23080@bignews6.bellsouth.net>
Source record: 21354

On 2008-09-29, Howard Kowall <hkowall@shaw.ca> wrote:
> Hello All
>
> Well after all the comments made and doing some research on the G5RV(I
> guess it has it place) I have decide to try something new and hopefully
> better.Here it is, the Mystery Antenna,I had all the parts at home, so it

I built a Mystery Antenna a few years ago just to see how it performed. Since then, John has changed his explanation a bit, but it is supposed to have a better pattern for its designed frequency, ala 20m, than the g5rv. Of course you can design it for whatever frequency you wish. I use mine for an all band portable antenna and it seems to work well.

I ended the parallel line in a pl-259. To that I attach, with a barrel connector, a ferrite bead balun (W2DU style) and then the coax to the tuner to prevent any common mode from coming back down the line. We use it at ham field day each year for the GOTA area.

I will not claim any particular advantage over, say, a dipole fed with ladder line to a tuner and will not quote reports, which are at best nebulus anyway, but it was fun to build and does work fine.

Incidentally, the cw operator at field day put together the D3 (the 1.5 wavelength ant) on John's W5GI site, tuned for the 40m cw freqs and it worked very well. Of course that requires a bit more real estate.

73 ...Edwin, KD5ZLB
--
____
"Once you have flown, you will walk the earth with your eyes
turned skyward, for there you have been, there you long to
return."-da Vinci http://bellsouthpwp2.net/e/d/edwinljohnson

3181. Re: 2MTR/ 440 DIPLEXER

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 15:09:56 UTC
From: JB <nospam@goofball.net>
Message-ID: <8d6Ek.794$Dk4.331@nwrddc02.gnilink.net>
Source record: 21355

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:rJZDk.588$595.87@newsfe01.iad...
>
> "justme" <jbleaux@gmail.com> wrote in message
> news:27l9g1.jkt.17.2@news.alt.net...
> > WANTED for running both bands on one antenna.
> >
> > tnx
> http://www.rfparts.com/diamond/Product_Catalog/plexers.html
>
> A couple of these will suit your needs.
>
If you get the pigtail type you can cut of the stupid PL259 and put N males
on. I wanted to tear my hair out when I bought a unit with bulkhead
connectors and wound up probably losing 3 db in all the jumpers and
adapters.

3182. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 15:25:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbqs1p$v36$1@news.albasani.net>
Source record: 21356

Howard Kowall wrote:

>> ...
> comments.Will let you all know how it works,and some of the readings I get
> from it.
> http://w5gi.com/mysteryantenna.htm
>
> thanx all
> Howard
> VE4ISP
> ps. thanx to all that commented on my G5RV post

Here is one guys thoughts on it:

http://www.coolweb.ws/genesis/Downloads/Thoughts%20on%20the%20Mystery%20Antenna.pdf

Regards,
JS

3183. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 16:40:04 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <c502e4lm7nvqboctd2lo7267hno519mlpf@4ax.com>
Source record: 21357

On Sun, 28 Sep 2008 22:21:49 -0700, "Sal M. Onella"
<salmonella@food.poisoning.org> wrote:

>"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
>news:llkvd41jmb0ftp8abuo3ue7om7cvr93d48@4ax.com...
>> My guess(tm) is that most modern HF radios can also safely operate
>> into high VSWR loads, but suspect that manufacturers are also hesitant
>> to guarantee such operation. Most manufacturers don't even specify a
>> maximum VSWR and simply reduce power if excessive reverse power
>> (usually 2:1 at full power) is detected.

>I have two HF radios, (Kenwood TS-120, TS-870) and I often observe the
>forward power climbing as I manually tune and reduce the reflected power.
>At first glance, this would seem to indicate the rig had previously
>throttled back its output in response to the consequences of a mismatch.

That's normal. You're not measuring forward power. You're measuring
RF voltage near the radio antenna connector. Once the load (coax +
antenna) moves away from a 50 ohm resistive load, all bets are off as
to what the voltage means. The same for a VSWR meter or watt meter
installed between the radio and the coax cable to the antenna. Once
the load gets away from 50 ohms, the voltage readings are not an
indication of power.

>I never intentionally tune at anything more than a few watts, so perhaps the
>protection circuits operate at less than full power, too. The autotuner in
>the TS-870 uses about 10 watts.

Yep. That's the way it should be done. The auto-tuners intentionally
reduce power to prevent damage if they cross through some odd
resonance that causes the voltage across some internal component to go
sky high. Half the power, 1/4th the voltage. It could zap the tuner,
but also zap the power amplfier if tuned at full power.

That begs the question "What happens to a transmitter if one
intentionally runs it with a high VSWR?" I don't know the full
answer. Conventional wisdom is that the xmitter finals overheat. I've
never seen much of that except with a tube power amplifier. With the
power amps I worked on, the voltage across the transistor would either
increase dramatically, or the current through the transistor would
increase dramatically. Excess voltage would zap the junction. Excess
current might cause overheating, but more commonly, would simply turn
the xsistor wire bonds into fuses or melt the junction even before the
heat sink could extract the heat.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3184. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 16:47:25 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <wB7Ek.1234$fD.634@flpi145.ffdc.sbc.com>
Source record: 21358

Jeff Liebermann wrote:
> That's normal. You're not measuring forward power. You're measuring
> RF voltage near the radio antenna connector. Once the load (coax +
> antenna) moves away from a 50 ohm resistive load, all bets are off as
> to what the voltage means. The same for a VSWR meter or watt meter
> installed between the radio and the coax cable to the antenna. Once
> the load gets away from 50 ohms, the voltage readings are not an
> indication of power.

It's not an indication of *NET* power but it is certainly an
indication of forward power (or reverse power). If it weren't
anyone could sue Bird for false advertising.

> That begs the question "What happens to a transmitter if one
> intentionally runs it with a high VSWR?" I don't know the full
> answer. Conventional wisdom is that the xmitter finals overheat. I've
> never seen much of that except with a tube power amplifier.

A high VSWR can cause over-voltage or over-current conditions
depending upon phase. Over-current conditions can indeed cause
the finals to overheat. Over-voltage conditions can cause punch-
through of the finals. The key to understanding the effect of
SWR on the finals is in understanding constructive and destructive
interference.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3185. Re: 2MTR/ 440 DIPLEXER

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 16:52:47 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <u712e4l8rms9r1m8teh854t8qqce3imu6c@4ax.com>
Source record: 21359

On Mon, 29 Sep 2008 15:09:56 GMT, "JB" <nospam@goofball.net> wrote:

>If you get the pigtail type you can cut of the stupid PL259 and put N males
>on. I wanted to tear my hair out when I bought a unit with bulkhead
>connectors and wound up probably losing 3 db in all the jumpers and
>adapters.

Have you ever actually measured the loss in coax adapters? See:
<http://802.11junk.com/jeffl/antennas/connector-loss/>
This was a bench test of a mess of adapters at 2.4GHz and 450MHz. The
numbers worked out to about 0.05dB loss per adapter at 2.4Ghz or
roughly what an equivalent length of LMR-400 would lose. At 450MHz,
the entire string only lost 0.2dB. I've also run the same test in
front of various radio clubs with perhaps 5ft of assorted adapters in
series at 450MHz. (sorry, no photos). The loss was also minimal.

However, I cheated. Not one of the adapters in my test had a "UHF
connector" at either end. When I ran the same test with a string of
UHF connectors, the results were far worse for loss and VSWR at
2.4GHz. For this reason, you're probably justified in replacing the
UHF connectors with N but not because of the added adapters.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3186. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 17:15:36 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <hk22e49qthamn6f646env2ashtmqu9er0r@4ax.com>
Source record: 21360

On Mon, 29 Sep 2008 11:47:25 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>Jeff Liebermann wrote:
>> That's normal. You're not measuring forward power. You're measuring
>> RF voltage near the radio antenna connector. Once the load (coax +
>> antenna) moves away from a 50 ohm resistive load, all bets are off as
>> to what the voltage means. The same for a VSWR meter or watt meter
>> installed between the radio and the coax cable to the antenna. Once
>> the load gets away from 50 ohms, the voltage readings are not an
>> indication of power.
>
>It's not an indication of *NET* power but it is certainly an
>indication of forward power (or reverse power). If it weren't
>anyone could sue Bird for false advertising.

Bird is very specific that their 50 ohm wattmeters are only useful in
a 50 ohm system. Here's one of your articles explaining how it works
in a 75 ohm system:
<http://groups.google.com/group/rec.radio.amateur.antenna/msg/717e8daabed08fd9>
Incidentally, I've been running cheap 75 ohm coax in 50 ohm systems
for years without any problem. Max VSWR= 1.5:1
<http://www.qsl.net/n9zia/wireless/75_ohm_hardline.html>
It's especially useful at 2.4Ghz, where the rather high coax cable
losses almost totally eliminates any detectable reflected power.

>> That begs the question "What happens to a transmitter if one
>> intentionally runs it with a high VSWR?" I don't know the full
>> answer. Conventional wisdom is that the xmitter finals overheat. I've
>> never seen much of that except with a tube power amplifier.

>A high VSWR can cause over-voltage or over-current conditions
>depending upon phase. Over-current conditions can indeed cause
>the finals to overheat. Over-voltage conditions can cause punch-
>through of the finals. The key to understanding the effect of
>SWR on the finals is in understanding constructive and destructive
>interference.

Agreed. I didn't want to go into the mechanism for where the excess
voltage or current came from, just the risks involved in tuning at
full power. You can run a radio at full power with a high VSWR load,
but it's likely that either the PA voltage or the current are going to
approach the point of no return. Reducing power is much safer than
finding the limit the hard way.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3187. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 17:57:44 UTC
From: dplatt@radagast.org
Message-ID: <ohh7r5-qp6.ln1@radagast.org>
Source record: 21362

In article <%BZDk.587$595.345@newsfe01.iad>,
Sal M. Onella <salmonella@food.poisoning.org> wrote:

>> My guess(tm) is that most modern HF radios can also safely operate
>> into high VSWR loads, but suspect that manufacturers are also hesitant
>> to guarantee such operation. Most manufacturers don't even specify a
>> maximum VSWR and simply reduce power if excessive reverse power
>> (usually 2:1 at full power) is detected.
>
>That sounds right..
>
>I have two HF radios, (Kenwood TS-120, TS-870) and I often observe the
>forward power climbing as I manually tune and reduce the reflected power.
>At first glance, this would seem to indicate the rig had previously
>throttled back its output in response to the consequences of a mismatch.
>
>I never intentionally tune at anything more than a few watts, so perhaps the
>protection circuits operate at less than full power, too. The autotuner in
>the TS-870 uses about 10 watts.

My own experience with a TS-2000 strongly suggests that this radio
does reduce its transmit power into difficult loads, even at
relatively low output-power settings (e.g. the 10-watt "tune" setting).

I've tried using this radio with an SGC longwire autotuner I picked up
for cheap at a hamfest, and have had great difficulty getting a
successful tuning. I hit the "tune" button, the radio starts
transmitting, and the autotuner simply chatters away indefinitely. I
can see the radio's SWR indicator bouncing all over the place, but it
never settles down and the tuner never "locks".

If I use the same autotuner, and the same antenna setup, with a
Ten-Tec Scout, the tuner will often achieve a successful lock on the
very same frequencies within 3-4 seconds, even though the Ten-Tec's
"tune" power setting is at the lower end of the SGC's tuning-power
specification range.

The TS-2000 has a high-SWR power scaleback. The Ten-Tec does not
(according to the manual it's SWR-protected in a different way). I
infer that the TS-2000 is probably varying its transmit power
constantly, as the SGC tries different matching combinations, and that
the rapid fluctuations in forward power are "confusing" the
autotuner's match-search algorithm.

So, it's entirely possible that Kenwood uses a transmit-power
throttleback algorithm which is sensitive to the output SWR, rather

than to the absolute level of reflected power seen by the finals.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3188. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 18:06:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <PO8Ek.1812$ZP4.214@nlpi067.nbdc.sbc.com>
Source record: 21361

Jeff Liebermann wrote:
> Bird is very specific that their 50 ohm wattmeters are only useful in
> a 50 ohm system.

What you seem to be missing is that it takes only a few
inches of 50 ohm coax on each side of the directional
wattmeter to force a "50 ohm system". 50 ohm coax *IS*
a 50 ohm system, i.e. the load doesn't matter.

All this is easily proven by wading through the math.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3189. Re: Bondage movie posts on Usenet -- a thing of the past?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 19:06:26 UTC
From: N8WWM <mrbindwell@n8wwm.com>
Message-ID: <gbr963dbp1@news.tornevall.net>
Source record: 21363
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.shortwave,rec.radio.amateur.antenna,alt.ohio.toledo

"Leo Marvin" <psr2002@gmail.com> wrote in message
news:7cfc74bb-f772-4d61-83d4-98f53641399f@y38g2000hsy.googlegroups.com...
> What happened to alll the great videos and stills from sessions at
> places like Hogtied, Hardtied, Infernal Restraints, etc., etc.? Am I
> the only one who doesn't see these anymore on groups like
> alt.binaries.multimedia.bondage and
> alt.binaries.erotica.pictures.bondage? Was there some kind of legal
> action taken? Or have my ISP providers (both of them) just decided to
> suck? Seriously -- anybody know what's up?? Is there any other place
> to go for these posts?
>
>
My isp dropped the good stuff too. ;-((

mrbindwell

3190. Any Toledo hot spots?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 19:09:06 UTC
From: N8WWM <mrbindwell@n8wwm.com>
Message-ID: <gbr9b2ddn1@news.tornevall.net>
Source record: 21364
Cross-posted to: soc.subculture.bondage-bdsm,alt.bdsm-personals,alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

Hi everyone!

Anyone know of a nice club or hangout in the Toledo area that caters to cross dressing radio operators? I'm a guy from Toledo who enjoys showing a submissive man a good time in every way. I have so many interests that there probably is some broad common ground between myself and about anyone. I love to talk about BDSM issues and interests, and have been generally regarded as a funny guy to hang out with who has a good head on his shoulders. Send me a message for anything else you'd like to know!
I've attatched a link to my picture below, I consider myself a BBW trapped in a mans body and will be dominant to the right gentleman. (ham radio operators move to the front of the line)

N8WWM mrbindwell
http://img293.imageshack.us/img293/1972/dougthecrossdresserpb7.jpg

3191. Re: Sharing photos

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 19:13:21 UTC
From: N8WWM <mrbindwell@n8wwm.com>
Message-ID: <gbr9j1$dg0$1@news.tornevall.net>
Source record: 21370
Cross-posted to: soc.subculture.bondage-bdsm,alt.bdsm-personals,alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

"Spanker" <spankerpoligoli@gmail.com> wrote in message
news:1a4b6ab0-ceab-425a-ad84-6c545f9fa5fc@s50g2000hsb.googlegroups.com...
> Does anyone wants to share photos in this group ?
>
> Have fun
>
Sure, here I am. Comments welcum.

http://img293.imageshack.us/img293/1972/dougthecrossdresserpb7.jpg

mrbindwell n8wwm

3192. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 19:22:35 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbr9to$s30$1@news.service.uci.edu>
Source record: 21367

Jeff Liebermann wrote:

> Half the power, 1/4th the voltage.

You probably mean half the voltage, 1/4 the power.

73, ac6xg

3193. Crisco bondage fantasies anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 19:22:50 UTC
From: N8WWM <mrbindwell@n8wwm.com>
Message-ID: <gbra4rdoo1@news.tornevall.net>
Source record: 21365
Cross-posted to: soc.subculture.bondage-bdsm,alt.bdsm-personals,alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

CRISCO KATHY, KC8QJP wants to try it.

3194. Re: I'm Looking For Someone To Choke Me!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 19:29:19 UTC
From: N8WWM <mrbindwell@n8wwm.com>
Message-ID: <gbragvdvj1@news.tornevall.net>
Source record: 21366
Cross-posted to: soc.subculture.bondage-bdsm,alt.bdsm-personals,alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

"nirvanafan201" <nirvanafan201@hotmail.com> wrote in message
news:652f66dc-2fc3-4494-a457-4898b8887aba@c65g2000hsa.googlegroups.com...
> Hey all! Hope you had a great summer, mine was ok... I'm a 24 yrs old
> college boy and ever since I can remember I have loved being choked.
> The feeling when I know my face is blue is absolutly amazing. My eyes
> buldging and everything going in slow motion! I just love it!!! My
> favorite way of being choked is with bare hands while im laying on my
> back, but anyway you want is ok with me! Anyone who is safe and sane
> and wants to meet up and choke me or if you're just up for talking,
> message me on yahoo. Nirvanafan201. I hope to talk to you soon!
>
I'm a guy from Toledo who enjoys showing a submissive boy a good time in every way. I have so many interests that there probably is some broad common ground between myself and about anyone. I love to talk about D/s and BDSM issues and interests, and have been generally regarded as a funny guy to hang out with who has a good head on his shoulders. Send me a message for anything else you'd like to know!

mrbindwell n8wwm

3195. Re: Is Comcast giving you this story?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 19:34:03 UTC
From: N8WWM <mrbindwell@n8wwm.com>
Message-ID: <gbrapr$e21$1@news.tornevall.net>
Source record: 21368
Cross-posted to: alt.ohio.toledo,rec.radio.shortwave,rec.radio.amateur.antenna

"Mutant" <mutant@psygone.org> wrote in message
news:adc539d1-6776-4cd6-a637-50cdfe9d6e93@d77g2000hsb.googlegroups.com...

United Press International - News. Analysis. Insight.® - 100 Years of
Journalistic Excellence
Comcast told to stop blocking Web tool
Published: Aug. 3, 2008 at 2:45 PM
WASHINGTON, Aug. 3 (UPI) -- Broadband Internet customers of cable
television giant Comcast should be free to use file-sharing software,
the Federal Communications Commission says.

The commission voted Friday to order Comcast to stop blocking its
Internet customers from using BitTorrent, an online software
application that enables users to share large movie, TV show and music
files, The Hollywood Reporter said.

Commission Chairman Kevin Martin split with his Republican colleagues
to join the two Democratic members to produce a 3-2 vote against
Comcast. The precedent-setting decision was hailed by supporters of so-
called net neutrality, which maintains Internet service providers
should be barred from discriminating among various types of traffic.

"It was unreasonable for Comcast to discriminate against particular
Internet applications, including BitTorrent," Martin wrote in his
majority opinion. "They delayed and blocked customers using a
disfavored application even when there was no network congestion."

Other commissioners, however, said Internet engineers need to regulate
traffic flow and say the ruling will nudge providers toward
instituting volume-based pricing.

The bastards took away my BDSM newgroups!

mrbindwell n8wwm

3196. Re: discussion

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 19:38:12 UTC
From: N8WWM <mrbindwell@n8wwm.com>
Message-ID: <gbrb1k$e87$1@news.tornevall.net>
Source record: 21369
Cross-posted to: soc.subculture.bondage-bdsm,alt.bdsm-personals,alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

"Insane" <me@goininsane.com> wrote in message news:gb5gp0$me1$1@aioe.org...
> we need people for disussion ,, http://www.goininsane.com
>
>
Can we discuss Toledo BDSM there?

mrbindwell n8wwm

3197. Re: wbc400 vs cnt400

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 22:55:31 UTC
From: ml <m@di.net>
Message-ID: <m-219745.18553129092008@news.optonline.net>
Source record: 21371

In article <CYWDk.702$Dk4.452@nwrddc02.gnilink.net>,
"JB" <nospam@goofball.net> wrote:

> "ml" <m@di.net> wrote in message
> news:m-04F9D8.18071028092008@news.optonline.net...
> > In article <m-9E7673.10460128092008@news.optonline.net>, ml <m@di.net>
> > wrote:
> >
> > > hi
> > >
> > > in laymans terms does anyone know the practical differences
> > > between these two cables from same firm?
> > >
> > >
> > > the loss seems about the same,
> > >
> > > some company i bought some cnt400 from sent me wbc which i am
> > > not familiar with trying to see if i got ripped
> > >
> > >
> > > thanks
> >
> > thanks for the responces so far appreciate it, but --
> >
> > the info posted was mostly in my original question/post....
> >
> >
> > so if anyone might happen to know the differences beyound whats
> > listed here i'd love to know and be greatful
> >
> >
> > i am guessing that if they are from same company but have different
> > part numbers there has to be some difference ??
> >
> It would seem the Andrew part # was dropped because of the duplication, or
> one was a rebrand of the other. A quick google will turn up specs for both.
> The wbc is spec'd ever so slightly better at 900 but may have just been from
> rounding. I haven't bought either lately. You have the cable in hand
> though, let me know if it meets it's own specs in testing. Have you used
> either before? There are good reasons for choosing the right cable for the
> job.

<<>>hi JB

thanks for the help when i get some time i'll have to call up
the manuf to see thou perhaps what you wrote above makes the
most sence just i need to be sure

i have certainly used lots of times microwave lmr 400 etc and
andrews cnt400 i typically always get the db both seem to have same
construction styles

i don't really have any way to test them per say they seem
pretty close so if there is a difference i prob wouldn't know until
comscope tells me
so i always wonder if there is something that could bite me
gotta give'm a buzz

thanks very much

3198. Re: Is Comcast giving you this story?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 23:00:59 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <ycednUbUtaS0w3zVnZ2dnUVZ_g2dnZ2d@comcast.com>
Source record: 21372
Cross-posted to: alt.ohio.toledo,rec.radio.shortwave,rec.radio.amateur.antenna

"N8WWM" <mrbindwell@n8wwm.com> wrote in message
news:gbrapr$e21$1@news.tornevall.net...
>
> "Mutant" <mutant@psygone.org> wrote in message
> news:adc539d1-6776-4cd6-a637-50cdfe9d6e93@d77g2000hsb.googlegroups.com...
>
> United Press International - News. Analysis. Insight.T - 100 Years of
> Journalistic Excellence
> Comcast told to stop blocking Web tool
> Published: Aug. 3, 2008 at 2:45 PM
> WASHINGTON, Aug. 3 (UPI) -- Broadband Internet customers of cable
> television giant Comcast should be free to use file-sharing software,
> the Federal Communications Commission says.
>
> The commission voted Friday to order Comcast to stop blocking its
> Internet customers from using BitTorrent, an online software
> application that enables users to share large movie, TV show and music
> files, The Hollywood Reporter said.
>
> Commission Chairman Kevin Martin split with his Republican colleagues
> to join the two Democratic members to produce a 3-2 vote against
> Comcast. The precedent-setting decision was hailed by supporters of so-
> called net neutrality, which maintains Internet service providers
> should be barred from discriminating among various types of traffic.
>
> "It was unreasonable for Comcast to discriminate against particular
> Internet applications, including BitTorrent," Martin wrote in his
> majority opinion. "They delayed and blocked customers using a
> disfavored application even when there was no network congestion."
>
> Other commissioners, however, said Internet engineers need to regulate
> traffic flow and say the ruling will nudge providers toward
> instituting volume-based pricing.
>
> The bastards took away my BDSM newgroups!
>
> mrbindwell n8wwm
what does this xposted garbage have to do with
rec.radio.amateur.antenna ??

3199. Re: Is Comcast giving you this story?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-29 23:11:00 UTC
From: Dave <noone@nowhere.com>
Message-ID: <8gdEk.815$kl6.10@nwrddc01.gnilink.net>
Source record: 21373
Cross-posted to: alt.ohio.toledo,rec.radio.shortwave,rec.radio.amateur.antenna

"W3CQH" <hsgorden@comcast.net> wrote in message
news:ycednUbUtaS0w3zVnZ2dnUVZ_g2dnZ2d@comcast.com...
>
> "N8WWM" <mrbindwell@n8wwm.com> wrote in message
> news:gbrapr$e21$1@news.tornevall.net...
>>
>> "Mutant" <mutant@psygone.org> wrote in message
>> news:adc539d1-6776-4cd6-a637-50cdfe9d6e93@d77g2000hsb.googlegroups.com...
>>
>> United Press International - News. Analysis. Insight.T - 100 Years of
>> Journalistic Excellence
>> Comcast told to stop blocking Web tool
>> Published: Aug. 3, 2008 at 2:45 PM
>> WASHINGTON, Aug. 3 (UPI) -- Broadband Internet customers of cable
>> television giant Comcast should be free to use file-sharing software,
>> the Federal Communications Commission says.
>>
>> The commission voted Friday to order Comcast to stop blocking its
>> Internet customers from using BitTorrent, an online software
>> application that enables users to share large movie, TV show and music
>> files, The Hollywood Reporter said.
>>
>> Commission Chairman Kevin Martin split with his Republican colleagues
>> to join the two Democratic members to produce a 3-2 vote against
>> Comcast. The precedent-setting decision was hailed by supporters of so-
>> called net neutrality, which maintains Internet service providers
>> should be barred from discriminating among various types of traffic.
>>
>> "It was unreasonable for Comcast to discriminate against particular
>> Internet applications, including BitTorrent," Martin wrote in his
>> majority opinion. "They delayed and blocked customers using a
>> disfavored application even when there was no network congestion."
>>
>> Other commissioners, however, said Internet engineers need to regulate
>> traffic flow and say the ruling will nudge providers toward
>> instituting volume-based pricing.
>>
>> The bastards took away my BDSM newgroups!
>>
>> mrbindwell n8wwm
> what does this xposted garbage have to do with
> rec.radio.amateur.antenna ??
>

>

and what does your xposted reply to his xposted garbage have to do with any
of the groups listed??

3200. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 02:20:14 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B297D774FC54nonenowhere@61.9.191.5>
Source record: 21374

"Howard Kowall" <hkowall@shaw.ca> wrote in
news:UG4Ek.42$ex3.13@newsfe02.iad:

> Hello All
>
...
> I guess it has it place) I have decide to try something new and
> hopefully better.Here it is, the Mystery Antenna,I had all the parts
...

Now, lets see... that the "multi-band wire antenna that performs
exceptionally well even though it confounds antenna modeling software".

Yet another 'magic' antenna who's 'magic' cannot be explained!

Of course the claim is nonsense, the antenna can be modelled in NEC...
just the complication is evaluating an equivalent load in NEC terms for
the TL stubs.

You can evaluate the equivalent impedance of a s/c stub of 16.5' of RG8X
(or whatever you used) using the calculator at
http://www.vk1od.net/tl/tllc.php.

For example Z of s/c stub of 16.5' of RG8X at 7.1MHz is around 2.97
+j64.54, so it acts like a quite lossy inductor at that frequency.

Once the feedpoint impedance is found, the transmission line losses and
ATU losses can be evaluated for a system perspective.

Ask yourself why they choose to not model the antenna. Often, when people
claim that an antenna can't be modelled in reality just don't like the
answers.

Owen

3201. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 03:04:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbs501idu1@news.albasani.net>
Source record: 21375

Owen Duffy wrote:

> ...
> Ask yourself why they choose to not model the antenna. Often, when people
> claim that an antenna can't be modelled in reality just don't like the
> answers.
>
> Owen

I think they did model it, and compared the results against actual
hands-on observations, readings, contacts, etc.

This is why they make the claim NEC is missing something ... they simply
believe their eyes, ears and meter readings and signal reports ...

Regards,
JS

3202. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 04:08:56 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <bc93e4h3to7k6rihvl7vhgn0jcjc2fnvoe@4ax.com>
Source record: 21376

On Mon, 29 Sep 2008 12:22:35 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Jeff Liebermann wrote:
>> Half the power, 1/4th the voltage.

>You probably mean half the voltage, 1/4 the power.
>73, ac6xg

Complex concepts I can easily understand. It's the simple things that
drive me nuts. Thanks. Gone sulking...

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3203. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 04:36:24 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <e1iEk.62$kc.45@newsfe12.iad>
Source record: 21377

"Dave Platt" <dplatt@radagast.org> wrote in message
news:ohh7r5-qp6.ln1@radagast.org...
> In article <%BZDk.587$595.345@newsfe01.iad>,
> Sal M. Onella <salmonella@food.poisoning.org> wrote:

<snip >
> >
> >I have two HF radios, (Kenwood TS-120, TS-870) and I often observe the
> >forward power climbing as I manually tune and reduce the reflected power.
> >At first glance, this would seem to indicate the rig had previously
> >throttled back its output in response to the consequences of a mismatch.

< snip >
> So, it's entirely possible that Kenwood uses a transmit-power
> throttleback algorithm which is sensitive to the output SWR, rather
> than to the absolute level of reflected power seen by the finals.

Could be. I have not analyzed the innards of the beast, but the -870
detects and displays SWR at all power levels -- so it _knows_. That's one
of the bar-graph metering choices and if there's more than a watt or two
out, it will report SWR, good or bad.

3204. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 04:41:06 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <%5iEk.63$kc.19@newsfe12.iad>
Source record: 21378

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:sI3Ek.2039$c45.514@nlpi065.nbdc.sbc.com...

< snip >

> This is normal operation not necessarily associated with
> foldback. As the tuner is tuned closer to a Z0-match,
> more and more reflected power is redistributed back
> toward the antenna.

Ah, yes. I believe I picked up that little fact (here) in the recent past.
Let it get away from me, I did.

"Sal"

3205. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 06:23:41 UTC
From: Vee <veehbj@gmail.com>
Message-ID: <843c48d8-458a-40de-9314-c1123f16e44c@m44g2000hsc.googlegroups.com>
Source record: 21379

On Sep 25, 5:55 pm, Danny Richardson <> wrote:
> On Thu, 25 Sep 2008 18:33:11 -0500, "Howard Kowall" <hkow...@shaw.ca>
> wrote:
>
> >yes i have built a dipole and it works good with the manual tuner
> >BUT now my new rig has a built in tuner and of course it wont tune it
> >the dipole i built was cut for 3.747mhz and works great without a tuner
> >but with the auto tuner it wont tune anyware but 80mtrs
> >is there a magic number for a dipole to make it tunable on 80 and 40
> >thanx
> >howard
>
> Howard,
>
> Before you go sailing off into space on the GRV check this out.
>
> http://www.degendesigns.com/Downloads/TheEasyWay.PDF
>
> Danny, k6mhe

Danny,

Thanks for sharing this link. I found the article very well written
and some very good information on SWR and suggestions on antenna
design. Looks like the author is SK, so probably no way to follow up
with questions, as suggested in the article. I'm curious as to when
the article was written. I am just getting back on the air after
several years of inactivity. I am trying to decide what type of
antenna to put up in a 1/3 acre city lot without any tall trees. I'm
thinking about an off-center fed dipole. Looks like an 80 meter
dipole fed with ladder line and using a good antenna tuner would work
on all bands. I don't have room for a full half-wave 80 meter dipole,
but could do a bent off-center fed dipole. The Carolina Windom is
probably what I'm thinking about, but hate to pay their price for
something that could probably be home built. Also considering an all-
band vertical, mounted on the roof of my home.

Thanks again
Vee W7IBB – Utah

3206. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 07:22:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbsk4b$439$1@news.albasani.net>
Source record: 21380

Vee wrote:

> Danny,
>
> Thanks for sharing this link. I found the article very well written
> and some very good information on SWR and suggestions on antenna
> design. Looks like the author is SK, so probably no way to follow up
> with questions, as suggested in the article. I'm curious as to when
> the article was written. I am just getting back on the air after
> several years of inactivity. I am trying to decide what type of
> antenna to put up in a 1/3 acre city lot without any tall trees. I'm
> thinking about an off-center fed dipole. Looks like an 80 meter
> dipole fed with ladder line and using a good antenna tuner would work
> on all bands. I don't have room for a full half-wave 80 meter dipole,
> but could do a bent off-center fed dipole. The Carolina Windom is
> probably what I'm thinking about, but hate to pay their price for
> something that could probably be home built. Also considering an all-
> band vertical, mounted on the roof of my home.
>
> Thanks again
> Vee W7IBB ï¿½ Utah
>

This paper takes the view that the final stage(s) in a PA is/are very
much like a power generating plant. And, in a very simple comparison,
it/they is/are:

http://www.degendesigns.com/Downloads/TheEasyWay.PDF

However, that power generating station has carbon piles to sink the
power into and maintain a correct draw for the power the plant is
producing--until generators can be slowed or dropped off line to match
"the impedance" of the load being presented to it. The power plant has
switches and breakers to cut part of its' load to maintain a "correct
match" (or, correct impedance) being presented to its' load, etc.

In our PA's, we do not have such niceties ... the antenna must present
and hold a proper "draw" upon this power being generated in our
tubes/transistors/tank-circuits. If not, either too much current is
drawn, voltage dips, the design parameters of devices and components are
exceed and "something gives." If the load draws too little power,
voltage(s) spike, current drops, and the voltage rating of the
devices/components are exceeded and "something gives."

While the paper, in a round-about-way, does present this in an
convoluted view, it expounds on this/these events to build a case for

obsfucating SWR, forward power, etc.

But then, in old arrl literature, such inconsistencies abound ...
indeed, they can still be found in current material from this source
(arrl) ...

Regards,
JS

3207. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 08:35:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbsocm$9a0$1@news.albasani.net>
Source record: 21381

John Smith wrote:

> ...
> Regards,
> JS

Yanno, every time I read that 10 PAGE PAPER! it just peeves me off ...

Take his statement, "If a mismatched antenna causes power to be reflected back down the line, they reasoned, this power obviously wasn't radiated by the antenna."

He is using this to "poke fun at dummies who don't know what they are taking about", this gives you the hope that "this dummy" is going to simplify, explain and dispel your ignorance on this subject--however, during the next several pages he does NOTHING in this direction.

That statement can be stated more accurately as, "The LOAD is reflected back down the line!" DUH!

However, it can be pictured as power being "reflected", because it sure as heck doesn't get to the antenna where it is anywheres near useful! It sure as heck is going to cause stress and heating in devices and components. A simple FSM will prove this to you in short order! And, just touch those finals to prove the stress and heat.

The guy could state it, stupendously more, accurately in two pages, max--the paper is only a disclosure of the fact he doesn't understand what he is proposing to "teach" others ...

If you can't make a SIMPLE statement (or paper), on a concept, which an average layman can understand, you probably don't understand the concept(s) yourself ... end of story.

The paper stands in tribute to that mans ego ... sad, but true ... :-(

Regards,
JS

3208. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 09:22:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbsr56caa1@news.albasani.net>
Source record: 21382

John Smith wrote:

> ...
> Regards,
> JS

This BS is ALL the way through this paper of his ... reading and
re-reading this paper is going to give me little sleep this night.

Take this on baluns:

"Next, he puts a 1:1 ferrite- core transformer-type balun up at the
feedpoint of the antenna. What happens? His swr comes down to 1.5:1 at
the band edges. Boy, that balun really solved the problem.
Right?.....WRONG! In this case, if his rig would load up (or if he used
a transmatch) he would be much better off without a balun."

YES, that balun did solve his problem! Now the feedline is not the
major element in his antenna, and giving God knows what radiation pattern!

AND, in NO case would "he" be better off without a balun (well, unless
"he" had designed the feedline to be part of "his" antenna. Or, the
antenna was "perfect" and would always remain in that state,
theoretically ...)

I mean this ALL just galls me ... and then new guys coming along read
this crap, take it as "the holy word" since it has "arrl" attached to
it, and it ALL begins again ... ALL over.

Regards,
JS

3209. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 11:25:13 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <u0oEk.2146$yr3.1859@nlpi068.nbdc.sbc.com>
Source record: 21383

John Smith wrote:
> If you can't make a SIMPLE statement (or paper), on a concept, which an
> average layman can understand, you probably don't understand the
> concept(s) yourself ... end of story.

Here's a simple statement he could have made about reflected
power not being lost:

In a conjugately matched system using lossless transmission line:

Source Power = Forward Power - Reflected Power = Load Power
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3210. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 13:07:33 UTC
From: Dave <dave@dave.dave>
Message-ID: <qwpEk.6$BT1.4@newsfe04.iad>
Source record: 21384

Howard Kowall wrote:
> Hello All
>
> Well after all the comments made and doing some research on the G5RV(I
> guess it has it place) I have decide to try something new and hopefully
> better.Here it is, the Mystery Antenna,I had all the parts at home, so it
> did not cost any money at this point.
> Built it last night took about 1.5 hrs to build,including making my own
> center insulators and end insulators.Here is the link to the site,I am sure
> allot of you in this group know about it and looking forward to your
> comments.Will let you all know how it works,and some of the readings I get
> from it.
> http://w5gi.com/mysteryantenna.htm
>
> thanx all
> Howard
> VE4ISP
> ps. thanx to all that commented on my G5RV post
>
>
>
Dog bone, not wish bone.

3211. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 13:09:35 UTC
From: Dave <dave@dave.dave>
Message-ID: <kypEk.7$BT1.3@newsfe04.iad>
Source record: 21385

Dave Platt wrote:
The Ten-Tec does not
> (according to the manual it's SWR-protected in a different way).

My Ten_tec 516 measures heat sink temperature.

3212. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 13:17:28 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gbt8t8sli1@f04n12.cac.psu.edu>
Source record: 21386

John Smith wrote:
> Owen Duffy wrote:
>
>> ...
>> Ask yourself why they choose to not model the antenna. Often, when
>> people claim that an antenna can't be modelled in reality just don't
>> like the answers.
>>
>> Owen
>
> I think they did model it, and compared the results against actual
> hands-on observations, readings, contacts, etc.
>
> This is why they make the claim NEC is missing something ... they simply
> believe their eyes, ears and meter readings and signal reports ...

Let's not forget the possibility that they didn't know how to model the thing. I'm no great shakes at modeling, and that antenna is beyond my prowess at the present.

Of course, I'm mpore likely to assume that discrepancies between computer world and reality are my fault. Some others might assume that the data they input was correct, so it must be the programs fault....

And some on the fringe might say the antenna CAN't work - the computer says it can't!

- 73 de Mike N3LI -

3213. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 15:19:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbtg1j$35l$1@news.albasani.net>
Source record: 21387

Cecil Moore wrote:
> John Smith wrote:
>> If you can't make a SIMPLE statement (or paper), on a concept, which
>> an average layman can understand, you probably don't understand the
>> concept(s) yourself ... end of story.
>
> Here's a simple statement he could have made about reflected
> power not being lost:
>
> In a conjugately matched system using lossless transmission line:
>
> Source Power = Forward Power - Reflected Power = Load Power

Cecil:

Conjugately? Gawd man, that terms reminds me of yesteryears (Cecil, that term was an antique when I came along--your age is showing ;-) ...) lol However, the wife and I do get along, conjugately, from time to time--but, THAT IS a story for another day ... <EVIL GRIN>

I believe so, that "reflected power", is certainly causing some of the heating of the semiconductors (finals.) And, some of the "loss" due to SWR is not "lost" (as heat) at all--you can count the power radiating from the transmission line as "power delivered", I suppose ... but I will agree with "him" on one point, it darn sure well ain't endin' up in "SWR heaven!" ROFLOL

At extreme power and extreme SWR I have seen the dielectric of coax puncture and burn ... seemingly, gloriously, dramatically, instantaneously. And, yet, another reason why a balun may be a good idea ... if you grab hold of your coax and it feels warm, suspect dielectric heating and major loss(es) ...

Another thing, with the "correct" transmatch, a couple of coat-hangers can be made to look as right as rain ... at 160m! That don't mean it is right ... that paper burns me bum.

Regards,
JS

3214. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 15:23:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbtg9o$3e6$1@news.albasani.net>
Source record: 21388

Michael Coslo wrote:

>
> Let's not forget the possibility that they didn't know how to model the
> thing. I'm no great shakes at modeling, and that antenna is beyond my
> prowess at the present.
>
> Of course, I'm mpore likely to assume that discrepancies between
> computer world and reality are my fault. Some others might assume that
> the data they input was correct, so it must be the programs fault....
>
> And some on the fringe might say the antenna CAN't work - the computer
> says it can't!
>
> - 73 de Mike N3LI -

Absolutely, I am NOT making any statement "they" are correct (I have never tried this antenna myself--either as a model or as an actual antenna in reality.)

But, anyway you cut it, and on the ground floor, there ARE discrepancies in the basic equations, formulas and assumptions being put to use in the NEC, someday these will be fleshed out ...

Regards,
JS

3215. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 15:48:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbthpf$543$1@news.albasani.net>
Source record: 21389

Cecil Moore wrote:

>
> Here's a simple statement he could have made about reflected
> power not being lost:
>
> In a conjugately matched system using lossless transmission line:
>
> Source Power = Forward Power - Reflected Power = Load Power

Let's face it Cecil, that man was obviously "being paid by the word"--in our capitalistic society--I can understand that! (However, this paper appears to have been done to "justify" "his antennas" which he was selling at the time. Indeed, it reminds me, very much, of how db has been abused ... I'd say, in this regard, he did a nice job of "Barnum-ing it!" And, was wholly motivated by financial gains. LOL)

And, in that "reality", 100 words are worth 10x as much as 10 words ... and, any inaccuracy will just be justification for more words (and more profit) on another day ... or, more obsfucation ...

Regards,
JS

3216. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 16:18:19 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <30630735-94ce-412f-bf18-e48dc927c07d@z66g2000hsc.googlegroups.com>
Source record: 21390

On Sep 29, 11:04 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Owen Duffy wrote:
> > ...
> > Ask yourself why they choose to not model the antenna. Often, when people
> > claim that an antenna can't be modelled in reality just don't like the
> > answers.
>
> > Owen
>
> I think they did model it, and compared the results against actual
> hands-on observations, readings, contacts, etc.
>
> This is why they make the claim NEC is missing something ... they simply
> believe their eyes, ears and meter readings and signal reports ...
>
> Regards,
> JS

The evaluation of this antenna should start with connecting a choke
type BALUN at the input to isolate feedline radiation. A few feet of
wire draped across some tree limbs can let you talk to the world.
There have been an awful lot of hams who have thought they just
invented the best antena out there while talking off their coax.

Jimmie

3217. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 16:27:26 UTC
From: JB <nospam@goofball.net>
Message-ID: <OrsEk.1010$Dk4.164@nwrddc02.gnilink.net>
Source record: 21391

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:e1iEk.62$kc.45@newsfe12.iad...
>
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:ohh7r5-qp6.ln1@radagast.org...
> > In article <%BZDk.587$595.345@newsfe01.iad>,
> > Sal M. Onella <salmonella@food.poisoning.org> wrote:
>
> <snip >
> > >
> > >I have two HF radios, (Kenwood TS-120, TS-870) and I often observe the
> > >forward power climbing as I manually tune and reduce the reflected
power.
> > >At first glance, this would seem to indicate the rig had previously
> > >throttled back its output in response to the consequences of a
mismatch.
>
>
> < snip >
> > So, it's entirely possible that Kenwood uses a transmit-power
> > throttleback algorithm which is sensitive to the output SWR, rather
> > than to the absolute level of reflected power seen by the finals.
>
> Could be. I have not analyzed the innards of the beast, but the -870
> detects and displays SWR at all power levels -- so it _knows_. That's
one
> of the bar-graph metering choices and if there's more than a watt or two
> out, it will report SWR, good or bad.
>
Kenwood typically looks at forward, reflected current (or voltage) and
adjusts ALC voltage in response to a rise in either. In my TS130, I adjust
tuner into the ballpark, advance carrier, and fine tune for minimum ALC
reading.

3218. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 16:34:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbtkeq$86m$1@news.albasani.net>
Source record: 21392

JIMMIE wrote:

>
> The evaluation of this antenna should start with connecting a choke
> type BALUN at the input to isolate feedline radiation. A few feet of
> wire draped across some tree limbs can let you talk to the world.
> There have been an awful lot of hams who have thought they just
> invented the best antena out there while talking off their coax.
>
>
> Jimmie

Absolutely. The "truth" does have a way of outing itself ...

However, not so very long ago, I did just that ... and being ignorant to just how much the coax (transmission) line was serving as an antenna--I lived in ignorant bliss ... I can't say I wasn't happy! LOL

However, being the control freak I can be, I wanted that antenna "doing its' correct job"--when my ignorance had been dispelled (well, I am working on that one <wink.>)

Man! I have to read that paper one more time! ... LOL

Regards,
JS

3219. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 16:56:57 UTC
From: JB <nospam@goofball.net>
Message-ID: <tTsEk.947$kI6.305@nwrddc01.gnilink.net>
Source record: 21393

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:PO8Ek.1812$ZP4.214@nlpi067.nbdc.sbc.com...
> Jeff Liebermann wrote:
> > Bird is very specific that their 50 ohm wattmeters are only useful in
> > a 50 ohm system.
>
> What you seem to be missing is that it takes only a few
> inches of 50 ohm coax on each side of the directional
> wattmeter to force a "50 ohm system". 50 ohm coax *IS*
> a 50 ohm system, i.e. the load doesn't matter.
>
> All this is easily proven by wading through the math.
> --
> 73, Cecil http://www.w5dxp.com
> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

The accuracy of a Bird for measuring power goes out the window for an SWR other than 1:1. Are you saying that if you put an unterminated 3 inch piece of coax on the Bird you have a 50 ohm system? That sounds like semantics rather than Math. In fact you would have a 50 ohm system if you left the antenna port disconnected, Then you could say you had an unterminated 50 ohm system. Real handy huh?

3220. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 16:58:51 UTC
From: JB <nospam@goofball.net>
Message-ID: <fVsEk.1013$Dk4.976@nwrddc02.gnilink.net>
Source record: 21394

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:bc93e4h3to7k6rihvl7vhgn0jcjc2fnvoe@4ax.com...
> On Mon, 29 Sep 2008 12:22:35 -0700, Jim Kelley <jwkelley@uci.edu>
> wrote:
>
> >Jeff Liebermann wrote:
> >> Half the power, 1/4th the voltage.
>
> >You probably mean half the voltage, 1/4 the power.
> >73, ac6xg
>
> Complex concepts I can easily understand. It's the simple things that
> drive me nuts. Thanks. Gone sulking...
>
Consult db charts, voltage and power.

3221. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 17:03:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbtm4jabv1@news.albasani.net>
Source record: 21395

JB wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
>> ...
>> --
>> 73, Cecil http://www.w5dxp.com
>> "According to the general theory of relativity,
>> space without ether is unthinkable." Albert Einstein
>
> The accuracy of a Bird for measuring power goes out the window for an SWR
> other than 1:1. Are you saying that if you put an unterminated 3 inch piece
> of coax on the Bird you have a 50 ohm system? That sounds like semantics
> rather than Math. In fact you would have a 50 ohm system if you left the
> antenna port disconnected, Then you could say you had an unterminated 50
> ohm system. Real handy huh?
>

Geesh! In the class, "Transmission Line 101", most basic fact is a
transmission line only is valid at its' stated impedance if terminated
in its' proper load/impedance ...

I think he took it for granted his text was formatted for the proper
audience ... he was simply mistaken, in your particular case. :-(

Regards,
JS

3222. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 17:04:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbtm6pabv2@news.albasani.net>
Source record: 21396

JB wrote:
> "Jeff Liebermann" <jeffl@cruzio.com> wrote in message
>> ...
> Consult db charts, voltage and power.
>

And, he responds, repeat the "Transmission Line 101" class ...

Regards,
JS

3223. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 17:08:08 UTC
From: jawod <jawod@fuse.net>
Message-ID: <48E25CF8.8010805@fuse.net>
Source record: 21397

Howard Kowall wrote:
> Looking to buy a G5RV for 80 and 40 mtrs and maybe able to tune other bands
> lots of diff brands of this antenna
> can anyone suggest a manufacture
> or maybe another alternative
> thanx
> howard
>
>
Howard,

I made a homebrew using ARRL information and some advice from this group...pretty inexpensive and it continues to work well after 2 yrs. With a decent ATU, you should get most bands. Mine won't tune 30M. My G5RV is cut for 40M but does fairly well on 80M also. There is a longer version cut for 80M. Mine is copper wire, 300 Ohm window line for the feed and no balun. This comports with the original design, I think.

You can buy center and end insulators from many suppliers, including DX Engineering (or just make your own: short pieces of PVC, for eg...spray painted blk for UV protection).

One thing I might add to my G5RV (after listening to this group) would be some ferrite beads on the coax at the end of the measured window line feed.

For me, Building is more fun than Buying.

Good luck and 73

John
AB8O

3224. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 19:19:22 UTC
From: JB <nospam@goofball.net>
Message-ID: <_YuEk.1041$Dk4.360@nwrddc02.gnilink.net>
Source record: 21398

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gbtm6pabv2@news.albasani.net...
> JB wrote:
> > "Jeff Liebermann" <jeffl@cruzio.com> wrote in message
> >> ...
> > > Consult db charts, voltage and power.
> > >
> >
> > And, he responds, repeat the "Transmission Line 101" class ...
> >
> > Regards,
> > JS

I'm afraid these things don't always jump out at you from the General Class
license training seminar.

3225. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 19:26:48 UTC
From: JB <nospam@goofball.net>
Message-ID: <Y3vEk.957$kI6.125@nwrddc01.gnilink.net>
Source record: 21399

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gbtm4jabv1@news.albasani.net...
> JB wrote:
> > "Cecil Moore" <nospam@w5dxp.com> wrote in message
> >> ...
> >> --
> >> 73, Cecil http://www.w5dxp.com
> >> "According to the general theory of relativity,
> >> space without ether is unthinkable." Albert Einstein
> >
> > The accuracy of a Bird for measuring power goes out the window for an
SWR
> > other than 1:1. Are you saying that if you put an unterminated 3 inch
piece
> > of coax on the Bird you have a 50 ohm system? That sounds like
semantics
> > rather than Math. In fact you would have a 50 ohm system if you left
the
> > antenna port disconnected, Then you could say you had an unterminated
50
> > ohm system. Real handy huh?
> >
>
> Geesh! In the class, "Transmission Line 101", most basic fact is a
> transmission line only is valid at its' stated impedance if terminated
> in its' proper load/impedance ...
>
> I think he took it for granted his text was formatted for the proper
> audience ... he was simply mistaken, in your particular case. :-(
>
> Regards,
> JS

Now if you take 1000' of RG-174 and left it dangling over the end of a
cliff, the reflections wouldn't be able to climb back up the coax!

3226. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 19:27:04 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <72v4e49ei5tf0vr89q2eop42j020kgeu24@4ax.com>
Source record: 21400

On Tue, 30 Sep 2008 16:58:51 GMT, "JB" <nospam@goofball.net> wrote:

>
>"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
>news:bc93e4h3to7k6rihvl7vhgn0jcjc2fnvoe@4ax.com...
>> On Mon, 29 Sep 2008 12:22:35 -0700, Jim Kelley <jwkelley@uci.edu>
>> wrote:
>>
>> >Jeff Liebermann wrote:
>> >> Half the power, 1/4th the voltage.
>>
>> >You probably mean half the voltage, 1/4 the power.
>> >73, ac6xg
>>
>> Complex concepts I can easily understand. It's the simple things that
>> drive me nuts. Thanks. Gone sulking...

>Consult db charts, voltage and power.

Yeah, yeah. I seem to have contracted a temporary case of dyslexia.
Not only am I getting power and voltage backwards but I'm also
spending money instead of receive it, and voting Democrat instead of
Republican. Probably caused by too much exposure to RF which is
hopefully reversible.

Back to sulking... I just hate making misteaks.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3227. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 19:44:07 UTC
From: JB <nospam@goofball.net>
Message-ID: <bkvEk.1046$Dk4.787@nwrddc02.gnilink.net>
Source record: 21251

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:72v4e49ei5tf0vr89q2eop42j020kgeu24@4ax.com...
> On Tue, 30 Sep 2008 16:58:51 GMT, "JB" <nospam@goofball.net> wrote:
>
> >
> >"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
> >news:bc93e4h3to7k6rihvl7vhgn0jcjc2fnvoe@4ax.com...
> >> On Mon, 29 Sep 2008 12:22:35 -0700, Jim Kelley <jwkelley@uci.edu>
> >> wrote:
> >>
> >> >Jeff Liebermann wrote:
> >> >> Half the power, 1/4th the voltage.
> >>
> >> >You probably mean half the voltage, 1/4 the power.
> >> >73, ac6xg
> >>
> >> Complex concepts I can easily understand. It's the simple things that
> >> drive me nuts. Thanks. Gone sulking...
>
> >Consult db charts, voltage and power.
>
> Yeah, yeah. I seem to have contracted a temporary case of dyslexia.
> Not only am I getting power and voltage backwards but I'm also
> spending money instead of receive it, and voting Democrat instead of
> Republican. Probably caused by too much exposure to RF which is
> hopefully reversible.
>
> Back to sulking... I just hate making misteaks.
>
Just remember: What's bad for the country is good for the democrats. Maybe
we just need another depression or maybe a nuclear attack to show how badly
Bush has failed and how badly this country needs a diaper change!

Favorite Obummer quote: "This is the greatest country in the world!... and
we need change!"

3228. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 19:50:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <eovEk.1270$Ei5.1028@flpi143.ffdc.sbc.com>
Source record: 21252

JB wrote:
> The accuracy of a Bird for measuring power goes out the window for an SWR
> other than 1:1. Are you saying that if you put an unterminated 3 inch piece
> of coax on the Bird you have a 50 ohm system? That sounds like semantics
> rather than Math. In fact you would have a 50 ohm system if you left the
> antenna port disconnected, Then you could say you had an unterminated 50
> ohm system. Real handy huh?

The Bird readings are consistent. In such a case it will read
equal forward power and reflected power (within its accuracy).

This same subject was thrashed out on one of these discussion
groups a few years ago. (I have had a hard disk crash since then
and lost all my notes.) Back then I thought like you are thinking
now. A person a lot smarter than I came up with the equations to
back the proof that a 50 ohm environment is established in only
a few inches of ideal 50 ohm coax. If I remember right, the
necessary length to establish the Z0 of coax was less than ten
radii. It really surprised me.

He proved that a Bird directional wattmeter didn't need any
surrounding coax to establish the 50 ohm environment - that
the internal Thruline establishes a 50 ohm environment all
by itself. Perhaps someone smarter than I who is reading
this exchange can do the math for you.

When light is emerging from glass into free space, how long
does it take space to establish the 377 ohm characteristic
impedance? I suspect that all necessary reflections take place
at the impedance discontinuity and the characteristic impedance
is established immediately.

That is why we can calculate the reflection coefficient at
the junction of two transmission lines with differing Z0s
as (Z02-Z01)/(Z02+Z01).
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3229. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 20:37:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbu2mp$1lr$1@news.albasani.net>
Source record: 21253

JB wrote:

>
> Now if you take 1000' of RG-174 and left it dangling over the end of a
> cliff, the reflections wouldn't be able to climb back up the coax!
>

Frankly, the VF would be what I would be concerned about. Obviously,
the stress of the weight would distort the line from factory specs and
shoot 'em to hell ... not to mention power handling capacity would be
reduced ...

If I were you, this is what I would consider ... but hey, you will
eventually pick it up ...

Regards,
JS

3230. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 20:37:54 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B2A436CDB520nonenowhere@61.9.191.5>
Source record: 21254

JIMMIE <JIMMIEDEE123@yahoo.com> wrote in
news:30630735-94ce-412f-bf18-e48dc927c07d@z66g2000hsc.googlegroups.com:

...
> The evaluation of this antenna should start with connecting a choke
> type BALUN at the input to isolate feedline radiation. A few feet of

Then it is not the same antenna as described.

I agree with your implication that an antenna of this type warrants an attempt to minimise common mode current on the feedline... but that is not a part of the design as described.

I have not said anywhere that this antenna doesn't 'work' or does 'work' whatever that means, just commented on their opinion that it defies conventional explanation.

They haven't suggested that the problem is their own limitation in modelling or explaining, so it is reasonable to assume that their implication is that it just cannot be explained in conventional terms and using accepted tools.

I have questioned that assertion, I think it is not all that difficult to model. It presents no more challenges than dealt with in my models of a Bazooka (http://www.vk1od.net/DoubleBazooka/index.htm)and G5RV (http://www.vk1od.net/G5RV/index.htm) assuming an ideal balun.

I know the ideal balun condition appears inconsistent with my first par, the problem is that including the feedline common mode path in the model is complicated by the huge variability from one installation to another, both the length and route. (It is possible to model the antenna with a specific common mode configuration... it is just that is has limited applicability.)

I am tempted to do it one day. Although it isn't the same antenna in that it has a balun, it is revealing. My gut feed is that the antenna with balun is probably not that band on at lease many of the HF bands... more if you ditch the coax section and use open wire feeder to a balanced ATU... but we are moving further from the original.

Having said that, I do think the published VSWR figures at 145.3MHz are fanciful and highlight your average ham's obsession with VSWR, as if that single metric was a good indicator of system performance.

Owen

3231. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 20:43:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbu30s$2sd$1@news.albasani.net>
Source record: 21255

Jeff Liebermann wrote:

>
> Yeah, yeah. I seem to have contracted a temporary case of dyslexia.
> Not only am I getting power and voltage backwards but I'm also
> spending money instead of receive it, and voting Democrat instead of
> Republican. Probably caused by too much exposure to RF which is
> hopefully reversible.
>
> Back to sulking... I just hate making misteaks.

I am jealous!

I can't even tell the difference between black and white! But, I do know a senile old man with a young girl, when I see one, and a puppet who awaits his strings to be pulled ... <blank stare>

Regards,
JS

3232. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 20:46:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbu37f$38u$1@news.albasani.net>
Source record: 21256

JB wrote:

>> ...
> Just remember: What's bad for the country is good for the democrats. Maybe
> ...

Never heard of 'em; so, really can't say. Is there an official 3rd
party now?

All I am really familiar with is the republicrats and the democans. :-(

Gawd, I know, my ignorance is showing ... sorry all.

Regards,
JS

3233. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 20:57:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gbu3rv$43r$1@news.albasani.net>
Source record: 21257

JB wrote:

> ...
> I'm afraid these things don't always jump out at you from the General Class
> license training seminar.
>

JB:

Please, don't take offense easily ... this is but one of my hobbies,
some others are: growing old and cranky, becoming cynical, practicing my
"high school smart a$$ routine", doing my warped sense of humor,
displaying my ignorance, etc. ... I mean no real harm here ...

Warm regards,
JS

3234. Re: Gay BDSM Site

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 21:11:25 UTC
From: Leland C Scott <kc8ldo@madisonhts.com>
Message-ID: <gbu4sa$re5$1@news.tornevall.net>
Source record: 21258
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"n8wwm mrbindwell (fatboy)" <dougay@nospam.com> wrote in message
http://img409.imageshack.us/my.php?image=dougayn8wwmdickheadzb1.jpg

3235. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 21:43:44 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gbu6oa$m69$1@news.service.uci.edu>
Source record: 21259

Cecil Moore wrote:

> I suspect that all necessary reflections take place
> at the impedance discontinuity and the characteristic impedance
> is established immediately.

Cecil - you might like this.

What I got out of Feynman's QED was that the probability for a reflection to take place would be highest at the discontinuity. But that reflection would take place at any point thereafter with some lesser probability - inverse with distance (smaller arrow, different angle). Summing all the little probability arrows (vectors) for various distances results in a magnitude equivalent to a reflection occurring solely at the discontinuity. He used the reflection from a pane of glass as an example. But as you know a change of index of refraction is directly analogous to a change in impedance.

In relation to this discussion, there would be some distance from the discontinuity where the probability of reflection is so low, that beyond that point, the sum total contribution of all the reflections is immeasurably small. I believe it may have been Reg Edwards (sk) who spoke of the distances you refer to. The brilliant thing is that Quantum Electrodynamics substantiates his argument.

73, ac6xg

3236. hf shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 22:54:39 UTC
From: ml <m@di.net>
Message-ID: <m-A8940F.18543930092008@news.optonline.net>
Source record: 21260

hi

i have a general shielding question i realize that overall it
might be a impractical thing to build but looking at it i wonder...

ontop of my roof is elevator room it's about 20x20

flat roof

lets suppose the motor controller throws out 1.7 to 30mhz at
s9+ (all over)

lets say i take a single 20x20 sheet of copper put it on the top
roof (assume i could ground it if need be)

lets say before i put the copper i measured s9

what shielding if any might i see "S" wise??

i understand interference would still be radiating form the rest
of the unshielded structure but wondering if measuring ontop of the
copper sheeting id' observe any attenuation?? meaning would the
signal penatrate that copper? -- and if so around how
much??(alot/very little)

tnx

3237. Re: hf shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 23:01:01 UTC
From: Jim-NN7K
Message-ID: <6dyEk.2185$c45.1125@nlpi065.nbdc.sbc.com>
Source record: 21261

More effective to build a Faraday Cage around the elevator room
(service techs use these for RF tight enclosures).
Jim NN7K

ml wrote:
> hi
>
> i have a general shielding question i realize that overall it
> might be a impractical thing to build but looking at it i wonder...
>
> ontop of my roof is elevator room it's about 20x20
>
> flat roof
>
> lets suppose the motor controller throws out 1.7 to 30mhz at
> s9+ (all over)
>
> lets say i take a single 20x20 sheet of copper put it on the top
> roof (assume i could ground it if need be)
>
> lets say before i put the copper i measured s9
>
> what shielding if any might i see "S" wise??
>
> i understand interference would still be radiating form the rest
> of the unshielded structure but wondering if measuring ontop of the
> copper sheeting id' observe any attenuation?? meaning would the
> signal penatrate that copper? -- and if so around how
> much??(alot/very little)
>
>
> tnx

3238. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-09-30 23:19:17 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <73affd8d-90e1-423d-9316-2e58285b1ac0@f63g2000hsf.googlegroups.com>
Source record: 21262

On Sep 30, 4:37 pm, Owen Duffy <n...@no.where> wrote:
> JIMMIE <JIMMIEDEE...@yahoo.com> wrote
innews:30630735-94ce-412f-bf18-e48dc927c07d@z66g2000hsc.googlegroups.com:
>
> ...
>
> > The evaluation of this antenna should start with connecting a choke
> > type BALUN at the input to isolate feedline radiation. A few feet of
>
> Then it is not the same antenna as described.
>
> I agree with your implication that an antenna of this type warrants an
> attempt to minimise common mode current on the feedline... but that is
> not a part of the design as described.
>
> I have not said anywhere that this antenna doesn't 'work' or does 'work'
> whatever that means, just commented on their opinion that it defies
> conventional explanation.
>
> They haven't suggested that the problem is their own limitation in
> modelling or explaining, so it is reasonable to assume that their
> implication is that it just cannot be explained in conventional terms and
> using accepted tools.
>
> I have questioned that assertion, I think it is not all that difficult to
> model. It presents no more challenges than dealt with in my models of a
> Bazooka (http://www.vk1od.net/DoubleBazooka/index.htm)andG5RV
> (http://www.vk1od.net/G5RV/index.htm) assuming an ideal balun.
>
> I know the ideal balun condition appears inconsistent with my first par,
> the problem is that including the feedline common mode path in the model
> is complicated by the huge variability from one installation to another,
> both the length and route. (It is possible to model the antenna with a
> specific common mode configuration... it is just that is has limited
> applicability.)
>
> I am tempted to do it one day. Although it isn't the same antenna in that
> it has a balun, it is revealing. My gut feed is that the antenna with
> balun is probably not that band on at lease many of the HF bands... more
> if you ditch the coax section and use open wire feeder to a balanced
> ATU... but we are moving further from the original.
>
> Having said that, I do think the published VSWR figures at 145.3MHz are
> fanciful and highlight your average ham's obsession with VSWR, as if that

> single metric was a good indicator of system performance.
>
> Owen

With enough RG58 any antenna's VSWR looks pretty good.

Jimmie

3239. Re: hf shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 00:39:48 UTC
From: cnick6 <cnick6@qwest.net>
Message-ID: <48e2c6d4$0$87064$815e3792@news.qwest.net>
Source record: 21263

Is it possible to box up the motor? If you can enclose it, you should reduce most of its noise. Before enclosing it, I would use "RF Paint" to coat the inside of this box. The govt uses EM-SEC paint for their SCI projects.

If done properly, you should be able to nullify 99% of that EMI.

"ml" <m@di.net> wrote in message
news:m-A8940F.18543930092008@news.optonline.net...
> hi
>
> i have a general shielding question i realize that overall it
> might be a impractical thing to build but looking at it i wonder...
>
> ontop of my roof is elevator room it's about 20x20
>
> flat roof
>
> lets suppose the motor controller throws out 1.7 to 30mhz at
> s9+ (all over)
>
> lets say i take a single 20x20 sheet of copper put it on the top
> roof (assume i could ground it if need be)
>
> lets say before i put the copper i measured s9
>
> what shielding if any might i see "S" wise??
>
> i understand interference would still be radiating form the rest
> of the unshielded structure but wondering if measuring ontop of the
> copper sheeting id' observe any attenuation?? meaning would the
> signal penatrate that copper? -- and if so around how
> much??(alot/very little)
>
>
> tnx

3240. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 01:30:32 UTC
From: JB <nospam@goofball.net>
Message-ID: <YoAEk.1029$kI6.787@nwrddc01.gnilink.net>
Source record: 21264

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:eovEk.1270$Ei5.1028@flpi143.ffdc.sbc.com...
> JB wrote:
> > The accuracy of a Bird for measuring power goes out the window for an
SWR
> > other than 1:1. Are you saying that if you put an unterminated 3 inch
piece
> > of coax on the Bird you have a 50 ohm system? That sounds like
semantics
> > rather than Math. In fact you would have a 50 ohm system if you left
the
> > antenna port disconnected, Then you could say you had an unterminated
50
> > ohm system. Real handy huh?
>
> The Bird readings are consistent. In such a case it will read
> equal forward power and reflected power (within its accuracy).
>
> This same subject was thrashed out on one of these discussion
> groups a few years ago. (I have had a hard disk crash since then
> and lost all my notes.) Back then I thought like you are thinking
> now. A person a lot smarter than I came up with the equations to
> back the proof that a 50 ohm environment is established in only
> a few inches of ideal 50 ohm coax. If I remember right, the
> necessary length to establish the Z0 of coax was less than ten
> radii. It really surprised me.
>
> He proved that a Bird directional wattmeter didn't need any
> surrounding coax to establish the 50 ohm environment - that
> the internal Thruline establishes a 50 ohm environment all
> by itself. Perhaps someone smarter than I who is reading
> this exchange can do the math for you.
>
> When light is emerging from glass into free space, how long
> does it take space to establish the 377 ohm characteristic
> impedance? I suspect that all necessary reflections take place
> at the impedance discontinuity and the characteristic impedance
> is established immediately.
>
> That is why we can calculate the reflection coefficient at
> the junction of two transmission lines with differing Z0s
> as (Z02-Z01)/(Z02+Z01).
> --
> 73, Cecil http://www.w5dxp.com

> "According to the general theory of relativity,
> space without ether is unthinkable." Albert Einstein

Yer yankin my crank.

First off, lets get the Bird manual so that my practical generalizions are set aside, and we can be more specific.
http://www.bird-electronic.com/products/pdfs/opmanual/43.pdf

Originally we were talking about SWR shutdown circuits AND wattmeters although there may be a bit of difference how that is derived, the measurement is usually about a sensing inductance with canceling capacitance in the reverse mode = 0 volts with a 50 ohm termination.

The Bird 43 is a 50 ohm line section. (Page 5) the sensing isolation of the forward and reflected wave are given as "better than 25 db" (page6,7). It tells how the slug is calibrated in the reverse mode. Same as above.

It goes on about Load Power and states: "For loads with a VSWR of 1.2 or less, the power dissipated in a load
(Wl) is equivalent (with less than one percent error) to the forward power (Wf). When appreciable power is reflected, as with an antenna, it is necessary to use the exact load power which is given by:
Wl = Watts into Load = Wf - Wr" -- We know there is something going on here.

Now on to page 8 and here is where it makes plain that the meter and the shutdown circuits really don't measure SWR but forward and reflected wave and I don't really think there is a whole lot of math going on in the protection circuits of the radios.

The Bird can be used in other than 50 ohm systems (page 16,17) but now you have to figure out the actual power dissipated in the load, and the power dissipated in the coax. Examples are given.

If you use the (Z02-Z01)/(Z02+Z01) for the reflection coefficient, Fine! But the line must be properly terminated resistively. Great for discussion but real world gets complicated fast. As soon as the load gets reactive, the phase between the voltage and current are different and the length of the coax and it's velocity factor now contribute unless it is really short compared with the wavelength.

What we are really talking about here is the short piece of RG-174 (or whatever) from the radios' sensing circuit to the antenna connector where there was a dummy load to set the reflected nulls and output leveling, reflected indication and/or trip point. Now we remove the dummy load and there is a length of coax and an antenna there.

Now tell me the truth, if the SWR is above 1.2:1, does that mean the radio is making more power? No. Because I can read 100 watts out of a radio into a tuner and 195 watts forward and 175 watts reflected out of the tuner on 80m. I KNOW my MFJ tuner isn't a passive amplifier. Go back to Pp 6 and 7. It actually reads scaler because it is reading inductive (magnetic) and

capacitive (electric) so the output "power" is calibrated for known forward voltage scaler after being calibrated for 0 reflected voltage scaler at 1:1 SWR. Beyond the 1.2:1 case, the power reading is NOT CALIBRATED or accurate, but we can make inferences and guesses, and the ratio is useful. There are also inaccuracies due to the 25 db directivity isolation which adds some forward to the reflected and vice versa.

For more on that see:
http://www.bird-technologies.com/techapps/app_notes/StraightTalkAboutDirectivity.pdf

3241. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 01:31:24 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B2A75300A2B5nonenowhere@61.9.191.5>
Source record: 21265

Jim Higgins <invalid@invalid.invalid> wrote in
news:aug5e412ma0s1enhhb9s0f5n9fq1flj0g3@4ax.com:

...
> Which "RG-8" is the author referring to? Belden 8237, Belden 8267 or
> Belden 9913? His cited loss figures are way too low for Belden 8267
> (RG-213), probably the most common coax in use by hams on HF and high
> for Belden 9913, a spiral wound largely air dielectric coax that's a
> bitch to keep dry in outdoor use. He only cites the loss at 4MHz.
> Loss at 14 MHz is almost 3dB and at 28 MHz exceeds it. I'll fix the
> antenna before I'll use a tuner to fool the transmitter.

When they does get down to some hard numbers they can be wanting. Re your example above, they say "Since a 10:1 swr on 100 feet of RG8U at 4 Mhz increases loss by less than 1 db, don't worry...". The loss on 100' of RG8/U at 4MHz with a 50+j0 ohm load is 0.35dB, the loss with a 5+j0 ohm load is 1.64dB (a bad case of load end VSWR=10), some 1.3dB higher and clearly not less than 1dB higher as he explains. Since it is not clear, some readers might even think that the statements apply to indicated VSWR at the source end of the line.

When they get some things that are easy to check quite wrong, it does cast doubt on the credibility of the paper. Their point in this case about band edge VSWR is probably fair if qualified for usual configurations... but it needs qualfication and the premise they use to support the assertion is plain wrong. Why didn't they just correctly state the increased loss at VSWR=2 in support of their argument (it is about 0.1dB)?

You could pick through the technical content of the paper in this way, and try to discover if there is any real value to the name dropping... but it is a mix of good stuff and not so good stuff. There is still a place in the world for text books.

Nevertheless, I sympathise with them trying to find good reviewers... it is a challenge.

Owen

3242. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 02:00:26 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B2A7A1B93B40nonenowhere@61.9.191.5>
Source record: 21266

"JB" <nospam@goofball.net> wrote in
news:tTsEk.947$kI6.305@nwrddc01.gnilink.net:

> The accuracy of a Bird for measuring power goes out the window for an
> SWR other than 1:1. Are you saying that if you put an unterminated 3

If by "measuring power" you mean determining the average rate of flow of energy past the sensing element, you are not correct. The power can be calculated as the indicated 'forward' power - indicated 'reflected' power.

This is a property of any directional wattmeter of this type when the sensor is calibrated for an impedance that is real (ie non reactive), irrespective of the load or the type of coax that might be attached to either side of the instrument.

Of course, practical circuits are not ideal, and errors are introduced in all measurements. Some ham grade instruments are even less perfect.

The reason that Bird suggest that you can get an answer for power for VSWR < 1.2 by ignoring 'reflected' power, is that 'reflected' power is less than 1% of 'forward' power and ignoring it does not introduce significant error compared to other system errors.

Owen

3243. Re: hf shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 02:28:22 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gbun88$q4u$1@news.netins.net>
Source record: 21267

You would be adding a nice lightning attractor (not lightning rod) with the grounded copper sheet which if the right conditions occured would also set your house/apartment building on fire..... According to the ham exam the intference is their problem. Maybe you could use some ferrite loops/beads on your power leads to see if you could stop it.
Maybe not theanswer, but it's one way to look at it.

"ml" <m@di.net> wrote in message
news:m-A8940F.18543930092008@news.optonline.net...
> hi
>
> i have a general shielding question i realize that overall it
> might be a impractical thing to build but looking at it i wonder...
>
> ontop of my roof is elevator room it's about 20x20
>
> flat roof
>
> lets suppose the motor controller throws out 1.7 to 30mhz at
> s9+ (all over)
>
> lets say i take a single 20x20 sheet of copper put it on the top
> roof (assume i could ground it if need be)
>
> lets say before i put the copper i measured s9
>
> what shielding if any might i see "S" wise??
>
> i understand interference would still be radiating form the rest
> of the unshielded structure but wondering if measuring ontop of the
> copper sheeting id' observe any attenuation?? meaning would the
> signal penatrate that copper? -- and if so around how
> much??(alot/very little)
>
>
> tnx

3244. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 03:06:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <zOBEk.2211$yr3.243@nlpi068.nbdc.sbc.com>
Source record: 21268

JIMMIE wrote:
> With enough RG58 any antenna's VSWR looks pretty good.

With 200' of RG58 at 460 MHz, one doesn't even need
an antenna. :-)
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3245. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 03:22:51 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <f2CEk.2214$yr3.920@nlpi068.nbdc.sbc.com>
Source record: 21269

JB wrote:
> If you use the (Z02-Z01)/(Z02+Z01) for the reflection coefficient, Fine!
> But the line must be properly terminated resistively. Great for discussion
> but real world gets complicated fast. As soon as the load gets reactive, the
> phase between the voltage and current are different and the length of the
> coax and it's velocity factor now contribute unless it is really short
> compared with the wavelength.

You need to wade through the math. No matter what the phase,
the Bird directional wattmeter reads the forward or reflected
power referenced to its 50 ohm Thruline plus or minus 5%. If
that were not true, the Bird directional wattmeter would not
meet its published specifications. The phase is taken care of
when the sampled voltage and sampled current are added for
forward power or subtracted for reflected power.

> Now tell me the truth, if the SWR is above 1.2:1, does that mean the radio
> is making more power?

I certainly hope that is a rhetorical question. In a matched
system, the reflected power is part of the forward power. In
a matched system, the reflected power is redistributed back
toward the load and becomes a percentage of the forward power.

Source Power = Forward Power - Reflected Power = Load Power

If the SWR is not 1:1, the forward power must necessarily be
greater than the source power. Maybe the following web pages
will help:

http://www.mellesgriot.com/products/optics/oc_2_1.htm

"Clearly, if the wavelength of the incident light and the thickness of
the film are such that a phase difference exists between reflections of
p, then reflected wavefronts interfere destructively, and overall
reflected intensity is a minimum. If the two reflections are of equal
amplitude, then this amplitude (and hence intensity) minimum will be
zero." (Referring to 1/4 wavelength thin films.)

"In the absence of absorption or scatter, the principle of conservation
of energy indicates all 'lost' reflected intensity will appear as
enhanced intensity in the transmitted beam. The sum of the reflected and
transmitted beam intensities is always equal to the incident intensity.
This important fact has been confirmed experimentally."

http://micro.magnet.fsu.edu/primer/java/scienceopticsu/interference/waveinteractions/index
.html

"... when two waves of equal amplitude and wavelength that are
180-degrees ... out of phase with each other meet, they are not actually
annihilated, ... All of the photon energy present in these waves must
somehow be recovered or redistributed in a new direction, according to
the law of energy conservation ... Instead, upon meeting, the photons
are redistributed to regions that permit constructive interference, so
the effect should be considered as a redistribution of light waves and
photon energy rather than the spontaneous construction or destruction of
light."
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3246. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 03:34:33 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <edCEk.2216$yr3.653@nlpi068.nbdc.sbc.com>
Source record: 21271

JB wrote:
> Now tell me the truth, if the SWR is above 1.2:1, does that mean the radio
> is making more power?

A simple example should alleviate your confusion. Assume a
one second long lossless transmission line. Source power is
100 watts. Forward power is 200 watts. Reflected power is
100 watts. Source power is 100 watts.

How many joules are in the one second long transmission
during steady-state? Hint: it is *NOT* 100 watts.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3247. Re: hf shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 03:34:48 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <tdCEk.14971$hX5.12877@newsfe06.iad>
Source record: 21270

"ml" <m@di.net> wrote in message
news:m-A8940F.18543930092008@news.optonline.net...
> hi
>
> i have a general shielding question i realize that overall it
> might be a impractical thing to build but looking at it i wonder...
>
> ontop of my roof is elevator room it's about 20x20
>
> flat roof
>
> lets suppose the motor controller throws out 1.7 to 30mhz at
> s9+ (all over)
>
> lets say i take a single 20x20 sheet of copper put it on the top
> roof (assume i could ground it if need be)
>
> lets say before i put the copper i measured s9
>
> what shielding if any might i see "S" wise??
>
> i understand interference would still be radiating form the rest
> of the unshielded structure but wondering if measuring ontop of the
> copper sheeting id' observe any attenuation?? meaning would the
> signal penatrate that copper? -- and if so around how
> much??(alot/very little)

First, please know that a mesh is nearly as effective as a sheet -- and much, much less expensive. I doubt you can afford that copper sheeting. Can you cover the roof with metal mesh? (Using this principle, I draped some hardware cloth over my sprinkler valves & wiring and it stopped the false triggering of the solenoid valves from my 40m antenna. Effectiveness will vary, depending on the coupling mechanism; coupling via the building wiring may be as much of a problem as the radiation effects.)

Unless you are creating a true RF-tight enclosure (100dB of shielding effectiveness is typical for them.) nobody can tell you how much suppression you'll get, since the situation affects the numbers.

Getting into a struggle with a building owner, especially if it's your landlord, may be a bad idea. However, he is legally not allowed to operate a serious interference source and maybe can be forced to suppress the EMI at the source. Our local power company, bless their hearts, came out and completely fixed some power line EMI I had a few months ago. They appreciate the interference laws but not everybody does.

3248. Re: Gay BDSM Site

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 03:42:35 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <MkCEk.14992$hX5.14164@newsfe06.iad>
Source record: 21272

<[deleted]> wrote in message [deleted]...
>
> "[deleted]

126,000 newgroups and the You-Whip-Me-I-Whip-You Crowd picked us for their crap. Figure the odds. *sigh*

3249. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 03:57:31 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <MyCEk.33994$891.1700@newsfe07.iad>
Source record: 21273

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:30630735-94ce-412f-bf18-e48dc927c07d@z66g2000hsc.googlegroups.com...

< snip >

> A few feet of wire draped across some tree limbs
> can let you talk to the world.

Yes, absolutely!

I've told this story here before ...

My first HF antenna was a 10m vertical dipole I made out of copper water pipes. Using a tuner, I could work 15m with it, but not 20 -- it needed more metal. So, I grabbed an alligator clip lead and electrically added an old 8-foot ladder that was literally laying on the ground next to the dipole. This enabled me to get a good SWR and I immediately worked Hawaii from here near San Diego.

One wag asked if I was feeding it with ladder line. No.

3250. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 04:46:00 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B2A962E022C1nonenowhere@61.9.191.5>
Source record: 21274

Owen Duffy <none@no.where> wrote in
news:Xns9B2A7A1B93B40nonenowhere@61.9.191.5:

...
> This is a property of any directional wattmeter of this type when the
> sensor is calibrated for an impedance that is real (ie non reactive),
> irrespective of the load or the type of coax that might be attached to
> either side of the instrument.

I should have posted a link to an explantion of why this is so. The article
at http://www.vk1od.net/VSWR/VSWRMeter.htm contains an explanation.

Owen

3251. Re: wbc400 vs cnt400

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 07:17:45 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B2AAFE8643FCnonenowhere@61.9.191.5>
Source record: 21275

ml <m@di.net> wrote in news:m-9E7673.10460128092008@news.optonline.net:

> hi
>
> in laymans terms does anyone know the practical differences
> between these two cables from same firm?
>

I looked at adding these to the line loss calculator at http://www.vk1od.net/tl/tllc.php , but the clever people at Comscope prevent copy and paste from their PDF datasheets. As a matter of principle, I do not retype figures to minimise the risk of errors.

I guess we might see that policy applied to the Andrews products in time.

The Comscope takeover and subsequent web changes has made finding info on Andrews products so much more difficult. Still, there are always the competitors.

The products you mention competes with the LMR series, there is probably very little difference, but if you are fussy, buy the products for which you can get suitable product documentation and insist on no substitution.

Owen

3252. Re: Crisco bondage fantasies anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 08:27:36 UTC
From: "Brian G (Upstairs)" <mildew_spores@blueyonder.co.uk>
Message-ID: <YvGEk.65018$E41.16324@text.news.virginmedia.com>
Source record: 21276
Cross-posted to: soc.subculture.bondage-bdsm,alt.bdsm-personals,alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

It?

Brian

--

--
_____
I hope I grow on you....
I'm a Fungi!!!

No pictures, or you deserve a spanking
mildew_spores@blueyonder.co.uk
_____
"N8WWM" <mrbindwell@n8wwm.com> wrote in message
news:gbra4rdoo1@news.tornevall.net...
> CRISCO KATHY, KC8QJP wants to try it.
>

3253. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 12:04:20 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-0110080804200001@jbw-mac.itd.nrl.navy.mil>
Source record: 21277

In article <u0oEk.2146$yr3.1859@nlpi068.nbdc.sbc.com>, Cecil Moore
<nospam@w5dxp.com> wrote:

> John Smith wrote:
> > If you can't make a SIMPLE statement (or paper), on a concept, which an
> > average layman can understand, you probably don't understand the
> > concept(s) yourself ... end of story.
>
> Here's a simple statement he could have made about reflected
> power not being lost:
>
> In a conjugately matched system using lossless transmission line:
>
> Source Power = Forward Power - Reflected Power = Load Power

Hello, and in a general case one has to be careful in dealing with the
concepts of "forward" and "reflected" when talking about power. It can
become an issue when source impedance, tranmission line characteristic
impedance, and load impedance all have different values. The "matched"
value corresponding to no reflections might not be the value for maximum
power transfer from source to load. In this general case incident
(forward) voltage or current from the source becomes a function of
mismatch between the source and the reference impedance (e.g. 50 ohms) and
the mismatch between the load and reference. When the source is matched
this dependency vanishes and the incident power is the same as the
"available" power (Vsource^2/(4 * Real part of source impedance)) from the
source.

The source can be "matched" to the input of the transmission line feeding
the load but not be conjugately matched to the transmission line/load
combination.
Conversely, we can have reflections present at the source-line interface
for conjugate match conditions. Sincerely, and 73s from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

3254. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 12:08:19 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <7f77931c-673f-49e3-b18c-62b005635832@u28g2000hsc.googlegroups.com>
Source record: 21278

On Sep 30, 4:37 pm, Owen Duffy <n...@no.where> wrote:
> JIMMIE <JIMMIEDEE...@yahoo.com> wrote
innews:30630735-94ce-412f-bf18-e48dc927c07d@z66g2000hsc.googlegroups.com:
>
> ...
>
> > The evaluation of this antenna should start with connecting a choke
> > type BALUN at the input to isolate feedline radiation. A few feet of
>
> Then it is not the same antenna as described.
>
> I agree with your implication that an antenna of this type warrants an
> attempt to minimise common mode current on the feedline... but that is
> not a part of the design as described.

Any additional feedline is also not part of the antenna as described
but I am sure this attributes to many of the glowing reports that
seems to
refute antenna NEC analysis.

Jimmie

3255. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 12:44:58 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <fhKEk.1854$Rx.1@flpi144.ffdc.sbc.com>
Source record: 21279

J. B. Wood wrote:
> Cecil Moore <nospam@w5dxp.com> wrote:
>> In a conjugately matched system using lossless transmission line:
>> Source Power = Forward Power - Reflected Power = Load Power
>
> The source can be "matched" to the input of the transmission line feeding
> the load but not be conjugately matched to the transmission line/load
> combination.

Note that I specified an ideal lossless transmission line.
In a lossless system, if a conjugate match exists anywhere,
a conjugate match exists everywhere. My assertion was a
conceptual statement about an ideal example.

> Conversely, we can have reflections present at the source-line interface
> for conjugate match conditions.

I was also assuming a 50 ohm source with a 50 ohm Z0-match in a
lossless system. I should have specified such. Here is what I
had in mind.

XMTR---50 ohm coax---+---1/8WL 300 ohm twinlead---(97.3-j283.8)

There is a (close enough) 50 ohm Z0-match at '+' :-)
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3256. Re: hf shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 13:06:01 UTC
From: Dave <dave@dave.dave>
Message-ID: <ZAKEk.3298$YN3.1273@newsfe08.iad>
Source record: 21280

ml wrote:
> hi
>
> i have a general shielding question i realize that overall it
> might be a impractical thing to build but looking at it i wonder...
>
> ontop of my roof is elevator room it's about 20x20
>
> flat roof
>
> lets suppose the motor controller throws out 1.7 to 30mhz at
> s9+ (all over)
>
> lets say i take a single 20x20 sheet of copper put it on the top
> roof (assume i could ground it if need be)
>
> lets say before i put the copper i measured s9
>
> what shielding if any might i see "S" wise??
>
> i understand interference would still be radiating form the rest
> of the unshielded structure but wondering if measuring ontop of the
> copper sheeting id' observe any attenuation?? meaning would the
> signal penatrate that copper? -- and if so around how
> much??(alot/very little)
>
>
> tnx

I'd try bypassing and choking the wires going to the motor and the
controller.

3257. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 13:54:12 UTC
From: JB <nospam@goofball.net>
Message-ID: <8iLEk.6$P5.0@nwrddc02.gnilink.net>
Source record: 21281

Pop!

Thanks- It's really about minima and maxima being more intense in the complex vector addition of the reflections.

I see a lot of the same math for light. Polarization was interesting.

3258. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 14:16:37 UTC
From: JB <nospam@goofball.net>
Message-ID: <9DLEk.11$P5.8@nwrddc02.gnilink.net>
Source record: 21282

Obviously,
> the stress of the weight would distort the line from factory specs and
> shoot 'em to hell ... not to mention power handling capacity would be
> reduced ...

Haw! doesn't help to put a speed bump only 10' down the line. But if there is 30 db of loss in the first 10 ft. who cares.

3259. Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 15:11:49 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gc03vl$1ehg$1@f04n12.cac.psu.edu>
Source record: 21283

I've reworked and reinstalled my Bugcatcher antenna.

I'm having a bit of a problem with soldering the taps to the coils though. Seems road oils and general tarnishing has made it a bit difficult to get a clean soldering surface.

I know of a lot of ways to clean the surface, but most are a little rough on the coil or time consuming.

Anyone have any tip or trick to get the surface clean, shiny, and easily solderable?

note, I've tried some solvents without much luck, and any solvent has to not eat up the plexi coil form. I've tried steel wool, but it can't get to the interior of the coil, and regular sandpaper is going to eat the wire up.

I have even considered an acid flux bath, followed by a long water rinse, but that's always been verboten for electrical work.

- 73 d eMike N3LI -

3260. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 15:30:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bo57e4dlunt400i2ig49d0e9rj7mju11ok@4ax.com>
Source record: 21285

On Wed, 01 Oct 2008 11:11:49 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>I have even considered an acid flux bath, followed by a long water
>rinse, but that's always been verboten for electrical work.

Hi Mike,

It seems you've been out of electronics production for a verrry
loooong time. Acid flux is commonly used for environmental reasons.

Try dipping it into a small portion of Coca Cola overnight. The
Phosphoric Acid in it will strip anything....

73's
Richard Clark, KB7QHC

3261. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 15:31:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc054hkhm1@news.albasani.net>
Source record: 21284

Cecil Moore wrote:

> ...
> Note that I specified an ideal lossless transmission line.
> In a lossless system, if a conjugate match exists anywhere,
> a conjugate match exists everywhere. My assertion was a
> conceptual statement about an ideal example.
> ...

Cecil:

I believe so ...

However, you have been lifting weights with your brain. These things look elementary to you; your only mistake is you do not strive for even a simpler example, to let those wishing to, catch that first step ...

The lossless line is a key. Remember those lines of force around a magnet which can be seen with some iron powder and a paper?

These are being stored within the ether; you are seeing the only feeble proof of the ethers existence--magnetic lines of force, in that simple experiment. Remember the plans to store energy in a superconductor configured in an endless loop? Where do people think that energy is being stored? In the electrons and other particles? Naaa ... it is being stored within the ether--in magnetic lines of force ...

You lossless line has no loss, simple. 100% of the power being stored in the ether is being gotten back from the ether (and your lossless line is a superconductor.) And, when that condition exists, the workings of the antenna become a bit more clear (visible) ...

Art says some of this in his "ramblings", most just don't look for it ... Art just obsfucates beyond recognition (or fubar!)

Regards,
JS

3262. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 15:36:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc05dpkku1@news.albasani.net>
Source record: 21286

JIMMIE wrote:

>
> Any additional feedline is also not part of the antenna as described
> but I am sure this attributes to many of the glowing reports that
> seems to
> refute antenna NEC analysis.
>
> Jimmie

Is that why NEC can't evaluate these antennas correctly?:

http://assemblywizard.fr33webhost.com/v1p1comp%20All%20sorts%20of%20small%20antennas%20better%20by%20heuristics%20.pdf

Regards,
JS

3263. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 15:50:32 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gc0688sha1@f04n12.cac.psu.edu>
Source record: 21287

Richard Clark wrote:
> On Wed, 01 Oct 2008 11:11:49 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> I have even considered an acid flux bath, followed by a long water
>> rinse, but that's always been verboten for electrical work.
>
> Hi Mike,
>
> It seems you've been out of electronics production for a verrry
> loooong time. Acid flux is commonly used for environmental reasons.

35 years to be exact. We just about had it beat into us that you don't use acids near electronics.

But it does stand to reason that a good water rinse will remove acid flux very well. Certainly the flux removers for rosin can be environmentally and health unfriendly.

> Try dipping it into a small portion of Coca Cola overnight. The
> Phosphoric Acid in it will strip anything....

Probably take about 3 liters for a Bugcatcher coil - around 6 inches diameter, and about a foot in length.

But Thanks for the tip, I'll give it a try tonight. Might use Pepsi tho' ;^)

- 73 de Mike N3LI -

3264. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 15:55:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc06h5$m2f$1@news.albasani.net>
Source record: 21288

Michael Coslo wrote:

> ...
> Anyone have any tip or trick to get the surface clean, shiny, and easily
> solderable?
> ...
> - 73 d eMike N3LI -

Jasco paint stripper? Will work for paint, road oil, road tar, plastic insulation, etc.

For corrosion, Richards ideas seems plausible ... perhaps employ a combination of methods?

The active ingredient is Methylene Chloride, cheap brands use lye; lye just ain't that great, IMHO ...

Regards,
JS

3265. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 16:00:10 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <e8NEk.29$P5.28@nwrddc02.gnilink.net>
Source record: 21289

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:bo57e4dlunt400i2ig49d0e9rj7mju11ok@4ax.com...
> On Wed, 01 Oct 2008 11:11:49 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>>I have even considered an acid flux bath, followed by a long water
>>rinse, but that's always been verboten for electrical work.
>
> Hi Mike,
>
> It seems you've been out of electronics production for a verrry
> loooong time. Acid flux is commonly used for environmental reasons.
>
> Try dipping it into a small portion of Coca Cola overnight. The
> Phosphoric Acid in it will strip anything....
>
> 73's
> Richard Clark, KB7QHC

Hi Richard

I once made a small tub to hold the rusty part and filled it with a solution of water and washing soda (http://www.stovebolt.com/techtips/rust/electrolytic_derusting.htm) . A small DC current is then conducted from a metal part in the solution to the rusty part. The rusty part got shiny after a few hours.

Jerry KD6JDJ

3266. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 16:04:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5r77e49c05k03d56pcmivbfkmvc6957plh@4ax.com>
Source record: 21290

On Wed, 01 Oct 2008 16:00:10 GMT, "Jerry" <jerrymartes@verizon.net>
wrote:
> I once made a small tub to hold the rusty part and filled it with a
>solution of water and washing soda
>(http://www.stovebolt.com/techtips/rust/electrolytic_derusting.htm) . A
>small DC current is then conducted from a metal part in the solution to the
>rusty part. The rusty part got shiny after a few hours.

Hi Jerry,

That's a another arrow for the quiver. Thanx.

73's
Richard Clark, KB7QHC

3267. Re: KC8QJP and N8WWM Glory Hole Party - KC8QJP will be offering discount tax consulting through the gloryhole while N8WWM is on his knees

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 16:20:25 UTC
From: Leland C Scott <kc8ldo@madisonhts.com>
Message-ID: <gc086k$u0v$1@news.tornevall.net>
Source record: 21291
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.cb,alt.sports.football.pro.cleve-browns

"n8wwm mrbindwell (fatboy)" wrote:

http://img254.imageshack.us/my.php?image=dougpetro3yk1.jpg

> Pick up some crisco on your way over tonight, KC8QJP needs a good
> slathering on her hind quarters.
>
> She's also getting ready to start her tax return posts again like she does
> every year. You remember those..
>
> http://tinyurl.com/46teqq
>
> She says she wants to add some pics of her and me to them this year.
>
>
>
Cool!

3268. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 16:22:34 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <vg87e41n8qh4jf6ssugc6bga4of9lm6n7i@4ax.com>
Source record: 21304

On Wed, 01 Oct 2008 11:11:49 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>note, I've tried some solvents without much luck, and any solvent has to
>not eat up the plexi coil form. I've tried steel wool, but it can't get
>to the interior of the coil, and regular sandpaper is going to eat the
>wire up.

Assuming you want to avoid an aggressive chemical attack, methinks
you're on the right track. Instead of steel wool, emery cloth, or
sandpaper, use a damp cloth and some abrasive kitchen cleanser
(Comet). Wrap the small cloth between two of the turns (using a
tweezer to pull it through), apply some cleanser, and alternately pull
on the ends back and forth. Kinda like shoe polishing. The cleanser
should remove any grease and grind off any oxidation without removing
the wire plating. When done, wash with water and let dry before
soldering.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3269. Re: Gay BDSM Site

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 17:11:37 UTC
From: Doug Adair <n8wwn@bdsmlover.net>
Message-ID: <48e3af53$0$581$c5fe31e7@reader.usenet4all.se>
Source record: 21292
Cross-posted to:
soc.subculture.bondage-bdsm,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

"Leland C Scott" <kc8ldo@madisonhts.com> wrote in message
news:gbu4sa$re5$1@news.tornevall.net...
>
> "n8wwm mrbindwell (fatboy)" <dougay@nospam.com> wrote in message
> http://img409.imageshack.us/my.php?image=dougayn8wwmdickheadzb1.jpg
>
>
Kicking my sisters ass wasn't as easy as I thought it would be especially
while I was falling down drunk.

Here is the twats police reports...
http://img186.imageshack.us/img186/9956/n8assault1x2au3.jpg

http://img508.imageshack.us/img508/9041/n8assaultx2hu1.jpg

3270. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 17:22:08 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <1iOEk.1396$fD.676@flpi145.ffdc.sbc.com>
Source record: 21293

Jim Kelley wrote:
> Cecil Moore wrote:
>> I suspect that all necessary reflections take place
>> at the impedance discontinuity and the characteristic impedance
>> is established immediately.
>
> Cecil - you might like this. What I got out of Feynman's QED was
> that the probability for a reflection to take place would be
> highest at the discontinuity.

Even better. It is known to take a few radii to clearly
establish the characteristic impedance. The effect apparently
can be measured and there exists an equation for it. I just
had a flashback that it might be in Chipman.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3271. KB5URP the crack dealer

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 17:30:49 UTC
From: mopeyzakween@yahoo.com
Message-ID: <37e922bb-a265-46f1-b6c9-fd5d1db0d9ad@w7g2000hsa.googlegroups.com>
Source record: 21294
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)

PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

3272. Re: KB5URP the crack dealer

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 17:50:20 UTC
From: Channel Cop <nedrog@yahoo.com>
Message-ID: <BIidnbEB-OTKJX7VnZ2dnUVZ_uKdnZ2d@comcast.com>
Source record: 21295
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

<mopeyzakween@yahoo.com> wrote in message
news:37e922bb-a265-46f1-b6c9-fd5d1db0d9ad@w7g2000hsa.googlegroups.com...
> Batch Search Summary
> SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
> 3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS
>
>
> RESULTS FOR 'CHAPMAN,RANDALL '
> Search ID 3930206 Back to Top
> NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
> CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW
>
>
> CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
> SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
> MALE WHITE 508 195 BROWN Brown 10/26/1995
> NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
> CHAPMAN,RANDY
>
> BIRTHDATES 03/22/1961 (Primary)
>
>
> Arrest Summary (TRN)
> DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
> 01/16/1995 A 0007369727 TEXAS CITY PD View
>
>
> Arrest Date: 01/16/1995 Arrest Summary
>
>
> DATE OF ARREST 01/16/1995
> SEQUENCE CODE A
> TRACKING NUMBER 0007369727
> AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
> CHARGE
> TRACKING SUFFIX A001
> OFFENSE DETAIL
> INTERNAL AGENCY PERSON NUMBER 020130
> INTERNAL AGENCY CASE NUMBER 95633
> ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
> ARREST OFFENSE CITATION 481.115(b)
> LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
> DATE OF OFFENSE 01/16/1995

> ARREST DISPOSITION 205 (HELD)
> ARREST DISPOSITION DATE 01/16/1995
> PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
> GALVESTON)
> PROSECUTION DETAIL
> AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
> GALVESTON)
> PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
> PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
> PROSECUTOR OFFENSE CITATION 481.115(b)
> LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
> COURT STATUS
> COURT SEQUENCE a
> AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
> COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
> CITATION 481.115(b)
> LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
> COURT DISPOSITION 312 (DEFERRED)
> COURT DISPOSITION DATE 09/21/1995
> DATE OF SENTENCE/STATUS 09/21/1995
> CAUSE NUMBER 95CR0800
> FINAL PLEADING G (GUILTY)
> COURT PROBATION 4Y
> COURT FINE 200
> COURT COSTS 157
> AGENCY RECEIVING CUSTODY GCCSCD
>
That call sign is not his anymore - check it out @ qrz.com!

3273. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 18:16:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <-9ydnemNue0LI37VnZ2dnUVZ_gCdnZ2d@posted.easystreetonline>
Source record: 21296

Jerry wrote:
>
> Hi Richard
>
> I once made a small tub to hold the rusty part and filled it with a
> solution of water and washing soda
> (http://www.stovebolt.com/techtips/rust/electrolytic_derusting.htm) . A
> small DC current is then conducted from a metal part in the solution to the
> rusty part. The rusty part got shiny after a few hours.
>
> Jerry KD6JDJ

Neat idea. Washing soda (sodium carbonate) is sold at paint stores as
TSP substitute.

Roy Lewallen, W7EL

3274. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 19:12:06 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gc0im9$719$1@news.service.uci.edu>
Source record: 21298

Cecil Moore wrote:

> The effect apparently
> can be measured and there exists an equation for it.

Otherwise, how would they be able to make it?

73, ac6xg

3275. Re: Gay N8WWM BDSM Site

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 19:18:18 UTC
From: chickenhawk <lelnadsmaster@yahoo.com>
Message-ID: <48e3cd04$0$17067$6e1ede2f@read.cnntp.org>
Source record: 21297
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.cb,rec.radio.shortwave

"Doug Adair" <n8wwn@bdsmlover.net> wrote in message
news:48e3af53$0$581$c5fe31e7@reader.usenet4all.se...
>
> "Leland C Scott" <kc8ldo@madisonhts.com> wrote in message
> news:gbu4sa$re5$1@news.tornevall.net...
>>
>> "n8wwm mrbindwell (fatboy)" <dougay@nospam.com> wrote in message
>> http://img409.imageshack.us/my.php?image=dougayn8wwmdickheadzb1.jpg
>>
>>
> Kicking my sisters ass wasn't as easy as I thought it would be especially
> while I was falling down drunk.
>
> Here is the twats police reports...
> http://img186.imageshack.us/img186/9956/n8assault1x2au3.jpg
>
>
> http://img508.imageshack.us/img508/9041/n8assaultx2hu1.jpg
>
>
>
Hey Doug tell them about the time you were on the rain report for jamming
repeaters in Toledo!

3276. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 20:06:09 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B2B3E0AB2A89nonenowhere@61.9.191.5>
Source record: 21299

JIMMIE <JIMMIEDEE123@yahoo.com> wrote in
news:7f77931c-673f-49e3-b18c-62b005635832@u28g2000hsc.googlegroups.com:

> On Sep 30, 4:37 pm, Owen Duffy <n...@no.where> wrote:
...
>> I agree with your implication that an antenna of this type warrants
>> an attempt to minimise common mode current on the feedline... but
>> that is not a part of the design as described.
>
> Any additional feedline is also not part of the antenna as described
> but I am sure this attributes to many of the glowing reports that
> seems to
> refute antenna NEC analysis.

If that is to imply that common mode current only exists on the dipole side
of the common mode choke, it is a mistaken analysis. A common mistake, but
wrong nonetheless.

Owen

3277. Equal Librium Makes the News (a prescription for any problem)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 20:37:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <27n7e4llervvsd3ajd6skrqt3dm60s3thf@4ax.com>
Source record: 21301

taken from:
This Economy Does Not Compute
http://www.nytimes.com/2008/10/01/opinion/01buchanan.htm

>It seems clear that no one really knows what is coming next. Why?

>Well, part of the reason is that economists still try to understand
>markets by using ideas from traditional economics,
>especially so-called equilibrium theory.
... and some missing stuff ...
>Too bad for the theory, things doni¿½t seem to work that way.
perhaps they hadn't heard of Fig Newton's, or Guss' laws and the Weak Force. I'll hold my breath through the next news cycle to see if Art has rushed to the hill to prop up McCain.

Fill $1Trillion into two shoe boxes, and leave on the corner of Main and Wall.....

73's
Richard Clark, KB7QHC

3278. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 20:37:13 UTC
From: "Jim, K7JEB" <k7jeb_2@yahoo.com>
Message-ID: <pcREk.4373$YN3.3911@newsfe08.iad>
Source record: 21300

Michael Coslo wrote:
> I have even considered an acid flux bath, followed by a long water
> rinse, but that's always been verboten for electrical work.

FWIW, I "pickle" the heavily oxidized copper antenna
wire I have to solder by wrapping a paper-towel sheet
around the joint, pouring a tablespoon of "Lime Away"
on it, waiting half an hour and then unwrapping and
rinsing it throughly with tap water. The copper has
a reddish, 'blistered' look and soaks up solder like
a sponge. I make it a point to tin all of the "pickled"
copper on either side of the joint as well as the joint
itself.

The prohibition against using 'acid-core' solder on
electronics was that the acid flux was actually a solid,
would remain on the connection and be activated
by moisture later, eating away the connection and
the wires. The active acid in "Lime Away" is good
old sulfuric, which is washed away in this case by
liberal amounts of applied water or later rainfall.

Jim, K7JEB

3279. Re: Equal Librium Makes the News (a prescription for any problem)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 20:52:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5io7e4l9jeui67sna0qtjjj5mi5lpuq9s8@4ax.com>
Source record: 21302

On Wed, 01 Oct 2008 13:37:01 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>taken from:
>This Economy Does Not Compute
>http://www.nytimes.com/2008/10/01/opinion/01buchanan.htm
>
I should have read to the end before posting. Such a gold mine of
topicality that can be applied to the navel gazers here who demand
absolute "proof."

>Something of the attitude of economic traditionalists
>spilled out a number of years ago at a conference
>where economists and physicists met to discuss
>new approaches to economics.
>As one physicist who was there tells me,
>a prominent economist objected that the use of
>computational models amounted to "cheating"
> or "peeping behind the curtain," and
-tada!-
>that respectable economics, by contrast,
>had to be pursued through the proof
>of infallible mathematical theorems.

73's
Richard Clark, KB7QHC

3280. Re: hf shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:03:25 UTC
From: Dave <noone@nowhere.com>
Message-ID: <xAREk.92$P5.46@nwrddc02.gnilink.net>
Source record: 21303

"ml" <m@di.net> wrote in message
news:m-A8940F.18543930092008@news.optonline.net...
> hi
>
> i have a general shielding question i realize that overall it
> might be a impractical thing to build but looking at it i wonder...
>
> ontop of my roof is elevator room it's about 20x20
>
> flat roof
>
> lets suppose the motor controller throws out 1.7 to 30mhz at
> s9+ (all over)
>
> lets say i take a single 20x20 sheet of copper put it on the top
> roof (assume i could ground it if need be)
>
> lets say before i put the copper i measured s9
>
> what shielding if any might i see "S" wise??
>
> i understand interference would still be radiating form the rest
> of the unshielded structure but wondering if measuring ontop of the
> copper sheeting id' observe any attenuation?? meaning would the
> signal penatrate that copper? -- and if so around how
> much??(alot/very little)
>
>
> tnx
the copper sheet would likely not help shielding of the rf. it would
conduct the currents nicely and maybe redirect the fields a bit, but the
current would conduct out to the edge, right on around to the bottom and
radiate just as well down toward you as up away from you. I would assume
from your reference of an elevator room that this is a relatively tall
structure, so grounding is not going to help. the lengths of the ground
leads would make them also nice radiators for the rf from the motor, perhaps
making it worse if they were close to your antenna. Better to filter power
lines to the motor and controller and stop the noise inside the case... once
its out there is very little you can do to stop it.

3281. Re: Equal Librium Makes the News (a prescription for any problem)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:22:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc0pnf$e78$1@news.albasani.net>
Source record: 21305

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

What gets me:

1) We are about to reward the crooks, charlatans and greedy by making good their gambling debts and outright thefts!

2) No legislation/laws/regulations have been enacted to secure there is not an immediate repeat of the same. (I'd be surprised if anything meaningful is ever done ... I can't make that big a leap of faith)

3) Those "poor" who are caught up in this scam are about to become homeless, whereas the rich crooks are about to purchase nicer homes at near fire-sale prices.

4) All of this devalues the dollar and MY MONEY, and, oh yeah, YOURS TOO!

5) Etc. ... <a-look-of-doom-and-gloom>

Regards,
JS

3282. Re: Equal Librium Makes the News (a prescription for any problem)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:26:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc0ptg$e60$1@news.albasani.net>
Source record: 21306

John Smith wrote:

> ...
> Regards,
> JS

To summarize:

If it was a bum antenna, you toss in onto the scrap heap for later
salvage of parts/materials ...

Here, you toss your wallet in the garbage while paying a trillion+ fee
to dump it!

Regards,
JS

3283. shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:35:24 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <97c6214c-564f-483c-a8dd-215955248768@u26g2000hsd.googlegroups.com>
Source record: 21307
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Sep 29, 3:09 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
>
fake

3284. shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:35:42 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <0df8dff3-6728-4d8f-981a-f48cd9901f5f@k30g2000hse.googlegroups.com>
Source record: 21308
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Sep 29, 3:38 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
> "
fake

3285. shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:35:59 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <c65df352-e684-4ac1-99b9-70e90d8abec3@64g2000hsu.googlegroups.com>
Source record: 21309
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Sep 29, 3:13 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
> "
fake

3286. Re: I'm Looking For Someone To Choke Me!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:36:16 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <935afc3d-d173-46c6-8954-4ef497bfaf95@v15g2000hsa.googlegroups.com>
Source record: 21310
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Sep 29, 3:29 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
>
fake

3287. Re: Equal Librium Makes the News (a prescription for any problem)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:36:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <89r7e4911mf0alssh6sqtvq6j1k4tp5unl@4ax.com>
Source record: 21311

On Wed, 01 Oct 2008 14:22:50 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>What gets me:

That may be, but this thread is about Equal Librium and antenna
theory.

73's
Richard Clark, KB7QHC

3288. shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:38:26 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <f36b7bda-fefd-4021-960c-d5442b1bbd0d@q5g2000hsa.googlegroups.com>
Source record: 21312
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Sep 30, 5:11 pm, "Leland C Scott" <kc8...@madisonhts.com> wrote:
>
get a life

3289. shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:38:49 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <602f6caa-dee5-49b3-819b-2b9982915281@f36g2000hsa.googlegroups.com>
Source record: 21313
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

On Oct 1, 1:30 pm, mopeyzakw...@yahoo.com wrote:
>
spaming

3290. shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:40:02 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <82c2ab30-b0f8-4108-b31d-fe4e78628524@w32g2000hsf.googlegroups.com>
Source record: 21314
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Sep 29, 3:22 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
>
fake

3291. eBay: couple of antenna attachments

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:43:31 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <7aSEk.2931$be.1570@nlpi061.nbdc.sbc.com>
Source record: 21315

http://search.ebay.com/_W0QQsassZwd5jfrQQfrppZ50QQfsopZ32QQfsooZ2QQrdZ0

3292. Re: Equal Librium Makes the News (a prescription for any problem)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:53:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc0rggfss1@news.albasani.net>
Source record: 21316

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

Richard:

Once you take your librium (Chlordiazepoxide), anything becomes possible
... even if sweetened with the non-sugar substitute "equal."

Indeed, some chemical cocktails are hazardous to ones health -- I'd take
care with this one ... ROFLOL

Regards,
JS

3293. Re: eBay: couple of antenna attachments

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 21:55:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc0rlbfss2@news.albasani.net>
Source record: 21317

Henry Kolesnik wrote:
> http://search.ebay.com/_W0QQsassZwd5jfrQQfrppZ50QQfsopZ32QQfsooZ2QQrdZ0

How many years does it take for something to become a true antique, 50 years? ... krist, I am an antique myself! ;-)

Regards,
JS

3294. Re: Equal Librium Makes the News (a prescription for any problem)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 22:00:10 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <UpSEk.12008$ex3.6794@newsfe02.iad>
Source record: 21318

I have roughly a million gallons of Librium on hand. Just what is that equal to?

Walt, W2DU

3295. Re: Equal Librium Makes the News (a prescription for any problem)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 22:02:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc0s17gbu1@news.albasani.net>
Source record: 21319

John Smith wrote:
> Richard Clark wrote:
>
>> ...
>> 73's
>> Richard Clark, KB7QHC
>
> Richard:
>
> Once you take your librium (Chlordiazepoxide), anything becomes possible
> ... even if sweetened with the non-sugar substitute "equal."
>
> Indeed, some chemical cocktails are hazardous to ones health -- I'd take
> care with this one ... ROFLOL
>
> Regards,
> JS

And, I just caught my error!

By "you", I mean the "universal you" (i.e. everyone.)

Drop that defensive stance I see you taking ... ;-)

Regards,
JS

3296. shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 22:07:49 UTC
From: "kb9rqz-1@hotmail.com" <kb9rqz-1@hotmail.com>
Message-ID: <7229887e-2a60-4144-80d5-314f0f61b15c@t65g2000hsf.googlegroups.com>
Source record: 21320
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Sep 29, 3:29 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
>
fake

3297. Re: Equal Librium Makes the News (a prescription for any problem)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-01 23:04:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4208e45kv6rhcahfr906omq6kaq3l90c04@4ax.com>
Source record: 21321

On Wed, 1 Oct 2008 18:00:10 -0400, "Walter Maxwell" <walt@w2du.com>
wrote:

>I have roughly a million gallons of Librium on hand. Just what is that equal to?

Hi Walt,

It might be used as a gas additive - not necessarily in the tank, but
certainly useful at the pump.

73's
Richard Clark, KB7QHC

3298. Re: shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 01:00:18 UTC
From: Channel Cop <nedrog@yahoo.com>
Message-ID: <IpadnbFqYdiAgHnVnZ2dnUVZ_qPinZ2d@comcast.com>
Source record: 21322
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

"an old friend" <kb9rqz@hotmail.com> wrote in message
news:602f6caa-dee5-49b3-819b-2b9982915281@f36g2000hsa.googlegroups.com...
On Oct 1, 1:30 pm, mopeyzakw...@yahoo.com wrote:
>
spaming

you must know!

3299. Re: shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 01:01:38 UTC
From: Channel Cop <nedrog@yahoo.com>
Message-ID: <tqydnU8HRZXwgHnVnZ2dnUVZ_q7inZ2d@comcast.com>
Source record: 21323
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

"an old friend" <kb9rqz@hotmail.com> wrote in message
news:82c2ab30-b0f8-4108-b31d-fe4e78628524@w32g2000hsf.googlegroups.com...
On Sep 29, 3:22 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
>
fake

Its interesting that you answer yourself and call your self "FAKE"!

3300. Re: shownatova but the still after 117 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 01:37:11 UTC
From: "kb9rqz-1@hotmail.com" <kb9rqz-1@hotmail.com>
Message-ID: <143fce23-35f2-4732-a9c6-d70450ba0ee0@l62g2000hse.googlegroups.com>
Source record: 21324
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

On Oct 1, 9:00 pm, "Channel Cop" <ned...@yahoo.com> wrote:
> "an old friend" <kb9...@hotmail.com> wrote in
messagenews:602f6caa-dee5-49b3-819b-2b9982915281@f36g2000hsa.googlegroups.com...
> On Oct 1, 1:30 pm, mopeyzakw...@yahoo.com wrote:
>
>> spaming
>
> you must know!

excellent admission 9the accuastion falls flat though

3301. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 03:17:48 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <y3XEk.8487$YN3.3006@newsfe08.iad>
Source record: 21325

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:gc0688sha1@f04n12.cac.psu.edu...
Certainly the flux removers for rosin can be
> environmentally and health unfriendly.

Ethyl alcohol works for me. Maybe mass fumes are bad in a production
setting but I just dunk a cotton swab in it to clean up after a little
soldering job.

3302. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 04:28:31 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Q5YEk.4884$cs4.3828@newsfe01.iad>
Source record: 21326

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:h85xk.40563$_s1.6304@newsfe07.iad...
>
> "JoeSch" <joeschultz1@lycos.com> wrote in message
> news:3dc06661-0a64-4e5d-9449-6543cb2d9aba@l42g2000hsc.googlegroups.com...

< snip >

> > Does anyone have any ideas for a quick rooftop antenna I can put on a
> > pole and run into my house for the Jets game? I really don't mind if
> > the signal is somewhat snowy as long as I can make out what is
> > happening on the field-beats radio. Besides, this is football-
> > sometimes it snows for real and nobody complains, lol.

< snip >

> You need to make a basic yagi antenna. When finished, it greatly
resembles
> a TV antenna, except the elements are all nearly the same size, optimized
> for Channel 2. (

< snip >

I posted the instructions for a Channel 2 Yagi a few weeks ago. They were
acknowledged and I've been waiting anxiously for some feedback.

Curiosity got the better of me this afternoon, so I built the thing
myself -- exactly as described except for the second director, since I was
losing the light and three elements proved the point.

With just the folded dipole at ten feet, I got a recognizable KCBS picture
from 124 miles. Bad snow, noisy sound and no color. Joe, a dedicated Jets
fan, would watch this picture but his girl friend would not.

When I added the reflector, the snow and the sound got better. When I put
it up to fifteen feet I had color. When I added the first director and
returned it to fifteen feet, the snow got a lot less and the picture was
quite watchable. The girl friend would say, "Gee, Honey, that's a pretty
good picture. Can we get free HBO, too?" (They never understand ...
never.)

I measured the signal with my old analog signal level meter and got negative
16 dBmV, which looked about right. Another director should add only a dB or
two. Maybe I will try a preamp and see what that does. Trouble is, Channel
2 suffers from impulse noise (electrical appliances are usually the cause).
Antenna would need to be elevated to reduce that problem.

WCBS has an insignificant 1 dB more power than KCBS but their antenna height is a lot less, which impacts Joe in Connecticut. However, his distance is less, 100 miles vs. 124 miles.

"Sal"

3303. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 05:49:55 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <bdKdnWAsNdFi_XnVnZ2dnUVZ_vSdnZ2d@comcast.com>
Source record: 21327

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:Q5YEk.4884$cs4.3828@newsfe01.iad...
>
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
> news:h85xk.40563$_s1.6304@newsfe07.iad...
>>
>> "JoeSch" <joeschultz1@lycos.com> wrote in message
>> news:3dc06661-0a64-4e5d-9449-6543cb2d9aba@l42g2000hsc.googlegroups.com...
>
> < snip >
>
>> > Does anyone have any ideas for a quick rooftop antenna I can put on a
>> > pole and run into my house for the Jets game? I really don't mind if
>> > the signal is somewhat snowy as long as I can make out what is
>> > happening on the field-beats radio. Besides, this is football-
>> > sometimes it snows for real and nobody complains, lol.
>
> < snip >
>
>> You need to make a basic yagi antenna. When finished, it greatly
> resembles
>> a TV antenna, except the elements are all nearly the same size, optimized
>> for Channel 2. (
>
>
> < snip >
>
> I posted the instructions for a Channel 2 Yagi a few weeks ago. They were
> acknowledged and I've been waiting anxiously for some feedback.
>
> Curiosity got the better of me this afternoon, so I built the thing
> myself -- exactly as described except for the second director, since I was
> losing the light and three elements proved the point.
>
> With just the folded dipole at ten feet, I got a recognizable KCBS picture
> from 124 miles. Bad snow, noisy sound and no color. Joe, a dedicated
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> fan, would watch this picture but his girl friend would not.
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> it up to fifteen feet I had color. When I added the first director and
> returned it to fifteen feet, the snow got a lot less and the picture was
> quite watchable. The girl friend would say, "Gee, Honey, that's a pretty
> good picture. Can we get free HBO, too?" (They never understand ...

> never.)
>
> I measured the signal with my old analog signal level meter and got
> negative
> 16 dBmV, which looked about right. Another director should add only a dB
> or
> two. Maybe I will try a preamp and see what that does. Trouble is,
> Channel
> 2 suffers from impulse noise (electrical appliances are usually the
> cause).
> Antenna would need to be elevated to reduce that problem.
>
> WCBS has an insignificant 1 dB more power than KCBS but their antenna
> height
> is a lot less, which impacts Joe in Connecticut. However, his distance is
> less, 100 miles vs. 124 miles.
>
> "Sal"
>
A 3el 6m yagi would work very well, all you need is a 50 ohm to 75 ohm
adapter @ about 20 feet. Use a small TV rotator, and when your not watching
ch2 you can try calling CQ on 6m.

3304. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 07:45:55 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Z__Ek.25149$hX5.9332@newsfe06.iad>
Source record: 21328

"W3CQH" <hsgorden@comcast.net> wrote in message > >

< snip >

> A 3el 6m yagi would work very well, all you need is a 50 ohm to 75 ohm
> adapter @ about 20 feet. Use a small TV rotator, and when your not
watching
> ch2 you can try calling CQ on 6m.

This experiment will probably turn into a 6m Yagi, anyway, since we won't
have an analog Channel 2 after DTV takes over in February.

I'll need to check the polarization for 6m. Right now I have a couple of
j-poles for 6m, vertically polarized. Thanks.

3305. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 11:26:09 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <YridncX60IVOMnnVnZ2dnUVZ_oPinZ2d@comcast.com>
Source record: 21329

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:Z__Ek.25149$hX5.9332@newsfe06.iad...
>
> "W3CQH" <hsgorden@comcast.net> wrote in message > >
>
> < snip >
>
>> A 3el 6m yagi would work very well, all you need is a 50 ohm to 75 ohm
>> adapter @ about 20 feet. Use a small TV rotator, and when your not
> watching
>> ch2 you can try calling CQ on 6m.
>
>
> This experiment will probably turn into a 6m Yagi, anyway, since we won't
> have an analog Channel 2 after DTV takes over in February.
>
> I'll need to check the polarization for 6m. Right now I have a couple of
> j-poles for 6m, vertically polarized. Thanks.
>
AM - SSB - CW - (digital) = Horizontal, FM = Vertical

3306. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 13:31:43 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gc2ig0$1c9o$1@f04n12.cac.psu.edu>
Source record: 21330

Richard Clark wrote:
> On Wed, 01 Oct 2008 16:00:10 GMT, "Jerry" <jerrymartes@verizon.net>
> wrote:
>> I once made a small tub to hold the rusty part and filled it with a
>> solution of water and washing soda
>> (http://www.stovebolt.com/techtips/rust/electrolytic_derusting.htm) . A
>> small DC current is then conducted from a metal part in the solution to the
>> rusty part. The rusty part got shiny after a few hours.
>
> Hi Jerry,
>
> That's a another arrow for the quiver. Thanx.
>

Make sure to read the PDF file too. Apparently stainless steel will
produce chromate in the solution if used as an electrode.

http://www.pieperpower.com/employees/msds/Sodium_Chromate.htm

or other chromate - they are all mostly bad for you.

Since my coil has some stainless parts in the current path, I'll try
suspending it so that they don't touch the solution, and rotate the coil
to clean.

- 73 de Mike N3LI -

3307. Re: KB5URP the crack dealer

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 19:29:28 UTC
From: mopeyzakween@yahoo.com
Message-ID: <a5b13061-0da4-4332-89a4-5871902b2b3f@y71g2000hsa.googlegroups.com>
Source record: 21331
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

On Oct 1, 1:50 pm, "Channel Cop" <ned...@yahoo.com> wrote:
> <mopeyzakw...@yahoo.com> wrote in message
>
> news:37e922bb-a265-46f1-b6c9-fd5d1db0d9ad@w7g2000hsa.googlegroups.com...
>
>
>
> > Batch Search Summary
> > SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
> > 3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS
>
> > RESULTS FOR 'CHAPMAN,RANDALL '
> > Search ID 3930206 Back to Top
> > NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
> > CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW
>
> > CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
> > SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
> > MALE WHITE 508 195 BROWN Brown 10/26/1995
> > NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
> > CHAPMAN,RANDY
>
> > BIRTHDATES 03/22/1961 (Primary)
>
> > Arrest Summary (TRN)
> > DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
> > 01/16/1995 A 0007369727 TEXAS CITY PD View
>
> > Arrest Date: 01/16/1995 Arrest Summary
>
> > DATE OF ARREST 01/16/1995
> > SEQUENCE CODE A
> > TRACKING NUMBER 0007369727
> > AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
> > CHARGE
> > TRACKING SUFFIX A001
> > OFFENSE DETAIL
> > INTERNAL AGENCY PERSON NUMBER 020130
> > INTERNAL AGENCY CASE NUMBER 95633
> > ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
> > ARREST OFFENSE CITATION 481.115(b)
> > LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
> > DATE OF OFFENSE 01/16/1995

> > ARREST DISPOSITION 205 (HELD)
> > ARREST DISPOSITION DATE 01/16/1995
> > PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
> > GALVESTON)
> > PROSECUTION DETAIL
> > AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
> > GALVESTON)
> > PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
> > PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
> > PROSECUTOR OFFENSE CITATION 481.115(b)
> > LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
> > COURT STATUS
> > COURT SEQUENCE a
> > AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
> > COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
> > CITATION 481.115(b)
> > LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
> > COURT DISPOSITION 312 (DEFERRED)
> > COURT DISPOSITION DATE 09/21/1995
> > DATE OF SENTENCE/STATUS 09/21/1995
> > CAUSE NUMBER 95CR0800
> > FINAL PLEADING G (GUILTY)
> > COURT PROBATION 4Y
> > COURT FINE 200
> > COURT COSTS 157
> > AGENCY RECEIVING CUSTODY GCCSCD
>
> That call sign is not his anymore - check it out @ qrz.com!- Hide quoted text -
>
> - Show quoted text -

wrong on that score...he just had his info removed from QRZ. Check
FCC, dude.

3308. Randall Chapman, KB5URP, convicted crack dealer!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 19:31:09 UTC
From: mopeyzakween@yahoo.com
Message-ID: <5bbb7f6b-e03a-4e03-bb9a-7db9a7104e58@u65g2000hsc.googlegroups.com>
Source record: 21332
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)

PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

3309. shownatova but the still after 118 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 19:33:27 UTC
From: "kb9rqz-1@hotmail.com" <kb9rqz-1@hotmail.com>
Message-ID: <0c585434-f79c-4f30-84b1-bf7ccf8c37b6@59g2000hsb.googlegroups.com>
Source record: 21333
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

On Oct 2, 3:29 pm, mopeyzakw...@yahoo.com wrote:

spam

3310. shownatova but the still after 118 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 19:37:47 UTC
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Message-ID: <52e32e6f-e361-46a0-ba67-137d73d98be7@p25g2000hsf.googlegroups.com>
Source record: 21334
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

On Oct 2, 3:31 pm, mopeyzakw...@yahoo.com wrote:
> Batch Search Summary
spaming on I see

3311. Re: Gay N8WWM BDSM Site

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 19:54:27 UTC
From: Laurie J Luce <ljl@dougadair.com>
Message-ID: <gc393gkds1@news.tornevall.net>
Source record: 21335
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.cb,rec.radio.shortwave

"chickenhawk" <lelnadsmaster@yahoo.com> wrote in message
news:48e3cd04$0$17067$6e1ede2f@read.cnntp.org...
>
> "Doug Adair" <n8wwn@bdsmlover.net> wrote in message
> news:48e3af53$0$581$c5fe31e7@reader.usenet4all.se...
>>
>> "Leland C Scott" <kc8ldo@madisonhts.com> wrote in message
>> news:gbu4sa$re5$1@news.tornevall.net...
>>>
>>> "n8wwm mrbindwell (fatboy)" <dougay@nospam.com> wrote in message
>>> http://img409.imageshack.us/my.php?image=dougayn8wwmdickheadzb1.jpg
>>>
>>>
>> Kicking my sisters ass wasn't as easy as I thought it would be especially
>> while I was falling down drunk.
>>
>> Here is the twats police reports...
>> http://img186.imageshack.us/img186/9956/n8assault1x2au3.jpg
>>
>>
>> http://img508.imageshack.us/img508/9041/n8assaultx2hu1.jpg
>>
>>
>>
> Hey Doug tell them about the time you were on the rain report for jamming
> repeaters in Toledo!
>
Doug is someone who has fathered children and does nothing to support them
or have any involvement with them. He is one of the reasons we all pay
higher taxes for social welfare progams and why some people will rob, rape
or murder you because they had a father like Douglas.

He is a wart on humanity.

3312. shownatova but the still after 118 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 20:01:23 UTC
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Message-ID: <ab2d722d-0966-463a-821f-68517e1ee32d@l42g2000hsc.googlegroups.com>
Source record: 21336
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.cb,rec.radio.shortwave

On Oct 2, 3:54 pm, "Laurie J Luce" <l...@dougadair.com> wrote:
> "
why the fraud?

3313. Re: KC8QJP and N8WWM Glory Hole Party - KC8QJP will be offering discount tax consulting through the gloryhole while N8WWM is on his knees

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 20:02:20 UTC
From: Laurie J Luce <ljl@dugslappa.com>
Message-ID: <gc39i9kiu1@news.tornevall.net>
Source record: 21337
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.cb,rec.radio.shortwave

"Leland C Scott" <kc8ldo@madisonhts.com> wrote in message
news:gc086k$u0v$1@news.tornevall.net...
> "n8wwm mrbindwell (fatboy)" wrote:
>
> http://img254.imageshack.us/my.php?image=dougpetro3yk1.jpg
>
>> Pick up some crisco on your way over tonight, KC8QJP needs a good
>> slathering on her hind quarters.
>>
>> She's also getting ready to start her tax return posts again like she
>> does every year. You remember those..
>>
>> http://tinyurl.com/46teqq
>>
>> She says she wants to add some pics of her and me to them this year.
>>
>>
>>
> Cool!
>
What did Dougs kids give the dead beat dad for fathers day?

A subpoena
A notice of salary garnishment
A notice of suspension of driver's license.

3314. shownatova but stil it is day 118 of the lawsuit watch but the suit is STILL MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 20:10:46 UTC
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Message-ID: <123024c3-85bb-43f3-89ea-406588ba3add@c65g2000hsa.googlegroups.com>
Source record: 21338
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.cb,rec.radio.shortwave

On Oct 2, 4:02 pm, "Laurie J Luce" <l...@dugslappa.com> wrote:
>
why the spam
> - Show quoted text -

3315. Re: Amateur Radio Quiz: Historically Speaking (ARRL Amateur Radio News)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 20:25:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc3angdkb1@registered.motzarella.org>
Source record: 21339
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

admin@ng2000.com wrote:
> http://www.ng2000.com/fw.php?tp=amateur-radio
>
>
>

You idiots make me happy with my thread plonk addon ... may you burn in moderated hell ...

JS

3316. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 20:30:47 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gc3b1n$u0l$1@news.jpl.nasa.gov>
Source record: 21342

John Smith wrote:
> Michael Coslo wrote:
>
>>
>> Let's not forget the possibility that they didn't know how to model
>> the thing. I'm no great shakes at modeling, and that antenna is beyond
>> my prowess at the present.
>>
>> Of course, I'm mpore likely to assume that discrepancies between
>> computer world and reality are my fault. Some others might assume that
>> the data they input was correct, so it must be the programs fault....
>>
>> And some on the fringe might say the antenna CAN't work - the computer
>> says it can't!
>>
>> - 73 de Mike N3LI -
>
> Absolutely, I am NOT making any statement "they" are correct (I have
> never tried this antenna myself--either as a model or as an actual
> antenna in reality.)
>
> But, anyway you cut it, and on the ground floor, there ARE discrepancies
> in the basic equations, formulas and assumptions being put to use in the
> NEC, someday these will be fleshed out ...
>
> Regards,
> JS

I doubt that any antenna an amateur is likely to build has some physics not adequately modeled by the math in NEC. Exactly what might be these discrepancies in equations, formulae and assumptions? Considering that NEC has had decades of validation against actual measurements and a lot of really, really smart people looking at how it works, I'd be kind of surprised.

However, I can also easily believe that an amateur (or professional) could build an antenna that has measured performance different than expected from their NEC model of that antenna. The differences would lie, most likely, in these areas:
1) Inaccuracies in the model itself. Things like earth properties (NEC assumes uniform dielectric, it isn't) are an important source of error for antennas close to the ground. Most amateur models do not include a very good model of the surroundings (supports, trees, feedlines, etc.)

2) Inaccuracies in the measurements or not measuring the right things. A good example is using NEC to get feedpoint characteristics, then measuring at the rig, and not properly accounting for the transmission line, particularly if the feedpoint Z is reactive.

In the professional antenna world, if someone models an antenna, then builds it and tests it on the range, and the measurements differ from what the model predicted, the usual assumption is that what was built differed from what was modeled, or the measurements were off.

3317. Re: Gay N8WWM BDSM Site

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 20:34:27 UTC
From: Laurie J Luce <ljl@dugslappa.com>
Message-ID: <gc3beglku1@news.tornevall.net>
Source record: 21340
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

"Doug Adair" <n8wwn@bdsmlover.net> wrote in message
news:48e3af53$0$581$c5fe31e7@reader.usenet4all.se...
>
> "Leland C Scott" <kc8ldo@madisonhts.com> wrote in message
> news:gbu4sa$re5$1@news.tornevall.net...
>>
>> "n8wwm mrbindwell (fatboy)" <dougay@nospam.com> wrote in message
>> http://img409.imageshack.us/my.php?image=dougayn8wwmdickheadzb1.jpg
>>
>>
> Kicking my sisters ass wasn't as easy as I thought it would be especially
> while I was falling down drunk.
>
> Here is the twats police reports...
> http://img186.imageshack.us/img186/9956/n8assault1x2au3.jpg
>
>
> http://img508.imageshack.us/img508/9041/n8assaultx2hu1.jpg
>
>
>
You've really turned into a women hater since you went over to the gay BDSM
side doug.

3318. shownatova but stil it is day 118 of the lawsuit watch but the suit is STILL MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 20:35:52 UTC
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Message-ID: <225b666b-0115-41cd-ac43-f83b176afa11@h2g2000hsg.googlegroups.com>
Source record: 21341
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

On Oct 2, 4:34 pm, "Laurie J Luce" <l...@dugslappa.com> wrote:
>
can the spam

3319. shownatova but stil it is day 118 of the lawsuit watch but the suit is STILL MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 21:34:45 UTC
From: an old freind <kb9rqz-2@hotmail.com>
Message-ID: <4c43f095-039e-42fe-86ec-8a7d0a908d14@e17g2000hsg.googlegroups.com>
Source record: 21343
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Oct 1, 9:01 pm, "Channel Cop" <ned...@yahoo.com> wrote:

> Its interesting that you answer yourself and call your self "FAKE"!
why tell these lies spamer

3320. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 21:40:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc3f56ksn1@news.albasani.net>
Source record: 21344

Jim Lux wrote:
> John Smith wrote:
>> [A bunch of chit Jim, obviously, will/and does differ with]
>> Regards,
>> JS

>
> I doubt that any antenna an amateur is likely to build has some physics
> not adequately modeled by the math in NEC. Exactly what might be these
> discrepancies in equations, formulae and assumptions? Considering that
> NEC has had decades of validation against actual measurements and a lot
> of really, really smart people looking at how it works, I'd be kind of
> surprised.

I don't believe the above it correct. Indeed, if you will only review
my past objections and reflections on how "the NEC engine" demonstrates
"differences" you will be focused at the "focal point" of my "inquiries" ...

>
> However, I can also easily believe that an amateur (or professional)
> could build an antenna that has measured performance different than
> expected from their NEC model of that antenna. The differences would
> lie, most likely, in these areas:

Look, the dipole, standard monopole (1/4, 1/2, longwire, etc.) is NOT in
debate. Indeed, it is like NEC was designed to "explain/model" these, DUH!

> 1) Inaccuracies in the model itself. Things like earth properties (NEC
> assumes uniform dielectric, it isn't) are an important source of error
> for antennas close to the ground. Most amateur models do not include a
> very good model of the surroundings (supports, trees, feedlines, etc.)
>
> 2) Inaccuracies in the measurements or not measuring the right things. A
> good example is using NEC to get feedpoint characteristics, then
> measuring at the rig, and not properly accounting for the transmission
> line, particularly if the feedpoint Z is reactive.
>
> In the professional antenna world, if someone models an antenna, then
> builds it and tests it on the range, and the measurements differ from
> what the model predicted, the usual assumption is that what was built
> differed from what was modeled, or the measurements were off.

I could pick apart the above, attempt to poke fun, etc. -- however, I
would much rather join forces and attempt to focus on the points which
would lead us to real answers -- i.e., the arrl and illiterates have
already done enough damage, let us pursue a more productive path?

Leave us leave our minds open, OK?

Regards,
JS

3321. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 21:56:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc3g22lpa1@news.albasani.net>
Source record: 21345

John Smith wrote:

> ...
> Leave us leave our minds open, OK?
>
> Regards,
> JS

And damn, and DAMN, and well DAMN ...

If you want to build something from a 19?? to 1950 (or beyond?) publications, do I stop you? Is this what "you have you back up your ego about?" It this what threatens you? If so, go ahead, go to your grave with your pursuits, without my critique! ...

I am here about what "I AM", about "WHAT I THINK", about "WHAT I SEE", about "WHAT I SUSPECT", about "WHAT I WONDER", about "MY QUESTIONS TO OTHER MEN/WOMEN", about what I simply want to think about and want answers to ... yanno, I think you are really endangerd by those "others" here, I find ... Cecil, where are you? <evil grin>

If you can't participate, if you think I am am an idiot, if you think I am a moron ... could you do it politely until I give you reason to do differently ... indeed, I may feel threaten my "moronic brains" and respond ... please don't take insult, just reassure me I am not wrong ...

Regards,
JS

3322. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 22:04:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc3ggs$m47$1@news.albasani.net>
Source record: 21346

John Smith wrote:

> ...
> If you can't participate, if you think I am am an idiot, if you think I
> am a moron ... could you do it politely until I give you reason to do
> differently ... indeed, I may feel threaten my "moronic brains" and
> respond ... please don't take insult, just reassure me I am not wrong ...
>
> Regards,
> JS

Look, that got "corrupted" in my frustration, I am not a writer, I just attempt to bring my skills up to speed to participate here ...

Let me change all that:

If I can't think here ... If I can use this as a "note pad" ... If I can speculate here ... If I can't search for others here, if I can't use other as a "backboard" here ...

... then let it all be damned ... I am an idiot ... and let's look over your past, present and future questions, speculations, advances, etc. ...

Regards,
JS

3323. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 22:10:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc3gs3$m47$2@news.albasani.net>
Source record: 21347

John Smith wrote:

> ...
> Regards,
> JS

Geesh, can = can't in a lot of that. Those with a brain will know ...
those without will point it out ... don't think it necessary ... PLEASE!

I am taking a break from all this ... I need to ... :-)

Regards,
JS

3324. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 22:16:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jmhae4t2hn2q0b33rh6oa4fejat1qebv4g@4ax.com>
Source record: 21348

On Thu, 02 Oct 2008 15:10:05 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Geesh, can = can't in a lot of that. Those with a brain will know ...
>those without will point it out

It took 3 posts to point it out, but you managed....

> ... don't think it necessary ... PLEASE!

Not in the least necessary from any perspective; but I can see why
some modeling would be impossible to confirm against the data offered.
Afterall, if the prognosis of, say, netzheimers were based on a ï¿½0.1dB
DNA error, then all bets are off in proving sanity.

Knowledge may give weight, but accomplishments
give lustre, and many more people see than weigh.
Lord Chesterfield

73's
Richard Clark, KB7QHC

3325. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 22:32:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <b_bFk.2382$YU2.1504@nlpi066.nbdc.sbc.com>
Source record: 21349

John Smith wrote:
> I don't believe the above is correct.

Proof that NEC cannot model everything is at:

http://www.w5dxp.com/SUPRGAIN.EZ

Would you believe a vertical with
24 dBi omnidirectional gain?
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3326. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 22:46:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc3j0e$on6$1@news.albasani.net>
Source record: 21350

Richard Clark wrote:

> ...
> Not in the least necessary from any perspective; but I can see why
> some modeling would be impossible to confirm against the data offered.
> Afterall, if the prognosis of, say, netzheimers were based on a ï¿½0.1dB
> DNA error, then all bets are off in proving sanity.
>
> Knowledge may give weight, but accomplishments
> give lustre, and many more people see than weigh.
> Lord Chesterfield
>
> 73's
> Richard Clark, KB7QHC

LOL!

Thanks Richard!

I will place a grain (or two, or more) of salt upon the joint of the thumb with wrist (and, thinking fondly of you, as reason enough), swag down the shot of Tequila and touch tongue to the joint ... but for now, more important things beckon me ...

Ahh yes, if only for a night ... I suppose you will be here tomorrow ... may your dreams be filled with the such of mine ... here is too our further "exploits" :-)

Regards,
JS

3327. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 22:50:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc3j7eotq1@news.albasani.net>
Source record: 21101

Cecil Moore wrote:

> ...
> Would you believe a vertical with
> 24 dBi omnidirectional gain?

Cecil:

With the "truth" we have maintained before us, and especially here,
another shot of Ta-Kill-Ya (or, Tequila), I'd believe anything you would
state!--await my returned "brain" tomorrow--please? ROFLOL

Regards my friend,
JS

3328. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-02 23:30:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <fQcFk.1498$W06.972@flpi148.ffdc.sbc.com>
Source record: 21102

John Smith wrote:
> --await my returned "brain" tomorrow--please? ROFLOL

Good luck on that one. :-)
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3329. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 00:51:43 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <B0eFk.18469$kc.14360@newsfe12.iad>
Source record: 21103

"W3CQH" <hsgorden@comcast.net> wrote in message > >
> AM - SSB - CW - (digital) = Horizontal, FM = Vertical
>
>

My lone 6m rig is FM-only, so vertical is the way to go. Thanks.

3330. Re: Quick Rooftop Antenna For Channel 2?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 01:04:48 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <RceFk.18472$kc.18469@newsfe12.iad>
Source record: 21104

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:Q5YEk.4884

< snip >

> I posted the instructions for a Channel 2 Yagi a few weeks ago. They were
> acknowledged and I've been waiting anxiously for some feedback.
>
> Curiosity got the better of me this afternoon, so I built the thing
> myself -- exactly as described except for the second director, since I was
> losing the light and three elements proved the point.

< snip >

> ... the picture was quite watchable.

Today, I added the second director and the signal level actually went DOWN a
dB or two. I couldn't believe it, so I took the second director off and
the signal came back up.

Maybe the extra director is throwing off the impedance, and making any
additional gain disappear. The folded dipole is terminated in a 300/75 TV
balun and these are not precision instruments!

I noted that the MFG-259 analyzer did not show one distinct dip in the SWR.
There were dips all over the place. I realize that the -259 is 50 ohms and
I was reading into a 75 ohm system but I don't think that would greatly
affect the dips, other than how close to 1:1 I'd see.

3331. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 01:07:58 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gc3r9ctpn1@news.jpl.nasa.gov>
Source record: 21105

Cecil Moore wrote:
> John Smith wrote:
>> I don't believe the above is correct.
>
> Proof that NEC cannot model everything is at:
>
> http://www.w5dxp.com/SUPRGAIN.EZ
>
> Would you believe a vertical with
> 24 dBi omnidirectional gain?

Got a regular NEC deck or text description (can't read the EZ-NEC file..)

3332. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 03:30:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <cqCdnTJzc-JJDHjVnZ2dnUVZ_q7inZ2d@posted.easystreetonline>
Source record: 21106

Jim Lux wrote:
> Cecil Moore wrote:
>> John Smith wrote:
>>> I don't believe the above is correct.
>>
>> Proof that NEC cannot model everything is at:
>>
>> http://www.w5dxp.com/SUPRGAIN.EZ
>>
>> Would you believe a vertical with
>> 24 dBi omnidirectional gain?
>
> Got a regular NEC deck or text description (can't read the EZ-NEC file..)

Although NEC can't model everything (for example, it can't model a patch antenna containing dielectric), this model is not at all proof of that. All it shows is that models can be carelessly or intentionally constructed in such a way as to cause NEC to malfunction. An experienced EZNEC or NEC modeler would immediately run an Average Gain test and seen that the reported gain is about 16.7 dB too high due to numerical problems. If desired, this can be subtracted from the reported gain to give the gain that's much closer to reality.

A resistance, the jagged schematic symbol that we use in basic circuit analysis, can be and often is used as a simple model of a resistor. But anyone who has ever done any electronic design or analysis quickly discovers that this model is adequately accurate only under some limited group of conditions -- for example, it's a lousy model of a leaded resistor at 10 GHz --, and any calculations made using it will be far from measurement of a real resistor (assuming the measurements are capably made). Like the resistance and all other models, NEC also has limitations and boundaries over which it's valid. And it can be misapplied to produce just as egregiously bad results as using a resistance to model a leaded resistor at 10 GHz. In this case, the model violates at least one NEC rule by spacing two 40-foot #14 wires 1/2 wire diameter (0.032") apart. (NEC guidelines specify that parallel wires should be at least several wire diameters apart.) It would be a great challenge to actually construct this antenna. But, even at that, the NEC results are probably not bad once the average gain correction is made.

Here's the model in .NEC format for those who don't have EZNEC. I've changed the current source to a voltage source which simplifies the model without making any difference in results.

```
CM 40m triangular loop
CE
GW 1,31,.003048,0.,3.048,.003048,0.,12.192,8.138E-4
GW 2,53,0.,0.,12.192,0.,16.4592,12.192,8.138E-4
GW 3,61,0.,16.4592,12.192,0.,0.,3.048,8.138E-4
GW 4,31,0.,0.,3.048,0.,0.,12.192,8.138E-4
GE 1
LD 5,1,0,0,5.7471E+7,1.
LD 5,2,0,0,5.7471E+7,1.
LD 5,3,0,0,5.7471E+7,1.
LD 5,4,0,0,5.7471E+7,1.
FR 0,1,0,0,7.
GN 2,0,0,0,13.,.005
EX 0,1,16,0,1.414214,0.
RP 0,181,1,1000,90.,0.,-1.,0.,0.
EN
```

Roy Lewallen, W7EL

3333. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 03:53:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <QbydnYQvx--nCnjVnZ2dnUVZ_tLinZ2d@posted.easystreetonline>
Source record: 21107

Jim Lux wrote:
>
> I doubt that any antenna an amateur is likely to build has some physics
> not adequately modeled by the math in NEC. Exactly what might be these
> discrepancies in equations, formulae and assumptions? Considering that
> NEC has had decades of validation against actual measurements and a lot
> of really, really smart people looking at how it works, I'd be kind of
> surprised.
>
> However, I can also easily believe that an amateur (or professional)
> could build an antenna that has measured performance different than
> expected from their NEC model of that antenna. The differences would
> lie, most likely, in these areas:
> 1) Inaccuracies in the model itself. Things like earth properties (NEC
> assumes uniform dielectric, it isn't) are an important source of error
> for antennas close to the ground. Most amateur models do not include a
> very good model of the surroundings (supports, trees, feedlines, etc.)
>
> 2) Inaccuracies in the measurements or not measuring the right things. A
> good example is using NEC to get feedpoint characteristics, then
> measuring at the rig, and not properly accounting for the transmission
> line, particularly if the feedpoint Z is reactive.
>
> In the professional antenna world, if someone models an antenna, then
> builds it and tests it on the range, and the measurements differ from
> what the model predicted, the usual assumption is that what was built
> differed from what was modeled, or the measurements were off.

A lot of people are aware that some knowledge and skill is necessary in order to construct a good model which will give accurate results. What's not so widely appreciated is how difficult it is to make decent measurements of even such seemingly simple things as impedance, let alone gain and pattern.

Some years ago I was at what was then NOSC (Naval Ocean Systems Center) in San Diego, where they had the very best equipment to do full 3D pattern measurements of antennas mounted on carefully constructed and accurate scale models of U.S. Navy ships. They were also modeling the antennas and ship structures with NEC-4. One of the engineers confided to me that they'd learned that when the measurement disagreed with the model result, the model result was probably better. Of course, these people were very highly skilled in using the modeling software and how to avoid and detect its limitations. But they were also very highly skilled in making the best possible measurements.

A claim by an antenna manufacturer or creator that an antenna "can't be modeled by NEC" very often means that NEC's accurate results don't back up the manufacturer's or creator's inflated claims. If the claim includes a statement that some alleged physical rule or phenomenon ("critical coupling" comes to mind) isn't "accounted for" by NEC, you can be certain that the disparity is due to inflated claims rather than a shortcoming of NEC. There are, of course, some antennas that truly can't be modeled with NEC, for example a patch antenna with dielectric between the patch and ground plane. But those of NEC's limitations that aren't apparent from the basic program structure have been pretty well discovered and documented in the 30 years or so it's been in use.

Antennas are being designed every day with NEC and EZNEC which provide critical communications functions for military and government agencies, aerospace companies, space agencies, domestic and international broadcasters, scientific researchers, and many others. Many of those antennas have been carefully measured and verified before being put into service, and countless of them are in current use. I personally have designed a number of antennas with EZNEC, tested physical prototypes at a professional range, and seen them put into daily service performing critical functions as designed.

Roy Lewallen, W7EL

3334. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 03:58:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc459ladf1@news.albasani.net>
Source record: 21108

Roy Lewallen wrote:
> Jim Lux wrote:
>>
>> I doubt that any antenna an amateur is likely to build has some
>> physics not adequately modeled by the math in NEC. Exactly what might
>> be these discrepancies in equations, formulae and assumptions?
>> Considering that NEC has had decades of validation against actual
>> measurements and a lot of really, really smart people looking at how
>> it works, I'd be kind of surprised.
>>
>> However, I can also easily believe that an amateur (or professional)
>> could build an antenna that has measured performance different than
>> expected from their NEC model of that antenna. The differences would
>> lie, most likely, in these areas:
>> 1) Inaccuracies in the model itself. Things like earth properties (NEC
>> assumes uniform dielectric, it isn't) are an important source of error
>> for antennas close to the ground. Most amateur models do not include a
>> very good model of the surroundings (supports, trees, feedlines, etc.)
>>
>> 2) Inaccuracies in the measurements or not measuring the right things.
>> A good example is using NEC to get feedpoint characteristics, then
>> measuring at the rig, and not properly accounting for the transmission
>> line, particularly if the feedpoint Z is reactive.
>>
>> In the professional antenna world, if someone models an antenna, then
>> builds it and tests it on the range, and the measurements differ from
>> what the model predicted, the usual assumption is that what was built
>> differed from what was modeled, or the measurements were off.
>
> A lot of people are aware that some knowledge and skill is necessary in
> order to construct a good model which will give accurate results. What's
> not so widely appreciated is how difficult it is to make decent
> measurements of even such seemingly simple things as impedance, let
> alone gain and pattern.
>
> Some years ago I was at what was then NOSC (Naval Ocean Systems Center)
> in San Diego, where they had the very best equipment to do full 3D
> pattern measurements of antennas mounted on carefully constructed and
> accurate scale models of U.S. Navy ships. They were also modeling the
> antennas and ship structures with NEC-4. One of the engineers confided
> to me that they'd learned that when the measurement disagreed with the
> model result, the model result was probably better. Of course, these
> people were very highly skilled in using the modeling software and how
> to avoid and detect its limitations. But they were also very highly

> skilled in making the best possible measurements.
>
> A claim by an antenna manufacturer or creator that an antenna "can't be
> modeled by NEC" very often means that NEC's accurate results don't back
> up the manufacturer's or creator's inflated claims. If the claim
> includes a statement that some alleged physical rule or phenomenon
> ("critical coupling" comes to mind) isn't "accounted for" by NEC, you
> can be certain that the disparity is due to inflated claims rather than
> a shortcoming of NEC. There are, of course, some antennas that truly
> can't be modeled with NEC, for example a patch antenna with dielectric
> between the patch and ground plane. But those of NEC's limitations that
> aren't apparent from the basic program structure have been pretty well
> discovered and documented in the 30 years or so it's been in use.
>
> Antennas are being designed every day with NEC and EZNEC which provide
> critical communications functions for military and government agencies,
> aerospace companies, space agencies, domestic and international
> broadcasters, scientific researchers, and many others. Many of those
> antennas have been carefully measured and verified before being put into
> service, and countless of them are in current use. I personally have
> designed a number of antennas with EZNEC, tested physical prototypes at
> a professional range, and seen them put into daily service performing
> critical functions as designed.
>
> Roy Lewallen, W7EL

Oh, I C ... You will excuse me then, I have had a bit too much to drink,
to be coherent ... but then, from your response, you are in the same
shape, right? :-)

Regards,
JS

3335. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 04:18:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc46f2bip1@news.albasani.net>
Source record: 21109

Roy Lewallen wrote:

> ...
> Roy Lewallen, W7EL

Gawd, that is a lot Roy. Like I have said before, I have read your articles, since I was a boy ...

And, I shouldn't even be here, from the party ... but then, ya' already know that ... <wink>

Did I get that right? I mean, I like what I'm drinkin', what are you drinin', can I get you one? <goofy-smile>

Regards,
JS

3336. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 05:12:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <ktOdnZq_9oc2NHjVnZ2dnUVZ_vqdnZ2d@posted.easystreetonline>
Source record: 21110

Correction:

Roy Lewallen wrote:
> . . . An experienced
> EZNEC or NEC modeler would immediately run an Average Gain test and seen
> that the reported gain is about 16.7 dB too high due to numerical
> problems. If desired, this can be subtracted from the reported gain to
> give the gain that's much closer to reality.

I should have said "experienced *and not careless*". The average gain is
about 30.4 dB, not 16.7.

> . . . In this case, the model
> violates at least one NEC rule by spacing two 40-foot #14 wires 1/2 wire
> diameter (0.032") apart. (NEC guidelines specify that parallel wires
> should be at least several wire diameters apart.) It would be a great
> challenge to actually construct this antenna. But, even at that, the NEC
> results are probably not bad once the average gain correction is made.

The wires are just about one wire diameter, not 1/2, apart.

This antenna is a very difficult one for NEC. In a few minutes of
fiddling, I couldn't get a decent average gain at much less than about
0.3 foot wire spacing, and then it required specific segmentation. I'll
modify my earlier statement to say that this is an antenna that is
indeed pretty difficult for NEC to handle. But it's easily recognized as
such by looking at the average gain result. If you don't know about the
average gain test, look in the EZNEC manual -- included also with the
demo program -- index under "Average Gain". It's an important and
valuable tool.

Roy Lewallen, W7EL

3337. Re: hf shielding-mesh

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 10:04:05 UTC
From: ml <m@di.net>
Message-ID: <m-424E3D.06040503102008@news.optonline.net>
Source record: 21111

In article <ZAKEk.3298$YN3.1273@newsfe08.iad>, Dave <dave@dave.dave>
wrote:

> ml wrote:
> > hi
> >
> > i have a general shielding question i realize that overall it
> > might be a impractical thing to build but looking at it i wonder...
> >
> > ontop of my roof is elevator room it's about 20x20
> >
> > flat roof
> >
> > lets suppose the motor controller throws out 1.7 to 30mhz at
> > s9+ (all over)
> >
> > lets say i take a single 20x20 sheet of copper put it on the top
> > roof (assume i could ground it if need be)
> >
> > lets say before i put the copper i measured s9
> >
> > what shielding if any might i see "S" wise??
> >
> > i understand interference would still be radiating form the rest
> > of the unshielded structure but wondering if measuring ontop of the
> > copper sheeting id' observe any attenuation?? meaning would the
> > signal penatrate that copper? -- and if so around how
> > much??(alot/very little)
> >
> >
> > tnx
>
> I'd try bypassing and choking the wires going to the motor and the
> controller.

thanks for the help Dav, i sorta feared a simple sheet wouldn't do
much but wanted to double check

seems the device does not radiate along the power lines it just
radiate s of the device itself

it's about 12x12 x12 inches or so the motor controler is inside a
tight heavey metal cabinet the only rf measured is from that
device itself

my thought is to perhaps find a way to build copper mesh 'box' i
can place over it perhaps that would do the trick? it has to be
mesh as the controller gets pretty hot and is fan cooled

3338. Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 12:20:24 UTC
From: Chevy454 <nunyas@aol.com>
Message-ID: <183ce4hsa2tidl17emf61q5uommgqht4tt@4ax.com>
Source record: 21112

I want to make a flexible, portable, vertical 10M dipole from coax by folding back roughy 1/4 wavelength of the sheath and taping it in place.

I would not expect the sheath to perform like an equal length of solid or stranded wire because if the extra length of wire. Is there any theoretical way to compute a factor, or do I just keep snipping until I get lowest SWR at the desired freq?

Ken KC2JDY

3339. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 13:09:13 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ZPoFk.369$yI6.170@nwrddc01.gnilink.net>
Source record: 21113

snipping is the easiest way.

"Chevy454" <nunyas@aol.com> wrote in message
news:183ce4hsa2tidl17emf61q5uommgqht4tt@4ax.com...
>I want to make a flexible, portable, vertical 10M dipole from coax by
> folding back roughy 1/4 wavelength of the sheath and taping it in
> place.
>
> I would not expect the sheath to perform like an equal length of solid
> or stranded wire because if the extra length of wire. Is there any
> theoretical way to compute a factor, or do I just keep snipping until
> I get lowest SWR at the desired freq?
>
> Ken KC2JDY
>
>

3340. Re: hf shielding-mesh

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 13:10:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <hRoFk.370$yI6.265@nwrddc01.gnilink.net>
Source record: 21114

"ml" <m@di.net> wrote in message
news:m-424E3D.06040503102008@news.optonline.net...
> In article <ZAKEk.3298$YN3.1273@newsfe08.iad>, Dave <dave@dave.dave>
> wrote:
>
>> ml wrote:
>> > hi
>> >
>> > i have a general shielding question i realize that overall it
>> > might be a impractical thing to build but looking at it i
>> > wonder...
>> >
>> > ontop of my roof is elevator room it's about 20x20
>> >
>> > flat roof
>> >
>> > lets suppose the motor controller throws out 1.7 to 30mhz at
>> > s9+ (all over)
>> >
>> > lets say i take a single 20x20 sheet of copper put it on the top
>> > roof (assume i could ground it if need be)
>> >
>> > lets say before i put the copper i measured s9
>> >
>> > what shielding if any might i see "S" wise??
>> >
>> > i understand interference would still be radiating form the rest
>> > of the unshielded structure but wondering if measuring ontop of the
>> > copper sheeting id' observe any attenuation?? meaning would the
>> > signal penatrate that copper? -- and if so around how
>> > much??(alot/very little)
>> >
>> >
>> > tnx
>>
>> I'd try bypassing and choking the wires going to the motor and the
>> controller.
>
> thanks for the help Dav, i sorta feared a simple sheet wouldn't do
> much but wanted to double check
>
> seems the device does not radiate along the power lines it just
> radiate s of the device itself
>

> it's about 12x12 x12 inches or so the motor controler is inside a
> tight heavey metal cabinet the only rf measured is from that
> device itself
>
> my thought is to perhaps find a way to build copper mesh 'box' i
> can place over it perhaps that would do the trick? it has to be
> mesh as the controller gets pretty hot and is fan cooled

galvanized 'hardware cloth' that has about 1/2" mesh is plenty good for that
and can be easily soldered.

3341. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 13:12:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <dToFk.372$yl6.3@nwrddc01.gnilink.net>
Source record: 21115

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:01d6dacf-a2c5-459b-b6e7-9be7450a80a6@a70g2000hsh.googlegroups.com...
>I am begining to believe that there is really no interest in small
> antennas

only for very high frequencies.

where did art go, bad wx coming again, could use some entertainment!

3342. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 13:20:16 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <m_oFk.2167$as4.919@nlpi069.nbdc.sbc.com>
Source record: 21116

Roy Lewallen wrote:
> All it shows is that models can be carelessly or intentionally
> constructed in such a way as to cause NEC to malfunction.

SUPRGAIN.EZ was a complete accident from many years ago.
I noticed that the closer together the wires were, the
higher the reported gain. When it got to about 5 dBi
omni, I knew I had done something wrong.

All I was trying to do is show there are certain things
that NEC cannot do. I suspect that modeling Art's antenna
is one of those things.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3343. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 14:04:34 UTC
From: ltdoc@yahoo.com
Message-ID: <af49da98-bd16-4180-9a6d-a3e70f1dd2a6@a1g2000hsb.googlegroups.com>
Source record: 21117

Ken,
You'll have to do some 'tuning'/trimming no matter what you make the thing out of, wire/braid. So, why not make that braid adjustable? Let it slide up/down just a bit (carry lots of tape). No two installations are ever the same so being able to 'adjust' things is reasonable.
- 'Doc

3344. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 14:15:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <NOpFk.2437$Ws1.1713@nlpi064.nbdc.sbc.com>
Source record: 21118

Chevy454 wrote:
> I want to make a flexible, portable, vertical 10M dipole from coax by
> folding back roughy 1/4 wavelength of the sheath and taping it in
> place.

Be careful about the end of the coax sheath where the
voltage can reach levels high enough to arc and/or
give severe RF burns.

> I would not expect the sheath to perform like an equal length of solid
> or stranded wire because if the extra length of wire. Is there any
> theoretical way to compute a factor, or do I just keep snipping until
> I get lowest SWR at the desired freq?

A web page gives 460/f for the overall length. I would
use the standard 468/f and trim to resonance.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3345. Re: Is Comcast giving you this story?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 15:07:08 UTC
From: Laurie J Luce <ljl@dugslappa.com>
Message-ID: <gc5ckn$mq2$1@news.tornevall.net>
Source record: 21119
Cross-posted to: alt.ohio.toledo,rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.cb

"W3CQH" <hsgorden@comcast.net> wrote in message
news:ycednUbUtaS0w3zVnZ2dnUVZ_g2dnZ2d@comcast.com...
>
> "N8WWM" <mrbindwell@n8wwm.com> wrote in message
> news:gbrapr$e21$1@news.tornevall.net...
>>
>> "Mutant" <mutant@psygone.org> wrote in message
>> news:adc539d1-6776-4cd6-a637-50cdfe9d6e93@d77g2000hsb.googlegroups.com...
>>
>> United Press International - News. Analysis. Insight.T - 100 Years of
>> Journalistic Excellence
>> Comcast told to stop blocking Web tool
>> Published: Aug. 3, 2008 at 2:45 PM
>> WASHINGTON, Aug. 3 (UPI) -- Broadband Internet customers of cable
>> television giant Comcast should be free to use file-sharing software,
>> the Federal Communications Commission says.
>>
>> The commission voted Friday to order Comcast to stop blocking its
>> Internet customers from using BitTorrent, an online software
>> application that enables users to share large movie, TV show and music
>> files, The Hollywood Reporter said.
>>
>> Commission Chairman Kevin Martin split with his Republican colleagues
>> to join the two Democratic members to produce a 3-2 vote against
>> Comcast. The precedent-setting decision was hailed by supporters of so-
>> called net neutrality, which maintains Internet service providers
>> should be barred from discriminating among various types of traffic.
>>
>> "It was unreasonable for Comcast to discriminate against particular
>> Internet applications, including BitTorrent," Martin wrote in his
>> majority opinion. "They delayed and blocked customers using a
>> disfavored application even when there was no network congestion."
>>
>> Other commissioners, however, said Internet engineers need to regulate
>> traffic flow and say the ruling will nudge providers toward
>> instituting volume-based pricing.
>>
>> The bastards took away my BDSM newgroups!
>>
>> mrbindwell n8wwm
> what does this xposted garbage have to do with
> rec.radio.amateur.antenna ??
>

>
n8wwm gets drunk beats his wife and drools all over his keyboard posting garbage on the newsgroups ever since he was outed for being involved in gay toledo bdsm, he was in the closet.

3346. Re: I'm Looking For Someone To Choke Me!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 15:13:45 UTC
From: Laurie J Luce <ljl@dugslappa.com>
Message-ID: <gc5d14$mt4$1@news.tornevall.net>
Source record: 21120
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

"N8WWM" <mrbindwell@n8wwm.com> wrote in message
news:gbragvdvj1@news.tornevall.net...
>
> "nirvanafan201" <nirvanafan201@hotmail.com> wrote in message
> news:652f66dc-2fc3-4494-a457-4898b8887aba@c65g2000hsa.googlegroups.com...
>> Hey all! Hope you had a great summer, mine was ok... I'm a 24 yrs old
>> college boy and ever since I can remember I have loved being choked.
>> The feeling when I know my face is blue is absolutly amazing. My eyes
>> buldging and everything going in slow motion! I just love it!!! My
>> favorite way of being choked is with bare hands while im laying on my
>> back, but anyway you want is ok with me! Anyone who is safe and sane
>> and wants to meet up and choke me or if you're just up for talking,
>> message me on yahoo. Nirvanafan201. I hope to talk to you soon!
>>
> I'm a guy from Toledo who enjoys showing a submissive boy a good time in
> every way. I have so many interests that there probably is some broad
> common ground between myself and about anyone. I love to talk about D/s
> and BDSM issues and interests, and have been generally regarded as a funny
> guy to hang out with who has a good head on his shoulders. Send me a
> message for anything else you'd like to know!
>
> mrbindwell n8wwm
>
I would like to know if you are using protection from disease with your sick
gay n8wwm bdsm?

3347. Re: Is Comcast giving you this story?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 16:29:26 UTC
From: mopeyzakween@yahoo.com
Message-ID: <3b74d638-91fb-4685-956a-3cdc9eef8f14@25g2000hsk.googlegroups.com>
Source record: 21121
Cross-posted to: alt.ohio.toledo,rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.cb

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)

PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

3348. Re: I'm Looking For Someone To Choke Me!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 16:41:00 UTC
From: mopeyzakween@yahoo.com
Message-ID: <931bef89-5996-4402-857d-7f6092dcb128@y79g2000hsa.googlegroups.com>
Source record: 21122
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Oct 3, 11:13 am, "Laurie J Luce" <l...@dugslappa.com> wrote:
> "N8WWM" <mrbindw...@n8wwm.com> wrote in message
>
> news:gbragvdvj1@news.tornevall.net...
>
>
>
>
>
> > "nirvanafan201" <nirvanafan...@hotmail.com> wrote in message
> >news:652f66dc-2fc3-4494-a457-4898b8887aba@c65g2000hsa.googlegroups.com...
> >> Hey all! Hope you had a great summer, mine was ok... I'm a 24 yrs old
> >> college boy and ever since I can remember I have loved being choked.
> >> The feeling when I know my face is blue is absolutly amazing. My eyes
> >> buldging and everything going in slow motion! I just love it!!! My
> >> favorite way of being choked is with bare hands while im laying on my
> >> back, but anyway you want is ok with me! Anyone who is safe and sane
> >> and wants to meet up and choke me or if you're just up for talking,
> >> message me on yahoo. Nirvanafan201. I hope to talk to you soon!
>
> > I'm a guy from Toledo who enjoys showing a submissive boy a good time in
> > every way. I have so many interests that there probably is some broad
> > common ground between myself and about anyone. I love to talk about D/s
> > and BDSM issues and interests, and have been generally regarded as a funny
> > guy to hang out with who has a good head on his shoulders. Send me a
> > message for anything else you'd like to know!
>
> > mrbindwell n8wwm
>
> I would like to know if you are using protection from disease with your sick
> gay n8wwm bdsm?- Hide quoted text -
>
> - Show quoted text -

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
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TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157

AGENCY RECEIVING CUSTODY GCCSCD

3349. Re: I'm Looking For Someone To Choke Me!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 16:43:23 UTC
From: mopeyzakween@yahoo.com
Message-ID: <e9627b8b-1f09-4c44-b698-9a47e224df1e@u57g2000hsf.googlegroups.com>
Source record: 21123
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.cb

On Sep 29, 3:29 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
> "nirvanafan201" <nirvanafan...@hotmail.com> wrote in message
>
> news:652f66dc-2fc3-4494-a457-4898b8887aba@c65g2000hsa.googlegroups.com...> Hey all! Hope you had a great summer, mine was ok... I'm a 24 yrs old
> > college boy and ever since I can remember I have loved being choked.
> > The feeling when I know my face is blue is absolutly amazing. My eyes
> > buldging and everything going in slow motion! I just love it!!! My
> > favorite way of being choked is with bare hands while im laying on my
> > back, but anyway you want is ok with me! Anyone who is safe and sane
> > and wants to meet up and choke me or if you're just up for talking,
> > message me on yahoo. Nirvanafan201. I hope to talk to you soon!
>
> I'm a guy from Toledo who enjoys showing a submissive boy a good time in
> every way. I have so many interests that there probably is some broad common
> ground between myself and about anyone. I love to talk about D/s and BDSM
> issues and interests, and have been generally regarded as a funny guy to
> hang out with who has a good head on his shoulders. Send me a message for
> anything else you'd like to know!
>
> mrbindwell n8wwm

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

3350. shownatova but the still after 119 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 17:17:38 UTC
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Message-ID: <447f1f9d-f5b8-4d0a-9294-103ed616ef9e@t42g2000hsg.googlegroups.com>
Source record: 21124
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.cb

On Oct 3, 12:43 pm, mopeyzakw...@yahoo.com wrote:
> On Sep 29, 3:29 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
>
>
>
>
>
> > "nirvanafan201" <nirvanafan...@hotmail.com> wrote in message
>
> >news:652f66dc-2fc3-4494-a457-4898b8887aba@c65g2000hsa.googlegroups.com...> Hey all!
Hope you had a great summer, mine was ok... I'm a 24 yrs old
> > > college boy and ever since I can remember I have loved being choked.
> > > The feeling when I know my face is blue is absolutly amazing. My eyes
> > > buldging and everything going in slow motion! I just love it!!! My
> > > favorite way of being choked is with bare hands while im laying on my
> > > back, but anyway you want is ok with me! Anyone who is safe and sane
> > > and wants to meet up and choke me or if you're just up for talking,
> > > message me on yahoo. Nirvanafan201. I hope to talk to you soon!
>
> > I'm a guy from Toledo who enjoys showing a submissive boy a good time in
> > every way. I have so many interests that there probably is some broad common
> > ground between myself and about anyone. I love to talk about D/s and BDSM
> > issues and interests, and have been generally regarded as a funny guy to
> > hang out with who has a good head on his shoulders. Send me a message for
> > anything else you'd like to know!
>
> > mrbindwell n8wwm
>
> Batch Search Summary

spaming right along

3351. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 17:20:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc5k8i$2qa$1@news.albasani.net>
Source record: 21125

Cecil Moore wrote:
> Roy Lewallen wrote:
>> All it shows is that models can be carelessly or intentionally
>> constructed in such a way as to cause NEC to malfunction.
>
> SUPRGAIN.EZ was a complete accident from many years ago.
> I noticed that the closer together the wires were, the
> higher the reported gain. When it got to about 5 dBi
> omni, I knew I had done something wrong.
>
> All I was trying to do is show there are certain things
> that NEC cannot do. I suspect that modeling Art's antenna
> is one of those things.

Let me see, is there a way to "carelessly or intentionally" construct
data into my formula to compute the volume of a sphere to make the
formula "malfunction?"

Nope! Guess that formula is returning valid results! Nice being able
to have real confidence in it! ;-)

Regards,
JS

3352. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 17:20:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3-Kdne3ym6b2yXvVnZ2dnUVZ_hqdnZ2d@posted.easystreetonline>
Source record: 21126

Chevy454 wrote:
> I want to make a flexible, portable, vertical 10M dipole from coax by
> folding back roughy 1/4 wavelength of the sheath and taping it in
> place.
>
> I would not expect the sheath to perform like an equal length of solid
> or stranded wire because if the extra length of wire. Is there any
> theoretical way to compute a factor, or do I just keep snipping until
> I get lowest SWR at the desired freq?
>
> Ken KC2JDY

I've found this method to be very ineffective in choking common mode feedline current -- an effective sleeve requires a high impedance for the outer coax structure, which this doesn't provide. So your dipole impedance and performance will depend on the length and orientation of the feedline and the ultimate path to ground for the common mode current. You'll probably need to trim it when connected to the rig you'll be using, grounded (or not) as it will be when used.

Roy Lewallen, W7EL

3353. shownatova but the still after 119 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 17:23:09 UTC
From: an old freind <kb9rqz-2@hotmail.com>
Message-ID: <be666297-3b6e-4dd4-9f27-faf9e62f331d@t42g2000hsg.googlegroups.com>
Source record: 21127
Cross-posted to: alt.ohio.toledo,rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.cb

On Oct 3, 12:29 pm, mopeyzakw...@yahoo.com wrote:
> Batch Search Summary

spaming and stalking
> AGENCY RECEIVING CUSTODY GCCSCD

3354. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 17:45:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7bmce4hcc5nejqsd73olos1rfoma9d86gj@4ax.com>
Source record: 21128

On Fri, 03 Oct 2008 10:20:12 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Let me see, is there a way to "carelessly or intentionally" construct
>data into my formula to compute the volume of a sphere to make the
>formula "malfunction?"
>
>Nope! Guess that formula is returning valid results! Nice being able
>to have real confidence in it! ;-)

What is the volume of a sphere with the measured dimension of
a chord = 1 meter?

That was too easy!

73's
Richard Clark, KB7QHC

3355. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 19:31:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc5rusctr1@news.albasani.net>
Source record: 21129

Richard Clark wrote:

>
> What is the volume of a sphere with the measured dimension of
> a chord = 1 meter?
>
> That was too easy!
>
> 73's
> Richard Clark, KB7QHC

Ahhh, once again that magnificent intellect of yours is displayed ...

However, somehow, it has lost its' shock value ... :-|

Regards,
JS

3356. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 19:35:50 UTC
From: Chevy454 <nunyas@aol.com>
Message-ID: <v7sce4h0ijtipj9ipo9tq4f2l2rhq1ludd@4ax.com>
Source record: 21130

On Fri, 03 Oct 2008 10:20:44 -0700, Roy Lewallen <w7el@eznec.com>
wrote:
>I've found this method to be very ineffective in choking common mode
>feedline current -- an effective sleeve requires a high impedance for
>the outer coax structure, which this doesn't provide. So your dipole
>impedance and performance will depend on the length and orientation of
>the feedline and the ultimate path to ground for the common mode
>current. You'll probably need to trim it when connected to the rig
>you'll be using, grounded (or not) as it will be when used.

That's unfortunate, because I am looking for a simple arrangement.

What if I just hang a wire dipole vertically from the mast (= bendy
Black Widow crappie pole) with a PL-259 at the feedpoint? How much
would the coax feedline have to stand off from the dipole to keep from
interfering with its operation? I can't pull it too tightly away or
the pole will bend.

Ken KC2JDY

3357. Re: I'm Looking For Someone To Choke Me!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 19:45:28 UTC
From: Douglas Adair slappa <wowdouglasuratroubledperson@Hotmail.com>
Message-ID: <gc5svo$9pb$1@news.mixmin.net>
Source record: 21131
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.cb

<mopeyzakween@yahoo.com> wrote in message
news:e9627b8b-1f09-4c44-b698-9a47e224df1e@u57g2000hsf.googlegroups.com...
On Sep 29, 3:29 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
> "nirvanafan201" <nirvanafan...@hotmail.com> wrote in message
>
> news:652f66dc-2fc3-4494-a457-4898b8887aba@c65g2000hsa.googlegroups.com...>
Hey all! Hope you had a great summer, mine was ok... I'm a 24 yrs old
> > college boy and ever since I can remember I have loved being choked.
> > The feeling when I know my face is blue is absolutly amazing. My eyes
> > buldging and everything going in slow motion! I just love it!!! My
> > favorite way of being choked is with bare hands while im laying on my
> > back, but anyway you want is ok with me! Anyone who is safe and sane
> > and wants to meet up and choke me or if you're just up for talking,
> > message me on yahoo. Nirvanafan201. I hope to talk to you soon!
>
> I'm a guy from Toledo who enjoys showing a submissive boy a good time in
> every way. I have so many interests that there probably is some broad
common
> ground between myself and about anyone. I love to talk about D/s and BDSM
> issues and interests, and have been generally regarded as a funny guy to
> hang out with who has a good head on his shoulders. Send me a message for
> anything else you'd like to know!
>
> mrbindwell n8wwm

My my, Douglas W. Adair N8WWM, you've been a busy person with the courts.
It's a shame our courts are so impotent as to letting people like this loose
on our streets.

Defendant Case Number Date of Birth Charge
ADAIR, DOUGLAS CRB-06-07527-0102 07/10/1958 DOMESTIC VIOLENCE
ADAIR, DOUGLAS CRB-06-07527-0202 07/10/1958
ASSAULT;KNOWINGLY/RECKLESSLY CAUSE HARM
ADAIR, DOUGLAS CRB-07-08334-0101 07/10/1958 FALSIFICATION;MISLEAD
PUBLIC OFFICIAL
ADAIR, DOUGLAS CRB-07-19994-0101 07/10/1958 TELE-HARASS-CALL WHEN TOLD
NOT TO CALL
ADAIR, DOUGLAS TRC-01-01894-0104 07/10/1958 DRIVING/PHYSICAL CONTROL
UNDER INFLUENCE
ADAIR, DOUGLAS TRC-01-01894-0204 07/10/1958 LICENSE
REQ;DRIVER/CHAUFFEUR amended from LICENSE REQ;DRIVER/CHAUFFEUR
ADAIR, DOUGLAS TRC-01-01894-0304 07/10/1958 RIGHT OF WAY FROM OTHER
THAN ROADWAY
ADAIR, DOUGLAS TRC-01-01894-0404 07/10/1958 SIGNALS BEFORE CHANGING

COURSE, TURNING OR STOPPING
ADAIR, DOUGLAS TRD-00-36929-0102 07/10/1958 LICENSE
REQ;DRIVER/CHAUFFEUR
ADAIR, DOUGLAS TRD-00-36929-0202 07/10/1958 SQUEAL
TIRES,PEELING,EXHAUST NOISE

3358. Re: Is N8WWM giving you a story? Douglas W. Adair N8WWM sure isn't telling the truth.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 20:09:19 UTC
From: Douglas Adair slappa <wowdouglasuratroubledperson@Hotmail.com>
Message-ID: <gc5u5iant1@news.mixmin.net>
Source record: 21132
Cross-posted to: alt.ohio.toledo,rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.cb

<mopeyzakween@yahoo.com> wrote in message
news:3b74d638-91fb-4685-956a-3cdc9eef8f14@25g2000hsk.googlegroups.com...

Your quite the busy bee with the court system, aren't you. I wonder if all
these judges
know about your activities in the newsgroups, considering you've been in
trouble
before for stalking.

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-06-07527-0102&CaseKey1=567752039&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-06-07527-0202&CaseKey1=567752039&CaseKey2=2

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-07-08334-0101&CaseKey1=53293607&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-07-19994-0101&CaseKey1=652125457&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-93-05800-0101&CaseKey1=961353092&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0104&CaseKey1=25786984&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0204&CaseKey1=25786984&CaseKey2=2

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0304&CaseKey1=25786984&CaseKey2=3

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0404&CaseKey1=25786984&CaseKey2=4

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD-00-36929-0102&CaseKey1=838931261&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD-00-36929-0202&CaseKey1=838931261&CaseKey2=2

3359. Re: Is Comcast giving you this story?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 20:11:37 UTC
From: Douglas Adair slappa <wowdouglasuratroubledperson@Hotmail.com>
Message-ID: <gc5uh3$b25$1@news.mixmin.net>
Source record: 21133
Cross-posted to: alt.ohio.toledo,rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.cb

<mopeyzakween@yahoo.com> wrote in message
news:3b74d638-91fb-4685-956a-3cdc9eef8f14@25g2000hsk.googlegroups.com...
> Batch Search Summary

Quite the bugger, aren't you!!!

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-06-07527-0102&CaseKey1=567752039&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-06-07527-0202&CaseKey1=567752039&CaseKey2=2

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-07-08334-0101&CaseKey1=53293607&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-07-19994-0101&CaseKey1=652125457&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-93-05800-0101&CaseKey1=961353092&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0104&CaseKey1=25786984&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0204&CaseKey1=25786984&CaseKey2=2

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0304&CaseKey1=25786984&CaseKey2=3

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0404&CaseKey1=25786984&CaseKey2=4

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD-00-36929-0102&CaseKey1=838931261&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD-00-36929-0202&CaseKey1=838931261&CaseKey2=2

3360. Re: N8WWM Gay Toledo BDSM

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 20:19:24 UTC
From: chickenhawk <lelnadsmaster@yahoo.com>
Message-ID: <48e67e4f$0$17070$6e1ede2f@read.cnntp.org>
Source record: 21134
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

"Nomen Nescio" <nobody@dizum.com> wrote in message
news:23c8ceee0b20dde7f2ce595bd057f851@dizum.com...
> n8wwm@arrl.net
>
> Email for gay Toledo BDSM
>
http://img293.imageshack.us/img293/1972/dougthecrossdresserpb7.jpg

hahehahehahehaheha

3361. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 20:23:16 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <21c0bceb-1dc0-49b5-a961-c67838f67bdf@d31g2000hsg.googlegroups.com>
Source record: 21135

On Oct 3, 3:35 pm, Chevy454 <nun...@aol.com> wrote:
> On Fri, 03 Oct 2008 10:20:44 -0700, Roy Lewallen <w...@eznec.com>
> wrote:
>
> >I've found this method to be very ineffective in choking common mode
> >feedline current -- an effective sleeve requires a high impedance for
> >the outer coax structure, which this doesn't provide. So your dipole
> >impedance and performance will depend on the length and orientation of
> >the feedline and the ultimate path to ground for the common mode
> >current. You'll probably need to trim it when connected to the rig
> >you'll be using, grounded (or not) as it will be when used.
>
> That's unfortunate, because I am looking for a simple arrangement.
>
> What if I just hang a wire dipole vertically from the mast (= bendy
> Black Widow crappie pole) with a PL-259 at the feedpoint? How much
> would the coax feedline have to stand off from the dipole to keep from
> interfering with its operation? I can't pull it too tightly away or
> the pole will bend.
>
> Ken KC2JDY

The vinyl on the outside of coax has some fairly poor RF insulating
qualities.
A number of CB antennas were built like this and the end of the braid
would often arc through the vinyl if illegal power was used. One of
the manufacturers changed the way they were making them by embedding
wires on the inside of the fiberglass tube that was used to house the
antenna. The wires replaced the shield. Another design is to replace
the folded back shield with a trumpet shaped tube. This is common
today on WiFi antennas. I have one for 6M that has the coax running up
through some EMT tubing. The coax is held centered inside the tubing
with little blocks of styrofoam. A few years ago the PVC coupling I
was using to fasten it to the mast cracked. I repaired it by wrapping
with fiberglass and have had no problems since.

Jimmie

3362. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 20:34:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <puvce4h5nc0b5k6rnghiv7qce0gfkftqja@4ax.com>
Source record: 21136

On Fri, 03 Oct 2008 12:31:34 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>On Fri, 03 Oct 2008 10:20:12 -0700, John Smith
><assemblywizard@gmail.com> wrote:
>
>>Let me see, is there a way to "carelessly or intentionally" construct
>>data into my formula to compute the volume of a sphere to make the
>>formula "malfunction?"
>>
>>Nope! Guess that formula is returning valid results! Nice being able
>>to have real confidence in it! ;-)
>
>What is the volume of a sphere with the measured dimension of
> a chord = 1 meter?
>
>That was too easy!
>
>
>Ahhh, once again that magnificent intellect of yours is displayed ...
>
>However, somehow, it has lost its' shock value ... :-|

Which is to say even with your confidence and your formula that you
don't know. It demonstrates you can neither construct careless nor
careful data. This was anticipated and all would note that Sarah Lee
could answer her own questions even if she couldn't answer others'.
(Did they draft Cecil to Sedona last weekend for her rehearsals?)

Brett, let's just cut to the chase and point out all of your
"objections" to modeling are offered with rather pale logic and even
less demonstrables.

Simpler yet, you are just trolling - but that isn't groundbreaking
news here....

73's
Richard Clark, KB7QHC

3363. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 20:42:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc603jhhc1@news.albasani.net>
Source record: 21137

Richard Clark wrote:

>
> Brett, let's just cut to the chase and point out all of your
> "objections" to modeling are offered with rather pale logic and even
> less demonstrables.
>
> Simpler yet, you are just trolling - but that isn't groundbreaking
> news here....
>
> 73's
> Richard Clark, KB7QHC

Hey, I do a lot of what some would consider "illogical", like a belief in a superior being/race!

However, the failing of NEC need not be taken as a leap of faith, they can be demonstrated ...

But, ya'all wouldn't know a real troll if it bit ya' on the arse ...

Regards,
JS

3364. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 20:48:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc60f4$i72$1@news.albasani.net>
Source record: 21138

John Smith wrote:
[chit]

> Richard Clark wrote:
>> ...
>> Simpler yet, you are just trolling - but that isn't groundbreaking
>> news here....
>>
>> 73's
>> Richard Clark, KB7QHC

Or, let me summarize, by stating an example:

Take two boxes, mark one "TROLLS", the other "NON-TROLLS."

Now, put members of this group (or from your life experience--that'll work also) into the two boxes, sorting as you see fit.

Now, if you notice that one box is full of all those who agree with you and who you worship, and the other is full of all those not agreeing with you--you don't have a "troll problem" at all!

Regards,
JS

3365. shownatova but the still after 119 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 21:05:09 UTC
From: "kb9rqz-1@hotmail.com" <kb9rqz-1@hotmail.com>
Message-ID: <7454aa61-3ee6-4533-933c-247d129da182@t65g2000hsf.googlegroups.com>
Source record: 21139
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.cb

On Oct 3, 3:45 pm, "Douglas Adair slappa"
<wowdouglasuratroubledper...@Hotmail.com> wrote:
>
fake

3366. shownatova but the still after 119 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 21:09:19 UTC
From: "kb9rqz-1@hotmail.com" <kb9rqz-1@hotmail.com>
Message-ID: <fed740f1-391e-4105-b553-e0df106331f4@d31g2000hsg.googlegroups.com>
Source record: 21140
Cross-posted to: alt.ohio.toledo,rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.cb

On Oct 3, 4:11 pm, "Douglas Adair slappa"
<wowdouglasuratroubledper...@Hotmail.com> wrote:
> <mopeyzakw...@yahoo.com> wrote in message
>
> news:3b74d638-91fb-4685-956a-3cdc9eef8f14@25g2000hsk.googlegroups.com...
>
> > Batch Search Summary
>
> Quite the bugger, aren't you!!!
>
> http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

spaming and stalking

3367. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 21:47:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <Sp6dnYi8RKpCD3vVnZ2dnUVZ_tHinZ2d@posted.easystreetonline>
Source record: 21141

Chevy454 wrote:
>
> That's unfortunate, because I am looking for a simple arrangement.
>
> What if I just hang a wire dipole vertically from the mast (= bendy
> Black Widow crappie pole) with a PL-259 at the feedpoint? How much
> would the coax feedline have to stand off from the dipole to keep from
> interfering with its operation? I can't pull it too tightly away or
> the pole will bend.
>
> Ken KC2JDY

A very long distance I'm afraid. You might be able to live with the common mode current. Otherwise, a larger diameter air-insulated sleeve or some other decent isolation method like a J-pole are about all I know of that would reduce it. Even those methods, though, can result in some common mode current depending on the feedline length due to mutual coupling between the feedline and intentionally radiating part of the antenna.

If you really want to avoid common mode current on a high, elevated vertical, you need to first effectively choke the conducted current with a high Z sleeve or J-pole type decoupling stub. Then you need to take care of the coupled current. One effective way is to use two common mode chokes ("current baluns") spaced about a quarter wavelength apart along the feedline. The Isopole took care of both by using two flaring sleeves.

There are a lot of antennas being used out there which have no special effort taken to suppress common mode current, and they seem to function well enough to satisfy most users. But it can be a problem in some cases.

Roy Lewallen, W7EL

3368. Hy-Gain AV-14AVQ

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 22:24:05 UTC
From: Danny_x <Danny_x.32c5904@radiobanter.com>
Message-ID: <Danny_x.32c5904@radiobanter.com>
Source record: 21143

Does anyone know the transformation of the loading coil of this antenna?
Or does someone have a picture of that coil? Will an 9:5 coil of an old
CB antenna work?

--
Danny_x

3369. Re: Mobile antenna issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 22:29:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc66cv$o9e$1@news.albasani.net>
Source record: 21142

Michael Coslo wrote:

>
>
> Make sure to read the PDF file too. Apparently stainless steel will
> produce chromate in the solution if used as an electrode.
>
> http://www.pieperpower.com/employees/msds/Sodium_Chromate.htm
>
>
> or other chromate - they are all mostly bad for you.
>
> Since my coil has some stainless parts in the current path, I'll try
> suspending it so that they don't touch the solution, and rotate the coil
> to clean.
>
> - 73 de Mike N3LI -

Dilute it and toss it on your lawn. Unless your lawn fertilizer has
chromium in its composition, you lawn is very likely to be chromium
deprived ...

Regards,
JS

3370. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 23:01:11 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gc687u$m3p$1@news.service.uci.edu>
Source record: 21144

Richard Clark wrote:

> (Did they draft Cecil to Sedona last weekend for her rehearsals?)

No. They got Frank Caliendo to do it.

:-) ac6xg

3371. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 23:35:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9gade4hq3sm9ch7glbm6j4fbgibdhe78a8@4ax.com>
Source record: 21145

On Fri, 03 Oct 2008 13:48:28 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>>> Simpler yet, you are just trolling - but that isn't groundbreaking
>>> news here....
>
>Or, let me summarize, by stating an example:

It is trolling enough that you insist it would need three of your
examples.

Or you could simply answer how your confidence and formula would find
the volume of a sphere with a chord dimension of 1 meter to greater
accuracy than NEC models exhibit in finding far more characteristics
of antennas.

Let's see, does your confidence rise to respond to your own
sub-topic's assertion, or do you chase after the troll's crown?

73's
Richard Clark, KB7QHC

3372. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 23:36:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s2bde4ln1bp5iqfispicsdjhnd72dlaa2e@4ax.com>
Source record: 21146

On Fri, 03 Oct 2008 16:01:11 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>No. They got Frank Caliendo to do it.

The reference escapes me. Someone from the Sopranos?

73's
Richard Clark, KB7QHC

3373. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-03 23:57:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc6bgkvci1@news.albasani.net>
Source record: 21147

Richard Clark wrote:

> [pure crap, as usual]
> 73's
> Richard Clark, KB7QHC

OK Rickard, it is a troll if you say it is a troll ... others may just
not be able to recognize 'em ... end of story. ROFLOL

Regards,
JS

3374. Radio Oktoberfest 11/12

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 00:12:56 UTC
From: Yuri Blanarovich <K3BU@optonline.net>
Message-ID: <48e6b50b$0$5669$607ed4bc@cv.net>
Source record: 21148

Guten Tag Radio Aficionados!

Great opportunity to get out and have some fun with ham friends. The special table is reserved for those wearing their callsign hat or badge. Come and celebrate Yuri's 50 years in ham radio and check out this site for future Ham radio conventions the MountainView Resort in Glen Spey, NY.

As you may know, the Ardmore Mansion has been elegantly renovated this past year. Our motel units are currently being refurbished and the Black Sea Ballroom and Brew Pub are beaming with restored wood floors and new interiors. Our new pavilion is almost finished and will be ready for large outdoor events.

We are gearing up now for Oktoberfest, which will be held on Columbus Day weekend, October 11-12, bigger and better than ever. We will be featuring authentic German food and specialty Oktoberfest German beer, vendors, and games for adults and kids alike! The highlight of the evening is Jagermeister's own Fritz's Polka Band, performing live at the Saturday night dance. Also, for two nights only, Dark Forest, the area's premier Halloween events company, is presenting a Haunted House at neighboring Burn Brea Mansion. They will be celebrating the mansion's 100th anniversary by charging the same rates ($10 per person) they charged the last time the show was presented, 10 years ago! Transportation to and from Mountain View will be provided at no additional charge.

On Friday night, October 31, we are hosting a Halloween Masquerade Ball, with costume contests, dancing, and a frightfully fun time for all! Ages 21 and over, please. Then, on Saturday November 1, we present our Fall Festival & Market. Come and sample the best of the area, and enjoy the leaves changing colors while sipping on Mountain View's specialty cider.

Please check the web site for the latest news and programs at www.MVresort.com and check out or download the posters for more information. Spread the news, bring a friend and see the progress at MountainView. We are building our mailing lists and soon will have regular newsletters informing our patrons about the latest and upcoming events at the resort. Please pass on email or postal addresses so we can stay in touch.

See you at MaountainView!

Yuri and the crew
please email me if you are coming
K3BU@optimum.net

3375. Re: Going tp put this antenna up today

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 00:32:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc6div$24v$1@news.albasani.net>
Source record: 21149

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

He is only one of the funniest men alive! FAMOUS, in my household.

http://www.frankcaliendo.com/

Regards,
JS

3376. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 11:24:58 UTC
From: Chevy454 <nunyas@aol.com>
Message-ID: <g8kee41rmh022c9bbdal8779jggeos5v3i@4ax.com>
Source record: 21150

On Fri, 03 Oct 2008 14:47:12 -0700, Roy Lewallen <w7el@eznec.com>
wrote:
> ...You might be able to live with the
>common mode current. Otherwise, a larger diameter air-insulated sleeve
>or some other decent isolation method like a J-pole are about all I know
>of that would reduce it. Even those methods, though, can result in some
>common mode current depending on the feedline length due to mutual
>coupling between the feedline and intentionally radiating part of the
>antenna.

The large-diameter sleeve is impractical in my app because it make the
antenna non-flexible for storage. Also expensive.

My principal use will be QRP. I will stick some ferrite beads on the
feedline and hope for the best.

The most I would use non-QRP would be 25 watts SSB.

Ken KC2JDY

3377. Re: hf shielding-mesh

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 11:32:39 UTC
From: ml <m@di.net>
Message-ID: <m-7BE911.07323904102008@news.optonline.net>
Source record: 21201

In article <hRoFk.370$yI6.265@nwrddc01.gnilink.net>,
"Dave" <noone@nowhere.com> wrote:

> "ml" <m@di.net> wrote in message
> news:m-424E3D.06040503102008@news.optonline.net...
> > In article <ZAKEk.3298$YN3.1273@newsfe08.iad>, Dave <dave@dave.dave>
> > wrote:
> >
> >> ml wrote:
> >> > hi
> >> >
> >> > i have a general shielding question i realize that overall it
> >> > might be a impractical thing to build but looking at it i
> >> > wonder...
> >> >
> >> > ontop of my roof is elevator room it's about 20x20
> >> >
> >> > flat roof
> >> >
> >> > lets suppose the motor controller throws out 1.7 to 30mhz at
> >> > s9+ (all over)
> >> >
> >> > lets say i take a single 20x20 sheet of copper put it on the top
> >> > roof (assume i could ground it if need be)
> >> >
> >> > lets say before i put the copper i measured s9
> >> >
> >> > what shielding if any might i see "S" wise??
> >> >
> >> > i understand interference would still be radiating form the rest
> >> > of the unshielded structure but wondering if measuring ontop of the
> >> > copper sheeting id' observe any attenuation?? meaning would the
> >> > signal penatrate that copper? -- and if so around how
> >> > much??(alot/very little)
> >> >
> >> >
> >> > tnx
> >>
> >> I'd try bypassing and choking the wires going to the motor and the
> >> controller.
> >
> > thanks for the help Dav, i sorta feared a simple sheet wouldn't do
> > much but wanted to double check
> >

> > seems the device does not radiate along the power lines it just
> > radiate s of the device itself
> >
> > it's about 12x12 x12 inches or so the motor controler is inside a
> > tight heavey metal cabinet the only rf measured is from that
> > device itself
> >
> > my thought is to perhaps find a way to build copper mesh 'box' i
> > can place over it perhaps that would do the trick? it has to be
> > mesh as the controller gets pretty hot and is fan cooled
>
> galvanized 'hardware cloth' that has about 1/2" mesh is plenty good for that
> and can be easily soldered.

<<<<>>thanks Dav, never heard of hardware cloth and wasn't really
sure what the apeture size should be but i'll give the above a try

tnx

3378. RE:Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 14:50:00 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gc7vqqaih1@news.netins.net>
Source record: 21202

I've seen several simpler J-pole coaxial antenna plans, but this one ain't bad KD0FGX

http://www.w7dk.org/10%20meter%20vertical%20project.pdf

3379. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 14:51:08 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <wpLFk.602$yI6.152@nwrddc01.gnilink.net>
Source record: 21203

"Dave" <noone@nowhere.com> wrote in message
news:dToFk.372$yI6.3@nwrddc01.gnilink.net...
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:01d6dacf-a2c5-459b-b6e7-9be7450a80a6@a70g2000hsh.googlegroups.com...
>>I am begining to believe that there is really no interest in small
>> antennas
>
> only for very high frequencies.
>
> where did art go, bad wx coming again, could use some entertainment!
>
Do we dare try to resurrect Chip?

3380. RE:Effective length braid dipole leg? 2

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 14:59:03 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gc80boasl1@news.netins.net>
Source record: 21204

http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=9293

I've seen the one made with coax, but can't find it in my files or on the net, maybe not looking hard enough. This one is so easy and it is very portable for field use. KD0FGX

3381. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 15:18:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc81gjtvu1@news.albasani.net>
Source record: 21205

Rollie wrote:
> I've seen several simpler J-pole coaxial antenna plans, but this one ain't
> bad KD0FGX
>
> http://www.w7dk.org/10%20meter%20vertical%20project.pdf

I would argue that the gamma match on a 1/2 wave radiator is so close to the efficiency (or better than) than the 1/4 matching section of the j-pole, that this 1/4 matching section only becomes an encumbrance and should be avoided (if you don't mind the length, consider lengthening the 1/2 wave section to 5/8 wave.)

However, it (the gamma match) is absolutely more efficient than the coil/cap circuit in this design mentioned above.

A homemade coaxial cap. (a few refer to is as trombone cap) is easily constructed for the match--meaning parts can all be found around the home or from the nearest junk pile!

And, don't forget the UnUn ...

Regards,
JS

3382. Re: Effective length braid dipole leg? 2

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 16:00:33 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <CqMFk.2200$x%.1251@nlpi070.nbdc.sbc.com>
Source record: 21206

Rollie wrote:
> http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=9293
> I've seen the one made with coax, but can't find it in my files or on the
> net, maybe not looking hard enough. This one is so easy and it is very
> portable for field use. KD0FGX

IMO, it's hard to beat my "Pico-J" made with 300 ohm twinlead.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3383. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 16:11:42 UTC
From: Dave <noone@nowhere.com>
Message-ID: <2BMFk.626$P5.144@nwrddc02.gnilink.net>
Source record: 21207

"Wayne" <mygarbagecan@verizon.net> wrote in message
news:wpLFk.602$yI6.152@nwrddc01.gnilink.net...
>
> "Dave" <noone@nowhere.com> wrote in message
> news:dToFk.372$yI6.3@nwrddc01.gnilink.net...
>>
>> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
>> news:01d6dacf-a2c5-459b-b6e7-9be7450a80a6@a70g2000hsh.googlegroups.com...
>>>I am begining to believe that there is really no interest in small
>>> antennas
>>
>> only for very high frequencies.
>>
>> where did art go, bad wx coming again, could use some entertainment!
>>
> Do we dare try to resurrect Chip?
>
now that would be interesting, art and chip getting together!

3384. Re: Effective length braid dipole leg? 2

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 16:12:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc84ll$232$1@news.albasani.net>
Source record: 21208

Cecil Moore wrote:

> ...
> IMO, it's hard to beat my "Pico-J" made with 300 ohm twinlead.

Somehow, I have missed the importance of the "pico-j" ... how come no
link to some info on your webpage (I am looking at: http://www.w5dxp.com)?

I just might pickup a hunk of twinlead (or space/tape a couple of wires
together)

Regards,
JS

3385. Re: Effective length braid dipole leg? 2

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 16:46:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <N5NFk.3101$yr3.238@nlpi068.nbdc.sbc.com>
Source record: 21209

John Smith wrote:
> Somehow, I have missed the importance of the "pico-j" ... how come no
> link to some info on your webpage (I am looking at: http://www.w5dxp.com)?

If I remember correctly, it came from "Antennas West" who
are no longer in business.

> I just might pickup a hunk of twinlead (or space/tape a couple of wires
> together)

It actually seems to be a Zepp, rather than a J-Pole.
1/4WL feeding 1/2WL.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3386. Re: Effective length braid dipole leg? 2

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 17:31:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc899k$8en$1@news.albasani.net>
Source record: 21211

Cecil Moore wrote:

> ...
> It actually seems to be a Zepp, rather than a J-Pole.
> 1/4WL feeding 1/2WL.

OK, we have had a similar discussion before, part of your text here:

"In much the same way a Zepp or a J-Pole is not a 3/4WL
radiator even though they are 3/4WL long, a gamma match
on a base-fed 1/2WL vertical doesn't yield a 1/2WL
electrical radiator. For this reason, the length of a
gamma match should be considerably less than a wavelength.
A good rule of thumb is probably in the ballpark of less
than ~6% of a wavelength. Your idea seems to require about
16% of a wavelength."

I remember ...

Regards,
JS

3387. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 17:53:37 UTC
From: NM5K <nm5k@comcast.net>
Message-ID: <48E7ADA1.484F@comcast.net>
Source record: 21212

Art Unwin wrote:
>
> I am begining to believe that there is really no interest in small
> antennas

I use small antennas all the time.

> So is there really
> somebody being hired to produce small antennas?

It would be fairly hard to use a small antenna if no one
were around to make any... :/

>Same situation with
> hams as they fight at the very idea of the possibility of small
> efficient antennas that like the Universities do not want to hear of
> the possibilities

Most that deal with small antennas eventually find that there is
no free lunch. This attempt at small antenna perfection has gone
on since way before I was born. Of course, being that you disregard
all previous science, I guess you missed the memo. :(

> One doctorial student at Illinois University in Central illinois
> stated that they have so many requests for review of antennas by the
> populace it is not unusual to ignore the pleas of the local populace
> presumably based on the premise that if it was possible they would
> already have done it.

And he is right. They have only had about 100 years to work
on it.

> They have teachers way more intelligent than
> ordinary peopleand, where one spends most of her time working on
> behalf of the IEEE that research or computer operation has to be put
> to one side.

Delirious jibber jabber disregarded...

> If there really was an interest in diverse antennas instead of
> personal promotion maybe our tax dollars would be better spent. Yes,
> I write off the University of Illinois as they have never produced
> anything as pioneers in antennas especially with the departure of the
> log periodic designer that they paid hansomly to hang out there
> instead of there own Universities.

And likewise, neither have you.. So where is the beef?

So to sum up puting U of I to one
> side, is there anybody in Industry who desires small antennas or
> Universities investing time in such things ?.

Yes. But they deal with the real world, not a bunch of conjered up
voodoo science.

> When O when is anything going to happen in the small antenna areana or
> is the need actually ficticious
> because of diminishing returns with the use of such?

You can't polish a turd and turn it into a diamond.
Only people with limited room are likely to be interesting
in accepting a decrease in performance, vs using full size
antennas. The only place you see me using small antennas on HF
is mobile. And while I've spent a good deal of time trying to
optimize the efficiency of those antennas, I have no delusions
of grandeur when it comes to their efficiency vs say a dipole.
I happen to realize that there is no free lunch.

> What Universities
> in the U.S. that are serious about small antennas and what have they
> produced in the last couple of years?

Why don't you ask them. Could care less myself..

>If they can't or deny the
> possibilities then why fund them?

I don't.

>It is your money. But then who
> cares, we have antennas already so we don't need anymore
> especiually when denial of the new suggests that all is known.

Good point, and I agree. I really don't care. I like big manly
efficient antennas, not air cooled dummy loads on a stick. :/
If you say all is known, I'll take your word for it.
Of course, I know that's not true, but if it applies to you,
it's good to know a man who knows his limitations.
Clint Eastwood would be proud. :)

3388. 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 18:07:32 UTC
From: justme <jbleaux@gmail.com>
Message-ID: <2850u6.4nq.17.1@news.alt.net>
Source record: 21213

Someone has one of these just gathering dust. Please sell it to me.

Thanks

3389. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 18:12:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc8bn3baf1@news.albasani.net>
Source record: 21214

NM5K wrote:

>
> Yes. But they deal with the real world, not a bunch of conjered up
> voodoo science.
>

Funny you should mention that. As, when you peek closely under the hood of the NEC engine (at least the one I use and have the source code to), it does have a bit of what you call "voodoo science", IMHO ...

> Only people with limited room are likely to be interesting
> in accepting a decrease in performance, vs using full size
> antennas. The only place you see me using small antennas on HF

Don't forget us guys who are over 50 and getting tired of maintaining large hunks of metal in the sky and fighting the force of gravity Gods to do so (in more ways than one! And, not to mention neighbors, rules, regulations, etc.) With the price of real estate being manipulated near "Hong Kong Prices" (what is that, about a million dollars a sq. ft.?), reduced size antennas will only increase in uses and demand ...

Regards,
JS

3390. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 18:27:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bncfe4hqdph681jhqgffe64816jc6e1t1m@4ax.com>
Source record: 21215

On Sat, 04 Oct 2008 11:12:51 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>of the NEC engine (at least the one I use and have the source code to),
>it does have a bit of what you call "voodoo science", IMHO ...

In your Hyper-inflated Opinion. As with many of your opunions, none
are supported in accomplishment and I dare say you cannot recite a
block of labeled code that conforms to your supposed humility. As
with your confidence in reciting the volume of a sphere (and lacking a
simple answer to my offering a chord measurement to test your
confidence), I can well anticipate your post here, is as much a Troll
as any of the rest.

You can offer that labeled block of code to support your statement
or
admit your post is so much babble
or
your post is yet another troll

How many rounds will it take to resolve to one in three? I am sure
most here would hammer the last two in a heartbeat and the mole would
be whacked twice.

73's
Richard Clark, KB7QHC

3391. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 18:31:58 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <o-2dnUxFEvXfNXrVnZ2dnUVZ_uadnZ2d@earthlink.com>
Source record: 21210

"Chevy454" <nunyas@aol.com> wrote in message
news:g8kee41rmh022c9bbdal8779jggeos5v3i@4ax.com...
> On Fri, 03 Oct 2008 14:47:12 -0700, Roy Lewallen >
> The large-diameter sleeve is impractical in my app because it make the
> antenna non-flexible for storage. Also expensive.
>
> My principal use will be QRP. I will stick some ferrite beads on the
> feedline and hope for the best.
>
> The most I would use non-QRP would be 25 watts SSB.
>
> Ken KC2JDY

One design that I saw that you may try it to just use a 1/4 wavelength of wire at the end of the coax. Then about 1/4 of a wavelength down the coax you use a choke. It could be a coil of coax or it could be the beads at your power level.

I have not tried it, just saw it in one of the ARRL books.

3392. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 19:02:23 UTC
From: NM5K <nm5k@comcast.net>
Message-ID: <48E7BDBF.6C53@comcast.net>
Source record: 21216

Richard Clark wrote:

>
> You can offer that labeled block of code to support your statement
> or
> admit your post is so much babble
> or
> your post is yet another troll
>

I asked R2D2 his opinion on this matter, and he went
bleeeeppp, sputter, raiiinnnnnngggggggggggg, fart.

You can hear it for yourself if you go here and type
"bull@#Z$%" into the frame.
http://www.r2d2translator.com/

I just asked him if his sensors felt any extra amounts
of excrement applied, and he sputtered out another
long tirade, which ended up meaning, "well you can see
the stupid meter for yourself can't you!!"
You can see live streaming of this meter at:
http://home.comcast.net/~nm5k/bsmeter.gif

3393. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 19:43:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc8h1b$i14$1@news.albasani.net>
Source record: 21217

Richard Clark wrote:

> In your Hyper-inflated Opinion. As with many of your opunions, none
> are supported in accomplishment and I dare say you cannot recite a
> block of labeled code that conforms to your supposed humility. As
> ...
> 73's
> Richard Clark, KB7QHC

Richard:

Doesn't it even embarrass you in the least to make such statements which the mere application of common sense will declare an outrageous lie(s)?

The code which comes into play when a gamma match configuration of elements is defined and handed to the NEC engine, along with the proper pf to cancel the inductance of the gamma-rod, should be proof enough ... to any legitimate software engineer with "an antenna hobby." Indeed, any man with common sense who can understand the equation(s) being called to play and their very (rounding/guessing) nature ...

Download the code and locate it yourself! It comes in Fortran, Basic and "C" flavors--at least ... if you are intelligent to understand this conversation on even a basic level, you should be able to accomplish that ...

Regards,
JS

3394. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 19:45:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc8h4ghvr1@news.albasani.net>
Source record: 21218

NM5K wrote:

> ...
> I asked R2D2 his opinion on this matter, and he went
> bleeeeppp, sputter, raiiinnnnnngggggggggggg, fart.
>

Somehow, by the very nature of your participation(s) here, I can believe
that! ROFLOL

Well, I mean, you are liable to interpret your visions as such ... <chuckle>

Regards,
JS

3395. Re: KB5URP the crack dealer

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 19:53:22 UTC
From: Ron <apositiveplace@netscape.net>
Message-ID: <NQPFk.12969$cX6.2000@newsfe07.iad>
Source record: 21219
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

plonk

<mopeyzakween@yahoo.com> wrote in message
news:37e922bb-a265-46f1-b6c9-fd5d1db0d9ad@w7g2000hsa.googlegroups.com...
> Batch Search Summary
> SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
> 3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS
>
>
> RESULTS FOR 'CHAPMAN,RANDALL '
> Search ID 3930206 Back to Top
> NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
> CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW
>
>
> CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
> SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
> MALE WHITE 508 195 BROWN Brown 10/26/1995
> NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
> CHAPMAN,RANDY
>
> BIRTHDATES 03/22/1961 (Primary)
>
>
> Arrest Summary (TRN)
> DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
> 01/16/1995 A 0007369727 TEXAS CITY PD View
>
>
> Arrest Date: 01/16/1995 Arrest Summary
>
>
> DATE OF ARREST 01/16/1995
> SEQUENCE CODE A
> TRACKING NUMBER 0007369727
> AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
> CHARGE
> TRACKING SUFFIX A001
> OFFENSE DETAIL
> INTERNAL AGENCY PERSON NUMBER 020130
> INTERNAL AGENCY CASE NUMBER 95633
> ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
> ARREST OFFENSE CITATION 481.115(b)

> LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
> DATE OF OFFENSE 01/16/1995
> ARREST DISPOSITION 205 (HELD)
> ARREST DISPOSITION DATE 01/16/1995
> PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
> GALVESTON)
> PROSECUTION DETAIL
> AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
> GALVESTON)
> PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
> PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
> PROSECUTOR OFFENSE CITATION 481.115(b)
> LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
> COURT STATUS
> COURT SEQUENCE a
> AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
> COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
> CITATION 481.115(b)
> LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
> COURT DISPOSITION 312 (DEFERRED)
> COURT DISPOSITION DATE 09/21/1995
> DATE OF SENTENCE/STATUS 09/21/1995
> CAUSE NUMBER 95CR0800
> FINAL PLEADING G (GUILTY)
> COURT PROBATION 4Y
> COURT FINE 200
> COURT COSTS 157
> AGENCY RECEIVING CUSTODY GCCSCD
>
>

3396. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 20:07:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc8ie8$jm0$1@news.albasani.net>
Source record: 21220

Richard Clark wrote:

> ...
> How many rounds will it take to resolve to one in three? I am sure
> most here would hammer the last two in a heartbeat and the mole would
> be whacked twice.
>
> 73's
> Richard Clark, KB7QHC

And then, of course, there is this little jewel:

http://assemblywizard.fr33webhost.com/v1p1comp%20All%20sorts%20of%20small%20antennas%20better%20by%20heuristics%20.pdf

Citing antennas which NEC has a "bit" of a problem modeling. The
author, a professor and amateur, notes that the power is not being
"lost" as heat ... so you propose it is being transferred to another
dimension?

You remind me of the guy who took the boat trip to see the ocean. He
departed on the boat upstream at a large river. No one ever bothered to
tell him that he had reached the ocean ... he fell overboard ... among
his last cries, was heard, "And, I did so want to see the ocean before I
died ... gurrgleeee ... "

Regards,
JS

3397. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 22:29:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v2rfe4ljja2gill5ck5q4jmfl8t6fpmj3j@4ax.com>
Source record: 21221

On Sat, 04 Oct 2008 12:43:38 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>>On Sat, 04 Oct 2008 11:12:51 -0700, John Smith
>><assemblywizard@gmail.com> wrote:
>>
>>>of the NEC engine (at least the one I use and have the source code to),
>>>it does have a bit of what you call "voodoo science", IMHO ...

>> In your Hyper-inflated Opinion. As with many of your opunions, none
>> are supported in accomplishment and I dare say you cannot recite a
>> block of labeled code that conforms to your supposed humility.

>Download the code and locate it yourself!

Brett, what a feeble way to support your own statements. Above you
say you already have the code and have located a bit... Your dog ate
your homework?

WHACK-A-TROLL!

73's
Richard Clark, KB7QHC

3398. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 22:40:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc8rd8$u1o$1@news.albasani.net>
Source record: 21222

Richard Clark wrote:

> ...
> Brett, what a feeble way to support your own statements. Above you
> say you already have the code and have located a bit... Your dog ate
> your homework?
>
> WHACK-A-TROLL!
>
> 73's
> Richard Clark, KB7QHC

Due to the insane nature ALL of your postings have taken (and yes, I have noted you have refrained from using quotes from Shakespeare to validate your arguments), all that is left is to point out your insanity.

Restating what has been restated has lost all hope of getting though to you ... a shrink would be required now ... perhaps a family intervention?

You can prove my time carrying on any discussions with you is valid, if only you can download the source to the Numerical Electromagnetic Code, compile and link it, and feeding it a problem containing a defined gamma, and observing it though a debugger ... if you can't, all you are is a waste of time to me ... indeed, to any of consequence in this debate.

Regards,
JS

3399. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 22:58:02 UTC
From: Gary Smith <vkthree@gmail.com>
Message-ID: <gc8sef$j68$1@news-01.bur.connect.com.au>
Source record: 21223

I was looking on ebay a while back and found some, around $80 new i think,
never bought one so i can't tell you what they are like.

Gary
VK3LCD

"justme" <jbleaux@gmail.com> wrote in message
news:2850u6.4nq.17.1@news.alt.net...
> Someone has one of these just gathering dust. Please sell it to me.
>
> Thanks
>
>

3400. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 23:00:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc8shr$um8$1@news.albasani.net>
Source record: 21224

Richard Clark wrote:

> ...
> Brett, what a feeble way to support your own statements. Above you
> say you already have the code and have located a bit... Your dog ate
> your homework?
>
> WHACK-A-TROLL!
>
> 73's
> Richard Clark, KB7QHC

However, you no longer remind of the poor fool drowning in the proof he demands ...

You know remind me of this poor dummy:

http://www.degendesigns.com/Downloads/TheEasyWay.PDF

Talking about "stuff" he has no business discussing ...

Regards,
JS

3401. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 23:03:35 UTC
From: Gary Smith <vkthree@gmail.com>
Message-ID: <gc8sosjhl1@news-01.bur.connect.com.au>
Source record: 21226

BTW, it's a DIPLEXER (pronounced die plexer)if you want to work 2 seperate bands, a DUPLEXER is for working 2 frequencies on one band.

"justme" <jbleaux@gmail.com> wrote in message news:2850u6.4nq.17.1@news.alt.net...
> Someone has one of these just gathering dust. Please sell it to me.
>
> Thanks
>
>

3402. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 23:04:15 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B2DA37AE58B3Huckleberrybigvalley@198.186.192.196>
Source record: 21225

"justme" <jbleaux@gmail.com> wrote in news:2850u6.4nq.17.1@news.alt.net:

> Someone has one of these just gathering dust. Please sell it to me.
>
> Thanks
>
>

So which is it you are looking for, a 2M duplexer, or a 440 duplexer,
or one of each?

Ed K7AAT

3403. Re: KB5URP the crack dealer

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 23:27:27 UTC
From: AE5EH <AE5EH.32dfedb@radiobanter.com>
Message-ID: <AE5EH.32dfedb@radiobanter.com>
Source record: 21239

mopeyzakween@yahoo.com;649235 Wrote:
> Batch Search Summary
> SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
> 3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS
>
>
> RESULTS FOR 'CHAPMAN,RANDALL '
> Search ID 3930206 Back to Top
> NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
> CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW
>
>
> CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
> SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
> MALE WHITE 508 195 BROWN Brown 10/26/1995
> NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
> CHAPMAN,RANDY
>
> BIRTHDATES 03/22/1961 (Primary)
>
>
> Arrest Summary (TRN)
> DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
> 01/16/1995 A 0007369727 TEXAS CITY PD View
>
>
> Arrest Date: 01/16/1995 Arrest Summary
>
>
> DATE OF ARREST 01/16/1995
> SEQUENCE CODE A
> TRACKING NUMBER 0007369727
> AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
> CHARGE
> TRACKING SUFFIX A001
> OFFENSE DETAIL
> INTERNAL AGENCY PERSON NUMBER 020130
> INTERNAL AGENCY CASE NUMBER 95633
> ARREST OFFENSE 35990014 (POSS CS PG 1 1G)
> ARREST OFFENSE CITATION 481.115(b)
> LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
> DATE OF OFFENSE 01/16/1995
> ARREST DISPOSITION 205 (HELD)
> ARREST DISPOSITION DATE 01/16/1995

> PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
> GALVESTON)
> PROSECUTION DETAIL
> AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
> GALVESTON)
> PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
> PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 1G)
> PROSECUTOR OFFENSE CITATION 481.115(b)
> LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
> COURT STATUS
> COURT SEQUENCE a
> AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
> COURT OFFENSE 35990014 (POSS CS PG 1 1G)
> CITATION 481.115(b)
> LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
> COURT DISPOSITION 312 (DEFERRED)
> COURT DISPOSITION DATE 09/21/1995
> DATE OF SENTENCE/STATUS 09/21/1995
> CAUSE NUMBER 95CR0800
> FINAL PLEADING G (GUILTY)
> COURT PROBATION 4Y
> COURT FINE 200
> COURT COSTS 157
> AGENCY RECEIVING CUSTODY GCCSCD

I definitely have my own ideas why you would post something like this.
But let me ask you......what's your point?

--
AE5EH

3404. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 23:39:59 UTC
From: Gary Smith <vkthree@gmail.com>
Message-ID: <gc8ut4$lf3$1@news-01.bur.connect.com.au>
Source record: 21227

He is looking for a DIPLEXER.

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9B2DA37AE58B3Huckleberrybigvalley@198.186.192.196...
> "justme" <jbleaux@gmail.com> wrote in news:2850u6.4nq.17.1@news.alt.net:
>
>> Someone has one of these just gathering dust. Please sell it to me.
>>
>> Thanks
>>
>>
>
>
> So which is it you are looking for, a 2M duplexer, or a 440 duplexer,
> or one of each?
>
>
> Ed K7AAT
>

3405. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-04 23:41:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rjvfe45ut7b7t5aekluean3ie6nt4cvdvd@4ax.com>
Source record: 21228

On Sat, 04 Oct 2008 15:40:38 -0700, John Smith
<assemblywizard@gmail.com> wrote:
>> Brett, what a feeble way to support your own statements. Above you
>> say you already have the code and have located a bit... Your dog ate
>> your homework?

>all that is left is to point out

Plenty of wheezing, but not a whisper of support for your own
statement.

WHACK-A-TROLL!

73's
Richard Clark, KB7QHC

3406. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 02:24:43 UTC
From: JB <nospam@goofball.net>
Message-ID: <LzVFk.732$P5.518@nwrddc02.gnilink.net>
Source record: 21229

> Plenty of wheezing, but not a whisper of support for your own
> statement.
>
> WHACK-A-TROLL!
>
> 73's
> Richard Clark, KB7QHC

HEY! Are you guys making fun of my antenna again?!

3407. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 02:27:59 UTC
From: JB <nospam@goofball.net>
Message-ID: <PCVFk.735$yl6.734@nwrddc01.gnilink.net>
Source record: 21230

I'll look around in my junkbox. I might have a burned out one he can putz
around with.

"Gary Smith" <vkthree@gmail.com> wrote in message
news:gc8ut4$lf3$1@news-01.bur.connect.com.au...
> He is looking for a DIPLEXER.
>
>
>
> "Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
> news:Xns9B2DA37AE58B3Huckleberrybigvalley@198.186.192.196...
> > "justme" <jbleaux@gmail.com> wrote in news:2850u6.4nq.17.1@news.alt.net:
> >
> >> Someone has one of these just gathering dust. Please sell it to me.
> >>
> >> Thanks
> >>
> >>
> >
> >
> > So which is it you are looking for, a 2M duplexer, or a 440 duplexer,
> > or one of each?
> >
> >
> > Ed K7AAT
> >
>

3408. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 02:53:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc9a85$bu0$1@news.albasani.net>
Source record: 21231

Richard Clark wrote:
> On Sat, 04 Oct 2008 15:40:38 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>>> Brett, what a feeble way to support your own statements. Above you
>>> say you already have the code and have located a bit... Your dog ate
>>> your homework?
>
>> all that is left is to point out
>
> Plenty of wheezing, but not a whisper of support for your own
> statement.
>
> WHACK-A-TROLL!
>
> 73's
> Richard Clark, KB7QHC

In this instance, I said what I meant, and meant what I said, and ABSOLUTELY--stand behind it ... if you are pre-Alzheimer's, you already know that ... your real problem is that real men have went underground ... don't count on that as a condition which will alway exist ... fools with no mind and no extrapolative powers bore us (and, you will note, me especially!,) and, if you think I am a bad-A$$, what until you see my son ... ROFLOL

Regards,
JS

3409. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 02:54:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc9a9t$bu0$2@news.albasani.net>
Source record: 21232

JB wrote:

>
> HEY! Are you guys making fun of my antenna again?!

Huh?

Did you join forces with Art? <grin>

Regards,
JS

3410. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 04:07:45 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B2DD6F01164CHuckleberrybigvalley@198.186.192.196>
Source record: 21233

> He is looking for a DIPLEXER.
>
>

Oh. He said "duplexer" in the subject so naturally I thought he was
asking about duplexers.

Ed

3411. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 04:10:34 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d25156fd-6fbc-4c68-838f-2ac13b0bb6e8@26g2000hsk.googlegroups.com>
Source record: 21234

On Sep 28, 2:38 pm, "Frank" <frank...@nospam.telus.net> wrote:
> > According to:http://ham.srsab.se/ww/temp/test_MFJ269.pdf
> > ARRL lab measures the range of the MFJ 269 is 6 to 400
> > ohms. Not sure what the difference is between this and
> > the MFJ 259.
>
> > Frank
> >The anti resonant points are well within the MFJ 259 specifications
> >stated above.
>
> The results you are measuring are certainly within the range of the
> MFJ 259. As an example: a 493 ft dipole, 50 ft above an average
> ground shows anti-resonance, at 1.9 MHz, and is 15,000 ohms.
>
> Frank

Frank, that is twice that you have mentioned dipoleas a comparison.
May I remind you again that for equilibrium purposes the radiator
must be a wavelength or multiple there of, assuming ofcourse we are
considering a single radiator
To talk of a "dipole" when considering my design is totally
unreasonable.
Regards
Art

3412. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 04:15:34 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <KbXFk.1258$S71.57@newsfe13.iad>
Source record: 21235

"NM5K" <nm5k@comcast.net> wrote in message news:48E7ADA1.484F@comcast.net...
> Art Unwin wrote:

> > if it was possible they would
> > already have done it.
>
> And he is right. They have only had about 100 years to work
> on it.

Yes. In the 1950's the USAF studied small antennas for the "new" Boeing 707's that they were buying as C-135/KC-135. I remember reading about it in one of the magazines of the time. They apparently were not entirely happy with the antenna that projected forward from the top of the stabilizer. They continued to employ a belly-mount trailing wire on some aircraft at least into the 1980's. (Good info hard to find.)

If all the money the Air Force could throw at a problem didn't come up with some magic, do we have a lot of hope???

3413. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 04:17:48 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <dfd87d9a-90b3-4305-b37a-ee091486f372@f77g2000hsf.googlegroups.com>
Source record: 21236

On Sep 28, 4:47 pm, "JB" <nos...@goofball.net> wrote:
> > Actually, I will go out on a limb over this point.
>
> > I have always found that a mis-matched, or "out of specs", antenna will
> > continue to "ring the ether" a bit more efficiently than it will "pluck
> > a signal from the ether."
>
> Concur.
> RX level can be even more noticeable on high Q antennas off-resonance as you
> would expect.
>
> Now add the line loss. Also, reflections don't seem to matter much with CW
> and SSB but can have an effect on some digital modes and certainly
> television.
>
> With solid state PAs, not all are created equal, and shutback often errs on
> the side of keeping warranty costs down. Stability is in the reach of most
> modern ones now. The current can be dealt with if you can get the heat out
> of the junction to a point. But the voltage rise is the killer.
>
> Also be aware that any transmission line will be significant in your
> measurements at the rig end.
>
> The MFJ can see anti-resonance if it doesn't get confused on other oddities
> such as coax length or connector humps, reflections. It can get pretty
> dicey when you sweep because all these things jump out at you when the load
> is out of resonance and or mismatches anywhere on the line. Not to mention
> the harmonics in the unit when you are looking at high impedances.

Correct, that is why you measure in it's final environment and at
the source to the antenna.
Again JB let me state I am not a newby with respect to antennas and
are very much
aware of the circumstances that you point to which is why I measure
at the antenna feed point.......
...Same goes for any tuner arrangement I use which is also at the top
of the tower as well as a camera when needed
Art

3414. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 04:56:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <hY6dnaMGC75r1XXVnZ2dnUVZ_sLinZ2d@posted.easystreetonline>
Source record: 21237

Sal M. Onella wrote:
> "NM5K" <nm5k@comcast.net> wrote in message news:48E7ADA1.484F@comcast.net...
>> Art Unwin wrote:
>
>>> if it was possible they would
>>> already have done it.
>> And he is right. They have only had about 100 years to work
>> on it.
>
> Yes. In the 1950's the USAF studied small antennas for the "new" Boeing
> 707's that they were buying as C-135/KC-135. I remember reading about it in
> one of the magazines of the time. They apparently were not entirely happy
> with the antenna that projected forward from the top of the stabilizer.
> They continued to employ a belly-mount trailing wire on some aircraft at
> least into the 1980's. (Good info hard to find.)
>
> If all the money the Air Force could throw at a problem didn't come up with
> some magic, do we have a lot of hope???

Hope for what? Magic? The tradeoffs inherent in electrically small antennas are well known, and each design requires intelligent application of that knowledge to come up with an antenna that's acceptable in size, form factor, and performance for that particular use. Many, many antennas now being designed and ones in common use are electrically small -- the ones in your car's remote control key fob, your Bluetooth USB dongle or cell phone earpiece, and embedded in RFID tags are just a very few examples. With the increasing use of wireless devices, the need for electrically small antennas has grown rapidly, and there are a number of good texts devoted to that specific topic. These texts contain a good treatment of the tradeoffs involved and useful ideas for designs using currently available technology and materials, but no new fundamental theory.

Advancements in the art will continue to come with intelligent and clever application of established theory by people who understand the theory and how to apply it, not from tinkerers who lack this knowledge and conjure their miracles by vague hand-waving and bad measurement.

Roy Lewallen, W7EL

3415. Re: RE:Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 04:56:34 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <cOXFk.5516$_G.631@newsfe04.iad>
Source record: 21238

"Rollie" <rollie@iowatelecom.net> wrote in message
news:gc7vqqaih1@news.netins.net...
> I've seen several simpler J-pole coaxial antenna plans, but this one ain't
> bad KD0FGX
>
> http://www.w7dk.org/10%20meter%20vertical%20project.pdf

Interesting. Near the bottom of Page 1, right column, the author states he doesn't want to try to support a full 23-foot vertical structure on his garage roof. Yeah -- me neither.

Would it still work if the "J" had an obtuse angle between the u-shaped stub and the half-wave radiating element? I'm thinking the stub section could lay on the garage roof and the radiating element could be elevated, being somewhat easier to support at 16.5 feet of height.

I have a nice 6m Field Day J-pole I made from 450-ohm ladder line and feed with 50-ohm coax. I will use it to test the concept and report back. I think 6 and 10 are close enough for this.

3416. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 04:59:57 UTC
From: justme <jbleaux@gmail.com>
Message-ID: <28675f.m2f.19.1@news.alt.net>
Source record: 21240

I know that, Gary but when I advertised for a diplexer, I got not or few replies so I changed it to 'duplexer'.

"Gary Smith" <vkthree@gmail.com> wrote in message news:gc8sosjhl1@news-01.bur.connect.com.au...
> BTW, it's a DIPLEXER (pronounced die plexer)if you want to work 2 seperate
> bands, a DUPLEXER is for working 2 frequencies on one band.
>
>
> "justme" <jbleaux@gmail.com> wrote in message
> news:2850u6.4nq.17.1@news.alt.net...
>> Someone has one of these just gathering dust. Please sell it to me.
>>
>> Thanks
>>
>>
>

3417. Re: Effective length of braid dipole leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 05:45:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc9kajmct1@news.albasani.net>
Source record: 21241

Sal M. Onella wrote:

> ...
> Interesting. Near the bottom of Page 1, right column, the author states he
> doesn't want to try to support a full 23-foot vertical structure on his
> garage roof. Yeah -- me neither.
>
> Would it still work if the "J" had an obtuse angle between the u-shaped stub
> and the half-wave radiating element? I'm thinking the stub section could
> lay on the garage roof and the radiating element could be elevated, being
> somewhat easier to support at 16.5 feet of height.
>
> I have a nice 6m Field Day J-pole I made from 450-ohm ladder line and feed
> with 50-ohm coax. I will use it to test the concept and report back. I
> think 6 and 10 are close enough for this.

Yeah, exactly, why not keep those undefined feet of loss enabling
network whether we need it or not ... I always consider that first ... ;-)

Regards,
JS

3418. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 05:49:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc9kgpmct2@news.albasani.net>
Source record: 21242

Sal M. Onella wrote:

> ...
> If all the money the Air Force could throw at a problem didn't come up with
> some magic, do we have a lot of hope???
>
>

Kinda like, "Look at those pyramids, if we can't build 'em let wrap it
up and go home?"

Good argument, you go, I'll stay ...

Regards,
JS

3419. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 05:51:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc9kldmct3@news.albasani.net>
Source record: 21243

Roy Lewallen wrote:

> ...
> Hope for what? Magic? The tradeoffs inherent in electrically small
> antennas are well known, and each design requires intelligent
> application of that knowledge to come up with an antenna that's
> acceptable in size, form factor, and performance for that particular
> use. Many, many antennas now being designed and ones in common use are
> electrically small -- the ones in your car's remote control key fob,
> your Bluetooth USB dongle or cell phone earpiece, and embedded in RFID
> tags are just a very few examples. With the increasing use of wireless
> devices, the need for electrically small antennas has grown rapidly, and
> there are a number of good texts devoted to that specific topic. These
> texts contain a good treatment of the tradeoffs involved and useful
> ideas for designs using currently available technology and materials,
> but no new fundamental theory.
>
> Advancements in the art will continue to come with intelligent and
> clever application of established theory by people who understand the
> theory and how to apply it, not from tinkerers who lack this knowledge
> and conjure their miracles by vague hand-waving and bad measurement.
>
> Roy Lewallen, W7EL

Ahh, the "magic man" himself is here ... the guy who write a simplistic interface to feed a text file to the real NEC engine ...

My gawd man, carry on, we await you wisdom ...
<smiling-out-the-one-side-of-ones'-face>

With all DUE respect,
JS

3420. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 06:36:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4lnge4tqbc2c9cciv2l3bposatj5ankttd@4ax.com>
Source record: 21244

On Sat, 04 Oct 2008 19:53:54 -0700, John Smith
<assemblywizard@gmail.com> wrote:
>In this instance, I said what I meant, and meant what I said, and
You're popeye the sailor man. Yeah, yeah, yeah.

It would seem a self styled code wizard would know how to cut and
paste the code he objects too for all to see. Unless, of course,
assembly wizard means someone who folds cardboard into boxes.

73's
Richard Clark, KB7QHC

3421. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 06:44:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc9noupun1@news.albasani.net>
Source record: 21245

Richard Clark wrote:
> On Sat, 04 Oct 2008 15:40:38 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>>> Brett, what a feeble way to support your own statements. Above you
>>> say you already have the code and have located a bit... Your dog ate
>>> your homework?
>
>> all that is left is to point out
>
> Plenty of wheezing, but not a whisper of support for your own
> statement.
>
> WHACK-A-TROLL!
>
> 73's
> Richard Clark, KB7QHC

I am going to tell you, once and for all. I have tolerated your limited mind, I have overlooked your shortcomings, I have treated you like you belong ... you do not.

You have repaid this with being obnoxious, ignorant, short on anything relevant to the arguments, discussions, and debates here ...

You fall one brick short of a full load ... if you were going to demonstrate better, you would have done so by now ...

I really refrain from this, and save it to the last ... however, you have squarely requested it ... and I have granted it.

Be damned with what you have invoked ... and may it fulfill what you seem to desire ... if I am the only one to recognize this, then so be it.

Regards,
JS

3422. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 06:46:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc9nrupun2@news.albasani.net>
Source record: 21246

Richard Clark wrote:
> On Sat, 04 Oct 2008 19:53:54 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>> In this instance, I said what I meant, and meant what I said, and
> You're popeye the sailor man. Yeah, yeah, yeah.
>
> It would seem a self styled code wizard would know how to cut and
> paste the code he objects too for all to see. Unless, of course,
> assembly wizard means someone who folds cardboard into boxes.
>
> 73's
> Richard Clark, KB7QHC

I have but one work you are consigned to ... ignorant ...

Regards,
JS

3423. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 06:54:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc9oboqhi1@news.albasani.net>
Source record: 21247

Richard Clark wrote:
> On Sat, 04 Oct 2008 15:40:38 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>>> Brett, what a feeble way to support your own statements. Above you
>>> say you already have the code and have located a bit... Your dog ate
>>> your homework?
>
>> all that is left is to point out
>
> Plenty of wheezing, but not a whisper of support for your own
> statement.
>
> WHACK-A-TROLL!
>
> 73's
> Richard Clark, KB7QHC

Or, to summarize, these spires are not for you to roost upon and
defecate upon, they are for you to shooed away from!

Begone, oh pigeon brained! (and Shakespeare would even know that!)

Regards,
JS

3424. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 07:14:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gc9pggrqp1@news.albasani.net>
Source record: 21248

Richard Clark wrote:
> On Sat, 04 Oct 2008 19:53:54 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>> In this instance, I said what I meant, and meant what I said, and
> You're popeye the sailor man. Yeah, yeah, yeah.
>
> It would seem a self styled code wizard would know how to cut and
> paste the code he objects too for all to see. Unless, of course,
> assembly wizard means someone who folds cardboard into boxes.
>
> 73's
> Richard Clark, KB7QHC

However, now that I have expounded and embraced my utter disgust and disrespect for you, and so tarnished yourself, let me continue; you are one of the most ignorant men I have had the displeasure of encountering in this hobby!

You stand as very notable, but to degrees most men find despicable. You have, indeed, made yourself notable to me; I can only wish to fathom why you would have chosen such dark, questionable and detestable means to do so?

If your "good ole' buddies have a word to say for you, now would be the time ... I fear I feel like engaging all you like ...

YOUR IGNORANCE DOES NOT PASS MY SCRUTINY ... but then, that is what you wanted ... for what purpose? Perhaps you can enlighten?

Regards,
JS

3425. diugay antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 08:03:55 UTC
From: Lelnad C Snott <leland@owned.com>
Message-ID: <gc9siv$17o$1@news.tornevall.net>
Source record: 21249

ever hear of it?

kc8ldo

3426. Re: diugay antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 08:07:09 UTC
From: <>
Message-ID: <pctge4hqkj9u0fsoor28puef6blpb6jsde@4ax.com>
Source record: 21250

On Sun, 5 Oct 2008 04:03:55 -0400, "Lelnad C Snott" <leland@owned.com>
wrote:

>ever hear of it?
>
>kc8ldo
>
gay antennas?
w.

3427. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 09:55:53 UTC
From: Gary Smith <vkthree@gmail.com>
Message-ID: <gca300$q52$1@news-01.bur.connect.com.au>
Source record: 21151

I found plans to build one, not sure if you want to go that way or buy second hand, i guess you just wanna buy one. My mate has one but he won't give it up :<, i think i might have to build one for satellite work on my Alinco DR635.

"justme" <jbleaux@gmail.com> wrote in message news:2850u6.4nq.17.1@news.alt.net...
> Someone has one of these just gathering dust. Please sell it to me.
>
> Thanks
>
>

3428. Re:Effective length of braid dipole antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 11:12:58 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gca7fvgkp1@news.netins.net>
Source record: 21152

In the center of the article is an antenna called a double bazooka dipole made with some coax, I think this is what you may be looking for. I had only seen antenna plans using coax in the construction of J-pole antennas before. Live and Learn

K:\My Documents\Radio\Ham Radio\Understanding Antennas For the Non-technical Ham by N4JA.mht

3429. Re: Re:Effective length of braid dipole antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 11:35:12 UTC
From: Dave <noone@nowhere.com>
Message-ID: <QD1Gk.812$P5.730@nwrddc02.gnilink.net>
Source record: 21153

"Rollie" <rollie@iowatelecom.net> wrote in message
news:gca7fvgkp1@news.netins.net...
> In the center of the article is an antenna called a double bazooka dipole
> made with some coax, I think this is what you may be looking for. I had
> only seen antenna plans using coax in the construction of J-pole antennas
> before. Live and Learn
>
> K:\My Documents\Radio\Ham Radio\Understanding Antennas For the
> Non-technical Ham by N4JA.mht
>

note for qrp portable operation you can actually make the antenna field tunable. just strip the jacket off the coax far enough for the lowest frequency of interest and fold back the braid over itself. to tune a higher band just push the braid back up to cover the center conductor to shorten it to the new frequency. doing this a lot may wear out the braid, but for a temporary portable or emergency antenna it works just fine.

3430. QRL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 12:50:28 UTC
From: slazar19@stargate.net
Message-ID: <743853fc-eb09-4586-9536-cfdcebc70cab@n33g2000pri.googlegroups.com>
Source record: 21154

QRL?

3431. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 14:23:00 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <uKWdnRWJF_3-InXVnZ2dnUVZ_qrinZ2d@earthlink.com>
Source record: 21155

"Gary Smith" <vkthree@gmail.com> wrote in message
news:gc8sosjhl1@news-01.bur.connect.com.au...
> BTW, it's a DIPLEXER (pronounced die plexer)if you want to work 2 seperate
> bands, a DUPLEXER is for working 2 frequencies on one band.
>

While you are correct, if you look in the catalogs you will see the devices
to split to two or more antennas on differant bands are listed as and called
duplexers. Diplexers are not mentioned at all. Just another case where
people started calling something it is not and the meaning seemed to be
changed.

3432. Re: QRL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 15:37:24 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Ua5Gk.845$P5.631@nwrddc02.gnilink.net>
Source record: 21156

<slazar19@stargate.net> wrote in message
news:743853fc-eb09-4586-9536-cfdcebc70cab@n33g2000pri.googlegroups.com...
> QRL?

QRL QSB QSY 14195 QSX 14200 QTC 5 QSL?

3433. Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 15:44:55 UTC
From: espek2007@gmail.com
Message-ID: <2095fe8b-a456-4cc3-9810-21214234d338@b38g2000prf.googlegroups.com>
Source record: 21157
Cross-posted to: microsoft.public.jp.visualc,rec.radio.amateur.antenna,alt.fractals.pictures,sci.fractals,alt.philosophy

Dear members,

Firsly i would like to apologise to all members if this message is being interpreted as spam. Frankly, i have no business connection what soever with the owner of shaamtfractal.com (refer to as shaamtfractal). I would like to appeal to any members who knew the owner of the site to contact me personally or through this discussion group.
I have being following shaamtfractal since i stumbled upon it 3 weeks ago from a search engine. It seems that the fractal pattern is quite unique in the sense that it doesn't match to any of the conventional formula known. I have failed to replicate it using any technique known (especially "Conflict Chamber 4", "Turning Point 2" and most of it in the gallery). I am looking from the academic's perspective and not from the artistic's perspective because to me color & shade could easily be manipulated using a wide range of graphic tools.
Some of my academic collegue gave an opinion that the image could probably being produced from a high-end graphic software but they are amazed when i showed them the enlarge original's image (7680 x 5760) because it exposed the very fine detail of the unique pattern not found in others fractal pattern. "Medussa Belt" clearly show a grow-like pattern.
I have tried in vain to get more details regarding the formula used from the site's owner but the reply is that it is an industrial secret. From Whois the site is originated from Malaysia (one of South East Asia economic tiger).
BTW, i am not trying to steal any formula from the site owner but just trying to get some clue regarding the formula & technique used to produce the said images and hoping that fractal theory could made a significant leap forward.

regards,
Fractal John Doe
-Fractal Math for civilisation advancement.

3434. Re: QRL

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 16:17:26 UTC
From: Dave <dave@dave.dave>
Message-ID: <qM5Gk.18204$I44.2310@newsfe03.iad>
Source record: 21158

slazar19@stargate.net wrote:
> QRL?

http://home.alltel.net/johnshan/cw_ss_list_q.html

http://home.alltel.net/johnshan/cw_ss.html

3435. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 16:29:21 UTC
From: Frank <frank599@nospam.telus.net>
Message-ID: <BX5Gk.379$Oj.302@edtnps83>
Source record: 21159

>> The results you are measuring are certainly within the range of the
>> MFJ 259. As an example: a 493 ft dipole, 50 ft above an average
> >ground shows anti-resonance, at 1.9 MHz, and is 15,000 ohms.
>>
> >Frank

>Frank, that is twice that you have mentioned dipoleas a comparison.
>May I remind you again that for equilibrium purposes the radiator
>must be a wavelength or multiple there of, assuming ofcourse we are
>considering a single radiator
>To talk of a "dipole" when considering my design is totally
>unreasonable.
>Regards
>Art

But that is the typical input impedance of a one wavelength long
antenna (15,000 ohms).

Frank

3436. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 16:41:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hhqhe4tojq3ph01r2lv5r18s7h7gr6qurb@4ax.com>
Source record: 21160

On Sun, 05 Oct 2008 00:14:22 -0700, John Smith
<assemblywizard@gmail.com> wrote:
>> It would seem a self styled code wizard would know how to cut and
>> paste the code he objects too for all to see. Unless, of course,
>> assembly wizard means someone who folds cardboard into boxes.

>However, now that I have expounded and embraced my utter disgust

It is a curious thread. You have made any number of very clear
propositions offering testable statements, and you can't supply the
least scintilla of evidence, example, case, illustration, instance,
representative, sample, or specimen in their support. Well maybe a
cupful of specimen where, no doubt, this last comment of yours runneth
over.

Brett, if your own statements lead you to such embraceable disgust
(what a concept), imagine how others perceive them. :-)

73's
Richard Clark, KB7QHC

3437. shownatova but the still after 121 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 18:06:30 UTC
From: "kb9rqz-3@hotmail.com" <kb9rqz-3@hotmail.com>
Message-ID: <26868d54-08ea-441b-8a13-e1ce1b73e629@h60g2000hsg.googlegroups.com>
Source record: 21161
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Oct 1, 5:35 pm, an old friend <kb9...@hotmail.com> wrote:
> On Sep 29, 3:13 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:> "
>
> fake

3438. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 19:19:01 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <Sl8Gk.44669$Ep1.35508@bignews2.bellsouth.net>
Source record: 21162
Cross-posted to: microsoft.public.jp.visualc,rec.radio.amateur.antenna,alt.fractals.pictures,sci.fractals,alt.philosophy

<espek2007@gmail.com> wrote in message
news:2095fe8b-a456-4cc3-9810-21214234d338@b38g2000prf.googlegroups.com...
> Dear members,
>
> Firsly i would like to apologise to all members if this message is
> being interpreted as spam. Frankly, i have no business connection what
> soever with the owner of shaamtfractal.com (refer to as
> shaamtfractal). I would like to appeal to any members who knew the
> owner of the site to contact me personally or through this discussion
> group.
> I have being following shaamtfractal since i stumbled upon it 3 weeks
> ago from a search engine. It seems that the fractal pattern is quite
> unique in the sense that it doesn't match to any of the conventional
> formula known. I have failed to replicate it using any technique known
> (especially "Conflict Chamber 4", "Turning Point 2" and most of it in
> the gallery). I am looking from the academic's perspective and not
> from the artistic's perspective because to me color & shade could
> easily be manipulated using a wide range of graphic tools.
> Some of my academic collegue gave an opinion that the image could
> probably being produced from a high-end graphic software but they are
> amazed when i showed them the enlarge original's image (7680 x 5760)
> because it exposed the very fine detail of the unique pattern not
> found in others fractal pattern. "Medussa Belt" clearly show a grow-
> like pattern.
> I have tried in vain to get more details regarding the formula used
> from the site's owner but the reply is that it is an industrial
> secret. From Whois the site is originated from Malaysia (one of South
> East Asia economic tiger).
> BTW, i am not trying to steal any formula from the site owner but just
> trying to get some clue regarding the formula & technique used to
> produce the said images and hoping that fractal theory could made a
> significant leap forward.
>
> regards,
> Fractal John Doe
> -Fractal Math for civilisation advancement.

Tell us more. Like, which frequency is it on? Does it use a callsign? Stuff
like that.

Ed, NM2K

3439. shownatova but the still after 121 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 21:09:41 UTC
From: "kb9rqz-1@hotmail.com" <kb9rqz-1@hotmail.com>
Message-ID: <b1f263eb-f996-4290-b911-3cf6e68f05ef@v28g2000hsv.googlegroups.com>
Source record: 21163
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

On Oct 4, 3:53 pm, "Ron" <apositivepl...@netscape.net> wrote:
> plonk
>

3440. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 21:19:40 UTC
From: Dave <noone@nowhere.com>
Message-ID: <MbaGk.909$P5.499@nwrddc02.gnilink.net>
Source record: 21164
Cross-posted to: microsoft.public.jp.visualc,rec.radio.amateur.antenna,alt.fractals.pictures,sci.fractals,alt.philosophy

"Ed Cregger" <ecregger@bellsouff.net> wrote in message
news:Sl8Gk.44669$Ep1.35508@bignews2.bellsouth.net...
>
> <espek2007@gmail.com> wrote in message
> news:2095fe8b-a456-4cc3-9810-21214234d338@b38g2000prf.googlegroups.com...
>> Dear members,
>>
>> Firsly i would like to apologise to all members if this message is
>> being interpreted as spam. Frankly, i have no business connection what
>> soever with the owner of shaamtfractal.com (refer to as
>> shaamtfractal). I would like to appeal to any members who knew the
>> owner of the site to contact me personally or through this discussion
>> group.
>> I have being following shaamtfractal since i stumbled upon it 3 weeks
>> ago from a search engine. It seems that the fractal pattern is quite
>> unique in the sense that it doesn't match to any of the conventional
>> formula known. I have failed to replicate it using any technique known
>> (especially "Conflict Chamber 4", "Turning Point 2" and most of it in
>> the gallery). I am looking from the academic's perspective and not
>> from the artistic's perspective because to me color & shade could
>> easily be manipulated using a wide range of graphic tools.
>> Some of my academic collegue gave an opinion that the image could
>> probably being produced from a high-end graphic software but they are
>> amazed when i showed them the enlarge original's image (7680 x 5760)
>> because it exposed the very fine detail of the unique pattern not
>> found in others fractal pattern. "Medussa Belt" clearly show a grow-
>> like pattern.
>> I have tried in vain to get more details regarding the formula used
>> from the site's owner but the reply is that it is an industrial
>> secret. From Whois the site is originated from Malaysia (one of South
>> East Asia economic tiger).
>> BTW, i am not trying to steal any formula from the site owner but just
>> trying to get some clue regarding the formula & technique used to
>> produce the said images and hoping that fractal theory could made a
>> significant leap forward.
>>
>> regards,
>> Fractal John Doe
>> -Fractal Math for civilisation advancement.
>
>
> ------------
>

>
> Tell us more. Like, which frequency is it on? Does it use a callsign?
> Stuff like that.
>
> Ed, NM2K
>
maybe he should get together with frackytenna and swap algorithms? maybe
there is a new antenna hidden in the artwork somewhere?

3441. Re: diugay antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 21:48:30 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngeidhe.1lq7.bit-bucket@shell.config.com>
Source record: 21165

On Sun, 5 Oct 2008 04:03:55 -0400, Lelnad C Snott wrote:

> ever hear of it?

No. But, thanks for asking.

Jonesy

3442. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 21:51:27 UTC
From: Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll>
Message-ID: <48e936df$0$27230$ba620dc5@text.nova.planet.nl>
Source record: 21166
Cross-posted to: microsoft.public.jp.visualc,rec.radio.amateur.antenna,alt.fractals.pictures,sci.fractals,alt.philosophy

espek2007@gmail.com wrote:
> Dear members,
>
> Firsly i would like to apologise to all members if this message is
> being interpreted as spam. Frankly, i have no business connection what
> soever with the owner of shaamtfractal.com (refer to as
> shaamtfractal)CUT
Wat I saw on their site is not very fractal, and not very appealing
either, compared to a lot of free sites i have seen lately.
And the amount of crossposting(or is it multyposting??) tells me
that a spam interpretation is quite likely to hit the target.

3443. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 22:16:43 UTC
From: Immortalist <reanimater_2000@yahoo.com>
Message-ID: <83351f46-9a16-48a1-8fc7-33cbb30f7a2e@a2g2000prm.googlegroups.com>
Source record: 21167
Cross-posted to: microsoft.public.jp.visualc,rec.radio.amateur.antenna,alt.fractals.pictures,sci.fractals,alt.philosophy

On Oct 5, 2:51 pm, Sjouke Burry <burrynulnulf...@ppllaanneett.nnlll>
wrote:
> espek2...@gmail.com wrote:
> > Dear members,
>
> > Firsly i would like to apologise to all members if this message is
> > being interpreted as spam. Frankly, i have no business connection what
> > soever with the owner of shaamtfractal.com (refer to as
> > shaamtfractal)CUT
>
> Wat I saw on their site is not very fractal, and not very appealing
> either, compared to a lot of free sites i have seen lately.
> And the amount of crossposting(or is it multyposting??) tells me
> that a spam interpretation is quite likely to hit the target.

Just do the fractal brother
http://www-2.cs.cmu.edu/Groups/AI/html/faqs/ai/genetic/part2/faq-doc-2.html

3444. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-05 23:32:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <68fa6ab3-6fb1-43e8-a7c1-10e0eca78a80@s50g2000hsb.googlegroups.com>
Source record: 21168

On Oct 5, 11:29 am, "Frank" <frank...@nospam.telus.net> wrote:
> >> The results you are measuring are certainly within the range of the
> >> MFJ 259. As an example: a 493 ft dipole, 50 ft above an average
> > >ground shows anti-resonance, at 1.9 MHz, and is 15,000 ohms.
>
> > >Frank
> >Frank, that is twice that you have mentioned dipoleas a comparison.
> >May I remind you again that for equilibrium purposes the radiator
> >must be a wavelength or multiple there of, assuming ofcourse we are
> >considering a single radiator
> >To talk of a "dipole" when considering my design is totally
> >unreasonable.
> >Regards
> >Art
>
> But that is the typical input impedance of a one wavelength long
> antenna (15,000 ohms).
>
> Frank

Yes Frank but you have to remember mine is a new design. The antenna
is now on the ground
and has a resistive impedance of three figures. I anticipate that when
I put it on my 30 foot tower the impedance will drop
on top band by 50% where I will add a transformer to drop it to 50
ohms. Now on the other bands it may well not need a transformer
so I can play around on 20 M for the winter until I can achieve a good
match or place a tuner at the tower top.
As I have stated many times a radiator does not have to be straight so
figures found with a dipole are just not applicable in my case.
In fact a anti resonant impedance can be driven below 50 ohms if one
wanted to so prior findings are just not applicable.
In a month or so you will be able to put my antenna on your computor
program and check for yourself I promise you.
Regards
Art

3445. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 01:24:42 UTC
From: richardharrison@webtv.net
Message-ID: <28483-48E968DA-295@storefull-3252.bay.webtv.net>
Source record: 21169

Fractal John Doe wrote:
"---hoping that fractcal theory could make a significant leap forward."

You might start with references given in J.D. Kraus` "Antenns", 3rd.
efition in the section on "Artistic Antennas" (Fractals), page 772.

Best regards, Richard Harrison, KB5WZI

3446. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 02:35:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <dv-dndx2N_AW5HTVnZ2dnUVZ_v7inZ2d@posted.easystreetonline>
Source record: 21170

Richard Harrison wrote:
> Fractal John Doe wrote:
> "---hoping that fractcal theory could make a significant leap forward."
>
> You might start with references given in J.D. Kraus` "Antenns", 3rd.
> efition in the section on "Artistic Antennas" (Fractals), page 772.
>
> Best regards, Richard Harrison, KB5WZI
>

What's "fractal theory"? How does it differ from any other theories?

Roy Lewallen, W7EL

3447. Lv Lv man Lv women (paypal payment)(www.honest-shop.cn)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 02:38:38 UTC
From: baby <henny-love@163.com>
Message-ID: <e7871119-903e-4d33-a194-249188c027b9@a18g2000pra.googlegroups.com>
Source record: 21171

Timberland Timberland man Timberland women
(paypal payment)(www.honest-shop.cn)converse converse man
converse
High man converse women converse High women
D&G D&G man D&G women
ARMANI ARMANI man (paypal payment)(www.honest-shop.cn)
CHANEL CHANEL women
Lacoste Lacoste man Lacoste women
(paypal payment)(www.honest-shop.cn)HOGAN HOGAN man
Dior Dior women
CK CK women
EVISU EVISU man (paypal payment)(www.honest-shop.cn)
Fendi Fendi women
Mauri Mauri man
Lv Lv man Lv women (paypal payment)(www.honest-shop.cn)
Y3 Y3 man
VERSACE VERSACE man VERSACE women
DSQUARED DSQUARED man
(paypal payment)(www.honest-shop.cn)sandal Lv CLARKS Crocs UGG
GUCCI FENDI CHANEL PRADA versace Dior D&G TOUS Burberry
GENIU$ GENIU$ man
UGG
Air Rift Air Rift man Air Rift women (paypal payment)(www.honest-shop.cn
)
Court Force Court Force man Court Force women
ATO ATO man
Ed Hardy Ed Hardy man Ed Hardy women
(paypal payment)(www.honest-shop.cn)

Timberland Timberland man Timberland women
(paypal payment)(www.honest-shop.cn)converse converse man
converse
High man converse women converse High women
D&G D&G man D&G women
ARMANI ARMANI man (paypal payment)(www.honest-shop.cn)
CHANEL CHANEL women
Lacoste Lacoste man Lacoste women
(paypal payment)(www.honest-shop.cn)HOGAN HOGAN man
Dior Dior women
CK CK women
EVISU EVISU man (paypal payment)(www.honest-shop.cn)Fendi Fendi
women
Mauri Mauri man
Lv Lv man Lv women (paypal payment)(www.honest-shop.cn)

Y3 Y3 man
VERSACE VERSACE man VERSACE women
DSQUARED DSQUARED man
(paypal payment)(www.honest-shop.cn)sandal Lv CLARKS Crocs UGG
GUCCI FENDI CHANEL PRADA versace Dior D&G TOUS Burberry
GENIU$ GENIU$ man
UGG
Air Rift Air Rift man Air Rift women (paypal payment)(www.honest-shop.cn
)
Court Force Court Force man Court Force women
ATO ATO man
Ed Hardy Ed Hardy man Ed Hardy women
(paypal payment)(www.honest-shop.cn)

3448. Paul Smith shoes Jordan shoes Bape shoes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 02:40:03 UTC
From: baby <henny-love@163.com>
Message-ID: <de7650c8-9414-4c9c-872f-35a44bc8c50d@r15g2000prh.googlegroups.com>
Source record: 21172

Footwear (paypal payment)(www.honest-shop.cn)
Paul Smith shoes
Jordan shoes
Bape shoes
Chanel shoes (paypal payment)(www.honest-shop.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)(www.honest-shop.cn)
Gucci shoes
Hogan shoes (paypal payment)(www.honest-shop.cn)
Lv shoes
Prada shoes (paypal payment)(www.honest-shop.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)(www.honest-shop.cn)
Ice bream shoes
Sebago shoes (paypal payment)(www.honest-shop.cn)
Lacoste shoes
Air force one shoes (paypal payment)(www.honest-shop.cn)
TODS shoes
AF shoes

Footwear (paypal payment)(www.honest-shop.cn)
Paul Smith shoes Jordan shoes Bape shoes
Chanel shoes (paypal payment)(www.honest-shop.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)(www.honest-shop.cn)
Gucci shoes
Hogan shoes (paypal payment)(www.honest-shop.cn)
Lv shoes
Prada shoes (paypal payment)(www.honest-shop.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)(www.honest-shop.cn)
Ice bream shoes
Sebago shoes (paypal payment)(www.honest-shop.cn)
Lacoste shoes
Air force one shoes (paypal payment)(www.honest-shop.cn)
TODS shoes

AF shoes

3449. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 03:28:47 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <RBfGk.10465$V72.10232@newsfe09.iad>
Source record: 21173

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:hY6dnaMGC75r1XXVnZ2dnUVZ_sLinZ2d@posted.easystreetonline...
> Sal M. Onella wrote:.

< snip >

> > If all the money the Air Force could throw at a problem didn't come up
with
> > some magic, do we have a lot of hope???
>
> Hope for what? Magic?

< snip >

By "magic" I meant the development of technology that was heretofore
unidentified, not some false illusion by a conjurer. I agree with the
essential need for "clever application of established theory ... [etc]" as
you so eloquently stated.

In that sense, the IC was magic. (Sorry if I seem to liken technology too
much to magic.)

3450. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 04:16:40 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9f0de0c6-0b27-46a7-82cd-970808094a18@d70g2000hsc.googlegroups.com>
Source record: 21174

On Oct 5, 10:28 pm, "Sal M. Onella" <salmone...@food.poisoning.org>
wrote:
> "Roy Lewallen" <w...@eznec.com> wrote in message
>
> news:hY6dnaMGC75r1XXVnZ2dnUVZ_sLinZ2d@posted.easystreetonline...
>
> > Sal M. Onella wrote:.
>
> < snip >
>
>
>
> > > If all the money the Air Force could throw at a problem didn't come up
> with
> > > some magic, do we have a lot of hope???
>
> > Hope for what? Magic?
>
> < snip >
>
> By "magic" I meant the development of technology that was heretofore
> unidentified, not some false illusion by a conjurer. I agree with the
> essential need for "clever application of established theory ... [etc]" as
> you so eloquently stated.
>
> In that sense, the IC was magic. (Sorry if I seem to liken technology too
> much to magic.)

If the USAF crew all read the same books before their journey then
they all had the same experience many times over.
What it takes is imagination and the will to deviate from the well
trodden paths where different experiences and views
empower men to challenge the old based on experiences that others have
not travelled. It then takes a generation
for those that failed and snarled at the new to leave the scene so
that later research turns up the more recent past
and thus reinvents the wheel. Einstien left classical physics because
he could not find the key for the Universal laws
and probed into the science of relativity purely to gain a different
perspective or view of the former problem which required
a move away from the well trodden path to get the answer.
Unfortunately he died before finding the answer but was on the right
track
in not assuming that all was known because of the high number of

failures before him who all trod the same path and arrived at the same destination.

3451. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 06:29:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gccb94$qg0$1@news.albasani.net>
Source record: 21175

Richard Clark wrote:

> ...
> Brett, if your own statements lead you to such embraceable disgust
> (what a concept), imagine how others perceive them. :-)
>
> 73's
> Richard Clark, KB7QHC

Makes you wonder what Einstein might have said on the subject, doesn't it?

"A spirit is manifest in the laws of the Universe - a spirit vastly
superior to that of man." -- Albert Einstein

Regards,
JS

3452. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 06:39:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gccbr6$qg0$2@news.albasani.net>
Source record: 21176

Roy Lewallen wrote:

> ...
> What's "fractal theory"? How does it differ from any other theories?
>
> Roy Lewallen, W7EL

Short answer?

Imaginary numbers are valid and the driving force ... for instance? The square root of -1 ...

Regards,
JS

3453. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 07:11:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kfdje4551f1nbtbpanih301mpq6kg5jjvb@4ax.com>
Source record: 21177

On Sun, 05 Oct 2008 23:29:55 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>> Brett, if your own statements lead you to such embraceable disgust
>> (what a concept), imagine how others perceive them. :-)

>Makes you wonder what Einstein might have said on the subject, doesn't it?

Wondering about the thoughts of dead white men over your abandoned
topic is like validation shopping in the graveyard. Now, can you in
fact support your statement
>NEC engine (at least the one I use and have the source code to),
>it does have a bit of what you call "voodoo science"
with that actual bit of code (a labeled block)? Or has your
theoretical vacuum merely confirmed another attempted grave robbery?

73's
Richard Clark, KB7QHC

3454. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 13:08:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcd2kb$m3v$1@news.albasani.net>
Source record: 21178

Richard Clark wrote:
> On Sun, 05 Oct 2008 23:29:55 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>> Brett, if your own statements lead you to such embraceable disgust
>>> (what a concept), imagine how others perceive them. :-)
>
>> Makes you wonder what Einstein might have said on the subject, doesn't it?
>
> Wondering about the thoughts of dead white men over your abandoned
> topic is like validation shopping in the graveyard. Now, can you in
> fact support your statement
>> NEC engine (at least the one I use and have the source code to),
>> it does have a bit of what you call "voodoo science"
> with that actual bit of code (a labeled block)? Or has your
> theoretical vacuum merely confirmed another attempted grave robbery?
>
> 73's
> Richard Clark, KB7QHC

Interesting you would move to slight this "dead man"; makes one
anticipate much from your, yet to be displayed, display of mental
prowess ... keep us waiting no longer man! We wait with bated breath!
<yawn>

Oh wait, that must have been a "Shakespearian Slip!" (closely related
to the famous Freudian Slip ... I guess <chuckle>)

Regards,
JS

3455. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 13:16:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcd32l$m3v$2@news.albasani.net>
Source record: 21179

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

On second thought, your post reminds me, more, of a womans' slip showing ... I mean, taking for granted, one did not wish to expose what has been exposed in the event.

Regards,
JS

3456. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 13:20:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcd3ao$n96$1@news.albasani.net>
Source record: 21180

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

Or, to summarize, you would trash great minds in your personal pursuits to institute a personal attack ... now that it has been pointed out to you, blatantly, your vision has probably improved.

But then, one would have to look behind ones self, occasionally for that to be of use ... which brings to mind, "Fools rush in where brave men fear to tread." Or, something like that ...

Regards,
JS

3457. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 15:21:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g5ake4larohpvcvvcn83rt2v13c1bgsbd8@4ax.com>
Source record: 21181

On Mon, 06 Oct 2008 06:08:25 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>> Now, can you in fact support your statement
>>> NEC engine (at least the one I use and have the source code to),
>>> it does have a bit of what you call "voodoo science"
>> with that actual bit of code (a labeled block)? Or has your
>> theoretical vacuum merely confirmed another attempted grave robbery?
>
>Interesting you would move to slight this "dead man"

Not interesting at all. Thank you for confirming your topic's demise
from its intellectual poverty. It was a quick death, after all - a
stillbirth considering its antecedent.

73's
Richard Clark, KB7QHC

3458. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 16:11:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcddbf$3kt$1@news.albasani.net>
Source record: 21182

Richard Clark wrote:

> ...
> Not interesting at all. Thank you for confirming your topic's demise
> from its intellectual poverty. It was a quick death, after all - a
> stillbirth considering its antecedent.
>
> 73's
> Richard Clark, KB7QHC

Oh you noticed; for someone to have an intelligent conversation with you, you would first have to say something intelligent.

I tell you, I can't tell if there is real hope, still, for you, or not ... I won't tell you which way I am leaning, it might influence the outcome. ROFLOL

Anyway, you are always good for a laugh.

Regards,
JS

3459. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 16:28:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcdebi$4vj$1@news.albasani.net>
Source record: 21183

Richard Clark wrote:

> ...
> Not interesting at all. Thank you for confirming your topic's demise
> from its intellectual poverty. It was a quick death, after all - a
> stillbirth considering its antecedent.
>
> 73's
> Richard Clark, KB7QHC

Anyway, as usual, you missed the point. The "silence" you are pointing out is the sound of everyone firing up their favorite antenna modeling software, such as MMANA-GAL, then realizing they are actually going to have to construct something to get complete data ...

However, I can almost hear your thoughts, don't bother stating them; I will state them for you, "Now how do you like that JS? I am your worst nightmare!" -- Just before the room fills with laughter ...

Regards,
JS

3460. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 16:45:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n6fke4l04v65us1o8k3aaeks96badvj8os@4ax.com>
Source record: 21184

On Mon, 06 Oct 2008 09:11:24 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>> Not interesting at all. Thank you for confirming your topic's demise
>> from its intellectual poverty. It was a quick death, after all - a
>> stillbirth considering its antecedent.

>Oh you noticed

A corpse is a corpse - of course, of course;
and no one would talk to corpse, of course;
unless, of course, that corpse was the famous Mr. Dead!

> for someone to have an intelligent conversation with
>you, you would first have to say something intelligent.

And you have something intelligent to say? It would have to improve
over your gumming through
>>> NEC engine (at least the one I use and have the source code to),
>>> it does have a bit of what you call "voodoo science"

73's
Richard Clark, KB7QHC

3461. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 17:16:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcdh5s$8pq$1@news.albasani.net>
Source record: 21185

Richard Clark wrote:
> On Mon, 06 Oct 2008 09:11:24 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>> Not interesting at all. Thank you for confirming your topic's demise
>>> from its intellectual poverty. It was a quick death, after all - a
>>> stillbirth considering its antecedent.
>
>> Oh you noticed
>
> A corpse is a corpse - of course, of course;
> and no one would talk to corpse, of course;
> unless, of course, that corpse was the famous Mr. Dead!
>
>> for someone to have an intelligent conversation with
>> you, you would first have to say something intelligent.
>
> And you have something intelligent to say? It would have to improve
> over your gumming through
>>>> NEC engine (at least the one I use and have the source code to),
>>>> it does have a bit of what you call "voodoo science"
>
> 73's
> Richard Clark, KB7QHC

Voodoo science exists within the NEC code, the cat is out of the bag,
end of story ... of course, you are a "flat-earther", that changes
everything in your imaginary world ... and, due to near-sighted-vision,
will remain there, for you ...

Not only that, you now wish to take your imaginary vision into realms
where you are without grounds to go ... download the code, compile, link
and debug ... or else, get out yer' knitting needles and join the women
in the other room ...

Regards,
JS

3462. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 17:42:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5tike45cjv7jqpnoqqs04b3536ccsupho5@4ax.com>
Source record: 21186

On Mon, 06 Oct 2008 10:16:39 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>> And you have something intelligent to say? It would have to improve
>> over your gumming through
>>>>> NEC engine (at least the one I use and have the source code to),
>>>>> it does have a bit of what you call "voodoo science"
>
>Voodoo science exists within the NEC code

Sorry Brett, gumming repetition does not prove an idea you already
allowed as being a dead and embraceable disgust. You clearly don't
have any idea how to progress beyond incantation of trolling
prosodies.

To your credit, no one expects originality from you. After all, that
is the point of your (self-supposed) anonymity (an ironic joke I
enjoy). You could as easily be Sara luxuriating in the flush of your
TV debate victory (complete with your aw-shucksisms)!

73's
Richard Clark, KB7QHC

3463. Re: hf shielding-mesh

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 18:10:07 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gcdk9v$vh9$1@news.jpl.nasa.gov>
Source record: 21187

```
ml wrote:
> In article <hRoFk.370$yI6.265@nwrddc01.gnilink.net>,
> "Dave" <noone@nowhere.com> wrote:
>
>> "ml" <m@di.net> wrote in message
>> news:m-424E3D.06040503102008@news.optonline.net...
>>> In article <ZAKEk.3298$YN3.1273@newsfe08.iad>, Dave <dave@dave.dave>
>>> wrote:
>>>
>>>> ml wrote:
>>>>> hi
>>>>>
>>>>> i have a general shielding question i realize that overall it
>>>>> might be a impractical thing to build but looking at it i
>>>>> wonder...
>>>>>
>>>>> ontop of my roof is elevator room it's about 20x20
>>>>>
>>>>> flat roof
>>>>>
>>>>> lets suppose the motor controller throws out 1.7 to 30mhz at
>>>>> s9+ (all over)
>>>>>
>>>>> lets say i take a single 20x20 sheet of copper put it on the top
>>>>> roof (assume i could ground it if need be)
>>>>>
>>>>> lets say before i put the copper i measured s9
>>>>>
>>>>> what shielding if any might i see "S" wise??
>>>>>
>>>>> i understand interference would still be radiating form the rest
>>>>> of the unshielded structure but wondering if measuring ontop of the
>>>>> copper sheeting id' observe any attenuation?? meaning would the
>>>>> signal penatrate that copper? -- and if so around how
>>>>> much??(alot/very little)
>>>>>
>>>>>
>>>>> tnx
>>>> I'd try bypassing and choking the wires going to the motor and the
>>>> controller.
>>> thanks for the help Dav, i sorta feared a simple sheet wouldn't do
>>> much but wanted to double check
>>>
>>> seems the device does not radiate along the power lines it just
```

>>> radiate s of the device itself
>>>
>>> it's about 12x12 x12 inches or so the motor controler is inside a
>>> tight heavey metal cabinet the only rf measured is from that
>>> device itself
>>>
>>> my thought is to perhaps find a way to build copper mesh 'box' i
>>> can place over it perhaps that would do the trick? it has to be
>>> mesh as the controller gets pretty hot and is fan cooled
>> galvanized 'hardware cloth' that has about 1/2" mesh is plenty good for that
>> and can be easily soldered.
>
> <<<<>>thanks Dav, never heard of hardware cloth and wasn't really
> sure what the apeture size should be but i'll give the above a try
>
>

Presuming you're having troubles at HF, almost any aperture size will
do. (the usual guideline is that the perimeter of the aperture be
<<wavelength)

Of course, this only applies if it's an Efield issue. And, of course,
it assumes there's no conductors penetrating your "perforated box"
(which is what the shielding screen is). Any conductor penetrating the
box needs to have filters that "short" the unwanted signals to the
"inside" of the box.

If it's the radiated magnetic field, there's a whole 'nother set of
problems you'll have to deal with.

3464. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 19:34:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <46c02766-f9d4-4a75-ad2c-1302f0805077@t54g2000hsg.googlegroups.com>
Source record: 21188

On Oct 6, 8:16 am, John Smith <assemblywiz...@gmail.com> wrote:
> Richard Clark wrote:
> > ...
> > 73's
> > Richard Clark, KB7QHC
>
> On second thought, your post reminds me, more, of a womans' slip showing
> ... I mean, taking for granted, one did not wish to expose what has been
> exposed in the event.
>
> Regards,
> JS

John, do me a favour and re read Richards last 5 or 10 posts and then
ask yourself
Did Richard provide any thing to you that was usefull? He will only
supply querstions
so that he can belittle those that try to answer. He himself will
never supply anything
that is seen as profitablke to this group at large. If the last 12
postings doesn't satisfy
you then look at the last 25, or 50 postings. There is no likely
hood that he is going to change
after spending several years taking this tack to annoy people on this
group. So why respond to him
which only satisfies his quest of being belonged as a person some
where in this World.
He is lonely, he is without friends and just an obnoxious person
seeking a conversation with anybody
and I mean anybody that he can rope in and annoy just to extend the
length of the conversation so he has a sense of belonging.
So John look at his past postings and ask yourself is any conversation
with Richard worth while and then take the appropiate action.
He can then turn to KB9RQZ to satisfy his needs without disruption to
the rest of us and where he will find a true friend with similar
tastes.
Best regard
Art

3465. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-06 20:37:23 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gcdsu3$6f8$1@f04n12.cac.psu.edu>
Source record: 21189

Art Unwin wrote:
> On Oct 6, 8:16 am, John Smith <assemblywiz...@gmail.com> wrote:
>> Richard Clark wrote:
>>> ...
>>> 73's
>>> Richard Clark, KB7QHC
>> On second thought, your post reminds me, more, of a womans' slip showing
>> ... I mean, taking for granted, one did not wish to expose what has been
>> exposed in the event.
>>
>> Regards,
>> JS
>
> John, do me a favour and re read Richards last 5 or 10 posts and then
> ask yourself Did Richard provide any thing to you that was usefull? He will only
> supply querstions so that he can belittle those that try to answer.

So much fun to read though. I never miss a post.

- 73 de Mike N3LI -

3466. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 00:19:37 UTC
From: dfinn1@nc.rr.com
Message-ID: <a6696d00-3a03-4d83-85ae-915979307d43@y71g2000hsa.googlegroups.com>
Source record: 21190

On Oct 4, 2:12 pm, John Smith <assemblywiz...@gmail.com> wrote:
> NM5K wrote:
>
> > Yes. But they deal with the real world, not a bunch of conjered up
> > voodoo science.
>
> Funny you should mention that. As, when you peek closely under the hood
> of the NEC engine (at least the one I use and have the source code to),
> it does have a bit of what you call "voodoo science", IMHO ...

Can you believe that? This guy is claiming that the method of moments
is voodoo science! I wonder what is peek under the hood was. What
books did he read? Can he still read books? It's twight time...

>
> > Only people with limited room are likely to be interesting
> > in accepting a decrease in performance, vs using full size
> > antennas. The only place you see me using small antennas on HF
>
> Don't forget us guys who are over 50 and getting tired of maintaining
> large hunks of metal in the sky and fighting the force of gravity Gods
> to do so (in more ways than one!

Not to mention those fierce ether winds.

> And, not to mention neighbors, rules,
> regulations, etc.) With the price of real estate being manipulated near
> "Hong Kong Prices" (what is that, about a million dollars a sq. ft.?),

I guess "John" has not heard about the real estate crash.

> reduced size antennas will only increase in uses and demand ...

That is true because the microwave portions of the spectrum is
becoming so pervasive. But not HF.
>
> Regards,
> JS

Sigh....another senility eruption takes its course.

3467. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 00:52:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0c477d6f-8a57-4683-ae9b-d640ad3d32b3@y79g2000hsa.googlegroups.com>
Source record: 21191

On Oct 6, 7:19 pm, dfi...@nc.rr.com wrote:
> On Oct 4, 2:12 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
> > NM5K wrote:
>
> > > Yes. But they deal with the real world, not a bunch of conjered up
> > > voodoo science.
>
> > Funny you should mention that. As, when you peek closely under the hood
> > of the NEC engine (at least the one I use and have the source code to),
> > it does have a bit of what you call "voodoo science", IMHO ...
>
> Can you believe that? This guy is claiming that the method of moments
> is voodoo science! I wonder what is peek under the hood was. What
> books did he read? Can he still read books? It's twight time...
>
>
>
> > > Only people with limited room are likely to be interesting
> > > in accepting a decrease in performance, vs using full size
> > > antennas. The only place you see me using small antennas on HF
>
> > Don't forget us guys who are over 50 and getting tired of maintaining
> > large hunks of metal in the sky and fighting the force of gravity Gods
> > to do so (in more ways than one!
>
> Not to mention those fierce ether winds.
>
> > And, not to mention neighbors, rules,
> > regulations, etc.) With the price of real estate being manipulated near
> > "Hong Kong Prices" (what is that, about a million dollars a sq. ft.?),
>
> I guess "John" has not heard about the real estate crash.
>
> > reduced size antennas will only increase in uses and demand ...
>
> That is true because the microwave portions of the spectrum is
> becoming so pervasive. But not HF.
>
>
>
> > Regards,
> > JS
>

> Sigh....another senility eruption takes its course.

John could well be correct as certain assumed conditions(assumptions)
were set over and above Maxwell's laws
prior to the program being computed !
These programs are generally used to determine the functions of planar
antennas and the like that do NOT meet
the conditions implied in Maxwell's laws. One condition implicite in
all the laws of the masters is that
Newtons laws with respect to equilibrium must be observed, which rules
out such arrangements as the Yagi.
This is not to say that Maxwell's laws are used incorrectly in antenna
programs,only that it is usually used outside
its intended usage where acountability of all vectors are not
accounted for, which thus provides aproximations
Close enough for horse shoes and lemmings but not for the pursuit of
science along the lines intended by Newton and others.
Best regards
Art Unwin KB9MZ

3468. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 00:55:45 UTC
From: justme <jbleaux@gmail.com>
Message-ID: <28b1jj.t0t.17.1@news.alt.net>
Source record: 21192

Gary, normally, I wouldn't mind building one but I am strapped for time.

Where are the plans? Maybe I could throw one together.

Thanks

j/b

"Gary Smith" <vkthree@gmail.com> wrote in message
news:gca300$q52$1@news-01.bur.connect.com.au...
>I found plans to build one, not sure if you want to go that way or buy
>second hand, i guess you just wanna buy one. My mate has one but he won't
>give it up :<, i think i might have to build one for satellite work on my
>Alinco DR635.
>
>
>
> "justme" <jbleaux@gmail.com> wrote in message
> news:2850u6.4nq.17.1@news.alt.net...
>> Someone has one of these just gathering dust. Please sell it to me.
>>
>> Thanks
>>
>>
>

3469. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 02:13:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcegkbcgu1@news.albasani.net>
Source record: 21193

Richard Clark wrote:
> On Mon, 06 Oct 2008 10:16:39 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>> And you have something intelligent to say? It would have to improve
>>> over your gumming through
>>>>>> NEC engine (at least the one I use and have the source code to),
>>>>>> it does have a bit of what you call "voodoo science"
>> Voodoo science exists within the NEC code
>
> Sorry Brett, gumming repetition does not prove an idea you already
> allowed as being a dead and embraceable disgust. You clearly don't
> have any idea how to progress beyond incantation of trolling
> prosodies.
>
> To your credit, no one expects originality from you. After all, that
> is the point of your (self-supposed) anonymity (an ironic joke I
> enjoy). You could as easily be Sara luxuriating in the flush of your
> TV debate victory (complete with your aw-shucksisms)!
>
> 73's
> Richard Clark, KB7QHC

Well, let me see here, I mean, I want to give you all due respect, and all that ...

Have you presented material since the 1960's for us to preview ... no, no it seems you have not ...

Have you presented any pertinent data which would catch ones interest, no, no you have not ...

Have you presented any antennas which cannot be found in 1960's or prior articles, papers or books, no, no you have not ...

Have, you presented ANY areas which have not been gone over 1000 times ... no, no you have not ....

Have you been a pain in the arse, demanding attention to your mutterings, claiming importance to your mutterings, well, yes, yes you have done that ... YOU HAVE DONE THAT, UNFORTUANTLY!

Other than the bedrock of antenna literature, what have you to offer? What do you have to say that we cannot find in a book by one of your favorite gurus? What new have you offered, since, like say 1960?

Richard, if you are going to invoke minds such as Cecils', such as Roys', such as Walters', such as many would were writing articles when I was an adolescent--could you not reach down and offer just a bit more ... I mean, if it is within your reach ... ROFLOL

No, no you cannot, however, surprise me ... it has happened before ... perhaps you have saved the best for last ... or, is all you have to offer more butt kissing of those who have gone before?

Sad, so very sad, but then, you already know that and have prostituted all your mental prowess getting here ... <imagine-a-tear-in-each-of-my-eyes>

May Heaven provide you with better ...

Regards,
JS

3470. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 02:16:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcegqfcfb1@news.albasani.net>
Source record: 21194

Art Unwin wrote:

>> ...
> Best regard
> Art

You mean, AND THEN, notice the poor *(%^&$(*^*()& b*st*rd pokes fun at you?

Art, don't doubt me buddy, I have noticed!

However, Art, "You are a bit 'out there' even for me ... " <wink>

But, as always, the shade which could be pulled--remains open ...

Regards,
JS

3471. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 02:24:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gceh9p$d2r$1@news.albasani.net>
Source record: 21195

Art Unwin wrote:

>> ...
> Best regard
> Art

Art:

I have a weird sense of humor ...

But, "Poor Richard" (and NOT the invention of Franklin) has found the end of that ... please forgive my bad behavior, my mother would scold me, if she seen my past posts ... but then, she never enjoyed my enjoyment of a good drink either (she is a total tea totaler) <GRIN>

Regards,
JS

3472. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 02:28:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcehh3$d2r$2@news.albasani.net>
Source record: 21196

dfinn1@nc.rr.com wrote:

> ...
> Can you believe that? This guy is claiming that the method of moments
> is voodoo science! I wonder what is peek under the hood was. What
> books did he read? Can he still read books? It's twight time...
> ...

Dummy:

Not only can they believe it, those worth listening to have seen it.
Open a book up and get with 'em! (Or, be enlightened, open a few books!
And, make sure among those books are a few of recent authorship!)

Now, stand at ease -- for the present ... <wink>

Regards,
JS

3473. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 02:31:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcehm6$d2r$3@news.albasani.net>
Source record: 21197

Art Unwin wrote:

> ...
> John could well be correct as certain assumed conditions(assumptions)
> were set over and above Maxwell's laws
> prior to the program being computed !
> These programs are generally used to determine the functions of planar
> antennas and the like that do NOT meet
> the conditions implied in Maxwell's laws. One condition implicite in
> all the laws of the masters is that
> Newtons laws with respect to equilibrium must be observed, which rules
> out such arrangements as the Yagi.
> This is not to say that Maxwell's laws are used incorrectly in antenna
> programs,only that it is usually used outside
> its intended usage where acountability of all vectors are not
> accounted for, which thus provides aproximations
> Close enough for horse shoes and lemmings but not for the pursuit of
> science along the lines intended by Newton and others.
> Best regards
> Art Unwin KB9MZ

Art:

With so many fools (indians?) after my scalp, I am lucky to remain on
the square I occupy ... these fools attempt to drag us back to dark ages ...

Regards,
JS

3474. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 02:46:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2da669c3-64ca-4599-9e75-f3370d2855c9@t42g2000hsg.googlegroups.com>
Source record: 21198

On Oct 6, 9:24 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> > Best regard
> > Art
>
> Art:
>
> I have a weird sense of humor ...
>
> But, "Poor Richard" (and NOT the invention of Franklin) has found the
> end of that ... please forgive my bad behavior, my mother would scold
> me, if she seen my past posts ... but then, she never enjoyed my
> enjoyment of a good drink either (she is a total tea totaler) <GRIN>
>
> Regards,
> JS

John,
I have not read anything over the last two years regarding the M.O.M / NEC
Can you give me a smigeon of information of what is being said of such programs?
There was mention of such in a ARRL compendium a few years back that made mention of the assumption made
on the continuity of an applied sine wave which conflicts I believe with the Tank Circuit equivalent.
And ofcourse some programs do better with respect to proximity effect better than others, but I have never seen anything of major content.
I do know that all four forces of the standard model are included in such programs however they are rarely utelised since they are not really understood
in the present state of the art.
Regards
Art

3475. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 03:12:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcek31fin1@news.albasani.net>
Source record: 21199

Art Unwin wrote:

> ...
> John,
> I have not read anything over the last two years regarding the M.O.M /
> NEC
> Can you give me a smigeon of information of what is being said of such
> programs?
> There was mention of such in a ARRL compendium a few years back that
> made mention of the assumption made
> on the continuity of an applied sine wave which conflicts I believe
> with the Tank Circuit equivalent.
> And ofcourse some programs do better with respect to proximity effect
> better than others, but I have never seen anything of major content.
> I do know that all four forces of the standard model are included in
> such programs however they are rarely utelised since they are not
> really understood
> in the present state of the art.
> Regards
> Art

Art:

Actually, Roy, or one (or all the hams) engaged in writing an interface
to the NEC engine (MMANA-GAL and 'those guys' -- do an internet search,
their emails are readily available), which frees us from having to enter
the actual numerical data into a text file, would be much better gurus ...

As you know, I am much more interested it what we can't see, at the
moment -- the either ... Art, I have as many questions as you ...

Regards,
JS

3476. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 06:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1223359501@panix.com>
Source record: 21200
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

3477. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 07:21:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3u1me4hks5qsld8lq3l7855vt29c0ldqji@4ax.com>
Source record: 21051

On Mon, 06 Oct 2008 19:13:27 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>>>Richard Clark wrote:
>>>> And you have something intelligent to say? It would have to improve
>>>> over your gumming through
>>>> NEC engine (at least the one I use and have the source code to),
>>>> it does have a bit of what you call "voodoo science"
>>> Voodoo science exists within the NEC code
>>
>> Sorry Brett, gumming repetition does not prove an idea you already
>> allowed as being a dead and embraceable disgust. You clearly don't
>> have any idea how to progress beyond incantation of trolling
>> prosodies.
>>
>> To your credit, no one expects originality from you. After all, that
>> is the point of your (self-supposed) anonymity (an ironic joke I
>> enjoy). You could as easily be Sara luxuriating in the flush of your
>> TV debate victory (complete with your aw-shucksisms)!
>
>Well, let me see here, I mean, I want to give you all due respect, and
>all that ...

No you don't. This maudlin appeal is weak tea, save it for Authur who
shares your disability in lack of originality.

I do applaud the parade of the lame and lazy excuses you two manage to
bluff up in the guise of outrage. What a hoot! Insisting others to
prove your claims has to rank up there on the honor roll of welfare
queens. If the Congress had a bailout for ineptitude (and it has been
fairly proven they do), they would have granted you earmarks for your
mutual admiration society diary entries. You guys scribble out those
tear stained pages like they earn tax credits. Weep on! The election
cycle still has 30 days of promises to be made to the technically
indigent.

73's
Richard Clark, KB7QHC

3478. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 07:44:03 UTC
From: ltdoc@yahoo.com
Message-ID: <125e63c5-7cc1-441d-bd2a-837a83f4d483@q5g2000hsa.googlegroups.com>
Source record: 21052

Richard,
Calling people 'name' here is fairly common place. But making
comparison to politician is just plain nasty!
- 'Doc

3479. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 08:06:47 UTC
From: Gary Smith <vkthree@gmail.com>
Message-ID: <gcf5bk$50e$1@news-01.bur.connect.com.au>
Source record: 21053

http://www.qsl.net/ve3rgw/uvdup.html

Note it it is referred to as a duplexer lol.

"justme" <jbleaux@gmail.com> wrote in message
news:28b1jj.t0t.17.1@news.alt.net...
> Gary, normally, I wouldn't mind building one but I am strapped for time.
>
> Where are the plans? Maybe I could throw one together.
>
> Thanks
>
> j/b
>
>
> "Gary Smith" <vkthree@gmail.com> wrote in message
> news:gca300$q52$1@news-01.bur.connect.com.au...
>>I found plans to build one, not sure if you want to go that way or buy
>>second hand, i guess you just wanna buy one. My mate has one but he won't
>>give it up :<, i think i might have to build one for satellite work on my
>>Alinco DR635.
>>
>>
>>
>> "justme" <jbleaux@gmail.com> wrote in message
>> news:2850u6.4nq.17.1@news.alt.net...
>>> Someone has one of these just gathering dust. Please sell it to me.
>>>
>>> Thanks
>>>
>>>
>>
>
>

3480. Rotator controller

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 11:44:46 UTC
From: Gary Smith <vkthree@gmail.com>
Message-ID: <gcfi4d$h06$1@news-01.bur.connect.com.au>
Source record: 21054

Hi, looking for a KR-450 Controll box if anyone has one for sale.

Thanks

Gary
VK3LCD

3481. Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 13:02:52 UTC
From: Chevy454 <nunyas@aol.com>
Message-ID: <kbnme4ppof29hj9fh7q896jpnnkh02b7tj@4ax.com>
Source record: 21055

How effective is it to cut a one-band dipole for the highest frequency desired and clipping an extension on one leg to get low SWR on lower frequencies?

Ken KC2JDY

3482. Re: Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 13:29:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <VuJGk.3952$Ws1.1224@nlpi064.nbdc.sbc.com>
Source record: 21056

Chevy454 wrote:
> How effective is it to cut a one-band dipole for the highest frequency
> desired and clipping an extension on one leg to get low SWR on lower
> frequencies?

Would probably work with ladder-line, but not with coax.
You would be turning your antenna into an off-center-fed
dipole with a relatively high feedpoint impedance.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3483. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 15:51:20 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <cp0ne45kp36urlfv96gi35jqdtl6qs9jes@4ax.com>
Source record: 21057

On Mon, 6 Oct 2008 19:55:45 -0500, "justme" <jbleaux@gmail.com> wrote:

>Gary, normally, I wouldn't mind building one but I am strapped for time.
>Where are the plans? Maybe I could throw one together.

<http://www.southgatearc.org/techtips/diplexer.htm>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3484. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 15:52:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hr0ne41pca813fn93pdq81r5b4mup3uk2e@4ax.com>
Source record: 21058

On Tue, 7 Oct 2008 00:44:03 -0700 (PDT), ltdoc@yahoo.com wrote:

>Calling people 'name' here is fairly common place. But making
>comparison to politician is just plain nasty!

Yes, I know. It keeps me up at nights worrying about it.

About the politicians that is, they deserve better associations than
to antenna inventors; and at 12% approval, politicians have higher
validation. After all, they at least offer you a solution even if,
like antenna inventions, it doesn't work.

Can you imagine *we the people* telling our leaders to "fix it" and
our leaders asking us "How?"

Hmmmm, Maybe the happiness twins have something going!
How many here would react positively to a write-in campaign to elect
them for somethin'? I dropped the 'g to sound folksy like Brett %-)

73's
Richard Clark, KB7QHC

3485. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 16:49:59 UTC
From: richardharrison@webtv.net
Message-ID: <18670-48EB9337-1814@storefull-3253.bay.webtv.net>
Source record: 21059

Roy Lewallen wrote:
"What`s fractal theory?"

The IEEE lists a paper appearimg in "Antennas and Propagation 2007". EuCAP 2007.

Claims are size can be shrunk from two to four times without much loss in performance, and that the antenna is naturally broad in bandwidth. Two criteria must be met. The antenna must be symmetrical about a point, and it must be self-similar, having the same appearance at every scale.

Dr. Nathan Cohen (Chip) is founder of Fractal Antenna Systems, Inc. He is also a professor of Applied Science and Telecommunications at Boston University.

Best regards, Richard Harrison, KB5WZI

3486. Re: Hy-Gain AV-14AVQ

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 17:07:46 UTC
From: David Thompson <thompson@mindspring.com>
Message-ID: <2ZadnTB2Ntf7CnbVnZ2dnUVZ_h2dnZ2d@earthlink.com>
Source record: 21060

The 14AVQ has several coils that act as traps to isolate 10, 15, and 20 plus load 40. So no a single coil will not work

The AVS vertical made with a single 18 foot piece of aluminum might as it uses B&W coil stock and a connector wire with a clip. The coil in 3" in diameter. Anything less would require experimenting
to match the bands.
Dave K4JRB

"Danny_x" <Danny_x.32c5904@radiobanter.com> wrote in message
news:Danny_x.32c5904@radiobanter.com...
>
> Does anyone know the transformation of the loading coil of this antenna?
> Or does someone have a picture of that coil? Will an 9:5 coil of an old
> CB antenna work?
>
>
>
>
> --
> Danny_x

3487. Re: Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 17:34:10 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <df3e8c78-de71-4851-8ee7-c69754246d54@n38g2000prl.googlegroups.com>
Source record: 21061

On Oct 7, 6:02 am, Chevy454 <nun...@aol.com> wrote:
> How effective is it to cut a one-band dipole for the highest frequency
> desired and clipping an extension on one leg to get low SWR on lower
> frequencies?
>
> Ken KC2JDY

Still the same band, right? Try it; I think you'll find it works
well. Though it unbalances the leg length slightly, you probably
won't notice much difference between lengthening one leg or equally
lengthening both. It may be possible for you to try equally
lengthening both just to see, if you care.

Cheers,
Tom

3488. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 17:34:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <QuGdnWOeiNE0AHbVnZ2dnUVZ_tfinZ2d@posted.easystreetonline>
Source record: 21062

Richard Harrison wrote:
> Roy Lewallen wrote:
> "What`s fractal theory?"
>
> The IEEE lists a paper appearimg in "Antennas and Propagation 2007".
> EuCAP 2007.
>
> Claims are size can be shrunk from two to four times without much loss
> in performance, and that the antenna is naturally broad in bandwidth.
> Two criteria must be met. The antenna must be symmetrical about a point,
> and it must be self-similar, having the same appearance at every scale.
>
> Dr. Nathan Cohen (Chip) is founder of Fractal Antenna Systems, Inc. He
> is also a professor of Applied Science and Telecommunications at Boston
> University.
>
> Best regards, Richard Harrison, KB5WZI
>

As some of the longer term readers of this group might recall, the same or superior characteristics can be obtained by shrinking antennas by having their perimeters follow a random, rather than fractal, path. A random meander pattern submitted by Dr. Steve Best, who also wrote several IEEE papers on the subject, was shown to be superior to a fractal design in the quality factor criteria put forth by Chip in a "challenge" the latter publicized here some years ago (2000). Anyone interested is encouraged to go to http://eznec.com/misc/MI2/, read the 0Notes.txt file, and download and look at the various competing designs. The designs are in the form of EZNEC files, which can be viewed with any EZNEC program type including the demo.

But this doesn't explain what "fractal theory" is, unless it means the creation of antennas whose perimeters follow a fractal curve. In that case, "fractal theory" hasn't been shown to be superior to "random theory", and in some ways really no better than "square theory" or "round theory". Sounds a lot better when trying to talk potential investors into reaching for their wallets, though.

Roy Lewallen, W7EL

3489. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 17:47:59 UTC
From: richardharrison@webtv.net
Message-ID: <28482-48EBA0CF-1971@storefull-3252.bay.webtv.net>
Source record: 21063

J.B. wrote:
"As soon as the load gets reactive, the phase between the voltage and current are different and the length of the coax and its velocity factor now contribute unless it is really short compared with wavelength."

The Bird wattmeter won`t affect tuning and loading of an antenna if it is made part of a half-wavelength of line inserted for the measurement. This may be important at VHF and higher frequencies. The inserted line and its meter need to be specially tailored to make up a half wavelength, if it is to be inserted in nonflat lines. For several different frequencies, several line measurement assemblies are required.

Best regards, Richard Harrison, KB5WZI

3490. Re: Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 17:52:11 UTC
From: Chevy454 <nunyas@aol.com>
Message-ID: <q68ne417a0be590het9576ga2sbio3d0t1@4ax.com>
Source record: 21064

On Tue, 07 Oct 2008 08:29:14 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:
>Would probably work with ladder-line, but not with coax.
>You would be turning your antenna into an off-center-fed
>dipole with a relatively high feedpoint impedance.

Guess I need a tuner, then. A small piece of wire is more convenient,
but c'est la vie.

I'll cut the legs for the center of the range I will be using and keep
SWR low with a tuner.

Ken KC2JDY

3491. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 18:19:59 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <df9ne4dees7snqmhjc7eab88vjg8qsvbdr@4ax.com>
Source record: 21065

On Tue, 7 Oct 2008 11:49:59 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Dr. Nathan Cohen (Chip) is founder of Fractal Antenna Systems, Inc. He
>is also a professor of Applied Science and Telecommunications at Boston
>University.

I have no idea what "fractal theory" means. It's not a theory. It's a mathematical alogorithm with divisible self-similar properties that can be applied to antenna design.

Their web site seems to have been suspended for some reason.
<http://www.fractenna.com/>
is getting redirected to:
<http://ns4.netatlantic.com/suspended.page/>

Overview and references:
<http://en.wikipedia.org/wiki/Fractal_antenna>
Note that the article hints that a fractal antenna are intended to maximize the element lengths through self-similar repetative patterns. Whether a fractal (tubulence model) or a random meandering array is more effective is subject to some debate. Fractals may have a more efficient packing factor. (note: I don't pretend to know any more about fractal antennas than I've read).

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3492. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 18:37:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <dc29b721-61c3-4633-b905-a5bcbd449b68@p31g2000prf.googlegroups.com>
Source record: 21066

On Oct 7, 1:19 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Tue, 7 Oct 2008 11:49:59 -0500, richardharri...@webtv.net (Richard
>
> Harrison) wrote:
> >Dr. Nathan Cohen (Chip) is founder of Fractal Antenna Systems, Inc. He
> >is also a professor of Applied Science and Telecommunications at Boston
> >University.
>
> I have no idea what "fractal theory" means. It's not a theory. It's
> a mathematical alogorithm with divisible self-similar properties that
> can be applied to antenna design.
>
> Their web site seems to have been suspended for some reason.
> <http://www.fractenna.com/>
> is getting redirected to:
> <http://ns4.netatlantic.com/suspended.page/>
>
> Overview and references:
> <http://en.wikipedia.org/wiki/Fractal_antenna>
> Note that the article hints that a fractal antenna are intended to
> maximize the element lengths through self-similar repetative patterns.
> Whether a fractal (tubulence model) or a random meandering array is
> more effective is subject to some debate. Fractals may have a more
> efficient packing factor. (note: I don't pretend to know any more
> about fractal antennas than I've read).
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

That is exactly correct. The fractal antenna is an optimised meander
antenna where
the radiator "packing" per unit space is superior. It is just that a
fractal pattern has a
mathematical background where impedance can be garranteed where-as a
meander line design is subject
to human error. I see no reason why one antenna should be seen as
"better" than the other
if the radiating length and the unit areas are the same. I also see
this as another example where people talk down on this antenna
as a way of resisting change. Obviously industry see it as
particularly usefull especially with encapsulated designs and Chip is

making a lot of money
despite the dirisivenes of the "experts" on the newsgroup..
Art

3493. Re: Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 18:49:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <OaOGk.2537$x%.1126@nlpi070.nbdc.sbc.com>
Source record: 21067

Chevy454 wrote:
> On Tue, 07 Oct 2008 08:29:14 -0500, Cecil Moore <nospam@w5dxp.com>
> wrote:
>> Would probably work with ladder-line, but not with coax.
>> You would be turning your antenna into an off-center-fed
>> dipole with a relatively high feedpoint impedance.
>
> Guess I need a tuner, then.

I may have been mistaken about your intent. Are you using
the above idea to extend your frequency range within a
single band? I earlier assumed you were going for multi-
band operation.

If you are expanding frequency coverage within a single
band, your idea should work just fine.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3494. Re: Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 18:52:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <7oane4dmfa5og6fta5lqnr4tekl4lglupn@4ax.com>
Source record: 21068

On Tue, 07 Oct 2008 09:02:52 -0400, Chevy454 <nunyas@aol.com> wrote:

>How effective is it to cut a one-band dipole for the highest frequency
>desired and clipping an extension on one leg to get low SWR on lower
>frequencies?
>Ken KC2JDY

What band? What frequency range? How much space do you have? Numbers
are always helpful.

I dunno about an asymmetric dipole. I've never seen it done, which
makes me suspicious. It should be very easy to model to see what
happens. Numbers?

If you want bandwidth from an HF dipole, look into a cage or birdcage
antenna. It's especially effective at 160 and 75/80 meters. There's
no increase in gain over a dipole, but the usable bandwidth is much
better. Even better, is a biconical, which is a cage antenna where
all the wires come together at the feed point, and are spread into a
cone shape at the ends. You can get several decades of usable
bandwidth out of a biconical with a fairly constant gain. That's why
it's used for EMC/RFI testing:
<http://www.smeter.net/antennas/wire-cage-dipole.php>
<http://www.arrl.org/news/stories/2001/05/03/2/>
<http://personal.ee.surrey.ac.uk/Personal/D.Jefferies/antennexarticles/cage.html>
<http://jproc.ca/rrp/whitehorse.html> (bottom of page)
<http://images.google.com/images?hl=en&q=cage+dipole>
<http://www.smc-comms.com/cage_dipole.html>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3495. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 19:19:14 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gcgcni$1kq4$1@f04n12.cac.psu.edu>
Source record: 21069

Roy Lewallen wrote:
> Richard Harrison wrote:
>> Roy Lewallen wrote:
>> "What`s fractal theory?"
>>
>> The IEEE lists a paper appearimg in "Antennas and Propagation 2007".
>> EuCAP 2007.
>>
>> Claims are size can be shrunk from two to four times without much loss
>> in performance, and that the antenna is naturally broad in bandwidth.
>> Two criteria must be met. The antenna must be symmetrical about a point,
>> and it must be self-similar, having the same appearance at every scale.
>>
>> Dr. Nathan Cohen (Chip) is founder of Fractal Antenna Systems, Inc. He
>> is also a professor of Applied Science and Telecommunications at Boston
>> University.
>>
>> Best regards, Richard Harrison, KB5WZI
>>
>
> As some of the longer term readers of this group might recall, the same
> or superior characteristics can be obtained by shrinking antennas by
> having their perimeters follow a random, rather than fractal, path. A
> random meander pattern submitted by Dr. Steve Best, who also wrote
> several IEEE papers on the subject, was shown to be superior to a
> fractal design in the quality factor criteria put forth by Chip in a
> "challenge" the latter publicized here some years ago (2000). Anyone
> interested is encouraged to go to http://eznec.com/misc/MI2/, read the
> 0Notes.txt file, and download and look at the various competing designs.
> The designs are in the form of EZNEC files, which can be viewed with any
> EZNEC program type including the demo.
>
> But this doesn't explain what "fractal theory" is, unless it means the
> creation of antennas whose perimeters follow a fractal curve. In that
> case, "fractal theory" hasn't been shown to be superior to "random
> theory", and in some ways really no better than "square theory" or
> "round theory". Sounds a lot better when trying to talk potential
> investors into reaching for their wallets, though.

Before we get too far off base here, Fractal theory does not refer to
fractal antennas. It is an entire field that might be characterized as
the science of self similarity.

Somehow I see Richard C. making a comparison any moment here in his
latest skirmish with a couple other posters..... ;^)

- 73 de Mike N3LI -

3496. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 19:22:00 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <vscne4p9qsesdg7bqvca04llaftfkoc73s@4ax.com>
Source record: 21070

On Tue, 7 Oct 2008 11:37:54 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>That is exactly correct.

Thanks. However, having you endorse my pontifications makes me worry
that I may have said something wrong, or made a mistake. I'll double
check.

>The fractal antenna is an optimised meander
>antenna where
>the radiator "packing" per unit space is superior. It is just that a
>fractal pattern has a
> mathematical background where impedance can be garranteed where-as a
>meander line design is subject
>to human error.

There are various tests for randomness.
<http://www.ciphersbyritter.com/RES/RANDTEST.HTM>
Random number generators are well developed.
<http://www.random.org>
I see no reason for "human error" unless you use a coin toss or dice
throw to design your antennas, which would be quite tedious.

> I see no reason why one antenna should be seen as
>"better" than the other
> if the radiating length and the unit areas are the same.

I do. Trying to shoe horn efficient radiators inside a small package,
such as a cell phone is not a trivial exercise. There are lots of
compromises that can be made if the design is constrained in size,
such as tolerating a high VSWR, strange pattern, and bandwidth
limitations. Incidentally, the primary limiting factor is size,
followed by SAR (specific absorption rate). Gain and pattern are
lesser priorities. VSWR is somewhere near the bottom.

>I also see
>this as another example where people talk down on this antenna
>as a way of resisting change.

Resisting is a complex problem, that includes imaginary parts. Any
reactance introduced into your change will convert your resistance
into an impedance. Think of it as people impeding change, not
resisting change.

>Obviously industry see it as
>particularly usefull especially with encapsulated designs and Chip is

>making a lot of money
>despite the dirisivenes of the "experts" on the newsgroup..

Ummm.... where do I collect this money? I could tell a few stories
about chip antenna companies, but I'm sworn to simulated ignorance.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3497. Re: Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 19:36:24 UTC
From: nm5k@wt.net
Message-ID: <6ab525e0-1dbd-4fb0-9086-e4b74b42df57@a19g2000pra.googlegroups.com>
Source record: 21071

On Oct 7, 8:02 am, Chevy454 <nun...@aol.com> wrote:
> How effective is it to cut a one-band dipole for the highest frequency
> desired and clipping an extension on one leg to get low SWR on lower
> frequencies?
>
> Ken KC2JDY

It works. You are not shifting the center point of the dipole
enough to really cause any problems as far as balance, etc.
I do it all the time with portable dipoles.

3498. Re: Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 20:31:05 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <wGPGk.7994$t76.3258@newsfe06.iad>
Source record: 21072

Ken,

If you design the antenna for a high frequency, and then start clipping, it will resonate at a higher frequency. No amount of clipping is going to give you low SWR at a lower frequency.
--
-larry
K8UT
"Chevy454" <nunyas@aol.com> wrote in message
news:kbnme4ppof29hj9fh7q896jpnnkh02b7tj@4ax.com...
> How effective is it to cut a one-band dipole for the highest frequency
> desired and clipping an extension on one leg to get low SWR on lower
> frequencies?
>
> Ken KC2JDY

3499. Re: hf shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 21:19:30 UTC
From: ml <m@di.net>
Message-ID: <m-CB82B7.17193007102008@news.optonline.net>
Source record: 21073

In article <6dyEk.2185$c45.1125@nlpi065.nbdc.sbc.com>,
Jim-NN7K <nn7kexk7zfg@noway.net.> wrote:

> More effective to build a Faraday Cage around the elevator room
> (service techs use these for RF tight enclosures).
> Jim NN7K
>
> ml wrote:
> > hi
> >
> > i have a general shielding question i realize that overall it
> > might be a impractical thing to build but looking at it i wonder...
> >
> > ontop of my roof is elevator room it's about 20x20
> >
> > flat roof
> >
> > lets suppose the motor controller throws out 1.7 to 30mhz at
> > s9+ (all over)
> >
> > lets say i take a single 20x20 sheet of copper put it on the top
> > roof (assume i could ground it if need be)
> >
> > lets say before i put the copper i measured s9
> >
> > what shielding if any might i see "S" wise??
> >
> > i understand interference would still be radiating form the rest
> > of the unshielded structure but wondering if measuring ontop of the
> > copper sheeting id' observe any attenuation?? meaning would the
> > signal penatrate that copper? -- and if so around how
> > much??(alot/very little)
> >
> >
> > tnx

<<<<<>>>wanted to thank everyone for responding and offering some tips

just a few FYI's

I doubt i could afford or be allowed to build a 'cage' around the
entire room

The motor emits to noticable noise

the motor controller in the cabinet aka magnetek600 sure does.

i would be easy i guess since it's rather small um loaf of
bread sized to build a copper mesh around it i was considering
going to a a/c place and have them do it professionally

measuring w/my ft-817 and a small hand held spectrum analyzer i
measure almost no noise along the input power lines nor any
out to the motor there is 1 sensor cable to the motor also
no noise all are run in seperate conduit

best as i can measure that is

appreciate all the help folks

3500. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 21:47:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1clne49hfdk0ejam4o1bpetsvp0c8fde2h@4ax.com>
Source record: 21074

On Tue, 07 Oct 2008 12:22:00 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>>I also see
>>this as another example where people talk down on this antenna
>>as a way of resisting change.
>
>Resisting is a complex problem, that includes imaginary parts. Any
>reactance introduced into your change will convert your resistance
>into an impedance. Think of it as people impeding change, not
>resisting change.

Hi Jeff,

You have quoted one of Art's more cryptic statements, especially when
he hasn't the vaguest notion of what a fractal antenna is and has
talked it down on many occasions when I suggested he visit a site with
more 300 pages of modeling and measured results:
http://www.qsl.net/kb7qhc/antenna/fractal/index.htm

This stuff is over a decade to 15 years old, and possibly contains
(long) prior Art now found in (new) patents claiming to be original
work. ;-)

I worked out a general rule for fractal design, but it is of academic
interest only, and is distinguished in that role by its lack of
discussion here. ;-)

In fact, I can well imagine Art, in high dudgeon, would furiously
refuse to go there. I mention this only because that vaudevillian act
is so outrï¿½ as to be camp Art.

The test for this distinguished role follows from it being discussed
hereafter, or the language of this posting. :-0
(I vote for Artrï¿½.)

73's
Richard Clark, KB7QHC

3501. Re: KC8QJP and N8WWM Glory Hole Party - KC8QJP will be offering discount tax consulting through the gloryhole while N8WWM is on his knees

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 22:56:34 UTC
From: "n8wwm mrbindwell (fatboy)" <dougay@nospam.com>
Message-ID: <gcgpfa$ct7$1@news.mixmin.net>
Source record: 21075
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.cb

"Leland C Scott" <kc8ldo@madisonhts.com> wrote in message
news:gc086k$u0v$1@news.tornevall.net...
> "n8wwm mrbindwell (fatboy)" wrote:
>
> http://img254.imageshack.us/my.php?image=dougpetro3yk1.jpg
>
>> Pick up some crisco on your way over tonight, KC8QJP needs a good
>> slathering on her hind quarters.
>>
>> She's also getting ready to start her tax return posts again like she
>> does every year. You remember those..
>>
>> http://tinyurl.com/46teqq
>>
>> She says she wants to add some pics of her and me to them this year.
>>
>>
>>
> Cool!
>
they're having it over here, queerboy.

Lance & Lisa Adair
10431 Jackman Rd
Temperance, MI 48182-9629
(734) 854-2426

3502. shownatovah still day 123 of the lawsuit watch the suit is of course still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 23:09:33 UTC
From: an old freind <kb9rqz-2@hotmail.com>
Message-ID: <43243b76-7a56-4ce1-8ca6-f86d1d09c3de@a18g2000pra.googlegroups.com>
Source record: 21076
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.cb

On Oct 7, 6:56 pm, "n8wwm mrbindwell \(fatboy\)" <dou...@nospam.com>
wrote:
> "
fake

3503. Re: [FRACTAL] Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 23:15:36 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngenrco.1oin.bit-bucket@shell.config.com>
Source record: 21077

Please folks, put "fractal" in the Subject: header for this BS
so that my filters (and many others, I'll bet) can 'process' it.

3504. Re: Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-07 23:19:06 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <H9OdnUTT2In7c3bVnZ2dnUVZ_rPinZ2d@comcast.com>
Source record: 21078

"Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET> wrote in message
news:wGPGk.7994$t76.3258@newsfe06.iad...
> Ken,
>
> If you design the antenna for a high frequency, and then start clipping,
> it will resonate at a higher frequency. No amount of clipping is going to
> give you low SWR at a lower frequency.
> --
> -larry
> K8UT

I think he is talking about clipping extra wire to one end, as with a clip lead, not clipping off a piece of existing wire. That would not be repeatable anyhow.

Tam/WB2TT

> "Chevy454" <nunyas@aol.com> wrote in message
> news:kbnme4ppof29hj9fh7q896jpnnkh02b7tj@4ax.com...
>> How effective is it to cut a one-band dipole for the highest frequency
>> desired and clipping an extension on one leg to get low SWR on lower
>> frequencies?
>>
>> Ken KC2JDY
>
>

3505. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 01:24:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gch23qafv1@news.albasani.net>
Source record: 21079

ltdoc@yahoo.com wrote:
> Richard,
> Calling people 'name' here is fairly common place. But making
> comparison to politician is just plain nasty!
> - 'Doc
>

LOL ... I like your way of thinking.

OK. Just consider me Obama and "him" McCain ... <grin>

Regards,
JS

3506. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 01:36:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gch2ra$as6$1@news.albasani.net>
Source record: 21080

Richard Clark wrote:
> On Mon, 06 Oct 2008 19:13:27 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>>> Richard Clark wrote:
>>>>> And you have something intelligent to say? It would have to improve
>>>>> over your gumming through
>>>>> NEC engine (at least the one I use and have the source code to),
>>>>> it does have a bit of what you call "voodoo science"
>>>> Voodoo science exists within the NEC code
>>> Sorry Brett, gumming repetition does not prove an idea you already
>>> allowed as being a dead and embraceable disgust. You clearly don't
>>> have any idea how to progress beyond incantation of trolling
>>> prosodies.
>>>
>>> To your credit, no one expects originality from you. After all, that
>>> is the point of your (self-supposed) anonymity (an ironic joke I
>>> enjoy). You could as easily be Sara luxuriating in the flush of your
>>> TV debate victory (complete with your aw-shucksisms)!
>> Well, let me see here, I mean, I want to give you all due respect, and
>> all that ...
>
> No you don't. This maudlin appeal is weak tea, save it for Authur who
> shares your disability in lack of originality.
>
> I do applaud the parade of the lame and lazy excuses you two manage to
> bluff up in the guise of outrage. What a hoot! Insisting others to
> prove your claims has to rank up there on the honor roll of welfare
> queens. If the Congress had a bailout for ineptitude (and it has been
> fairly proven they do), they would have granted you earmarks for your
> mutual admiration society diary entries. You guys scribble out those
> tear stained pages like they earn tax credits. Weep on! The election
> cycle still has 30 days of promises to be made to the technically
> indigent.
>
> 73's
> Richard Clark, KB7QHC

OK. I have been kind, actually. Really? You just don't matter ... I
have suggested it in my text to you, consider my text summarized with
the simple statement.

Besides, you are a long-winded-blow-hard ... you remind me of the guy
who I just walk away from my rig, come back ten minutes later, with a
cup of coffee, and wait a long time for him to finish ... a long wait,

most likely ... :-(

Regards,
JS

3507. Re: Observations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 03:43:36 UTC
From: JB <nospam@goofball.net>
Message-ID: <I%VGk.1470$P5.380@nwrddc02.gnilink.net>
Source record: 21081

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:28482-48EBA0CF-1971@storefull-3252.bay.webtv.net...
> J.B. wrote:
> "As soon as the load gets reactive, the phase between the voltage and
> current are different and the length of the coax and its velocity factor
> now contribute unless it is really short compared with wavelength."
>
> The Bird wattmeter won`t affect tuning and loading of an antenna if it
> is made part of a half-wavelength of line inserted for the measurement.
> This may be important at VHF and higher frequencies. The inserted line
> and its meter need to be specially tailored to make up a half
> wavelength, if it is to be inserted in nonflat lines. For several
> different frequencies, several line measurement assemblies are required.
>
> Best regards, Richard Harrison, KB5WZI
>
Hence, impractical for multiband use, where the sampling line might just as well be left in place and considered part of the whole line length even for those times when you have to insert a 5K watt slug (because your 500 watt amp pegs the 1000 watt slug) just so you can fully load for maximum forward voltage with your Pi-Net.

Certainly useful for your 2m antenna being fed with surplus CATV hardline so you can adjust the line length for a multiple and find a good SWR. But are there still reflections? Yes.

3508. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 04:26:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <esboe412rqbjr69u3ttc78o5q6lgv468nh@4ax.com>
Source record: 21082

On Tue, 07 Oct 2008 18:36:36 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>OK. I have been kind, actually. Really? You just don't matter ...

Boy, self contradiction in the space of a breath.

That, or we are into parsing. What kind have you been?

Talk about gassing on, the two of you could be the solution to the
energy crisis if we could just get you guys off the endangered
wheezers list.

73's
Richard Clark, KB7QHC

3509. Re: Hy-Gain AV-14AVQ

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 05:44:12 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <MMXGk.4002$sc2.36@news-server.bigpond.net.au>
Source record: 21083

Here is the link to the assembly instructions of the AV-18AVQII.
http://www.hy-gain.com/man/pdf/AV-18AVQII.pdf

As the previous poster said it uses traps.

Maybe you meant the AV-18VS which uses the coil at the base.

I would be interested if someone has the details of the coil, diameter,
number of turns and the spacing and the wire diameter as well.

Here is the link to the AV -18VS assy instructions:
http://www.hy-gain.com/man/pdf/AV-18VS.pdf

HH

"David Thompson" <thompson@mindspring.com> wrote in message
news:2ZadnTB2Ntf7CnbVnZ2dnUVZ_h2dnZ2d@earthlink.com...
> The 14AVQ has several coils that act as traps to isolate 10, 15, and 20
> plus load 40. So no a single coil will not work
>
> The AVS vertical made with a single 18 foot piece of aluminum might as it
> uses B&W coil stock and a connector wire with a clip. The coil in 3" in
> diameter. Anything less would require experimenting
> to match the bands.
> Dave K4JRB
>
> "Danny_x" <Danny_x.32c5904@radiobanter.com> wrote in message
> news:Danny_x.32c5904@radiobanter.com...
>>
>> Does anyone know the transformation of the loading coil of this antenna?
>> Or does someone have a picture of that coil? Will an 9:5 coil of an old
>> CB antenna work?
>>
>>
>>
>>
>> --
>> Danny_x
>
>

3510. Balanced transmission lines in a progressive wave regime. 'Cos seeing is believing!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 11:32:56 UTC
From: "www.Radiondistics.com" <francesco.errante@tiscali.it>
Message-ID: <76c28936-1589-4ae0-ad6c-5dae57222cd8@42g2000pry.googlegroups.com>
Source record: 21084

A step by step experimental verification of the aperiodic behaviour of
a properly adapted balanced transmission line.

by

Francesco Errante

www.Radiondistics.com

3511. Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 13:11:04 UTC
From: Howard Kowall <hkowall@shaw.ca>
Message-ID: <Ij2Hk.54207$gY7.37460@newsfe19.iad>
Source record: 21085

Has anyone ever tried putting a dipole antenna up with the center insulator being a high power 50 ohm dummy load,then connecting the dipole elements across the dummy load.This would always keep a suitable match at 50 ohms and satisfy the transceiver.Would most of the power go to the dummy load and not the elements and wouldn't radiate.In thinking about this it all logically makes sense the load would really never change or would it have some reactance with the dipole elements.
Thanx All
Howard
VE4ISP

3512. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 13:50:38 UTC
From: ltdoc@yahoo.com
Message-ID: <12c6ffc3-f2d4-4aeb-a87a-0fa7a2e1cde3@p10g2000prf.googlegroups.com>
Source record: 21086

Howard,
Yes. Been some years ago now, but there was even a commercial
version sold (did pretty well too). Wish I could remember the name of
that thingy.
- 'Doc

3513. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 14:45:27 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gcih27$15km$1@f04n12.cac.psu.edu>
Source record: 21087

Howard Kowall wrote:
> Has anyone ever tried putting a dipole antenna up with the center insulator
> being a high power 50 ohm dummy load,then connecting the dipole elements
> across the dummy load.

Yes. There was a commercial antenna quite a few years ago that did just
that. I think QST did a review on it. It wasn't advertised as a resistor
across the end of the coax, but they either tore the thing apart or
X-rayed it, and there it was.

> This would always keep a suitable match at 50 ohms
> and satisfy the transceiver. Would most of the power go to the dummy load and
> not the elements and wouldn't radiate.In thinking about this it all
> logically makes sense the load would really never change or would it have
> some reactance with the dipole elements.

I guess, But, and hold on to your hat... 50 ohms SWR is not an
indication that an antenna works at all, much less that it works well!

Imagine where the power is going to and what it is becoming. To the
resistor, and it is becoming heat. Anything that is radiated is almost
an accident.

- 73 de Mike N3LI -

3514. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 15:23:36 UTC
From: JB <nospam@goofball.net>
Message-ID: <Yf4Hk.1499$yI6.280@nwrddc01.gnilink.net>
Source record: 21088

"Howard Kowall" <hkowall@shaw.ca> wrote in message
news:Ij2Hk.54207$gY7.37460@newsfe19.iad...
> Has anyone ever tried putting a dipole antenna up with the center
insulator
> being a high power 50 ohm dummy load,then connecting the dipole elements
> across the dummy load.This would always keep a suitable match at 50 ohms
> and satisfy the transceiver.Would most of the power go to the dummy load
and
> not the elements and wouldn't radiate.In thinking about this it all
> logically makes sense the load would really never change or would it have
> some reactance with the dipole elements.
> Thanx All
> Howard
> VE4ISP
>
It's lossy, but antenna tuners might be too much fiddling.

3515. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 15:52:04 UTC
From: JB <nospam@goofball.net>
Message-ID: <EG4Hk.1595$P5.791@nwrddc02.gnilink.net>
Source record: 21089

> http://www.qsl.net/ve3rgw/uvdup.html
>
> Note it it is referred to as a duplexer lol.
>
Not a bad deal since you have to replace the connectors on the stupid ones you buy.

Looks like pretty good isolation too. Most off the shelf units are 45-60 db isolation. Double shielded pigtails eliminates any worry of cross coupling and the loss for one connector pair anyway. How does it do with 100w FM and long QSOs? Seems like SM throughout would be called for.

3516. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 16:25:46 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngepnoa.qi.bit-bucket@shell.config.com>
Source record: 21090

On Wed, 8 Oct 2008 08:11:04 -0500, Howard Kowall wrote:
> Has anyone ever tried putting a dipole antenna up with the center insulator
> being a high power 50 ohm dummy load,then connecting the dipole elements
> across the dummy load.

> This would always keep a suitable match at 50 ohms
> and satisfy the transceiver.

You seem to understand nothing about parallel resistances/reactances.

3517. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 16:59:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <t2ppe4h3l4chptf55egbnldsl426b1lsv6@4ax.com>
Source record: 21091

On Wed, 8 Oct 2008 08:11:04 -0500, "Howard Kowall" <hkowall@shaw.ca>
wrote:

>Has anyone ever tried putting a dipole antenna up with the center insulator
>being a high power 50 ohm dummy load,then connecting the dipole elements
>across the dummy load.(...)

There was some phony antenna that when tested turned out to be nothing
but a resistor across the feed point. Google search and my fading
memory couldn't recall the name. The VSWR was great, but nothing else
about the antenna was useful, probably due to all your RF power being
dissipated in the 50 ohm load instead of being radiated by the
antenna.

A squashed rhombic with an approximately 500 ohm resistor does have
some proponents. See:
<http://www.hard-core-dx.com/nordicdx/antenna/wire/t2fd.html>
<http://www.hard-core-dx.com/nordicdx/antenna/wire/t2design.html>
<http://en.wikipedia.org/wiki/T2FD_Antenna>
Search Google for "T2FD antenna".

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3518. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 17:02:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcip3t$829$1@news.albasani.net>
Source record: 21092

Richard Clark wrote:
> On Tue, 07 Oct 2008 18:36:36 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> OK. I have been kind, actually. Really? You just don't matter ...
>
> Boy, self contradiction in the space of a breath.
>
> That, or we are into parsing. What kind have you been?
>
> Talk about gassing on, the two of you could be the solution to the
> energy crisis if we could just get you guys off the endangered
> wheezers list.
>
> 73's
> Richard Clark, KB7QHC

I hope you feel you have made your point; I am satisfied with the forum
you have given me to present mine ...

Regards,
JS

3519. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 17:07:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcipbq$829$2@news.albasani.net>
Source record: 21093

Howard Kowall wrote:
> Has anyone ever tried putting a dipole antenna up with the center insulator
> being a high power 50 ohm dummy load,then connecting the dipole elements
> across the dummy load.This would always keep a suitable match at 50 ohms
> and satisfy the transceiver.Would most of the power go to the dummy load and
> not the elements and wouldn't radiate.In thinking about this it all
> logically makes sense the load would really never change or would it have
> some reactance with the dipole elements.
> Thanx All
> Howard
> VE4ISP
>
>

When you run a 73 ohm "resistor" and a 50 ohm resistor in parallel?

You would need a balun (rf transformer) to match to that antenna ...

Then you would need a suitable name for it. Let me see, we are mating
up a "dummy load" with a "dipole." How about "Dummy-Pole?" <grin>

Regards,
JS

3520. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 18:23:09 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gcj3j5$31a$1@news.service.uci.edu>
Source record: 21098

Richard Clark wrote:

> I worked out a general rule for fractal design, but it is of academic
> interest only, and is distinguished in that role by its lack of
> discussion here. ;-)

And it can be distinguished from works of academic interest by its lack
of discussion everywhere else. :-)

ac6xg

3521. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 18:29:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1qupe4hej2keajp9b1fi3q495m2lbkuana@4ax.com>
Source record: 21094

On Wed, 08 Oct 2008 10:02:49 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>I hope you feel you have made your point; I am satisfied with the forum
>you have given me to present mine ...

The instructions for bailing out in a parachute suggests you pull the
ripcord BEFORE you hit the ground.

73's
Richard Clark, KB7QHC

3522. Re: Balanced transmission lines in a progressive wave regime. 'Cos seeing is believing!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 18:44:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b8vpe4d3mll9fh02fuuk5f57qcrj89kem6@4ax.com>
Source record: 21095

On Wed, 8 Oct 2008 04:32:56 -0700 (PDT), "www.Radiondistics.com"
<francesco.errante@tiscali.it> wrote:

>A step by step experimental verification of the aperiodic behaviour of
>a properly adapted balanced transmission line.

This looks like a 160M antenna in 6 shoeboxes. At least at the start
of the page. By the end of the page it looks like a design from 80
years ago: the Beverage.

The page would benefit if it had a premise (prominently shown).

You could also use more definitions. A whole lot more.

Be careful of your usage of "balanced" as it may infringe upon the
current (no pun intended) usage of "equilibrium." That aside, this
page seems to be as readable as Art's distinctive writing.

As for the usage of:
" 'Cos seeing is believing!"
is that a dialect from Italy?

73's
Richard Clark, KB7QHC

3523. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 19:37:08 UTC
From: Rick T <rickw7rt@yahoo.com>
Message-ID: <48ed0bfe$0$89874$815e3792@news.qwest.net>
Source record: 21096

Howard Kowall wrote:
> Has anyone ever tried putting a dipole antenna up with the center insulator
> being a high power 50 ohm dummy load,then connecting the dipole elements
> across the dummy load.This would always keep a suitable match at 50 ohms
> and satisfy the transceiver.Would most of the power go to the dummy load and
> not the elements and wouldn't radiate.In thinking about this it all
> logically makes sense the load would really never change or would it have
> some reactance with the dipole elements.
> Thanx All
> Howard
> VE4ISP
>
>
You would probably be better off loss-wise just using 1000'
of RG58 feedline......same result; lots of loss, low SWR.

Rick - W7RT

3524. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 20:08:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcj40r$mu8$1@news.albasani.net>
Source record: 21097

Richard Clark wrote:
> On Wed, 08 Oct 2008 10:02:49 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> I hope you feel you have made your point; I am satisfied with the forum
>> you have given me to present mine ...
>
> The instructions for bailing out in a parachute suggests you pull the
> ripcord BEFORE you hit the ground.
>
> 73's
> Richard Clark, KB7QHC

Richard:

Look out the door of your plane ... it never left ground ...

Regards,
JS

3525. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 20:15:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcj4c8$mu8$2@news.albasani.net>
Source record: 21099

Jim Kelley wrote:

> ...
> And it can be distinguished from works of academic interest by its lack
> of discussion everywhere else. :-)
>
> ac6xg

Other than biological sciences, studies in probability and statistics
and those exploring chaos (well, perhaps the art world--no pun intended
<grin>) ... it seems you are quite correct.

Regards,
JS

3526. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 21:55:51 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <Q%9Hk.2884$jX5.935@newsfe08.iad>
Source record: 21100

You're probably thinking of the B&W multi-band folded dipoles.
Very expensive. Great SWR.
--
-larry
K8UT
<ltdoc@yahoo.com> wrote in message
news:12c6ffc3-f2d4-4aeb-a87a-0fa7a2e1cde3@p10g2000prf.googlegroups.com...
> Howard,
> Yes. Been some years ago now, but there was even a commercial
> version sold (did pretty well too). Wish I could remember the name of
> that thingy.
> - 'Doc
>

3527. Re: Need help from members

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 22:09:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fnbqe4ljqkqma0a642d87sp5u6vt18neug@4ax.com>
Source record: 21001

On Wed, 08 Oct 2008 11:23:09 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Richard Clark wrote:
>
>> I worked out a general rule for fractal design, but it is of academic
>> interest only, and is distinguished in that role by its lack of
>> discussion here. ;-)
>
>And it can be distinguished from works of academic interest by its lack
>of discussion everywhere else. :-)

Can't argue with that.

These fractal threads usually start with trolls (the original poster
was certainly so qualified), and fill up with more soon after.

73's
Richard Clark, KB7QHC

3528. Re: small antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 22:18:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lsbqe4dcoa77c3r22cbipnls1citnognkv@4ax.com>
Source record: 21002

On Wed, 08 Oct 2008 13:08:56 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>> The instructions for bailing out in a parachute suggests you pull the
>> ripcord BEFORE you hit the ground.
>
>Look out the door of your plane ... it never left ground ...

We watched you from the ground plunge through an opening in your fog.

73's
Richard Clark, KB7QHC

3529. Re: Balanced transmission lines in a progressive wave regime. 'Cos seeing is believing!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-08 23:15:26 UTC
From: Dave <noone@nowhere.com>
Message-ID: <iabHk.1598$yI6.1262@nwrddc01.gnilink.net>
Source record: 21003

i read it, but i still don't know what you are trying to prove... maybe you
and art need to get together and have a long chat.

"www.Radiondistics.com" <francesco.errante@tiscali.it> wrote in message
news:76c28936-1589-4ae0-ad6c-5dae57222cd8@42g2000pry.googlegroups.com...
>A step by step experimental verification of the aperiodic behaviour of
> a properly adapted balanced transmission line.
>
> by
>
> Francesco Errante
>
> www.Radiondistics.com

3530. Re: Balanced transmission lines in a progressive wave regime. 'Cos seeing is believing!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 00:21:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c6jqe4dg0bevrut1er8m4mpihugn5ah9gq@4ax.com>
Source record: 21004

On Wed, 8 Oct 2008 04:32:56 -0700 (PDT), "www.Radiondistics.com"
<francesco.errante@tiscali.it> wrote:

>A step by step experimental verification of the aperiodic behaviour of
>a properly adapted balanced transmission line.

Seeing is not believing. Or as Prez Reagan might have said "see, but
verify."

When I copied the photo "a demonstration of radiofluorescence" into
photoshop and reduce it to eight levels of brightness, the same cosine
shaped curve that is typically found in short antennas is visible.

The light is brighter by more power, it is not equally bright along
its length. The excess power is nearely saturating the camera's image
out to the end. Stop down the lens by 4 or 8 stops and publish that
picture - we don't need to see the patio furniture.

73's
Richard Clark, KB7QHC

3531. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 03:14:53 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <j7tqe41v2jnbdm0963kh8b3nhncktauptp@4ax.com>
Source record: 21005

On Wed, 08 Oct 2008 10:07:03 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>You would need a balun (rf transformer) to match to that antenna ...
>
>Then you would need a suitable name for it. Let me see, we are mating
>up a "dummy load" with a "dipole." How about "Dummy-Pole?" <grin>

Been there, done that. About 30 years ago, I went on a field day
exercise where one of the HF stations was running a lightbulb on a
pole for an antenna. 100 watts RF, about 50ft of RG-8/u, voltage
stepped down with some kind of xfomer or balun, and a 150 watt
incandescent light bulb. I don't recall how well they did, but I
could see that the log was filling with contacts. Who needs an
antenna anyway?

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3532. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 03:43:24 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3295C48D20Dnonenowhere@61.9.191.5>
Source record: 21006

"Howard Kowall" <hkowall@shaw.ca> wrote in
news:Ij2Hk.54207$gY7.37460@newsfe19.iad:

> Has anyone ever tried putting a dipole antenna up with the center
> insulator being a high power 50 ohm dummy load,then connecting the
> dipole elements across the dummy load.This would always keep a
> suitable match at 50 ohms and satisfy the transceiver.Would most of
> the power go to the dummy load and not the elements and wouldn't
> radiate.In thinking about this it all logically makes sense the load
> would really never change or would it have some reactance with the
> dipole elements. Thanx All
> Howard
> VE4ISP

Firstly, your proposal does not produce a 50 ohms antenna at all
frequencies. Your circuit analysis skills are lacking.

Various antennas include a resistance somewhere, and although it means
loss, it limits the feedline VSWR excursions with frequency and the loss in
the resistor may be more than offset by the reduction of feedline loss at
some frequencies.

Owen

3533. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 08:16:44 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mr66q2nf7.fsf@persaunet.uninett.no>
Source record: 21007

Owen Duffy <none@no.where> writes:

> Various antennas include a resistance somewhere, and although it means
> loss, it limits the feedline VSWR excursions with frequency and the loss in
> the resistor may be more than offset by the reduction of feedline loss at
> some frequencies.

Not so useful for most amateur applications, but very useful for what remains of professional HF radio. Frequency agility is often required, particularly by the military, and operators either don't have time, or skill, to fiddle with antenna tuners. Unless you are manpack portable, the loss of signal can be made up by increasing power.

Automatic antenna tuners are getting ever better, though. May be these designs are getting less popular.

LA4RT Jon

3534. silly rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 09:46:39 UTC
From: ml <m@di.net>
Message-ID: <m-B40DDD.05463909102008@news.optonline.net>
Source record: 21008

hi

I have a few ham rigs that have a seperate rx antenna, if i
activate this function it simply choices this for rx when unkeyed.

my Yaesu mark v Field have 2 jacks for rx antenna marked in/out

so i am confused dson't seem to say anything in the manual about how
that actualy works

i suppose the IN would connect to my receive antenna but what would
the out connect to

3535. Re: silly rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 15:08:45 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gcl6q2$4f7$1@registered.motzarella.org>
Source record: 21009

"ml" <m@di.net> wrote in message
news:m-B40DDD.05463909102008@news.optonline.net...
> hi
>
> I have a few ham rigs that have a seperate rx antenna, if i
> activate this function it simply choices this for rx when unkeyed.
>
>
> my Yaesu mark v Field have 2 jacks for rx antenna marked in/out
>
> so i am confused dson't seem to say anything in the manual about how
> that actualy works
>
> i suppose the IN would connect to my receive antenna but what would
> the out connect to

A transmit/receive relay switch? I don't know either. Just a guess.

Ed, NM2K

3536. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 15:16:53 UTC
From: Bob Schreibmaier <k3ph@ptd.net>
Message-ID: <20081009-151653.435.0@Bob-Schreibmaier.news.ptd.net>
Source record: 21010

In article <Ij2Hk.54207$gY7.37460@newsfe19.iad>, hkowall@shaw.ca says...
>
>
>Has anyone ever tried putting a dipole antenna up with the center insulator
>being a high power 50 ohm dummy load,then connecting the dipole elements
>across the dummy load.This would always keep a suitable match at 50 ohms
>and satisfy the transceiver.Would most of the power go to the dummy load and
>not the elements and wouldn't radiate.In thinking about this it all
>logically makes sense the load would really never change or would it have
>some reactance with the dipole elements.
>Thanx All
>Howard
>VE4ISP

That is very similar to what the Maxcom Antenna Matcher
did. It was reviewed (and panned) in November 1984 QST.
As you suspected, almost all the power would go into the
dummy load and very little would be radiated.

Honestly, it's not a very good idea. :-)

73,
Bob
K3PH

--
+---+
| Bob Schreibmaier K3PH | E-mail: k3ph@ptd.net |
| Kresgeville, PA 18333 | http://www.dxis.org |
+---+

3537. Re: hf shielding

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 15:24:18 UTC
From: richardharrison@webtv.net
Message-ID: <28482-48EE2222-2539@storefull-3252.bay.webtv.net>
Source record: 21011

(ml) wrote:
"The motor emits lo noticable noise. The motor controller in the cabinet
aka Magnetek 600 sure does."

The cabinet should be made RF tight and grounded.

A brute force pi filter, series L and shunt C on every conductor
penetrating the shielded cabinet usually solves the interference.

Best regards, Richard Harrison, KB5WZI

3538. Re: silly rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 16:06:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2mase49o7ibm201qs9f30stp3qclqds6pl@4ax.com>
Source record: 21012

On Thu, 09 Oct 2008 05:46:39 -0400, ml <m@di.net> wrote:

>hi
>
>I have a few ham rigs that have a seperate rx antenna, if i
>activate this function it simply choices this for rx when unkeyed.
>
>
>my Yaesu mark v Field have 2 jacks for rx antenna marked in/out
>
>so i am confused dson't seem to say anything in the manual about how
>that actualy works
>
>i suppose the IN would connect to my receive antenna but what would
>the out connect to

Hi Myles,

My Drake TR7 has the same thing (a separate antenna jack). It also
has a switch. The switch goes to the T/R relay. In one position of
the switch, receive follows the transmit path and shares that antenna;
in the other position of the switch it goes to this second antenna
jack so the receive has a separate antenna and does not share with
transmit.

When all else fails, RTMFM (read the meticulously formatted manual).

73's
Richard Clark, KB7QHC

3539. rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 18:25:47 UTC
From: ml <m@di.net>
Message-ID: <m-0619CF.14254709102008@news.optonline.net>
Source record: 21013

In article <gcl6q2$4f7$1@registered.motzarella.org>,
"Ed Cregger" <ecregger@bellsouff.net> wrote:

> "ml" <m@di.net> wrote in message
> news:m-B40DDD.05463909102008@news.optonline.net...
> > hi
> >
> > I have a few ham rigs that have a seperate rx antenna, if i
> > activate this function it simply choices this for rx when unkeyed.
> >
> >
> > my Yaesu mark v Field have 2 jacks for rx antenna marked in/out
> >
> > so i am confused dson't seem to say anything in the manual about how
> > that actualy works
> >
> > i suppose the IN would connect to my receive antenna but what would
> > the out connect to
>
>
> ----------
>
>
> A transmit/receive relay switch? I don't know either. Just a guess.
>
>
> Ed, NM2K

<<seems i didn't explain the set up right

in the menus there is a switch to use the rx jacks

on the ts2000 it's 1 rx jack on or off

i understand this

on my markv Field there is also a rx on/off setting

but 2 jacks(not a switch) one is rx antenna INPUT one rx
antenna OUTPUT

i can guess what the input is for i plug my rx antenna there but
what is the outputfor?

i see a few righs now have that set up just can't think what
that is for

and it's not in the manual

these are rx only jacks, naturally the rigs have regular main
tx/rx pl259 jack

thanks

3540. Re: rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 18:55:46 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gclk3i$1dr8$1@f04n12.cac.psu.edu>
Source record: 21014

ml wrote:
> In article <gcl6q2$4f7$1@registered.motzarella.org>,
> "Ed Cregger" <ecregger@bellsouff.net> wrote:
>
>> "ml" <m@di.net> wrote in message
>> news:m-B40DDD.05463909102008@news.optonline.net...
>>> hi
>>>
>>> I have a few ham rigs that have a seperate rx antenna, if i
>>> activate this function it simply choices this for rx when unkeyed.
>>>
>>>
>>> my Yaesu mark v Field have 2 jacks for rx antenna marked in/out
>>>
>>> so i am confused dson't seem to say anything in the manual about how
>>> that actualy works
>>>
>>> i suppose the IN would connect to my receive antenna but what would
>>> the out connect to
>>
>> ----------
>>
>>
>> A transmit/receive relay switch? I don't know either. Just a guess.
>>
>>
>> Ed, NM2K
>
> <<seems i didn't explain the set up right
>
> in the menus there is a switch to use the rx jacks
>
> on the ts2000 it's 1 rx jack on or off
>
> i understand this
>
>
> on my markv Field there is also a rx on/off setting
>
> but 2 jacks(not a switch) one is rx antenna INPUT one rx
> antenna OUTPUT
>
> i can guess what the input is for i plug my rx antenna there but
> what is the outputfor?

>
> i see a few righs now have that set up just can't think what
> that is for
>
> and it's not in the manual
>
>
> these are rx only jacks, naturally the rigs have regular main
> tx/rx pl259 jack

Sometimes when a station uses say a beverage antenna for separate receive, there will be multiple rigs using the same antenna. Take the antenna to the input, and the output goes to the next rig.

- 73 de Mike N3LI -

3541. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 19:27:55 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gcllvs$6sk$1@f04n12.cac.psu.edu>
Source record: 21015

Bob Schreibmaier wrote:
> In article <Ij2Hk.54207$gY7.37460@newsfe19.iad>, hkowall@shaw.ca says...
>>
>> Has anyone ever tried putting a dipole antenna up with the center insulator
>> being a high power 50 ohm dummy load,then connecting the dipole elements
>> across the dummy load.This would always keep a suitable match at 50 ohms
>> and satisfy the transceiver.Would most of the power go to the dummy load and
>> not the elements and wouldn't radiate.In thinking about this it all
>> logically makes sense the load would really never change or would it have
>> some reactance with the dipole elements.
>> Thanx All
>> Howard
>> VE4ISP
>
> That is very similar to what the Maxcom Antenna Matcher
> did. It was reviewed (and panned) in November 1984 QST.
> As you suspected, almost all the power would go into the
> dummy load and very little would be radiated.
>
> Honestly, it's not a very good idea. :-)

This one is meant to be a poor antenna, for use at really close distances.

http://www.wa0dx.org/wa0itp/dlspecial.html

Here is the gold standard, the MaxCom. If you gan get the link, QST had
a review. It was a toroid, and 3 resistors. Apparently a very high
quality dummy load (these things cost between 600 to 900 dollars!

http://www.eham.net/articles/14905

Had great SWR tho'!

- 73 de Mike N3LI -

3542. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 21:54:18 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <f2942fd0-bc67-4654-8fec-c081a71d866a@g25g2000prf.googlegroups.com>
Source record: 21016

On Oct 9, 3:27 pm, Michael Coslo <m...@psu.edu> wrote:
> Bob Schreibmaier wrote:
> > In article <Ij2Hk.54207$gY7.37...@newsfe19.iad>, hkow...@shaw.ca says...
>
> >> Has anyone ever tried putting a dipole antenna up with the center insulator
> >> being a high power 50 ohm dummy load,then connecting the dipole elements
> >> across the dummy load.This would always keep a suitable match at 50 ohms
> >> and satisfy the transceiver.Would most of the power go to the dummy load and
> >> not the elements and wouldn't radiate.In thinking about this it all
> >> logically makes sense the load would really never change or would it have
> >> some reactance with the dipole elements.
> >> Thanx All
> >> Howard
> >> VE4ISP
>
> > That is very similar to what the Maxcom Antenna Matcher
> > did. It was reviewed (and panned) in November 1984 QST.
> > As you suspected, almost all the power would go into the
> > dummy load and very little would be radiated.
>
> > Honestly, it's not a very good idea. :-)
>
> This one is meant to be a poor antenna, for use at really close distances.
>
> http://www.wa0dx.org/wa0itp/dlspecial.html
>
> Here is the gold standard, the MaxCom. If you gan get the link, QST had
> a review. It was a toroid, and 3 resistors. Apparently a very high
> quality dummy load (these things cost between 600 to 900 dollars!
>
> http://www.eham.net/articles/14905
>
> Had great SWR tho'!
>
> - 73 de Mike N3LI -- Hide quoted text -
>
> - Show quoted text -

Once I joke about using a CB groundplane with a 10 db pad for an all
band antenna.
I thought about this for a while and decided to try it. I did nt have
to use 10 db maybe it was only 3db or 6db I cant remember now
to get an antenna that my soliddtate transceiver with no tuner was
happy with on allHF bands. I was fairly amazed at how well the

antenna worked or at least amazed that it did work at all.

Jimmie

3543. Re: rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-09 22:55:55 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <l8idnSbFZfRoFnPVnZ2dnUVZ_rPinZ2d@comcast.com>
Source record: 21017

```
"ml" <m@di.net> wrote in message
news:m-0619CF.14254709102008@news.optonline.net...
> In article <gcl6q2$4f7$1@registered.motzarella.org>,
> "Ed Cregger" <ecregger@bellsouff.net> wrote:
>
>> "ml" <m@di.net> wrote in message
>> news:m-B40DDD.05463909102008@news.optonline.net...
>> > hi
>> >
>> > I have a few ham rigs that have a seperate rx antenna, if i
>> > activate this function it simply choices this for rx when
>> > unkeyed.
>> >
>> >
>> > my Yaesu mark v Field have 2 jacks for rx antenna marked
>> > in/out
>> >
>> > so i am confused dson't seem to say anything in the manual about how
>> > that actualy works
>> >
>> > i suppose the IN would connect to my receive antenna but what
>> > would
>> > the out connect to
>>
>>
>> ----------
>>
>>
>> A transmit/receive relay switch? I don't know either. Just a guess.
>>
>>
>> Ed, NM2K
>
> <<seems i didn't explain the set up right
>
> in the menus there is a switch to use the rx jacks
>
> on the ts2000 it's 1 rx jack on or off
>
> i understand this
>
>
> on my markv Field there is also a rx on/off setting
>
```

> but 2 jacks(not a switch) one is rx antenna INPUT one rx
> antenna OUTPUT
>
> i can guess what the input is for i plug my rx antenna there but
> what is the outputfor?
>
> i see a few righs now have that set up just can't think what
> that is for
>
> and it's not in the manual
>
>
> these are rx only jacks, naturally the rigs have regular main
> tx/rx pl259 jack
>
> thanks
I would go to the page of the manual that shows the rear view of the radio,
with the various jacks numbered. It should state what each is for, and on
what page you can find more information. Are these RCA jacks? My guess about
the Rx out is that it might be for connecting to an external preamp.

3544. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 00:41:12 UTC
From: dfinn1@nc.rr.com
Message-ID: <87f40f6d-de0d-4fd4-9758-b6b946a4fd11@t39g2000prh.googlegroups.com>
Source record: 21018

On Oct 8, 1:07 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Howard Kowall wrote:
> > Has anyone ever tried putting a dipole antenna up with the center insulator
> > being a high power 50 ohm dummy load,then connecting the dipole elements
> > across the dummy load.This would always keep a suitable match at 50 ohms
> > and satisfy the transceiver.Would most of the power go to the dummy load and
> > not the elements and wouldn't radiate.In thinking about this it all
> > logically makes sense the load would really never change or would it have
> > some reactance with the dipole elements.
> > Thanx All
> > Howard
> > VE4ISP
>
> When you run a 73 ohm "resistor" and a 50 ohm resistor in parallel?
>
> You would need a balun (rf transformer) to match to that antenna ...
>
> Then you would need a suitable name for it. Let me see, we are mating
> up a "dummy load" with a "dipole." How about "Dummy-Pole?" <grin>
>
> Regards,
> JS

I'm glad you called it a 'balun (rf transformer)' instead of a 'balun
(CM Choke)'. Did Cecil review this before you posted it?

3545. Re: silly rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 02:12:42 UTC
From: JB <nospam@goofball.net>
Message-ID: <uSyHk.2000$P5.1701@nwrddc02.gnilink.net>
Source record: 21019

"ml" <m@di.net> wrote in message
news:m-B40DDD.05463909102008@news.optonline.net...
> hi
>
> I have a few ham rigs that have a seperate rx antenna, if i
> activate this function it simply choices this for rx when unkeyed.
>
>
> my Yaesu mark v Field have 2 jacks for rx antenna marked in/out
>
> so i am confused dson't seem to say anything in the manual about how
> that actualy works
>
> i suppose the IN would connect to my receive antenna but what would
> the out connect to

A little weird but here goes:

Input to the A/B antenna inputs are TR switched to the RX via relay RL 1002.

If external RX antenna is selected in menu, the TR switched RX line from A/B antennas go to "RX out" rather than to the internal receivers while the "RX in" is switched to the internal receivers.

3546. Re: rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 02:25:22 UTC
From: ml <m@di.net>
Message-ID: <m-0DEC92.22252209102008@news.optonline.net>
Source record: 21020

In article <gclk3i$1dr8$1@f04n12.cac.psu.edu>,
Michael Coslo <mjc5@psu.edu> wrote:

> ml wrote:
> > In article <gcl6q2$4f7$1@registered.motzarella.org>,
> > "Ed Cregger" <ecregger@bellsouff.net> wrote:
> >
> >> "ml" <m@di.net> wrote in message
> >> news:m-B40DDD.05463909102008@news.optonline.net...
> >>> hi
> >>>
> >>> I have a few ham rigs that have a seperate rx antenna, if i
> >>> activate this function it simply choices this for rx when unkeyed.
> >>>
> >>>
> >>> my Yaesu mark v Field have 2 jacks for rx antenna marked in/out
> >>>
> >>> so i am confused dson't seem to say anything in the manual about how
> >>> that actualy works
> >>>
> >>> i suppose the IN would connect to my receive antenna but what would
> >>> the out connect to
> >>
> >> ----------
> >>
> >>
> >> A transmit/receive relay switch? I don't know either. Just a guess.
> >>
> >>
> >> Ed, NM2K
> >
> > <<seems i didn't explain the set up right
> >
> > in the menus there is a switch to use the rx jacks
> >
> > on the ts2000 it's 1 rx jack on or off
> >
> > i understand this
> >
> >
> > on my markv Field there is also a rx on/off setting
> >
> > but 2 jacks(not a switch) one is rx antenna INPUT one rx
> > antenna OUTPUT

> >
> > i can guess what the input is for i plug my rx antenna there but
> > what is the outputfor?
> >
> > i see a few righs now have that set up just can't think what
> > that is for
> >
> > and it's not in the manual
> >
> >
> > these are rx only jacks, naturally the rigs have regular main
> > tx/rx pl259 jack
>
> Sometimes when a station uses say a beverage antenna for separate
> receive, there will be multiple rigs using the same antenna. Take the
> antenna to the input, and the output goes to the next rig.
>
>
> - 73 de Mike N3LI -

thanks Mike

never thought of that, so it's just a pass thru very interesting

3547. Re: silly rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 05:11:45 UTC
From: JB <nospam@goofball.net>
Message-ID: <luBHk.2027$P5.798@nwrddc02.gnilink.net>
Source record: 21021

> Input to the A/B antenna inputs are TR switched to the RX via relay RL
1002.
>
> If external RX antenna is selected in menu, the TR switched RX line from
A/B
> antennas go to "RX out" rather than to the internal receivers while the
"RX
> in" is switched to the internal receivers.
>
If normal RX is selected in menu, the RX in and out go nowhere.

http://www.wz5q.net/index/manuals.htm

3548. Hygain rotor quality decline?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 05:36:10 UTC
From: ddl@danlan.*com
Message-ID: <1350382@news1.IPSWITCHS.CMM>
Source record: 21022
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

I just installed my third HAMIV rotor; I got about 4 years each from
the previous two. The most recent failure was the pot, with 5-6 turns
worn through at the spot I usually leave the rotor. Makes me think
the brake wasn't working very well. The previous unit was freewheeling;
I don't remember exactly what was wrong. The screws holding the case
together are always corroded in place so any repair becomes less trivial
as they break off. And anyway the inside usually looks bad enough (with
lots of rusted ball bearings) that repair is unappealing.

On the current (new) unit I noticed that one screw hole for the control cable
cover plate was stripped (and they should have noticed too since the screw
was hanging out) and one mounting screw hole was not tapped to full depth
(I had to get a shorter bolt).

I bought the first HAMIV about 8 years ago to replace a HAMM from the
60's (IIRC). They say the HAMIV is an improvement but it certainly
doesn't seem to last as long. Is there another rotor with the same
mounting pattern that might be better? It's an inside-tower mount
so I'm kind of constrained. Maybe I should look at rebuilding the HAMM?
It was seized but I still have it.

If anyone wants the two failed HAMIV rotors for parts let me know or
I will probably toss them soon...

Dan Lanciani
ddl@danlan.*com

3549. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 10:57:44 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1010080657440001@jbw-mac.itd.nrl.navy.mil>
Source record: 21023

> That is very similar to what the Maxcom Antenna Matcher
> did. It was reviewed (and panned) in November 1984 QST.
> As you suspected, almost all the power would go into the
> dummy load and very little would be radiated.
>
> Honestly, it's not a very good idea. :-)
>
> 73,
> Bob
> K3PH

Hello, and generally not if maximizing operating efficiency (the portion of available transmitter power that is being radiated by the antenna) is of concern. However, placing a low-loss pad between the output of one device and the input of another can be a simple, inexpensive broadband matching technique if the power loss in the pad can be tolerated .
Sincerely, and 73s from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

3550. Re: silly rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 12:17:14 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gcnh4b$17t4$1@f04n12.cac.psu.edu>
Source record: 21024

JB wrote:
>> Input to the A/B antenna inputs are TR switched to the RX via relay RL
> 1002.
>> If external RX antenna is selected in menu, the TR switched RX line from
> A/B
>> antennas go to "RX out" rather than to the internal receivers while the
> "RX
>> in" is switched to the internal receivers.
>>
> If normal RX is selected in menu, the RX in and out go nowhere.
>
> http://www.wz5q.net/index/manuals.htm
>

The Mk5 Field radio is a mass of menus, and some of them will make the radio appear not to work. Technically it is a great radio, but I don't like it very much. Our club has one, and that means that those of us who don't have one have to re-learn it every time we use it. So if the manual is lost, so am I. Love that one punch notch filter though.

- 73 de Mike N3LI -

3551. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 12:22:29 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gcnhe5$1eie$1@f04n12.cac.psu.edu>
Source record: 21025

JIMMIE wrote:
>
> Once I joke about using a CB groundplane with a 10 db pad for an all
> band antenna.
> I thought about this for a while and decided to try it. I did nt have
> to use 10 db maybe it was only 3db or 6db I cant remember now
> to get an antenna that my soliddtate transceiver with no tuner was
> happy with on allHF bands. I was fairly amazed at how well the
> antenna worked or at least amazed that it did work at all.

What is more, you didn't have to spend 600 dollars for a bad antenna.

- 73 de Mike N3LI -

3552. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 12:29:40 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gcnhrk$103o$1@f04n12.cac.psu.edu>
Source record: 21026

J. B. Wood wrote:
>> That is very similar to what the Maxcom Antenna Matcher
>> did. It was reviewed (and panned) in November 1984 QST.
>> As you suspected, almost all the power would go into the
>> dummy load and very little would be radiated.
>>
>> Honestly, it's not a very good idea. :-)
>>
>> 73,
>> Bob
>> K3PH
>
> Hello, and generally not if maximizing operating efficiency (the portion
> of available transmitter power that is being radiated by the antenna) is
> of concern. However, placing a low-loss pad between the output of one
> device and the input of another can be a simple, inexpensive broadband
> matching technique if the power loss in the pad can be tolerated .
> Sincerely, and 73s from N4GGO,

But as a good operating practice, Hams usually want to have efficient
ways to transfer their limited power.

It's in that realm between extremes - the Person who never puts up an
antenna because nothing is perfect enough, and the person who is willing
to waste almost all their power in the name of Low SWR, or maximum
convenience.

IMO, it's best to settle somewhere towards the more efficient end of
that group.

Which I guess is why I have a big ungainly Bug-Catcher type antenna on
the car instead of a short and cute whip.

- 73 de Mike N3LI -

3553. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 15:27:09 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1010081127090001@jbw-mac.itd.nrl.navy.mil>
Source record: 21027

In article <gcnhrk$103o$1@f04n12.cac.psu.edu>, Michael Coslo
<mjc5@psu.edu> wrote:
>
> Which I guess is why I have a big ungainly Bug-Catcher type antenna on
> the car instead of a short and cute whip.
>
> - 73 de Mike N3LI -

Hello, and you can have a physically short and efficient whip if you
choose an appropriate frequency band ;-). Now what ever happened to those
cute car-mount cell phone antennas? Guess they're in antenna heaven along
with the K40s. Sincerely,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

3554. Re: silly rx ant question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 15:52:00 UTC
From: JB <nospam@goofball.net>
Message-ID: <ASKHk.29$r_3.22@nwrddc02.gnilink.net>
Source record: 21028

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:gcnh4b$17t4$1@f04n12.cac.psu.edu...
> JB wrote:
> >> Input to the A/B antenna inputs are TR switched to the RX via relay RL
> > 1002.
> >> If external RX antenna is selected in menu, the TR switched RX line
from
> > A/B
> >> antennas go to "RX out" rather than to the internal receivers while the
> > "RX
> >> in" is switched to the internal receivers.
> >>
> > If normal RX is selected in menu, the RX in and out go nowhere.
> >
> > http://www.wz5q.net/index/manuals.htm
> >
>
> The Mk5 Field radio is a mass of menus, and some of them will make the
> radio appear not to work. Technically it is a great radio, but I don't
> like it very much. Our club has one, and that means that those of us
> who don't have one have to re-learn it every time we use it. So if the
> manual is lost, so am I. Love that one punch notch filter though.
>
> - 73 de Mike N3LI -

I like my TS2000 for that reason. Gives me back 40 meters. Most of the
useful buttons are cloistered around the tuning knob. Great for one hand
operation in contests and events. Probably doesn't do all the MP field does
but great bang for the buck.

I was a station trustee for a club and wrote one page instructions with
short notes about quirks, to post or put in plastic. Just about any radio
is a problem for those who don't own one. I keep my TS130 for the GOTA
station. You would be astonished at how many radio techs would fix the
radio and have to break out a Op Manual to do a radio check. Even my own
radios, I keep the PDF shortcuts on the desk top.

The instructions say nothing about the RX out. You have to go to the
schematic.

3555. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 16:03:40 UTC
From: JB <nospam@goofball.net>
Message-ID: <w1LHk.32$r_3.5@nwrddc02.gnilink.net>
Source record: 21029

"J. B. Wood" <wood@itd.nrl.navy.mil> wrote in message
news:wood-1010080657440001@jbw-mac.itd.nrl.navy.mil...
> > That is very similar to what the Maxcom Antenna Matcher
> > did. It was reviewed (and panned) in November 1984 QST.
> > As you suspected, almost all the power would go into the
> > dummy load and very little would be radiated.
> >
> > Honestly, it's not a very good idea. :-)
> >
> > 73,
> > Bob
> > K3PH
>
> Hello, and generally not if maximizing operating efficiency (the portion
> of available transmitter power that is being radiated by the antenna) is
> of concern. However, placing a low-loss pad between the output of one
> device and the input of another can be a simple, inexpensive broadband
> matching technique if the power loss in the pad can be tolerated .
> Sincerely, and 73s from N4GGO,
>
> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

I was wondering when we would hear from someone like you.

3556. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 16:18:18 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9cuue4ti9ssv383dubvaqeb57gglpeikhk@4ax.com>
Source record: 21031

On Fri, 10 Oct 2008 11:27:09 -0400, wood@itd.nrl.navy.mil (J. B. Wood)
wrote:

>Now what ever happened to those
>cute car-mount cell phone antennas? Guess they're in antenna heaven along
>with the K40s. Sincerely,

Nope. The cell phone antenna on the vehicle roof has been replaced by
a GPS telematics antenna, GPS map antenna, wi-fi war driver antenna,
XM/Sirius DAB antenna, GPRS antenna, and possibly a mobile DTV
antenna. Aerodynamics and safety have dictated that today's vehicles
have curved roofs and air bags in the door columns, making most
permanent roof top antennas impossible. Besides, most of today's cell
phones do not include an external antenna connector or need a car kit
"docking station". Besides, modern cell phones have to handle a wide
variety of frequencies for world cellular coverage, GPS, wi-fi,
Bluegoof, mobile TV, WiMax, and whatever else can be crammed in. A
single external antenna just isn't going to work without a diplexer
and multiple connectors. At least the antennas are now all internal
or the typical smartphone will look like a porcupine antenna farm, or
if retractable, a Swiss army knife.

Incidentally, the K40 has been replaced by the Wilson 1000 and 5000 as
the mobild CB antenna of choice.
<http://www.wilsonantenna.com/w1000.htm>
<http://www.wilsonantenna.com/W5000.htm>
Good to 5,000 watts AM or 20,000 watts SSB. For mounting elsewhere on
the vehicle, there are antennas with oversized stainless base or
center loading coils that could probably survive a direct lightning
hit. Of course, you need two of them with a "co-phasing" harness.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3557. Re: 2 METER 440 DUPLEXER WANTED....USED.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 17:14:15 UTC
From: justme <jbleaux@gmail.com>
Message-ID: <28ko27.mqh.19.1@news.alt.net>
Source record: 21032

Thanks, Gary.

j/b

"Gary Smith" <vkthree@gmail.com> wrote in message
news:gcf5bk$50e$1@news-01.bur.connect.com.au...
> http://www.qsl.net/ve3rgw/uvdup.html
>
> Note it it is referred to as a duplexer lol.
>
>
> "justme" <jbleaux@gmail.com> wrote in message
> news:28b1jj.t0t.17.1@news.alt.net...
>> Gary, normally, I wouldn't mind building one but I am strapped for time.
>>
>> Where are the plans? Maybe I could throw one together.
>>
>> Thanks
>>
>> j/b
>>
>>
>> "Gary Smith" <vkthree@gmail.com> wrote in message
>> news:gca300$q52$1@news-01.bur.connect.com.au...
>>>I found plans to build one, not sure if you want to go that way or buy
>>>second hand, i guess you just wanna buy one. My mate has one but he won't
>>>give it up :<, i think i might have to build one for satellite work on my
>>>Alinco DR635.
>>>
>>>
>>>
>>> "justme" <jbleaux@gmail.com> wrote in message
>>> news:2850u6.4nq.17.1@news.alt.net...
>>>> Someone has one of these just gathering dust. Please sell it to me.
>>>>
>>>> Thanks
>>>>
>>>>
>>>
>>
>>
>

3558. Re: Hygain rotor quality decline?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 17:15:53 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <BeqdncoLO4374nLVnZ2dnUVZ_vjinZ2d@earthlink.com>
Source record: 21030
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"Dan Lanciani" <ddl@danlan.*com> wrote in message
news:1350382@news1.IPSWITCHS.CMM...
>I just installed my third HAMIV rotor; I got about 4 years each from
> the previous two. The most recent failure was the pot, with 5-6 turns
> worn through at the spot I usually leave the rotor.

That sure sounds like a short life for a rotator. As you have it inside the tower (?) I guess that you have a thrust bearing at the top of the tower. Are you near the salt water or in a very windy place ? Do you contes with it and turn it a lot ?

I put one up about a year ago that was used,but rebuilt. I am not in an area that is very hard on the rotators. I hope it will last longer than 4 years. It is in the tower about 5 feet down and I have a thrust bearing at the top. Just truning a 3 element tribander and beams for 6,2, and 432 on 15 foot booms.

3559. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 17:33:50 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-4013E5.09334110102008@netnews.worldnet.att.net>
Source record: 21033

In article <gcnhe5$1eie$1@f04n12.cac.psu.edu>,
Michael Coslo <mjc5@psu.edu> wrote:

> JIMMIE wrote:
> >
> > Once I joke about using a CB groundplane with a 10 db pad for an all
> > band antenna.
> > I thought about this for a while and decided to try it. I did nt have
> > to use 10 db maybe it was only 3db or 6db I cant remember now
> > to get an antenna that my soliddtate transceiver with no tuner was
> > happy with on allHF bands. I was fairly amazed at how well the
> > antenna worked or at least amazed that it did work at all.
>
>
> What is more, you didn't have to spend 600 dollars for a bad antenna.
>
>
> - 73 de Mike N3LI -

Years ago, I was working on a Marine HF Radio, on the bench, in Seattle
WA, connected to a Bird 1 Kw Dummy Load. As I was setting the -16 db
Pilot Carrier Level for the Public Coast Station KMI, at Point Rayes CA,
on 12 Mhz, I got a reply from the Operator, ON Duty, asking for Station
Call Sign. I had a nice chat with him for about 5 minutes. ANY antenna,
no matter how it is built, even a Dummy Load, will radiate, and
communicate IF the Band is open. If the Band is closed, it doesn't
matter how efficient the antenna is, you will not communicate.

--
Bruce in alaska
add <path> after <fast> to reply

3560. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 17:39:13 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <yoMHk.45189$kh2.38767@bignews3.bellsouth.net>
Source record: 21034

"JB" <nospam@goofball.net> wrote in message
news:w1LHk.32$r_3.5@nwrddc02.gnilink.net...
>
> "J. B. Wood" <wood@itd.nrl.navy.mil> wrote in message
> news:wood-1010080657440001@jbw-mac.itd.nrl.navy.mil...
>> > That is very similar to what the Maxcom Antenna Matcher
>> > did. It was reviewed (and panned) in November 1984 QST.
>> > As you suspected, almost all the power would go into the
>> > dummy load and very little would be radiated.
>> >
>> > Honestly, it's not a very good idea. :-)
>> >
>> > 73,
>> > Bob
>> > K3PH
>>
>> Hello, and generally not if maximizing operating efficiency (the portion
>> of available transmitter power that is being radiated by the antenna) is
>> of concern. However, placing a low-loss pad between the output of one
>> device and the input of another can be a simple, inexpensive broadband
>> matching technique if the power loss in the pad can be tolerated .
>> Sincerely, and 73s from N4GGO,
>>
>> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
>> Naval Research Laboratory
>> 4555 Overlook Avenue, SW
>> Washington, DC 20375-5337
>
> I was wondering when we would hear from someone like you.
>

When using the radio with the padded antenna in a city environment and when utilizing nearby repeaters, it is quite acceptable to design equipment this way. It also reduces the sensitivity of the radio to unfortunate antenna shorts against automobile interiors or body parts.

If you have enough power left over to be DFQ into the repeaters with the power available, I see it as a viable compromise that can be most beneficial.

Hams tend to think in terms of operating simplex out into the far reaches of the aether, but there are many situations where padding is a useful feature.

Ed, NM2K

3561. Re: Hygain rotor quality decline?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 20:11:42 UTC
From: ddl@danlan.*com
Message-ID: <1350415@news1.IPSWITCHS.CMM>
Source record: 21035
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

In article <BeqdncoLO4374nLVnZ2dnUVZ_vjinZ2d@earthlink.com>, rmowery28146@earthlink.net (Ralph Mowery) writes:
|
| "Dan Lanciani" <ddl@danlan.*com> wrote in message
| news:1350382@news1.IPSWITCHS.CMM...
| >I just installed my third HAMIV rotor; I got about 4 years each from
| > the previous two. The most recent failure was the pot, with 5-6 turns
| > worn through at the spot I usually leave the rotor.
|
| That sure sounds like a short life for a rotator. As you have it inside the
| tower (?) I guess that you have a thrust bearing at the top of the tower.

There is a collar; I'm reluctant to elevate it by calling it a bearing but
it does prevent any significant mast bending moment from reaching the rotor.

| Are you near the salt water or in a very windy place ?

Yes, about a block from the ocean.

| Do you contes with
| it and turn it a lot ?

I don't turn it a lot and I always leave it in the same position since
that is the position that allows me to lower the tower and I wouldn't
want it stuck in some other position. Obviously this isn't great for
the pot if the brake isn't working well.

But none of this explains the reduction in life compared to the old HAMM
(I think we are talking nearly an order of magnitude) or the screw hole
tapping problems with the latest unit. Was there a stainless bearing
option (perhaps third-party) for the HAMM? That might have had something
to do with it. Other than the bearings (and of course the pot) the latest
failure doesn't look *too* bad inside.

Dan Lanciani
ddl@danlan.*com

3562. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 23:35:39 UTC
From: George Csahanin <georgec@dyb.com>
Message-ID: <7FRHk.3922$yr3.2283@nlpi068.nbdc.sbc.com>
Source record: 21036

Doesn't B&W do exactly that?

They called it a "balancing network" or some such thing...a resistor. Army published a paper on it in the 40's or 50's.

Problem is the loss it causes.

-GC
W2DB

<ltdoc@yahoo.com> wrote in message
news:12c6ffc3-f2d4-4aeb-a87a-0fa7a2e1cde3@p10g2000prf.googlegroups.com...
> Howard,
> Yes. Been some years ago now, but there was even a commercial
> version sold (did pretty well too). Wish I could remember the name of
> that thingy.
> - 'Doc
>

3563. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-10 23:41:39 UTC
From: George Csahanin <georgec@dyb.com>
Message-ID: <MKRHk.3923$yr3.1740@nlpi068.nbdc.sbc.com>
Source record: 21037

http://www.bwantennas.com/ama/fdipole.ama.htm

http://www.bwantennas.com/ama/veeant.ama.htm

"Howard Kowall" <hkowall@shaw.ca> wrote in message
news:Ij2Hk.54207$gY7.37460@newsfe19.iad...
> Has anyone ever tried putting a dipole antenna up with the center
> insulator being a high power 50 ohm dummy load,then connecting the dipole
> elements across the dummy load.This would always keep a suitable match
> at 50 ohms and satisfy the transceiver.Would most of the power go to the
> dummy load and not the elements and wouldn't radiate.In thinking about
> this it all logically makes sense the load would really never change or
> would it have some reactance with the dipole elements.
> Thanx All
> Howard
> VE4ISP
>

3564. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 00:31:49 UTC
From: George Csahanin <georgec@lintv.com>
Message-ID: <jsSHk.2223$Ei5.1557@flpi143.ffdc.sbc.com>
Source record: 21038

From an offshore site:
http://www.radiohc.org/Distributions/Dxers/ttfd2.html

http://www.hard-core-dx.com/nordicdx/antenna/wire/t2fd.html

http://www.universal-radio.com/catalog/sw_ant/0562.html

http://www.johncon.com/john/T2fd/

http://www.wellbrook.uk.com/UMBT2FD.html

http://home.comcast.net/~smithab11/T2FD.htm

http://www.korpi.biz/t2fd.pdf

http://p1k.arrl.org/cgi-bin/topdf.cgi?id=29006&pub=qst (if you have a arrl membership)

"George Csahanin" <georgec@dyb.com> wrote in message
news:7FRHk.3922$yr3.2283@nlpi068.nbdc.sbc.com...
> Doesn't B&W do exactly that?
>
> They called it a "balancing network" or some such thing...a resistor. Army
> published a paper on it in the 40's or 50's.
>
> Problem is the loss it causes.
>
>
> -GC
> W2DB
>
>
> <ltdoc@yahoo.com> wrote in message
> news:12c6ffc3-f2d4-4aeb-a87a-0fa7a2e1cde3@p10g2000prf.googlegroups.com...
>> Howard,
>> Yes. Been some years ago now, but there was even a commercial
>> version sold (did pretty well too). Wish I could remember the name of
>> that thingy.
>> - 'Doc
>>
>
>

3565. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 01:01:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcotsq$gp9$1@news.albasani.net>
Source record: 21039

dfinn1@nc.rr.com wrote:

> ...
> I'm glad you called it a 'balun (rf transformer)' instead of a 'balun
> (CM Choke)'. Did Cecil review this before you posted it?

That is very disappointing and does not speak well for you.

I certainly expected you to realize a 1:1 balun (1:1 rf transformer
constructed in transmission line mode) IS a common mode choke ... :-(

Hang in there ... you'll get it ... eventually.

Regards,
JS

3566. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 01:03:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcou1i$gp9$2@news.albasani.net>
Source record: 21040

Jeff Liebermann wrote:
> On Wed, 08 Oct 2008 10:07:03 -0700, John Smith
> <assemblywizard@gmail.com> wrote:

>> ...
>> Then you would need a suitable name for it. Let me see, we are mating
>> up a "dummy load" with a "dipole." How about "Dummy-Pole?" <grin>
>
> Been there, done that. About 30 years ago, I went on a field day
> exercise where one of the HF stations was running a lightbulb on a
> pole for an antenna. 100 watts RF, about 50ft of RG-8/u, voltage
> stepped down with some kind of xfomer or balun, and a 150 watt
> incandescent light bulb. I don't recall how well they did, but I
> could see that the log was filling with contacts. Who needs an
> antenna anyway?
>

Hmmm, sounds like that you mention might be the "Original DummyPole!"
Or, "DummyPole I."

This new design should probably be named "DummyPole II." <grin>

Regards,
JS

3567. Re: Balanced transmission lines in a progressive wave regime. 'Cos seeing is believing!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 01:07:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcou9f$gp9$3@news.albasani.net>
Source record: 21041

Richard Clark wrote:

> ...
> Seeing is not believing. Or as Prez Reagan might have said "see, but
> verify."
> ...
> 73's
> Richard Clark, KB7QHC

I must concur, here, akin to "Trickle Down Economics", we have the
"Trickle Down Transmission Line!" (or, TDTL) ROFLOL

Regards,
JS

3568. Re: KC8QJP and N8WWM Glory Hole Party - KC8QJP will be offering discount tax consulting through the gloryhole while N8WWM is on his knees

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 01:22:26 UTC
From: Steve <kenwood1701@hotmail.com>
Message-ID: <48efffd8$0$4894$607ed4bc@cv.net>
Source record: 21042
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.cb,alt.sports.football.pro.cleve-browns

FYI, THE "TINYURL.COM" BELOW IS LOADED WITH SPYWARE!!!

Leland C Scott wrote:

>"n8wwm mrbindwell (fatboy)" wrote:
>
>http://img254.imageshack.us/my.php?image=dougpetro3yk1.jpg
>
>
>
>>Pick up some crisco on your way over tonight, KC8QJP needs a good
>>slathering on her hind quarters.
>>
>>She's also getting ready to start her tax return posts again like she does
>>every year. You remember those..
>>
>>http://tinyurl.com/46teqq
>>
>>She says she wants to add some pics of her and me to them this year.
>>
>>
>>
>>
>>
>Cool!
>
>
>
>

3569. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 02:12:02 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <a120f49ihj570jc78j0d9v8a9m4p6oh3l7@4ax.com>
Source record: 21043

On Fri, 10 Oct 2008 18:03:39 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Hmmm, sounds like that you mention might be the "Original DummyPole!"
>Or, "DummyPole I."
>
>This new design should probably be named "DummyPole II." <grin>

Nope. I vaguely recall it was called a "lamptenna".

Somewhat later, I helped build a dipole using four 4ft fluorescent
tubes (two in each leg of the dipole hung horizontally on bamboo
poles). The 96" length was about right for a 10 meter dipole. About
80 watts out got the bulbs to light up. Once lit, the tubes were
quite conductive and made a functional transmit antenna and impressive
light show. It was totally useless for CW, kinda marginal for SSB,
and just great for AM. We had RTTY but couldn't find anyone to help
test it. We never did figure out how to light up the bulbs so we
could try receive. Various gross violations of the electrical code
and of common sense were attempted with no useful results.

There are those that can see the light...
--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

3570. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 03:18:59 UTC
From: George Csahanin <george@dyb.com>
Message-ID: <uZUHk.2133$hc1.419@flpi150.ffdc.sbc.com>
Source record: 21044

From an offshore site:
http://www.radiohc.org/Distributions/Dxers/ttfd2.html

http://www.hard-core-dx.com/nordicdx/antenna/wire/t2fd.html

http://www.universal-radio.com/catalog/sw_ant/0562.html

http://www.johncon.com/john/T2fd/

http://www.wellbrook.uk.com/UMBT2FD.html

http://home.comcast.net/~smithab11/T2FD.htm

http://www.korpi.biz/t2fd.pdf

"George Csahanin" <georgec@dyb.com> wrote in message
news:7FRHk.3922$yr3.2283@nlpi068.nbdc.sbc.com...
> Doesn't B&W do exactly that?
>
> They called it a "balancing network" or some such thing...a resistor. Army
> published a paper on it in the 40's or 50's.
>
> Problem is the loss it causes.
>
>
> -GC
> W2DB
>
>
> <ltdoc@yahoo.com> wrote in message
> news:12c6ffc3-f2d4-4aeb-a87a-0fa7a2e1cde3@p10g2000prf.googlegroups.com...
>> Howard,
>> Yes. Been some years ago now, but there was even a commercial
>> version sold (did pretty well too). Wish I could remember the name of
>> that thingy.
>> - 'Doc
>>
>
>

3571. Half Size 40M rotatable dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 08:35:34 UTC
From: maxpowervk@yahoo.com.au
Message-ID: <ae33ec71-4c46-480f-85fd-a63955174cb0@z6g2000pre.googlegroups.com>
Source record: 21045

Hello all. I am looking at building a half size rotatable 40M dipole. It will be approxiamately 10 metres long end to end. It will have a loading coil in each leg with about 5 metres of wire wound on a nylon former. My question is, where would be the best spot to mount the loading coils? Half way along each leg, ie- about 2.5 metres from the feed point or should the coils be mounted closer to the feed point? I realise that this antenna will be inferior to a full size dipole, but a half size one will fit where I am located.
Any constructive ideas or experience with loading coils would be appreciated.
Cheers
Max

3572. Re: Half Size 40M rotatable dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 10:54:55 UTC
From: Dave <noone@nowhere.com>
Message-ID: <3C%Hk.218$r_3.154@nwrddc02.gnilink.net>
Source record: 21046

the farther out you can get them the better it will usually work, adding capacitive loading hats on the ends of the elements will also help and increase the bandwidth.

<maxpowervk@yahoo.com.au> wrote in message news:ae33ec71-4c46-480f-85fd-a63955174cb0@z6g2000pre.googlegroups.com...
> Hello all. I am looking at building a half size rotatable 40M dipole.
> It will be approxiamately 10 metres long end to end. It will have a
> loading coil in each leg with about 5 metres of wire wound on a nylon
> former. My question is, where would be the best spot to mount the
> loading coils? Half way along each leg, ie- about 2.5 metres from the
> feed point or should the coils be mounted closer to the feed point? I
> realise that this antenna will be inferior to a full size dipole, but
> a half size one will fit where I am located.
> Any constructive ideas or experience with loading coils would be
> appreciated.
> Cheers
> Max

3573. Re: Hygain rotor quality decline?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 14:07:20 UTC
From: ltdoc@yahoo.com
Message-ID: <f16b5dc3-1aa8-4908-a1eb-3ce456bff075@a1g2000hsb.googlegroups.com>
Source record: 21047
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Dan,
I think you may have answered one or two of your complaints. I
also think you have had a couple of 'manufacturing defects' that the
company really ought to fix.
Because of where you live, you are going to have corrosion problems
no matter who makes your rotor. About the only simple means of
reducing that corrosion problem is regular maintenance, more regular
than 'normal'?
Two 'duds' in a row is sort of unusual. That tends to tell me that
quality control may not be the 'best' in the woprld, or at least could
be a little better. I'm sure they won't jump for joy with another
complaint, but I certainly think I would complain if it were my rotor!
Good luck.
- 'Doc

3574. Re: Half Size 40M rotatable dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 14:31:01 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <bvd1f4lnlmuuvlfvkde1ok1irb6oh06607@4ax.com>
Source record: 21048

On Sat, 11 Oct 2008 01:35:34 -0700 (PDT), maxpowervk@yahoo.com.au
wrote:

>Hello all. I am looking at building a half size rotatable 40M dipole.
>It will be approxiamately 10 metres long end to end. It will have a
>loading coil in each leg with about 5 metres of wire wound on a nylon
>former. My question is, where would be the best spot to mount the
>loading coils? Half way along each leg, ie- about 2.5 metres from the
>feed point or should the coils be mounted closer to the feed point? I
>realise that this antenna will be inferior to a full size dipole, but
>a half size one will fit where I am located.
>Any constructive ideas or experience with loading coils would be
>appreciated.
>Cheers
>Max

Here is the install info for the 40M add-on for the Cushcraft A3S
Beam.
http://www.cushcraft.com/support/pdf/A743_451.pdf

I have been happy with its performance and durability. I expect you
can glean some info from the pictures.

John Ferrell W8CCW

3575. Re: Hygain rotor quality decline?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 14:33:43 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <iu6dnY0-59ChJG3VnZ2dnUVZ_qDinZ2d@comcast.com>
Source record: 21049
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

<ltdoc@yahoo.com> wrote in message
news:f16b5dc3-1aa8-4908-a1eb-3ce456bff075@a1g2000hsb.googlegroups.com...
> Dan,
> I think you may have answered one or two of your complaints. I
> also think you have had a couple of 'manufacturing defects' that the
> company really ought to fix.
> Because of where you live, you are going to have corrosion problems
> no matter who makes your rotor. About the only simple means of
> reducing that corrosion problem is regular maintenance, more regular
> than 'normal'?
> Two 'duds' in a row is sort of unusual. That tends to tell me that
> quality control may not be the 'best' in the woprld, or at least could
> be a little better. I'm sure they won't jump for joy with another
> complaint, but I certainly think I would complain if it were my rotor!
> Good luck.
> - 'Doc
>

Dan,

Since you live so close to the ocean, you might want to try and coat (spray paint) the rotator assy with NEOPRENE PAINT. (This paint is waterproof & impervious to salt water & diesel fuel and you should be able to find it in either a well stocked hardware store or paint supply store).

You also might want to coat any open antenna connectors as well as any coaxial connectors.

Your other option would be to coat your rotator with a 2-part epoxy based paint, although this is rather expensive, and if you had to take the rotator apart it would be a BEAR OF A JOB! Personally, I would stay with the NEOPRENE!

my $0.02
73's de Howard W3CQH

3576. Re: Half Size 40M rotatable dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 15:46:33 UTC
From: maxpowervk@yahoo.com.au
Message-ID: <07667b83-7563-4070-8a86-80f345c23b23@v28g2000hsv.googlegroups.com>
Source record: 21050

On Oct 11, 9:54 pm, "Dave" <no...@nowhere.com> wrote:
> the farther out you can get them the better it will usually work, adding
> capacitive loading hats on the ends of the elements will also help and
> increase the bandwidth.
>
Hello Dave,
I was wondering about capacity hats. Don't know much about them or had
any experience with them. Will have a look on google.
Cheers
Max

3577. Re: Balanced transmission lines in a progressive wave regime. 'Cos seeing is believing!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 17:11:19 UTC
From: ~5Z4ES~ <enrico5z4esLEVAMI@gmail.com>
Message-ID: <gcqmuajlh1@tdi.cu.mi.it>
Source record: 20951

Oh goodness, that Dill Hole smoke seller of Errante is here too.

Just plonk him, no need to waste bites....

Enrico 5z4es Nairobi, Kenya
(in Juba Southern Sudan at the moment)

3578. Re: Half Size 40M rotatable dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 17:50:45 UTC
From: Dave <noone@nowhere.com>
Message-ID: <VH5Ik.253$Rx2.103@nwrddc01.gnilink.net>
Source record: 20952

<maxpowervk@yahoo.com.au> wrote in message
news:07667b83-7563-4070-8a86-80f345c23b23@v28g2000hsv.googlegroups.com...
On Oct 11, 9:54 pm, "Dave" <no...@nowhere.com> wrote:
> the farther out you can get them the better it will usually work, adding
> capacitive loading hats on the ends of the elements will also help and
> increase the bandwidth.
>
Hello Dave,
I was wondering about capacity hats. Don't know much about them or had
any experience with them. Will have a look on google.
Cheers
Max

the cushcraft 40-2cd and the xm-240 use them just after the loading coil.
They can also be mounted at the tip of the elements. They use two 18-24"
long aluminum rods in an X configuration. More rods, or adding a wire
around the tips adds more capacitance.

3579. shownatovah day 127 o0f the lawsuit the suit is of course still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-11 18:38:28 UTC
From: "kb9rqz-1@hotmail.com" <kb9rqz-1@hotmail.com>
Message-ID: <fe2b025b-9ec7-4551-b6e5-5ae0b54e5351@f63g2000hsf.googlegroups.com>
Source record: 20953
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.cb

On Oct 10, 9:22 pm, Steve <kenwood1...@hotmail.com> wrote:
> FYI, THE "TINYURL.COM" BELOW IS LOADED WITH SPYWARE!!!
>

course that is the games they play

3580. Re: Half Size 40M rotatable dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-12 01:51:23 UTC
From: Ken Fowler <ko6no@yahoo.com>
Message-ID: <S9-dnVUWL--HxWzVnZ2dnUVZ_obinZ2d@comcast.com>
Source record: 20954

On 11-Oct-2008, maxpowervk@yahoo.com.au wrote:

> Path:
> border1.nntp.dca.giganews.com!nntp.giganews.com!postnews.google.com!z6g2000pre.googlegro
ups.com!not-for-mail
> From: maxpowervk@yahoo.com.au
> Newsgroups: rec.radio.amateur.antenna
> Subject: Half Size 40M rotatable dipole.
> Date: Sat, 11 Oct 2008 01:35:34 -0700 (PDT)
> Organization: http://groups.google.com
> Lines: 12
> Message-ID:
> <ae33ec71-4c46-480f-85fd-a63955174cb0@z6g2000pre.googlegroups.com>
> NNTP-Posting-Host: 134.144.79.9
> Mime-Version: 1.0
> Content-Type: text/plain; charset=ISO-8859-1
> Content-Transfer-Encoding: 7bit
> X-Trace: posting.google.com 1223714134 15494 127.0.0.1 (11 Oct 2008
> 08:35:34 GMT)
> X-Complaints-To: groups-abuse@google.com
> NNTP-Posting-Date: Sat, 11 Oct 2008 08:35:34 +0000 (UTC)
> Complaints-To: groups-abuse@google.com
> Injection-Info: z6g2000pre.googlegroups.com; posting-host=134.144.79.9;
> posting-account=dOyICwoAAADSQLi117DIlftvMW6S9x-3
> User-Agent: G2/1.0
> X-HTTP-Via: 1.1 US
> X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.0; .NET
> CLR
> 1.1.4322; .NET CLR 2.0.50727),gzip(gfe),gzip(gfe)
> Bytes: 1743
> Xref: number1.nntp.dca.giganews.com rec.radio.amateur.antenna:301925
>
> Hello all. I am looking at building a half size rotatable 40M dipole.
> It will be approxiamately 10 metres long end to end. It will have a
> loading coil in each leg with about 5 metres of wire wound on a nylon
> former. My question is, where would be the best spot to mount the
> loading coils? Half way along each leg, ie- about 2.5 metres from the
> feed point or should the coils be mounted closer to the feed point? I
> realise that this antenna will be inferior to a full size dipole, but
> a half size one will fit where I am located.
> Any constructive ideas or experience with loading coils would be
> appreciated.
> Cheers
> Max

Where you place them is probably not too important to the performance but the inductance needed increases as you move away from the center. The center impedance will be lower than the nominal 72 ohms. EZNEC is good for evaluating the size of inductance and effect on center impedance. Reg, (SK) G4???, used to have programs, where you could plug in lengths and inductances and get answers about F and Z. I believe someone on this newsgroup archived his programs.

73. Ken Fowler, KO6NO

3581. Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-12 03:12:20 UTC
From: Gary Pewitt <n9zsv@magtel.com>
Message-ID: <esp2f495cj16j0c1jmni43qrr7en6dp8fa@4ax.com>
Source record: 20955

Here's a simple question. I want to connect my transceiver to several antennas using 450 ohm ladder line and a balanced tuner. I found a couple of small double pole double throw knife switches for the ladder line. There are only two ways to hook these up. I can hook the tuner output to the center with the ground on the bottom and the antenna on the top connectors. This will allow me to connect the transceiver to the antenna or to ground. The second way is to connect the transceiver to the top contacts, the antenna to the center, and ground to the bottom contacts. This will let me connect the antenna to the radio or to ground. Is it better to ground the radio and let the antenna float? Or to ground the antenna and let the radio float?
Of course if I leave the switch handle sticking straight up nothing is connected to anything.
I am inclined to think grounding the antenna is better but I have been wrong before.

Thanks and 73 Gary N9ZSV

3582. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-12 03:31:07 UTC
From: Dave <dave@dave.dave>
Message-ID: <%belk.13691$8r1.9366@newsfe05.iad>
Source record: 20956

Gary Pewitt wrote:
> Here's a simple question. I want to connect my transceiver to several
> antennas using 450 ohm ladder line and a balanced tuner. I found a
> couple of small double pole double throw knife switches for the ladder
> line. There are only two ways to hook these up. I can hook the tuner
> output to the center with the ground on the bottom and the antenna on
> the top connectors. This will allow me to connect the transceiver to
> the antenna or to ground. The second way is to connect the
> transceiver to the top contacts, the antenna to the center, and ground
> to the bottom contacts. This will let me connect the antenna to the
> radio or to ground. Is it better to ground the radio and let the
> antenna float? Or to ground the antenna and let the radio float?
> Of course if I leave the switch handle sticking straight up nothing is
> connected to anything.
> I am inclined to think grounding the antenna is better but I have been
> wrong before.
>
> Thanks and 73 Gary N9ZSV

Ground the antenna, ground the rig chassis, float the rig RF In.

3583. Re: Hygain rotor quality decline?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-12 03:52:21 UTC
From: ddl@danlan.*com
Message-ID: <1350442@news1.IPSWITCHS.CMM>
Source record: 20957
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

In article <iu6dnY0-59ChJG3VnZ2dnUVZ_qDinZ2d@comcast.com>, hsgorden@comcast.net (W3CQH) writes:
|
| <ltdoc@yahoo.com> wrote in message
| news:f16b5dc3-1aa8-4908-a1eb-3ce456bff075@a1g2000hsb.googlegroups.com...
| > Dan,
| > I think you may have answered one or two of your complaints. I
| > also think you have had a couple of 'manufacturing defects' that the
| > company really ought to fix.

Yeah, but somehow it didn't seem worth the bother. I was up on the tower when I discovered the short-tapped mounting hole and of course at that point it was easier to get a shorter bolt.

| > Because of where you live, you are going to have corrosion problems
| > no matter who makes your rotor.

Although the corrosion makes the rotors unappealing to work on I don't think it was the cause of the failures.

| > About the only simple means of
| > reducing that corrosion problem is regular maintenance, more regular
| > than 'normal'?

Perhaps, though I still wonder why the HAMM faired so much better. In order to do any kind of regular maintenance I think I'd have to replace the bolts that hold the case together with stainless in advance since they rust in place very quickly.

| > Two 'duds' in a row is sort of unusual.

Three duds...

| > That tends to tell me that
| > quality control may not be the 'best' in the woprld, or at least could
| > be a little better. I'm sure they won't jump for joy with another
| > complaint, but I certainly think I would complain if it were my rotor!

Yeah, again it just doesn't seem too productive. I'm sure they would be happy to have me ship back the latest one and I could wait around for a replacement with my tower down. (I put it up today.) I think I'd rather look for an alternative product or revisit the HAMM which I still have.

| Dan,
|

| Since you live so close to the ocean, you might want to try and coat (spray
| paint) the rotator assy with NEOPRENE PAINT. (This paint is waterproof &
| impervious to salt water & diesel fuel and you should be able to find it in
| either a well stocked hardware store or paint supply store).

I'm not sure how this would help in more than a cosmetic way. You understand that the rotor is not sealed, right? There is a gap between the bottom of the bell and the mounting plate. It points down so water shouldn't be *flowing* in, but the insides are certainly exposed to the weather. The only thing keeping the bearings from rusting is the grease, and the retainer strip really can't insure that they are always fully coated. The more I think about this the more I remember stainless bearings in the HAMM, though it might have been an after-market modification.

| You also might want to coat any open antenna connectors as well as any
| coaxial connectors.

I've had good luck with a tight spiral wrap of ordinary vinyl tape. Just took apart some connectors that had been up for more than a decade and they were shiny as new. Lately I've also been filling the insides with STUFF dielectric paste but I'm not sure this makes much difference.

Dan Lanciani
ddl@danlan.*com

3584. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-12 14:43:56 UTC
From: ltdoc@yahoo.com
Message-ID: <a1ba7938-5212-475b-ae72-ac97e692fbaa@t65g2000hsf.googlegroups.com>
Source record: 20958

Gary,
The biggest problem would be in trying to use the radio without connecting an antenna to it. If you can be sure of always doing that, then I would ground the unused antenna (personal preference, radio is grounded anyway). Same thing if you ground the radio's antenna connection. If you forget, it causes problems, sometimes big ones. I tend to make allowances for my bad memory. You may not have that problem, so...
- 'Doc

3585. Re: Hygain rotor quality decline?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-12 14:52:02 UTC
From: ltdoc@yahoo.com
Message-ID: <e7a62836-091d-4275-9ced-ffdbd752bfe9@q35g2000hsg.googlegroups.com>
Source record: 20959
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Dan,
There's no 'fool proof' way of 'fixing' any rotor that doesn't mean a lot of inconvenience in some way. Picking the most palatable inconvenience is the 'trick'.
"Productive"? Uh, yeah, I agree with you, probably not very productive, But I'd do that complaining anyway. Who knows, they might really surprise you (and me :)).
Which solution is the best? I have no idea.
- 'Doc

Beat the @#$ thing to death with a very large hammer. Productive? No, but @#$ sure satisfying!

3586. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-12 15:41:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dk64f4t3ctra5d2ahbh2er6887tutltv8l@4ax.com>
Source record: 20960

On Sat, 11 Oct 2008 22:12:20 -0500, Gary Pewitt <n9zsv@magtel.com>
wrote:

> I found a
>couple of small double pole double throw knife switches for the ladder
>line. There are only two ways to hook these up.

Hi Gary,

I see your problem right here.

There are four ways to hook these up.

73's
Richard Clark, KB7QHC

3587. Re: Hygain rotor quality decline?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-12 17:30:54 UTC
From: Grumpy The Mule <s_foonly@foo.bar>
Message-ID: <Xns9B357F505C2852MDWN@194.177.96.78>
Source record: 20961
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Howdy,

In the 70's I worked on a project developing dual use small
boat radar. We had a terrible time with bearing corrosion at
first.

You might want to try wash-out resistant grease intended for
boat trailer wheel hubs.

In the radar we eventually used Andok C which is no longer
manufactured. Nye developed Rheolube 374C as a replacement
for Andok C. Both are an NLGI Grade 4 grease,

McMaster-Carr has a good selection of stainless steel bearings
and they have ceramic balls for bearings I believe. I'd want
to play with those a bit first before putting them up on a
tower.

73,
Grumpy

ddl@danlan.*com (Dan Lanciani) wrote in
news:1350442@news1.IPSWITCHS.CMM:

> I've had good luck with a tight spiral wrap of ordinary vinyl tape.
> Just took apart some connectors that had been up for more than a
> decade and they were shiny as new. Lately I've also been filling the
> insides with STUFF dielectric paste but I'm not sure this makes much
> difference.
>
> Dan Lanciani
> ddl@danlan.*com

3588. Re: Small Antennas .....and how I had to evade coat hangers as a fetus....by assemblywizard@gmail.com

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-12 19:48:11 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <9d6577c9-9b00-4572-aafc-b2dc1a336831@j68g2000hsf.googlegroups.com>
Source record: 20962

On Sep 27, 2:18 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Rollie wrote:
> > In what area are you refering to when wanting a small antenna.
> > ...
> > Lots of luck,
>
> I stumbled upon this most interesting .PDF file and loaded it up to a
> website of mine:
>
> http://assemblywizard.fr33webhost.com/v1p1comp%20All%20sorts%20of%20s...
>
> I like "his style" -- antennas which would put a bent-up coat-hanger,
> suffering the damage of laying on a freeway for a month, to shame!
>
> Regards,
> JS

Yep, Johnny "little boi" Smith has an affliction for coat hangers. He recalls clearly like it happened just yesterday, on having to always evade a coat hanger that used to infilitrate his mommas pussy in an attempt to rid her womb of what was to become Johnny "Little boi Lover" Smith out of California. O bet that old caot hanger was also found on the freeway by his momma in her vain attempt. No wonder after spawning Johnny Boi she gave up on screwing and took up the art of blow jobs, which I hear she has no equal, other than her boi John Smith.

3589. Re: Hygain rotor quality decline?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 00:34:37 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <ylwlk.106$E%3.36@newsfe19.iad>
Source record: 20963
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"Grumpy The Mule" <s_foonly@foo.bar> wrote in message
news:Xns9B357F505C2852MDWN@194.177.96.78...
> Howdy,
>
> In the 70's I worked on a project developing dual use small
> boat radar. We had a terrible time with bearing corrosion at
> first.
>
> You might want to try wash-out resistant grease intended for
> boat trailer wheel hubs.

Good advice.

> McMaster-Carr has a good selection of stainless steel bearings
> and they have ceramic balls for bearings I believe. I'd want
> to play with those a bit first before putting them up on a
> tower.

Most folks instantly think of stainless steels for corrosion protection. However SS is not a particularly corrosion resistant material around salt water. All commonly available grades of SS are subject to halogen corrosion, i.e. chlorides in sea water. Before retirement I worked at Eastman Chemical company in their research laboratories. They frequently had to resort to rather exotic alloys, such as Hastelloy C-276, for applications where halogens were involved. These alloys tend to be extremely expensive and nearly impossible to machine.

I would suggest using lots of a good grease and frequent maintenance if your rotor is exposed to salt air.

Barry WA4VZQ

3590. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 01:16:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcu7ha$9uj$1@news.albasani.net>
Source record: 20964

Richard Clark wrote:

>
> Hi Gary,
>
> I see your problem right here.
>
> There are four ways to hook these up.
>
> 73's
> Richard Clark, KB7QHC

Hmmm, I guess you post implies you are a bit short on beginning with the first way?

How typical ... <yawn>

Regards,
JS

3591. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 01:39:03 UTC
From: Jim-NN7K
Message-ID: <4FxIk.3379$ZP4.855@nlpi067.nbdc.sbc.com>
Source record: 20965

Was an outfit here in the U.S> actually "Marketed" such!
With claims that would give less than 3:1 SWR, on any frequency!
Wondered how it could do that and still perform- asked buddy (engineer)
and this was the "Black Box" he came up with! (50 ohm, 200 watt, non
inductive resistor! No majic involved, just a Dummy Load, in parallel
with a couple pieces of wire! Think ARRL, finally exposed it!
Yes it will radiate, but at WHAT effeciency?? Jim NN7K

dfinn1@nc.rr.com wrote:
> On Oct 8, 1:07 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> Howard Kowall wrote:
>>> Has anyone ever tried putting a dipole antenna up with the center insulator
>>> being a high power 50 ohm dummy load,then connecting the dipole elements
>>> across the dummy load.This would always keep a suitable match at 50 ohms
>>> and satisfy the transceiver.Would most of the power go to the dummy load and
>>> not the elements and wouldn't radiate.In thinking about this it all
>>> logically makes sense the load would really never change or would it have
>>> some reactance with the dipole elements.
>>> Thanx All
>>> Howard
>>> VE4ISP

3592. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 02:06:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcuag4ehs1@news.albasani.net>
Source record: 20966

Jim-NN7K wrote:
> Was an outfit here in the U.S> actually "Marketed" such!
> With claims that would give less than 3:1 SWR, on any frequency!
> Wondered how it could do that and still perform- asked buddy (engineer)
> and this was the "Black Box" he came up with! (50 ohm, 200 watt, non
> inductive resistor! No majic involved, just a Dummy Load, in parallel
> with a couple pieces of wire! Think ARRL, finally exposed it!
> Yes it will radiate, but at WHAT effeciency?? Jim NN7K

Makes me wonder if you have been paying attention?; indeed, it has been
the arrl which has been "exposed!" ROFLOL!

Regards,
JS

3593. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 03:59:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t6h5f4dque5tjgavsjf904u23jtcrtgf29@4ax.com>
Source record: 20967

On Sun, 12 Oct 2008 18:16:25 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Richard Clark wrote:
>> There are four ways to hook these up.

>How typical ... <yawn>

Go back to sleep, Brett. You certainly added nothing.

Switch one center posts: Rig - now called the rig switch
Switch two center posts: Antenna - now called the antenna switch

Rig switch position 1: both sides to ground
Rig switch position 2: both sides to antenna switch position 1
Antenna switch position 1: both sides to rig switch position2
Antenna switch position 2: both sides to ground

Rig can be
1. open
2. grounded
3. to switched antenna

Antenna can be
1. open
2. grounded
3. to switched rig

Both rig and antenna can be independantly open or grounded, or
interconnected. No real advantage in the open positions, but they are
available as a 6 state solution. As such, a 4 state solution that was
sought.

More switches, more states. Classic cross-point switching.

73's
Richard Clark, KB7QHC

3594. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 12:36:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gcvfcc$p0g$1@news.albasani.net>
Source record: 20968

Richard Clark wrote:

> ...
> Go back to sleep, Brett. You certainly added nothing.
> ...
> 73's
> Richard Clark, KB7QHC

I'll wakeup, when something interesting comes about ...

Regards,
JS

3595. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 15:53:23 UTC
From: Jim-NN7K
Message-ID: <3aKIk.3476$c45.186@nlpi065.nbdc.sbc.com>
Source record: 20969

John Smith wrote:
> Jim-NN7K wrote:
>> Was an outfit here in the U.S> actually "Marketed" such!
>> With claims that would give less than 3:1 SWR, on any frequency!
>> Wondered how it could do that and still perform- asked buddy (engineer)
>> and this was the "Black Box" he came up with! (50 ohm, 200 watt, non
>> inductive resistor! No majic involved, just a Dummy Load, in parallel
>> with a couple pieces of wire! Think ARRL, finally exposed it!
>> Yes it will radiate, but at WHAT effeciency?? Jim NN7K
>
> Makes me wonder if you have been paying attention?; indeed, it has been
> the arrl which has been "exposed!" ROFLOL!
>
> Regards,
> JS
'Corse, this WAS from memory, of this antenna-- From some 25 YEARS ago!
When it was first introduced! Hindsight is always better than Foresight!
:) Jim

3596. Re: Dummy Load Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 16:22:34 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gcvskb$1946$1@f04n12.cac.psu.edu>
Source record: 20970

Bruce in alaska wrote:
> In article <gcnhe5$1eie$1@f04n12.cac.psu.edu>,
> Michael Coslo <mjc5@psu.edu> wrote:
>
>> JIMMIE wrote:
>>> Once I joke about using a CB groundplane with a 10 db pad for an all
>>> band antenna.
>>> I thought about this for a while and decided to try it. I did nt have
>>> to use 10 db maybe it was only 3db or 6db I cant remember now
>>> to get an antenna that my soliddtate transceiver with no tuner was
>>> happy with on allHF bands. I was fairly amazed at how well the
>>> antenna worked or at least amazed that it did work at all.
>>
>> What is more, you didn't have to spend 600 dollars for a bad antenna.
>>
>>
>> - 73 de Mike N3LI -
>
> Years ago, I was working on a Marine HF Radio, on the bench, in Seattle
> WA, connected to a Bird 1 Kw Dummy Load. As I was setting the -16 db
> Pilot Carrier Level for the Public Coast Station KMI, at Point Rayes CA,
> on 12 Mhz, I got a reply from the Operator, ON Duty, asking for Station
> Call Sign. I had a nice chat with him for about 5 minutes. ANY antenna,
> no matter how it is built, even a Dummy Load, will radiate, and
> communicate IF the Band is open. If the Band is closed, it doesn't
> matter how efficient the antenna is, you will not communicate.
>

But we shouldn't have to spend 600 dollars to find that out! ;^)

While it is true that at ceratin times, anything will "get out", and at other times, nothing does, there is a whole range in between. I did some mobile contesting this weekend, and the consequences of having a bit more efficent and productive antenna were apparent. Mor QSO's, and less time spent doing multiple exchange sends.

And wow, the bands were weird this past weekend.

But given the results of shootouts, it is clear that having a good mobile antenna will add quite a bit of punch to your signal. IIRC the Hamsticks were about 20 db down (Cecil, I think you had some test results, so correct me if I'm way off).

- 73 de Mike N3LI -

3597. Re: "Dummy Load" is what you get when John "dumbass" Smith busts a nut..in some poor faggots backside!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 19:36:54 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <3d131ab4-957b-4a0c-9c35-ecba9b1dc7b8@r66g2000hsg.googlegroups.com>
Source record: 20971

On Oct 13, 11:22 am, Michael Coslo <m...@psu.edu> wrote:
> Bruce in alaska wrote:
> > In article <gcnhe5$1ei...@f04n12.cac.psu.edu>,
> > Michael Coslo <m...@psu.edu> wrote:
>
> >> JIMMIE wrote:
> >>> Once I joke about using a CB groundplane with a 10 db pad for an all
> >>> band antenna.
> >>> I thought about this for a while and decided to try it. I did nt have
> >>> to use 10 db maybe it was only 3db or 6db I cant remember now
> >>> to get an antenna that my soliddtate transceiver with no tuner was
> >>> happy with on allHF bands. I was fairly amazed at how well the
> >>> antenna worked or at least amazed that it did work at all.
>
> >> What is more, you didn't have to spend 600 dollars for a bad antenna.
>
> >>   - 73 de Mike N3LI -
>
> > Years ago, I was working on a Marine HF Radio, on the bench, in Seattle
> > WA, connected to a Bird 1 Kw Dummy Load. As I was setting the -16 db
> > Pilot Carrier Level for the Public Coast Station KMI, at Point Rayes CA,
> > on 12 Mhz, I got a reply from the Operator, ON Duty, asking for Station
> > Call Sign. I had a nice chat with him for about 5 minutes. ANY antenna,
> > no matter how it is built, even a Dummy Load, will radiate, and
> > communicate IF the Band is open. If the Band is closed, it doesn't
> > matter how efficient the antenna is, you will not communicate.
>
> But we shouldn't have to spend 600 dollars to find that out! ;^)
>
> While it is true that at ceratin times, anything will "get out", and at
> other times, nothing does, there is a whole range in between. I did some
> mobile contesting this weekend, and the consequences of having a bit
> more efficent and productive antenna were apparent. Mor QSO's, and less
> time spent doing multiple exchange sends.
>
> And wow, the bands were weird this past weekend.
>
> But given the results of shootouts, it is clear that having a good
> mobile antenna will add quite a bit of punch to your signal. IIRC the
> Hamsticks were about 20 db down (Cecil, I think you had some test
> results, so correct me if I'm way off).
>
>   - 73 de Mike N3LI -- Hide quoted text -

>
> - Show quoted text -

3598. Re: Half Size 40M rotatable dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 19:43:24 UTC
From: nm5k@wt.net
Message-ID: <2c82d6cd-d613-416a-a572-a848711e1aa2@31g2000prz.googlegroups.com>
Source record: 20972

On Oct 11, 3:35 am, maxpowe...@yahoo.com.au wrote:
> Hello all. I am looking at building a half size rotatable 40M dipole.
> It will be approxiamately 10 metres long end to end. It will have a
> loading coil in each leg with about 5 metres of wire wound on a nylon
> former. My question is, where would be the best spot to mount the
> loading coils? Half way along each leg, ie- about 2.5 metres from the
> feed point or should the coils be mounted closer to the feed point? I
> realise that this antenna will be inferior to a full size dipole, but
> a half size one will fit where I am located.
> Any constructive ideas or experience with loading coils would be
> appreciated.
> Cheers
> Max

1/2 to appx 3/4 out from the center point is usually about the best
compromise.
You want to improve the current distribution, but at the same time
not get so carried away that the loss from the extra number of
coil turns needed outweigh that.
With no hat, 3/4 the way out is about as far as you want to go.
You could probably go a bit farther out if you use a hat on each
end. But myself, I'd probably still leave it at about 3/4 the way
out even with a hat. The typical hats used will not be too big
vs the wavelength on 40m.. IE: Four spokes of 3-4 feet long
is not a huge increase in capacitance for that band.
So I would not run the coil all the way at the end.
Reg Edwards old "vertload" program will let you see the best
point to mount the coil, but it does not deal with hats.
Only a single "stinger" whip. It will also tell you about
how many turns for the coil at the various positions.
Those programs are probably archived on some site.
A google search would probably turn them up.

3599. Re: Half Size 40M rotatable dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 19:48:10 UTC
From: nm5k@wt.net
Message-ID: <2daa6767-e433-4c0d-ba75-3d5a5af54380@t39g2000prh.googlegroups.com>
Source record: 20973

On Oct 11, 12:50 pm, "Dave" <no...@nowhere.com> wrote:

>
> the cushcraft 40-2cd and the xm-240 use them just after the loading coil.
> They can also be mounted at the tip of the elements. They use two 18-24"
> long aluminum rods in an X configuration. More rods, or adding a wire
> around the tips adds more capacitance.

The tips is a better location for the hats. You get some degradation
if you
mount the hat just above the coil.
You can check W8JI's mobile antenna info for the why's..
BTW, you generally will use the same techniques for these as you
would a mobile whip..
A half size dipole is basically just two mobile whips end to end to
make a
dipole. All the techniques used to maximize mobile antenna performance
can be applied to half size, or smaller dipoles.

3600. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 21:15:44 UTC
From: Hank Zoeller <bogusaddress@dontbothernotvalid.com>
Message-ID: <48f3bbbc$0$12366$c3e8da3@news.astraweb.com>
Source record: 20974

Richard Clark wrote:
> Rig can be
> 1. open
> 2. grounded
> 3. to switched antenna
>
> Antenna can be
> 1. open
> 2. grounded
> 3. to switched rig

As a refinement I'd put a dummy load on switch #1 so that the choices would be:
Rig can be:
1. Open
2. To dummy load
3. To switched antenna

The antenna switch would remain the same -- open, grounded or to switched rig.

I'd rather run my rig into a somewhat reasonable load rather than a short to ground during the inevitable instance of forgetting to set the switch properly.

If running less than say 200 watts output then one could even use an incandescent light bulb for the dummy load. It would presumably light up if one were to inadvertently transmit in that configuration. So, the rig would be at least partially protected and the operator would have some indication of why no one is answering his CQ. Maybe a *red* light bulb?

One could also physically (not electrically) parallel the switches so there were only two configurations. The rig connected to the antenna =OR= the rig connected to the dummy and the antenna connected to ground. That would be cool.

73,
--
HZ

3601. Measurements for a CDMA450 coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 21:20:56 UTC
From: jonaslonnroth@gmail.com
Message-ID: <c9baa1b0-2d86-477f-9ffb-5cca2759ccbc@u57g2000hsf.googlegroups.com>
Source record: 20975

I would like to experiment with a few different antennas to be used with a CDMA450 usb modem for portable use. The design frequency would be 455 MHz (second TX carrier of Scandinavian NMT-CDMA450). Boomer cells are now being introduced allowing for ranges beyond 62 km (up to 120).

The first design would be a coaxial dipole, i.e. with a tubular sleve covering the cable below the quarter wave tip. The design could be for RG58 with 0.66 velocity factor. From various sites I've seen a velocity factor estimate of 0.95 for the sleeve but no discussion on the diamter vs width of the sleeve. Also, I'm not sure that the sleeve should be an exact quarter wavelength. Reading the Franklin antenna Patent introduces a whole bunch of variables but for UHF use, the design should be well known.

I'd like to connect to the antenna with a TMC or SMA connector.

The tip would be a bare wire protected by a ball pen housing or the like.

Would using a ferrite ring on the cable below the sleeve help any?

I could compare this antenna to some commercial end fed half wavelegth antennas that I already have. I found a coaxial dipole to be a very good antenna on top of a 4 meter fishing rod 20 years ago when NMT 900 was started up and base stations few.

Regards

Jonas

SM0WJY

PS I'll post questions regarding a multielement coaxial antenna in a separate thread

3602. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 22:07:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fgh7f4l2vlihrpnb4mnb7k2uu9jooeoaua@4ax.com>
Source record: 20976

On Mon, 13 Oct 2008 15:15:44 -0600, Hank Zoeller
<bogusaddress@dontbothernotvalid.com> wrote:

>Richard Clark wrote:
>> Rig can be
>> 1. open
>> 2. grounded
>> 3. to switched antenna
>>
>> Antenna can be
>> 1. open
>> 2. grounded
>> 3. to switched rig
>
>As a refinement I'd put a dummy load on switch #1 so that the choices would be:
>Rig can be:
>1. Open
>2. To dummy load
>3. To switched antenna
>
>The antenna switch would remain the same -- open, grounded or to switched rig.
>
>I'd rather run my rig into a somewhat reasonable load rather than a short to
>ground during the inevitable instance of forgetting to set the switch properly.
>
>If running less than say 200 watts output then one could even use an
>incandescent light bulb for the dummy load. It would presumably light up if
>one were to inadvertently transmit in that configuration. So, the rig would
>be at least partially protected and the operator would have some indication of
>why no one is answering his CQ. Maybe a *red* light bulb?
>
>One could also physically (not electrically) parallel the switches so there
>were only two configurations. The rig connected to the antenna =OR= the rig
>connected to the dummy and the antenna connected to ground. That would be cool.

Hi Hank,

Sounds like good advances toward full use of the two switches.

73's
Richard Clark, KB7QHC

3603. Design measurements for a multielement vertical NMT-CDMA450 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 22:37:18 UTC
From: jonaslonnroth@gmail.com
Message-ID: <fbdbbc9c-f4d0-404e-b6c7-c0d5672b04f0@m74g2000hsh.googlegroups.com>
Source record: 20977

The multisection Franklin antenna for UHF has been widely published on the web. The first design is by N9ZIA:

http://www.qsl.net/n9zia/wireless/col432/index.html

This antenna used ground plane radials for decoupling

A modification by N1HFX uses a sleeve and ferrite toroids for decoupling:

www.rason.org/Projects/collant/collant.htm

There is also a design proposed by WA6SVT with a few variations in which a tubular sleeve is used and the coax elements covered with cupper tubes:

http://www.repeater-builder.com/antenna/n1bug-construction.html

I would like to build a pair of vertical multielement antennas for mobile use (when standing still) use to be used in cdma450 cell fringe zones. 7-9 dB gain should be enough to reach base stations of the outskirts of cells.

I suppose that a combination of the principles outlined in the articles by N1HFX and the ones cited around the WA6SVT design should work. Any feedback would be appreciated.

Q: How come coils are not used to space half-wave elements from each other? In several wifi designs, single loop coils are used. In some, coils consist of several turns:

http://mobileaccess.de/wlan/download/arlx-om2400-all-inst.pdf

So, what size should a phasing coil be for 455 MHz?

Regards
Jonas/SM0WJY

3604. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 23:19:25 UTC
From: JB <nospam@goofball.net>
Message-ID: <1IQIk.813$r_3.652@nwrddc02.gnilink.net>
Source record: 20978

"Gary Pewitt" <n9zsv@magtel.com> wrote in message
news:esp2f495cj16j0c1jmni43qrr7en6dp8fa@4ax.com...
> Here's a simple question. I want to connect my transceiver to several
> antennas using 450 ohm ladder line and a balanced tuner. I found a
> couple of small double pole double throw knife switches for the ladder
> line. There are only two ways to hook these up. I can hook the tuner
> output to the center with the ground on the bottom and the antenna on
> the top connectors. This will allow me to connect the transceiver to
> the antenna or to ground. The second way is to connect the
> transceiver to the top contacts, the antenna to the center, and ground
> to the bottom contacts. This will let me connect the antenna to the
> radio or to ground. Is it better to ground the radio and let the
> antenna float? Or to ground the antenna and let the radio float?
> Of course if I leave the switch handle sticking straight up nothing is
> connected to anything.
> I am inclined to think grounding the antenna is better but I have been
> wrong before.
>
> Thanks and 73 Gary N9ZSV

If you have a real problem with lightning in your area, do some reading on the situation. You might drastically redesign your grounding situation. The grounding should be tied together at the service entrance, so the antenna entrance should be near there and all tied together with low resistance to ground. This means the tuner should be there too or at the antenna The radio should be grounded to the entrance also. It is important that all grounding should be done outside the building rather than through the floor. That would bring the major current of a strike through your house. There are ARRL tis documents on the subject and a bunch of others.

3605. Re: Design measurements for a multielement vertical NMT-CDMA450 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 23:23:13 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <BLQIk.784$Rx2.113@nwrddc01.gnilink.net>
Source record: 20979

<jonaslonnroth@gmail.com> wrote in message
news:fbdbbc9c-f4d0-404e-b6c7-c0d5672b04f0@m74g2000hsh.googlegroups.com...
> The multisection Franklin antenna for UHF has been widely published on
> the web. The first design is by N9ZIA:
>
> http://www.qsl.net/n9zia/wireless/col432/index.html
>
> This antenna used ground plane radials for decoupling
>
> A modification by N1HFX uses a sleeve and ferrite toroids for
> decoupling:
>
> www.rason.org/Projects/collant/collant.htm
>
> There is also a design proposed by WA6SVT with a few variations in
> which a tubular sleeve is used and the coax elements covered with
> cupper tubes:
>
> http://www.repeater-builder.com/antenna/n1bug-construction.html
>
> I would like to build a pair of vertical multielement antennas for
> mobile use (when standing still) use to be used in cdma450 cell fringe
> zones. 7-9 dB gain should be enough to reach base stations of the
> outskirts of cells.
>
> I suppose that a combination of the principles outlined in the
> articles by N1HFX and the ones cited around the WA6SVT design should
> work. Any feedback would be appreciated.
>
> Q: How come coils are not used to space half-wave elements from each
> other? In several wifi designs, single loop coils are used. In some,
> coils consist of several turns:
>
> http://mobileaccess.de/wlan/download/arlx-om2400-all-inst.pdf
>
> So, what size should a phasing coil be for 455 MHz?
>
> Regards
> Jonas/SM0WJY

Hi Jonas

It isnt made clear that this colinear array of 1/ wave diplies is quite sensitive to ferquency change and intolerant to construction errors. If you ask questions like "what size should the phasing coils be", you find some difficulty in getting a long array to work. I'd advise you to try one of the designs that doesnt use "phasing coils" and just try whatever is easy for you to build.
I have (in the 1960s) designed and manufactured antennas using this end fed concept. The radiation pattern is effected by frequency change. The beam max will squint up with higher ferquencies and downward with lower frequencies.

Jerry KD6JDJ

3606. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 23:26:37 UTC
From: JB <nospam@goofball.net>
Message-ID: <NOQIk.814$r_3.714@nwrddc02.gnilink.net>
Source record: 20980

"JB" <nospam@goofball.net> wrote in message
news:1IQIk.813$r_3.652@nwrddc02.gnilink.net...
>
> "Gary Pewitt" <n9zsv@magtel.com> wrote in message
> news:esp2f495cj16j0c1jmni43qrr7en6dp8fa@4ax.com...
> > Here's a simple question. I want to connect my transceiver to several
> > antennas using 450 ohm ladder line and a balanced tuner. I found a
> > couple of small double pole double throw knife switches for the ladder
> > line. There are only two ways to hook these up. I can hook the tuner
> > output to the center with the ground on the bottom and the antenna on
> > the top connectors. This will allow me to connect the transceiver to
> > the antenna or to ground. The second way is to connect the
> > transceiver to the top contacts, the antenna to the center, and ground
> > to the bottom contacts. This will let me connect the antenna to the
> > radio or to ground. Is it better to ground the radio and let the
> > antenna float? Or to ground the antenna and let the radio float?
> > Of course if I leave the switch handle sticking straight up nothing is
> > connected to anything.
> > I am inclined to think grounding the antenna is better but I have been
> > wrong before.
> >
> > Thanks and 73 Gary N9ZSV
>
> If you have a real problem with lightning in your area, do some reading on
> the situation. You might drastically redesign your grounding situation.
The
> grounding should be tied together at the service entrance, so the antenna
> entrance should be near there and all tied together with low resistance to
> ground. This means the tuner should be there too or at the antenna The
> radio should be grounded to the entrance also. It is important that all
> grounding should be done outside the building rather than through the
floor.
> That would bring the major current of a strike through your house. There
> are ARRL tis documents on the subject and a bunch of others.
>

You will also want to dispense with the switches and use lightning arresters
so you won't be hanging onto several thousand volts built up on the switch.

3607. Re: Design measurements for a multielement vertical NMT-CDMA450 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-13 23:50:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b1n7f4t493l8gg54ne63upu9e8t23eoaf4@4ax.com>
Source record: 20981

On Mon, 13 Oct 2008 15:37:18 -0700 (PDT), jonaslonnroth@gmail.com
wrote:

>The multisection Franklin antenna for UHF has been widely published on

Hi Jonas,

The links you provide offer nothing new on the subject. They are
appealing and thorough, but I notice none of them give any verified
data as to the operation characteristics (unless they are buried as
generalities within the text).

One very telling problem is that the popular method of using coaxial
sections swapping phase ignore that there are TWO measures of velocity
factor, and only ONE is being used to construct the antenna. The
interior section will NOT have the same wavelength dimension as its
exterior.

Another telling problem is that with the last link, there is ever so
much goop being added, and coils being wrapped that this MUST shift
frequencies and shifts by an unknown amount. As none of these links
offers measured characteristics, it is equal to building model train
sections for appearance's sake.

The original Franklin antenna used wire sections. You could easier
just bend one continuous wire into the appropriate shape and be done
with it. No issues of varying velocity factor, no phasing coils, no
problems of goop or wrapping tape, and you could use the same radome.
Open a commercial unit and you will find that is how the Pro's do it.

73's
Richard Clark, KB7QHC

3608. Re: Design measurements for a multielement vertical NMT-CDMA450 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-14 03:04:04 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <E_TIk.858$Rx2.55@nwrddc01.gnilink.net>
Source record: 20982

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:b1n7f4t493l8gg54ne63upu9e8t23eoaf4@4ax.com...
> On Mon, 13 Oct 2008 15:37:18 -0700 (PDT), jonaslonnroth@gmail.com
> wrote:
>
>>The multisection Franklin antenna for UHF has been widely published on
>
> Hi Jonas,
>
> The links you provide offer nothing new on the subject. They are
> appealing and thorough, but I notice none of them give any verified
> data as to the operation characteristics (unless they are buried as
> generalities within the text).
>
> One very telling problem is that the popular method of using coaxial
> sections swapping phase ignore that there are TWO measures of velocity
> factor, and only ONE is being used to construct the antenna. The
> interior section will NOT have the same wavelength dimension as its
> exterior.
>
> Another telling problem is that with the last link, there is ever so
> much goop being added, and coils being wrapped that this MUST shift
> frequencies and shifts by an unknown amount. As none of these links
> offers measured characteristics, it is equal to building model train
> sections for appearance's sake.
>
> The original Franklin antenna used wire sections. You could easier
> just bend one continuous wire into the appropriate shape and be done
> with it. No issues of varying velocity factor, no phasing coils, no
> problems of goop or wrapping tape, and you could use the same radome.
> Open a commercial unit and you will find that is how the Pro's do it.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard

The the antenna I designed for "ACI" was a coaxial construction I left
the "skirt stubs" without dielectric so the radiators were close to 1/2
wave long since the Vp of the coax line inside was also air dielectric.
The only good thing about the array antenna project was that the customer
was happy. Also, I did learn alot while developing the array. The one
thing I remember is that there is alot of beam squint with frequency

variation when the number of elements is high. I dont expect the array of the 8 or 10 alternating coaxes to be controlable in either VSWR nor beam squint. But, it might be fun to try building one and try it.

Jerry

3609. Re: Design measurements for a multielement vertical NMT-CDMA450 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-14 06:07:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bld8f49ud50v2god9iu04q50kpt06i6dbc@4ax.com>
Source record: 20983

On Tue, 14 Oct 2008 03:04:04 GMT, "Jerry" <jerrymartes@verizon.net>
wrote:

> I dont expect the array of
>the 8 or 10 alternating coaxes to be controlable in either VSWR nor beam
>squint. But, it might be fun to try building one and try it.

Hi Jerry,

Fun, maybe, but one can expend the same effort more productively and
still have as much fun.

73's
Richard Clark, KB7QHC

3610. Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 05:17:22 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B37E2BFF7B46Huckleberrybigvalley@198.186.192.196>
Source record: 20984

I know this is slightly off topic, but since I am intending to run some RF cable in the conduit, and since there are a lot of intelligent hams on this group, I will proceed anyway:

Last year at the beginning of construction of a new house I buried about 50 feet of 3/4" Sched. 40 PVD between the house and a location on the property perimeter. Now that I am ready to use it, I can not locate the perimeter end.... it is somewhere in about a 10' area, and the end curves up to probably about a foot underground.

The ground is nearly pure sand, and is well landscaped now to the point that I do not want to randomly dig it up.

The end terminated in an elbow curving up and is well duct taped shut.

Can anyone suggest a method or equipment I might use to locate that far end?

Tnx.

Ed K7AAT

3611. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 05:31:28 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <0gfJk.691$%11.149@flpi144.ffdc.sbc.com>
Source record: 20985

Ed wrote:
>
> I know this is slightly off topic, but since I am intending to run
> some RF cable in the conduit, and since there are a lot of intelligent
> hams on this group, I will proceed anyway:
>
> Last year at the beginning of construction of a new house I buried
> about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
> the property perimeter. Now that I am ready to use it, I can not
> locate the perimeter end.... it is somewhere in about a 10' area, and the
> end curves up to probably about a foot underground.
>
> The ground is nearly pure sand, and is well landscaped now to the
> point that I do not want to randomly dig it up.
>
> The end terminated in an elbow curving up and is well duct taped
> shut.
>
> Can anyone suggest a method or equipment I might use to locate that
> far end?
>
> Tnx.
>
> Ed K7AAT

Ed;

Run a metal snake into the conduit then get a metal detector and sweep
the area for the conduit. If this doesn't work there are wire tracing
detectors that might do the job. You hook the transmitter to the snake
and sweep with the detector.
If all fails you might try a metal probe. Stick the probe into the
ground and feel for the conduit. Or dig up a couple of feet of conduit.
Note the direction it is going then move in that direction and dig a
small trench where you thing the conduit is.
One of these methods should work.
If all fails install new conduit.

Dave WD9BDZ

3612. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 06:28:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <I8WdnRs5_fEYEGjVnZ2dnUVZ_v3inZ2d@posted.easystreetonline>
Source record: 20986

A suggestion for other folks who will be burying a conduit: Take a bunch of pictures before the trench is filled. It's good to include distances to some fixed reference points -- you can write them with a marker on big pieces of paper laid on the ground to get them in the picture. I haven't yet used the pictures I took of mine, but I sure have made a lot of use of the pictures I took of the uncovered walls of a home addition, showing the locations of all the studs and wiring.

Roy Lewallen, W7EL

3613. 33 YEARS OF PLAY DX: THE VIDEO

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 07:59:06 UTC
From: francesco <francec58@libero.it>
Message-ID: <7adae103-454e-440d-ac6b-ffa43171fc92@u27g2000pro.googlegroups.com>
Source record: 20987

33 YEARS OF PLAY DX: THE VIDEO

The video of the celebration of 33 years of the fanzine "PlayDX" with the visit to "Città del Capo - Radio Metropolitana" (94.7-92.3 FM - Bologna) is available here:

http://blog.libero.it/radioascolto/5653675.html

73's Francesco

3614. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 08:45:46 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <58eba0a6-8107-40dc-85e9-6fd68adcfa69@s9g2000prm.googlegroups.com>
Source record: 20988

Andy suggests:

Couple a garden hose to the end you can find and run water into
the PVC.... Go to the area surrounding the buried end and look for
the
sandy ground to be wet......

Andy W4OAH

3615. Re: Hy-Gain AV-14AVQ

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 10:03:38 UTC
From: lwbyoyo1 <lwbyoyo1.33b77a7@radiobanter.com>
Message-ID: <lwbyoyo1.33b77a7@radiobanter.com>
Source record: 20989

Frank Zappa (lead guitar)Ray White (guitar, vocals)Steve Vai (guitar)Tommy Mars (keyboards, vocals)Bobby Martin (keyboards, saxophone, vocals)Ed Mann (percussion)Scott Thunes (bass)Chad Wackerman (drums)His name is Stevie VaiAnd he's a crazy guyLast November, I recall,He needed a spanking He decided thenA female specimenWould be excitin' for a nightTo give him a spanking Laurel was her nameShe came to Notre DameHe told me just the other dayHe oughta be thankingHer for the spanking She was large and softAnd she beat him offMade him drool upon his dorkAnd gave him a wankingAfter the spanking Hair brush!Oh! What a hair brush!(Its not that he requires grooming!Guys with light blue hair never do!) Then she did explain:There's another gameThat we can play with this device,And then a banana! It was slightly greenVapors in betweenRising up to fill the roomAnd cook the banana She said it was dryStevie won't you tryTo drool a little drool on itAnd grease the banana Later in the dawnLaurel carried onShe got right up and dressed herself andAte the banana
==========[image: http://www.qzone.la/img/userup/0808/2GU30U016.jpg]Look! Look!Look! our wow power leveling site: There have 'wow power leveling' (http://www.swow-power-leveling.com/) news,cheap 'wow powerleveling' (http://www.wow-powerleveler.com/),'world of warcraft gold' (http://www.toppowerlevel.net/buy.php) article,buy 'wow gold' (http://www.yoyo-power-leveling.com/buy_wow_gold.php),'world of warcraft power leveling' (http://www.wow-power-leveling1.com/).LWB

--
lwbyoyo1

3616. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 15:44:41 UTC
From: JB <nospam@goofball.net>
Message-ID: <JdoJk.1244$r_3.866@nwrddc02.gnilink.net>
Source record: 20990

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9B37E2BFF7B46Huckleberrybigvalley@198.186.192.196...
>
> I know this is slightly off topic, but since I am intending to run
> some RF cable in the conduit, and since there are a lot of intelligent
> hams on this group, I will proceed anyway:
>
> Last year at the beginning of construction of a new house I buried
> about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
> the property perimeter. Now that I am ready to use it, I can not
> locate the perimeter end.... it is somewhere in about a 10' area, and the
> end curves up to probably about a foot underground.
>
> The ground is nearly pure sand, and is well landscaped now to the
> point that I do not want to randomly dig it up.
>
> The end terminated in an elbow curving up and is well duct taped
> shut.
>
> Can anyone suggest a method or equipment I might use to locate that
> far end?
>
> Tnx.
>
> Ed K7AAT

Stab an antenna rod down until you find it.

3617. modeling capacitance hat with 4nec2 for w8jk design to wrk 40m

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 16:12:57 UTC
From: agh0792@louisiana.edu
Message-ID: <0eac5852-7c25-4c8e-bf5a-ef70f478faff@l33g2000pri.googlegroups.com>
Source record: 20991

Hello.. I am interested in modeling with 4nec2 a two element W8jk for
40 meters and higher frequencies. I was thinking of using two
elements similar to the rotatable dipole described at
http://www.k6if.com/40dip/40dip.html which uses capacitance loading at
the ends of a 40' element.
I have seen how to add loading in the form of a specified capacitance
in 4nec2 but am not sure
if it is possible to just physically model the capacitance hat as if
it were just additional wire segments. Any advice would be
appreciated. I had some fun with a "bamboo beam" made
in a W8jk design with two 24' elements spaced 8' and mounted up
20' (using #10 alum. wire).
Thanks in advance for comments... Whiskey5

3618. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 17:09:19 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <6babc83c-dd93-4c04-a00c-6836ec75dad4@v72g2000hsv.googlegroups.com>
Source record: 20992

On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
> I know this is slightly off topic, but since I am intending to run
> some RF cable in the conduit, and since there are a lot of intelligent
> hams on this group, I will proceed anyway:
>
> Last year at the beginning of construction of a new house I buried
> about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
> the property perimeter. Now that I am ready to use it, I can not
> locate the perimeter end.... it is somewhere in about a 10' area, and the
> end curves up to probably about a foot underground.
>
> The ground is nearly pure sand, and is well landscaped now to the
> point that I do not want to randomly dig it up.
>
> The end terminated in an elbow curving up and is well duct taped
> shut.
>
> Can anyone suggest a method or equipment I might use to locate that
> far end?
>
> Tnx.
>
> Ed K7AAT

Ive done this to locate wires in walls, might work for wires in
ground.

Make a buzzer form a relay by attaching the NC contacts in series with
the coil and battery.
Connect it to a wire running through the conduit making sure the wire
is not connected to power. The buzzer will generate enough hash you
can pick it up on a pocket AM rx.

Jimmie

3619. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 17:15:26 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <2k8cf4tkibjkllbn2bd8h3c82t8t5rr5ri@4ax.com>
Source record: 20993

On 15 Oct 2008 05:17:22 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

> Last year at the beginning of construction of a new house I buried
>about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
>the property perimeter. Now that I am ready to use it, I can not
>locate the perimeter end.... it is somewhere in about a 10' area, and the
>end curves up to probably about a foot underground.

If there is a wire in the conduit, just rent a "cable finder" from the
local rental yard. It's a low frequency transmitter and receiver
combination. If you have access to one end of the pipe, just shove a
metal "snake" into the pipe to provide a suitable conductor.

> The ground is nearly pure sand, and is well landscaped now to the
>point that I do not want to randomly dig it up.

That should be easy. Dry sand doesn't attenuate the signal much. Wet
sand is another story.

> The end terminated in an elbow curving up and is well duct taped
>shut.

Ummm... I think you'll find that the duct tape has dried out by now
and that your pipe is full of water and sand.

> Can anyone suggest a method or equipment I might use to locate that
>far end?

The cable finder is the right way. Ground penetrating radar will work
but is messy.

You can pressurize the conduit with an air compressor. That should
blow off what remains of the duct tape. Use your ears or a
stethescope to listen for the noise through the sand. If the end is
just below the surface, it should make a nice blow hole. Be prepared
to clean the sand out of your uncleable buried elbow.

If you think the pipe is clear, drop a small loudspeaker down the
other end and play rock music with a heavy bass beat. You should be
able hear that 50ft away. Use a stethescope.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3620. Re: modeling capacitance hat with 4nec2 for w8jk design to wrk 40m

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 17:17:26 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <VDpJk.2296$pr6.230@flpi149.ffdc.sbc.com>
Source record: 20994

agh0792@louisiana.edu wrote:
> ... if it is possible to just physically model the capacitance hat as if
> it were just additional wire segments.

It is certainly possible and is important that the top
hat wires be symmetrical around the connection point.
Whatever 'N' number of top-hat radials are modeled, the
spacing should be 360deg/N. It is easiest to model top-hat
radials in powers of 2, i.e. 4, 8, 16, ...

There's really no difference between elevated ground
plane radials and top-hat radials.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3621. Re: modeling capacitance hat with 4nec2 for w8jk design to wrk 40m

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 20:26:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <W5KdnR1Qb6FhzGvVnZ2dnUVZ_gWdnZ2d@posted.easystreetonline>
Source record: 20995

agh0792@louisiana.edu wrote:
> Hello.. I am interested in modeling with 4nec2 a two element W8jk for
> 40 meters and higher frequencies. I was thinking of using two
> elements similar to the rotatable dipole described at
> http://www.k6if.com/40dip/40dip.html which uses capacitance loading at
> the ends of a 40' element.
> I have seen how to add loading in the form of a specified capacitance
> in 4nec2 but am not sure
> if it is possible to just physically model the capacitance hat as if
> it were just additional wire segments. Any advice would be
> appreciated. I had some fun with a "bamboo beam" made
> in a W8jk design with two 24' elements spaced 8' and mounted up
> 20' (using #10 alum. wire).
> Thanks in advance for comments... Whiskey5

The only way to model the capacitance hat is as additional wires.

The W8JK presents a low feedpoint resistance, and shortening and loading the elements will lower it further. This will increase the potential for loss, so you might consider including the wire resistivity in your model. Also, the impedance of a W8JK changes rapidly with frequency, and shortening and loading the elements will further narrow its bandwidth. However, loss and bandwidth might be acceptable for your purpose, and capacitive end loading won't cause as much increase in loss and decrease in bandwidth as inductive loading would.

Roy Lewallen, W7EL

3622. Re: Design measurements for a multielement vertical NMT-CDMA450 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 21:45:13 UTC
From: jonaslonnroth@gmail.com
Message-ID: <e7aa6103-7b05-4ba6-a974-e17981691905@m44g2000hsc.googlegroups.com>
Source record: 20996

Thanks all for the input.

I agree, making that multielement antenna without any means for measurements is taking a risk that it will be quite inferior to a pro antenna and thus a waste of time. I found coaxial multielement antennas at procomm.dk. Length is between 70 cm to 535 cm.

So I back down to a hopefully more humble project. That would be taking a commercial mobile antenna wip of a 1/4 WL plus !/2 WL (Smarteq.com). It has a phasing coil inbetween. There is a side mount with a coaxial FME connector which could be used for a coaxial antenna with a quarterwave sleeve. The protruding wing (stopper) of the side mount would be taken off. It is then posible to slide a 1/4 WL Cu tube over the antenna mount. By fastening the tube to mount ground, one would obtain the sleeve needed for a coaxial exended antenna. Gain of the whip in a ground palne confguration is 3 dB.

Should a sleeve +protruding part of mount be eaxtly a quarter wavelength long at a velocity factor of 1 - or 0.95 ?

3623. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 23:53:08 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B38ABC663678Huckleberrybigvalley@198.186.192.196>
Source record: 20997

Roy Lewallen <w7el@eznec.com> wrote in news:I8WdnRs5
_fEYEGjVnZ2dnUVZ_v3inZ2d@posted.easystreetonline:

> A suggestion for other folks who will be burying a conduit: Take a
bunch
> of pictures before the trench is filled. It's good to include distances
> to some fixed reference points -- you can write them with a marker on
> big pieces of paper laid on the ground to get them in the picture. I
> haven't yet used the pictures I took of mine, but I sure have made a
lot
> of use of the pictures I took of the uncovered walls of a home
addition,
> showing the locations of all the studs and wiring.
>
> Roy Lewallen, W7EL
>

Damn ! NOW you tell me ! :^)

actually, I did take a gazillion pictures of the house construction
and from foundation, through all framing, to completion... but I
neglected the outside !

Ed K7AAT

3624. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 23:54:00 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B38ABEC478F2Huckleberrybigvalley@198.186.192.196>
Source record: 20998

AndyS <andysharpe@juno.com> wrote in news:58eba0a6-8107-40dc-85e9-6fd68adcfa69@s9g2000prm.googlegroups.com:

> Andy suggests:
>
> Couple a garden hose to the end you can find and run water into
> the PVC.... Go to the area surrounding the buried end and look for
> the
> sandy ground to be wet......
>
> Andy W4OAH
>

That's an excellent idea.... but I really hate water in my electrical conduits.... I'll use that as a last resort. Thanks.

Ed

3625. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 23:55:07 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B38AC1C4C37BHuckleberrybigvalley@198.186.192.196>
Source record: 20999

"JB" <nospam@goofball.net> wrote in
news:JdoJk.1244$r_3.866@nwrddc02.gnilink.net:

>
> "Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
> news:Xns9B37E2BFF7B46Huckleberrybigvalley@198.186.192.196...
>>
>> I know this is slightly off topic, but since I am intending to
>> run
>> some RF cable in the conduit, and since there are a lot of
>> intelligent hams on this group, I will proceed anyway:
>>
>> Last year at the beginning of construction of a new house I buried
>> about 50 feet of 3/4" Sched. 40 PVD between the house and a location
>> on the property perimeter. Now that I am ready to use it, I can
>> not locate the perimeter end.... it is somewhere in about a 10' area,
>> and the end curves up to probably about a foot underground.
>>
>> The ground is nearly pure sand, and is well landscaped now to the
>> point that I do not want to randomly dig it up.
>>
>> The end terminated in an elbow curving up and is well duct taped
>> shut.
>>
>> Can anyone suggest a method or equipment I might use to locate
>> that
>> far end?
>>
>> Tnx.
>>
>> Ed K7AAT
>
> Stab an antenna rod down until you find it.
>
>

A definate consideration.... since the ground is sand. If the
antenna rod doesn't just bend around the conduit... may just work. Tnx.

Ed

3626. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-15 23:59:12 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B38ACCDF1EEHuckleberrybigvalley@198.186.192.196>
Source record: 21000

> Run a metal snake into the conduit then get a metal detector and sweep
> the area for the conduit. If this doesn't work there are wire tracing
> detectors that might do the job. You hook the transmitter to the snake
> and sweep with the detector.
> If all fails you might try a metal probe. Stick the probe into the
> ground and feel for the conduit. Or dig up a couple of feet of
> conduit. Note the direction it is going then move in that direction
> and dig a small trench where you thing the conduit is.
> One of these methods should work.
> If all fails install new conduit.
>
> Dave WD9BDZ

Dave, your idea above, plus some comments from others has made me realize that this is the way I should proceed, for my first attempt. I do have a Service Monitor. I'll simply run my snake into the empty pvc conduit until it hits the end (duct tape) and connect an RF signal to it, then using a small HT, track the signal down to the end.

My thanks to all for other ideas presented here, too.

Ed K7AAT

3627. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 00:48:12 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <gbwJk.1320$Rx2.294@nwrddc01.gnilink.net>
Source record: 20851

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9B38ABEC478F2Huckleberrybigvalley@198.186.192.196...
> AndyS <andysharpe@juno.com> wrote in news:58eba0a6-8107-40dc-85e9-
> 6fd68adcfa69@s9g2000prm.googlegroups.com:
>
>> Andy suggests:
>>
>> Couple a garden hose to the end you can find and run water into
>> the PVC.... Go to the area surrounding the buried end and look for
>> the
>> sandy ground to be wet......
>>
>> Andy W4OAH
>>
>
>
>
> That's an excellent idea.... but I really hate water in my electrical
> conduits.... I'll use that as a last resort. Thanks.
>
> Ed

Hi Ed

Have you considered the use of a wad of towel pulled thru the conduit to
dry it after using water to locate the burried end?

Compressed air could be used in place of the water. The air excaping
from the burried end shouild be easily detected.

Jerry KD6JDJ

3628. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 01:50:02 UTC
From: Jim-NN7K
Message-ID: <E5xJk.2678$W06.2377@flpi148.ffdc.sbc.com>
Source record: 20852

Jerry wrote:

>> That's an excellent idea.... but I really hate water in my electrical
>> conduits.... I'll use that as a last resort. Thanks.
>>
>> Ed
>

When in doubt, couple ways the Pros do it:

1) Run a Metalic Snake thru it, and hook to a (Low Power RF , or a
Fairly high power A.F. source-- follow the snake (above ground with
an inductive sampler (or rf receiver)) to the end - use a cable
marker (Paint) to follow the duct if needed to find an intermediate
point , then repeat agan if necessary.

2) for those that have access to a "THUMPER", can do the same
Apply high level of sound to the PVC, and use a listening device
to follow the noise, in the ground.

Works for locating buried cables for utilities- should work for you!
Jim NN7K

3629. small omnidirectional mobile antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 02:04:40 UTC
From: Tad Danley <tdanley@nospamatverizon.net>
Message-ID: <YixJk.1387$r_3.565@nwrddc02.gnilink.net>
Source record: 20853

How do the small low profile omni mobile for VHF
and UHF compare in performance to conventional
1/4 wave (VHF) and 3 dB gain (UHF) antennas? I
have a hard time believing they are anything
close to comparable.

Antennex sells a VHF unity gain model
(TRABT-1420) and a UHF 3 dB gain model
(TRAB-4303). They also hold a patent on 'field
diverse' antenna technology.
http://www.antenex.com/pdfsandzips/megwhitepaper.pdf

I know these antennas are very popular for
public safety applications - does anyone have
real world A:B comparison data comparing them
with a conventional mobile antenna?

Thanks and 73,

Tad Danley, K3TD

3630. Re: small omnidirectional mobile antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 02:28:19 UTC
From: Danny Richardson <>
Message-ID: <cg9df49khvajljt5idr3aid1dmu8gknoo7@4ax.com>
Source record: 20854

On Thu, 16 Oct 2008 02:04:40 GMT, Tad Danley
<tdanley@nospamatverizon.net> wrote:

>How do the small low profile omni mobile for VHF
>and UHF compare in performance to conventional
>1/4 wave (VHF) and 3 dB gain (UHF) antennas? I
>have a hard time believing they are anything
>close to comparable.
>
[snip]

Your thinking is quite correct. I've got one of their wiz bang "Mean
Effective Gain" rated antennas around here somewhere.

When I measured that antenna mounted top dead center on a vehicle the
performance was substantially worse when compared with a ï¿½-wavelength
mounted on the same vehicle.

73,
Danny, K6MHE

3631. Re: Changing dipole resonance by changing one leg?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 03:23:15 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <qaCdnWsv_eQ_LmvVnZ2dnUVZ_oWdnZ2d@giganews.com>
Source record: 20855

Jeff Liebermann wrote:
> Chevy454 wrote:
>
>>How effective is it to cut a one-band dipole for the highest frequency
>>desired and clipping an extension on one leg to get low SWR on lower
>>frequencies?
>>Ken KC2JDY
>
> What band? What frequency range? How much space do you have? Numbers
> are always helpful.
>
> I dunno about an asymmetric dipole. I've never seen it done, which
> makes me suspicious. It should be very easy to model to see what
> happens. Numbers?
>
> If you want bandwidth from an HF dipole, look into a cage or birdcage
> antenna. It's especially effective at 160 and 75/80 meters. There's
> no increase in gain over a dipole, but the usable bandwidth is much
> better.
> Even better, is a biconical, which is a cage antenna where
> all the wires come together at the feed point, and are spread into a
> cone shape at the ends. You can get several decades of usable
> bandwidth out of a biconical with a fairly constant gain. That's why
> it's used for EMC/RFI testing:
> <http://www.smeter.net/antennas/wire-cage-dipole.php>
> <http://www.arrl.org/news/stories/2001/05/03/2/>
> <http://personal.ee.surrey.ac.uk/Personal/D.Jefferies/antennexarticles/cage.html>
> <http://jproc.ca/rrp/whitehorse.html> (bottom of page)
> <http://images.google.com/images?hl=en&q=cage+dipole>
> <http://www.smc-comms.com/cage_dipole.html>
>
>
> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

I use a 4-wire cage inverted vee on 80m. With it cut a bit long (1:1 at
around 3650 KHz), it's barely 2:1 at 4000KHz. Spreaders are 1/2" thinwall
PVC... 24"x24". I used the handy design program at http://www.smeter.net/.

73,
Bryan WA7PRC

3632. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 03:27:12 UTC
From: JERD <jedunk@Take_Outbigpond.net.au>
Message-ID: <kwyJk.5856$sc2.2014@news-server.bigpond.net.au>
Source record: 20856

"Jim-NN7K" <nn7kexk7zfg@noway.net.> wrote in message
news:E5xJk.2678$W06.2377@flpi148.ffdc.sbc.com...
> Jerry wrote:
>
>>> That's an excellent idea.... but I really hate water in my electrical
>>> conduits.... I'll use that as a last resort. Thanks.
>>>
>>> Ed
>>
>
> When in doubt, couple ways the Pros do it:
>
> 1) Run a Metalic Snake thru it, and hook to a (Low Power RF , or a
> Fairly high power A.F. source-- follow the snake (above ground with
> an inductive sampler (or rf receiver)) to the end - use a cable
> marker (Paint) to follow the duct if needed to find an intermediate
> point , then repeat agan if necessary.
>
> 2) for those that have access to a "THUMPER", can do the same
> Apply high level of sound to the PVC, and use a listening device
> to follow the noise, in the ground.
>
> Works for locating buried cables for utilities- should work for you!
> Jim NN7K

What an interesting thread!

How about one of those 'stage' smoke machines pumped into the open end?

VK5JE

3633. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 03:58:55 UTC
From: Cable Shill <cable_shill@comcast.net>
Message-ID: <0iedf4ltt4mnrgds8qjgvfl6fnqpnn987v@4ax.com>
Source record: 20857

Ed <Huckleberry_REMOVE_@bigvalley.net> wrote:

>
> I know this is slightly off topic, but since I am intending to run
>some RF cable in the conduit, and since there are a lot of intelligent
>hams on this group, I will proceed anyway:
>
> Last year at the beginning of construction of a new house I buried
>about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
>the property perimeter. Now that I am ready to use it, I can not
>locate the perimeter end.... it is somewhere in about a 10' area, and the
>end curves up to probably about a foot underground.
>
> The ground is nearly pure sand, and is well landscaped now to the
>point that I do not want to randomly dig it up.
>
> The end terminated in an elbow curving up and is well duct taped
>shut.
>
> Can anyone suggest a method or equipment I might use to locate that
>far end?
>
> Tnx.
>
> Ed K7AAT

Another simple way - the old Native American waiting for a train
method. Push the fish tape all the way until it stops. Person 1 keeps
ramming the fish tape and person 2 puts ear to ground near far end and
listens for it. Needs no batteries or smoke.

Nix the water. I like the compressed air trick, Just don't look
directly at the conduit end . .

--
"From spongecake to satellites, it's gotta be Krebstar"

3634. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 04:17:43 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B38D8A59C8ECHuckleberrybigvalley@198.186.192.196>
Source record: 20858

> Another simple way - the old Native American waiting for a train
> method. Push the fish tape all the way until it stops. Person 1 keeps
> ramming the fish tape and person 2 puts ear to ground near far end and
> listens for it. Needs no batteries or smoke.
>

I like that! I will try it before bothering to hook up an RF source to
the fish tape!

Ed K7AAT

3635. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 04:18:49 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B38D8D4D5BE2Huckleberrybigvalley@198.186.192.196>
Source record: 20859

>
> How about one of those 'stage' smoke machines pumped into the open
> end?
>
> VK5JE

That's a good one, too, but in my case, I KNOW that I duct taped the end of the conduit in such a manner that it is truly air tight... even possibly under pressure. Thanks anyway.

Ed

3636. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 05:27:04 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <a1kdf45aur60g9utn3k2vsjgqnlm68g5rg@4ax.com>
Source record: 20860

On Wed, 15 Oct 2008 20:58:55 -0700, Cable Shill
<cable_shill@comcast.net> wrote:

>Another simple way - the old Native American waiting for a train
>method. Push the fish tape all the way until it stops. Person 1 keeps
>ramming the fish tape and person 2 puts ear to ground near far end and
>listens for it. Needs no batteries or smoke.
>
>Nix the water. I like the compressed air trick, Just don't look
>directly at the conduit end . .

Well, how about combining the two methods? Find some flex lawn drip
irrigation tubing. Attach a bosons whistle to the end and shove it
through the pipe. Add compressed air and it should scream like a
banshee. That should be easy to hear through the sand. Maybe the
duct tape will act as a diaphragm.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3637. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 07:27:56 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <T3CJk.5509$Ws1.4362@nlpi064.nbdc.sbc.com>
Source record: 20861

Ed wrote:
>> Run a metal snake into the conduit then get a metal detector and sweep
>> the area for the conduit. If this doesn't work there are wire tracing
>> detectors that might do the job. You hook the transmitter to the snake
>> and sweep with the detector.
>> If all fails you might try a metal probe. Stick the probe into the
>> ground and feel for the conduit. Or dig up a couple of feet of
>> conduit. Note the direction it is going then move in that direction
>> and dig a small trench where you thing the conduit is.
>> One of these methods should work.
>> If all fails install new conduit.
>>
>> Dave WD9BDZ
>
>
> Dave, your idea above, plus some comments from others has made me
> realize that this is the way I should proceed, for my first attempt. I
> do have a Service Monitor. I'll simply run my snake into the empty pvc
> conduit until it hits the end (duct tape) and connect an RF signal to
> it, then using a small HT, track the signal down to the end.
>
> My thanks to all for other ideas presented here, too.
>
>
> Ed K7AAT
>

Ed;

Thanks for the compliment. I wish you luck and envy you for your acreage
for antenna's. My lot here in St. Louis is something like 40 feet by
120 feet with the house in the center. I do have some trees along the
back alley that I have wire hanging from. Works but not optimal.
Let us know how everything works out.

Dave WD9BDZ

3638. Re: small omnidirectional mobile antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 08:08:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gd6sq6fhk1@news.albasani.net>
Source record: 20862

Tad Danley wrote:
> How do the small low profile omni mobile for VHF and UHF compare in
> performance to conventional 1/4 wave (VHF) and 3 dB gain (UHF)
> antennas? I have a hard time believing they are anything close to
> comparable.
>
> Antennex sells a VHF unity gain model (TRABT-1420) and a UHF 3 dB gain
> model (TRAB-4303). They also hold a patent on 'field diverse' antenna
> technology. http://www.antenex.com/pdfsandzips/megwhitepaper.pdf
>
> I know these antennas are very popular for public safety applications -
> does anyone have real world A:B comparison data comparing them with a
> conventional mobile antenna?
>
> Thanks and 73,
>
> Tad Danley, K3TD

Check out a 1/2 wave DLM shortened to about 3/16 ... good performance
and small size ... you can get smaller, but performance will decline.

Beats catching bugs! (or, a Texas Bug Catcher!)

Regards,
JS

3639. electronics hobby shop estate sale cleanout-various items

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 12:22:01 UTC
From: "Dwight D. Eisenhower" <rottedHonda@yahoo.com>
Message-ID: <09643bb9-a663-401b-bb96-ec9bae6b7024@s50g2000hsb.googlegroups.com>
Source record: 20863

http://shop.ebay.com/merchant/66-catalina_W0QQ_nkwZQQ_armrsZ1QQ_fromZQQ_mdoZ

HEATHKIT MODEL GD-1B GRID DIP METER-vintage-CB-HAM-SW-$ 0 Bids
$24.99 5d 13h 13m
RCA MODEL WT-501 TRANSISTOR TESTOR NPN-PNP-IN/OUT CIRCT 0 Bids $9.98
5d 13h 13m
PRECISION APPARATUS 3-420 WHITE DOT/BAR GENERATOR-TV-$$ 0 Bids $9.98
5d 13h 13m
ARGUS MODEL 300 AUTOMATIC SLIDE PROJECTOR-vintage-nice- 0 Bids $9.98
5d 13h 13m
RCA VICTOR VICTROLA BAKELITE AM RADIO/PHONO 45RPM 7"-$$ 0 Bids $9.98
5d 13h 13m
WOLLENSAK MODEL 715 8MM MOVIE PROJECTOR-COMPLETE-$$$$$$ 0 Bids $9.98
5d 13h 13m
SPERRY GYROSCOPE TYPE B-7A AUTOPILOT COMPONENT AMP-WWII
B-17 B-24 B-25 B-29 VINTAGE USAAF SPERRY A-12 AUTOPILOT 0 Bids $24.99
5d 13h 13m
(2) VINTAGE RADIO-PHONO SPEAKERS-RL-113-1 & 10747-8"-$$ 0 Bids $9.98
5d 13h 13m
2 vintage 8track decks-BELAIR portable-PANASONIC record 0 Bids $9.98
5d 13h 13m
(3) vintage cassette decks-PIONEER-KENWOOD-REALISTIC-$$ 0 Bids
$24.99 5d 13h 13m
PRECISION APPARATUS MOD EV-10-S TUBE MULTI-TESTER-nice! 0 Bids $9.98
5d 13h 13m
"HOLIDAY PARADE" painting print by E. MELVIN BOLSTAD-$$ 0 Bids
$24.99

3640. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 13:36:34 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <d7529c36-959c-453d-9d76-76dd6ffea0c5@a1g2000hsb.googlegroups.com>
Source record: 20864

Plumbers power snake for sewers... Rent it at the rent it shop... It will auger up through that duct tape and sand like it is tissue paper...

denny/ k8do

3641. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 14:21:53 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <epief4lpedl0ieoq34nndmli82ta5645b1@4ax.com>
Source record: 20865

On Thu, 16 Oct 2008 06:36:34 -0700 (PDT), Denny <k8do@mailblocks.com>
wrote:

>Plumbers power snake for sewers... Rent it at the rent it shop... It
>will auger up through that duct tape and sand like it is tissue
>paper...
>
>denny/ k8do

Ummm.... this is through 3/4" schedule 40 PVC with at least two right
angles. The augers I've seen are for much larger sewer drain pipe and
will not fit inside 3/4" PVC. Anything that can drill through sand
can probably also do some real damage to the PVC. A much smaller
diameter "snake" is probably safer. With only 1ft of sand to push
through, a solid "tape" type electricians snake can be pushed through
by hand. The only down side is that the pipe will fill with sand when
the duct tape is breached, so cleanup may be a problem. If dry sand,
a small hose on the end of a vacuum cleaner should work.

Incidentally, the frequencies used by commerical cable finders are
815Hz, 8Khz, and 82KHz at 2-3 watts.
<http://www.rycominstruments.com/3-8879-Cable-Utility-Locator.asp>
However, that's good for 15 ft depth and many miles of cable. Higher
frequencies will probably work for 1ft of sand and only 100ft of wire.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3642. Re: Bondage movie posts on Usenet -- a thing of the past?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 15:58:40 UTC
From: mopeyzakween@yahoo.com
Message-ID: <e78885da-dd35-4a33-ab1f-86f17e1c7a79@f63g2000hsf.googlegroups.com>
Source record: 20866
Cross-posted to: soc.subculture.bondage-bdsm,rec.radio.shortwave,rec.radio.amateur.antenna,alt.ohio.toledo

On Sep 29, 3:06 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:
> "Leo Marvin" <psr2...@gmail.com> wrote in message
>
> news:7cfc74bb-f772-4d61-83d4-98f53641399f@y38g2000hsy.googlegroups.com...> What happened to alll the great videos and stills from sessions at
> > places like Hogtied, Hardtied, Infernal Restraints, etc., etc.? Am I
> > the only one who doesn't see these anymore on groups like
> > alt.binaries.multimedia.bondage and
> > alt.binaries.erotica.pictures.bondage? Was there some kind of legal
> > action taken? Or have my ISP providers (both of them) just decided to
> > suck? Seriously -- anybody know what's up?? Is there any other place
> > to go for these posts?
>
> My isp dropped the good stuff too. ;-((
>
> mrbindwell

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE

TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

3643. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 16:37:22 UTC
From: JB <nospam@goofball.net>
Message-ID: <65KJk.1540$r_3.650@nwrddc02.gnilink.net>
Source record: 20867

> Ummm.... this is through 3/4" schedule 40 PVC with at least two right
> angles. The augers I've seen are for much larger sewer drain pipe and
> will not fit inside 3/4" PVC. Anything that can drill through sand

Ouch! Unless you are trying to fish a phone line, you (might/might not/want) WILL dig it all up and go to 2" with 45 degree bends and bevel the inside edges. Once above ground you can break out to pull boxes.

You have my sympathy.

3644. Re: CRACK DEALER

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 16:53:19 UTC
From: lance adair <adair@limpwrist.com>
Message-ID: <nkKJk.1250$KW4.1005@newsfe02.iad>
Source record: 20868
Cross-posted to: rec.radio.cb,rec.radio.shortwave,rec.radio.amateur.antenna

Lance & Lisa Adair
10431 Jackman Rd
Temperance, MI 48182-9629
(734) 854-2426

3645. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 17:17:05 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <IGKJk.1548$r_3.851@nwrddc02.gnilink.net>
Source record: 20869

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9B38D8D4D5BE2Huckleberrybigvalley@198.186.192.196...
>
>>
>> How about one of those 'stage' smoke machines pumped into the open
>> end?
>>
>> VK5JE
>
>
> That's a good one, too, but in my case, I KNOW that I duct taped the
> end of the conduit in such a manner that it is truly air tight... even
> possibly under pressure. Thanks anyway.
>
> Ed

Hi Ed

Will the taped end will not leak with 80 PSI air in the conduit?

Jerry KD6JDJ

3646. Re: I like polish sausage

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 18:37:32 UTC
From: chickenhawk <lelnadsmaster@yahoo.com>
Message-ID: <48f789ee$0$17066$6e1ede2f@read.cnntp.org>
Source record: 20870
Cross-posted to: soc.men,rec.radio.amateur.antenna

"lance adair" <adair@limpwrist.com> wrote in message
news:f0KJk.12783$vs7.11402@newsfe04.iad...
>
> "krp" <krp@krp.krp> wrote in message news:gci7f5toq1@aioe.org...
>>I wish the polish knight would let me polish his sausage!
>>
> n8wwm polishes mine
>
doug adair is the gay bdsm queen of toledo

http://groups.google.com/groups/search?hl=en&q=n8wwm+gay&qt_s=Search+Groups

3647. Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 19:00:33 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <48f78f3a$0$40314$4fafbaef@reader5.news.tin.it>
Source record: 20871

I make here reference to the well-known chart, shown in almost all the ARRL Antenna Handbooks, setting the relationship among the real SWR (i.e. that measured at antenna), the SWR measured at transmitter and the "line loss".

In the text they explain that the "line loss" to be considered when using the chart is the line loss under matched conditions (i.e. that given by the line manufacturer), that is without taking into account the extra loss caused by SWR.

They make the example of a line having a (matched) loss of 1.0dB with an SWR of 4.5 at antenna. The graph shows that the corresponding SWR at transmitter is 3.0.

Unless I am wrong, a simple calculation shows that, in the considered example, the SWR at transmitter is about 2.3 rather than 3.0.

Here it goes (please note that, for the assumed SWR at antenna of 4.5, the extra loss caused by SWR is just 1.0dB):

- actual loss on the forward wave: 1.0dB (matched) + 1.0dB (extra by SWR), for a total of 2.0dB
- return loss corresponding to an SWR at antenna of 4.5: 4.0dB
- actual loss on the reflected wave: 1.0dB (matched) + 1.0dB (extra by SWR), for a total of 2.0dB
- return loss at transmitter: 8.0dB
- SWR measured at transmitter (corresponding to a return loss of 8.0dB): about 2.3

It is interesting to note that the chart would give an identical result if by "line loss" they would mean the total line loss (that is also including the extra loss due to SWR) rather than just the matched line loss (as they state in the text).

Any comment?

Thanks and 73

Tony I0JX

3648. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 19:47:33 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9n4ff4d94vkcqhg9cmsfv9faa4lgj6kc8n@4ax.com>
Source record: 20872

On Thu, 16 Oct 2008 16:37:22 GMT, "JB" <nospam@goofball.net> wrote:

>> Ummm.... this is through 3/4" schedule 40 PVC with at least two right
>> angles. The augers I've seen are for much larger sewer drain pipe and
>> will not fit inside 3/4" PVC. Anything that can drill through sand
>
>Ouch! Unless you are trying to fish a phone line, you (might/might
>not/want) WILL dig it all up and go to 2" with 45 degree bends and bevel the
>inside edges. Once above ground you can break out to pull boxes.
>
>You have my sympathy.

Thanks for the sympathy but it's not my conduit or problem. The
plumbing belongs to Ed, K6AAT.

Question: What's the difference between conduit and plumbing?
Answer: Plumbing holds water. Otherwise, they're the same.

I'm not sure what might be going inside a 3/4" conduit, but if it's
for a tower, it's way too small. The original question does not
indicate what manner of wiring goes inside. With 3/4", you can get
perhaps one run of LMR400 plus some flat rotator cable and you're
full. Hard to tell from here.

It's also possible to place a diplexer (or triplexer) at both ends of
the single coax run for splitting out HF, VHF, and UHF. I've done
that when running multiple coax cables was impossible.
<http://www.rfparts.com/diamond/Product_Catalog/plexers.html>

It's been a long time since I've done any tower construction, but for
commercial installs, I never used buried coax runs. AC power for the
tower lights were in 3" steel threaded conduit (not EMT), but the coax
was all above ground. That shortened the coax runs about 25ft which
was well worth the effort.

Incidentally, a good trick is to *NOT* lay the conduit perfectly
horizontally plumb. Put one end lower than the other so that water
well drain into that end. Shove a PEX sprinkler line down to the low
point of pipe and pump out the water once a year. I prefer
pressurized conduit, but a water sump works fairly well.

I discovered, the hard way, why using steel pipe instead of PVC was a
good idea. With everything underground, the obvious parking location
for the crane, cherry picker, or propane truck was directly on top of
the buried PVC. After a few cracked pipes, I decided that steel was a
good idea.

I like to pressurize the conduit slightly to keep the water out. It's really not necessary as most coax will survive when immersed. However, everyone re-uses coax, which has cuts in the outer jacket, and which might not be fully waterproof. A pressure gauge, bicycle valve, bicycle pump, some putty, and a few PSI are good enough.

I almost forgot.... a slow death to the installer that shoved a coax barrel splice down a stuffed conduit, thus insuring that all subsequent coax runs will jam up against the coax connectors.

Also, this is what happens when a monopole tower is stuffed full of coax cables, and some idiot decides to enlarge the hole with a cutting torch.
<http://802.11junk.com/jeffl/pics/drivel/slides/monopoleBurn.html>
<http://odessaoffice.com/wireless/priceless.jpg>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3649. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 19:50:23 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <bj6ff4dm3p95rob2qm7q98q426ts5d46un@4ax.com>
Source record: 20873

On Thu, 16 Oct 2008 17:17:05 GMT, "Jerry" <jerrymartes@verizon.net>
wrote:

> Will the taped end will not leak with 80 PSI air in the conduit?
> Jerry KD6JDJ

Well, if it does leak, the sand above the duct tape will dribble down
into the 3/4" conduit creating a rather awkward clean up exercise.
That's why conduit runs usually terminate above the ground, not below.
The trick is to find the conduit end without blowing off the seal.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3650. Re: N8WWM likes polish sausage

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 20:16:40 UTC
From: dougs owner <slapdougay@yahoo.com>
Message-ID: <gd87fb$m75$2@registered.motzarella.org>
Source record: 20874
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"chickenhawk" <lelnadsmaster@yahoo.com> wrote in message
news:48f789ee$0$17066$6e1ede2f@read.cnntp.org...
>
> "lance adair" <adair@limpwrist.com> wrote in message
> news:f0KJk.12783$vs7.11402@newsfe04.iad...
>>
>> "krp" <krp@krp.krp> wrote in message news:gci7f5toq1@aioe.org...
>>>I wish the polish knight would let me polish his sausage!
>>>
>> n8wwm polishes mine
>>
> doug adair is the gay bdsm queen of toledo
>
> http://groups.google.com/groups/search?hl=en&q=n8wwm+gay&qt_s=Search+Groups
>
Found in Toledo petro mens room..

http://img117.imageshack.us/my.php?image=n8wwmpetroad2ou4.jpg

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-06-07527-0102&CaseKey1=567752039&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-06-07527-0202&CaseKey1=567752039&CaseKey2=2

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-07-08334-0101&CaseKey1=53293607&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-07-19994-0101&CaseKey1=652125457&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB-93-05800-0101&CaseKey1=961353092&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0104&CaseKey1=25786984&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0204&CaseKey1=25786984&CaseKey2=2

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0304&CaseKey1=25786984&CaseKey2=3

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC-01-01894-0404&CaseKey1=25786984&CaseKey2=4

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD-00-36929-0102&CaseKey1=838931261&CaseKey2=1

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD-00-36929-0202&CaseKey1=838931261&CaseKey2=2

3651. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 20:17:50 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <48f7a158$0$40308$4fafbaef@reader5.news.tin.it>
Source record: 20875

I realized my error!

In my budget I counted the extra line loss caused by SWR twice:

- first time when I have added 1 dB to the loss of the forward and the return wave

- second time when I took some power out of the antenna (to account for an SWR of 4.5) and delivered it back to the transmitter

ARRL is always correct!

Sorry for the useless noise

Tony I0JX

3652. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 20:31:56 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <0xNJk.1488$Rx2.3@nwrddc01.gnilink.net>
Source record: 20876

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:bj6ff4dm3p95rob2qm7q98q426ts5d46un@4ax.com...
> On Thu, 16 Oct 2008 17:17:05 GMT, "Jerry" <jerrymartes@verizon.net>
> wrote:
>
>> Will the taped end will not leak with 80 PSI air in the conduit?
>> Jerry KD6JDJ
>
> Well, if it does leak, the sand above the duct tape will dribble down
> into the 3/4" conduit creating a rather awkward clean up exercise.
> That's why conduit runs usually terminate above the ground, not below.
> The trick is to find the conduit end without blowing off the seal.
>
> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

Hi Jeff

It may be of little interest to the OP, but the sand might have difficulty leaking back into a conduit with air blowing out of it. In addition, the air might leak from a small rupture below the oipen end of the conduit. The OP may have no access to compressed air anyway.

Jerry KD6JDJ

3653. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 20:57:44 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <3a9ff49m6plotucggljrs4ducr514c7prf@4ax.com>
Source record: 20877

On Thu, 16 Oct 2008 20:31:56 GMT, "Jerry" <jerrymartes@verizon.net>
wrote:

>
>"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
>news:bj6ff4dm3p95rob2qm7q98q426ts5d46un@4ax.com...
>> On Thu, 16 Oct 2008 17:17:05 GMT, "Jerry" <jerrymartes@verizon.net>
>> wrote:
>>
>>> Will the taped end will not leak with 80 PSI air in the conduit?
>>> Jerry KD6JDJ
>>
>> Well, if it does leak, the sand above the duct tape will dribble down
>> into the 3/4" conduit creating a rather awkward clean up exercise.
>> That's why conduit runs usually terminate above the ground, not below.
>> The trick is to find the conduit end without blowing off the seal.

> Hi Jeff
> It may be of little interest to the OP, but the sand might have difficulty
>leaking back into a conduit with air blowing out of it. In addition, the
>air might leak from a small rupture below the oipen end of the conduit.
>The OP may have no access to compressed air anyway.
>
> Jerry KD6JDJ

Welcome to rec.radio.amateur.antenna.physics

Ok, let's do the math. Dry sand weighs 100 lb/cubic-foot. There's
about 1 ft of sand above the end of the 3/4" conduit. The weight
action is roughly conical, so the volume of sand involved is (my
guess) about:
100 lbs/ft^3 * 1/3 = 33 lbs of sand.
All that it acting on a 3/4" diameter pipe, with a cross sectional
area of about:
Pi * 0.75" = 2.4 in^2
Therefore, the pressure exerted by the sand is:
33 lbs / 2.4 in^2 = 14 PSI
So, if he can pressurize the pipe to more than 14 PSI, he can lift the
column of sand sufficiently to keep it from dribbling into the pipe.

Of course, it's not that simple. Laminar air flow, pressure gradients
across the conduit, and the effects of the duct tape will ruin my
simplistic guesswork. Worse, the back pressure created by the
immovable column of sand will force some sand particles into the
conduit around the edges with the "reflected" air pressure. In the
middle of the conduit, the air flow is all out of the conduit, but

near the edges, it could easily be the other direction. I'm also assuming that the sand is a perfect air seal, which it's not. To prevent all this from happening, the minimum air pressure should be about twice the 14 PSI, which is easily achievable with an air compressor, but not a vacuum cleaner.

I'm also trying to imagine how the process will work. I see an air compressor pumping madly away as the neighbors kids furiously dig around the resultant sand volcano, as sand rapidly refills the conical hole. In my never humble opinion, there's no way to prevent sand from dropping into the conduit if the duct tape seal is broken before excavating the end of the conduit.

Once the sand is in the conduit, just blowing air through the pipe isn't going to magically elevate the sand particles 1ft or more in the air. The air does not have sufficient mass to convey enough momentum to move the sand particles, much less eject them vertically. For that, one needs a denser medium, such as water. Shoving a plunger through might work, but it's equally likely to jam sand particles into the PVC conduit walls.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3654. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 21:19:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1bbff4h3mquf0ke3g6uln25o0to5q5fk52@4ax.com>
Source record: 20878

On Thu, 16 Oct 2008 13:57:44 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

> Worse, the back pressure created by the
>immovable column of sand will force some sand particles into the
>conduit around the edges with the "reflected" air pressure.

H E R E S Y

Reflected waves do NOT have power in them - or so goes the catechism.

This new and dangerous introduction of a side topic can only lead to
endless debate about the superposition phase properties of sand in
vacua (particel theories inhabiting the crevices in the science of
Equal Librium)

73's
Richard Clark, KB7QHC

3655. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 21:24:36 UTC
From: Dave <noone@nowhere.com>
Message-ID: <oiOJk.1510$Rx2.550@nwrddc01.gnilink.net>
Source record: 20879

"Antonio Vernucci" <vernucci@tin.it> wrote in message
news:48f7a158$0$40308$4fafbaef@reader5.news.tin.it...
>I realized my error!
>
> In my budget I counted the extra line loss caused by SWR twice:
>
> - first time when I have added 1 dB to the loss of the forward and the
> return wave
>
> - second time when I took some power out of the antenna (to account for an
> SWR of 4.5) and delivered it back to the transmitter
>
> ARRL is always correct!

All Hail the ARRL!

3656. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-16 22:04:20 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <ETOJk.1579$r_3.1351@nwrddc02.gnilink.net>
Source record: 20880

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:3a9ff49m6plotucggljrs4ducr514c7prf@4ax.com...
> On Thu, 16 Oct 2008 20:31:56 GMT, "Jerry" <jerrymartes@verizon.net>
> wrote:
>
>>
>>"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
>>news:bj6ff4dm3p95rob2qm7q98q426ts5d46un@4ax.com...
>>> On Thu, 16 Oct 2008 17:17:05 GMT, "Jerry" <jerrymartes@verizon.net>
>>> wrote:
>>>
>>>> Will the taped end will not leak with 80 PSI air in the conduit?
>>>> Jerry KD6JDJ
>>>
>>> Well, if it does leak, the sand above the duct tape will dribble down
>>> into the 3/4" conduit creating a rather awkward clean up exercise.
>>> That's why conduit runs usually terminate above the ground, not below.
>>> The trick is to find the conduit end without blowing off the seal.
>
>> Hi Jeff
>> It may be of little interest to the OP, but the sand might have
>> difficulty
>>leaking back into a conduit with air blowing out of it. In addition, the
>>air might leak from a small rupture below the oipen end of the conduit.
>>The OP may have no access to compressed air anyway.
>>
>> Jerry KD6JDJ
>
> Welcome to rec.radio.amateur.antenna.physics
>
> Ok, let's do the math. Dry sand weighs 100 lb/cubic-foot. There's
> about 1 ft of sand above the end of the 3/4" conduit. The weight
> action is roughly conical, so the volume of sand involved is (my
> guess) about:
> 100 lbs/ft^3 * 1/3 = 33 lbs of sand.
> All that it acting on a 3/4" diameter pipe, with a cross sectional
> area of about:
> Pi * 0.75" = 2.4 in^2
> Therefore, the pressure exerted by the sand is:
> 33 lbs / 2.4 in^2 = 14 PSI
> So, if he can pressurize the pipe to more than 14 PSI, he can lift the
> column of sand sufficiently to keep it from dribbling into the pipe.
>
> Of course, it's not that simple. Laminar air flow, pressure gradients

> across the conduit, and the effects of the duct tape will ruin my
> simplistic guesswork. Worse, the back pressure created by the
> immovable column of sand will force some sand particles into the
> conduit around the edges with the "reflected" air pressure. In the
> middle of the conduit, the air flow is all out of the conduit, but
> near the edges, it could easily be the other direction. I'm also
> assuming that the sand is a perfect air seal, which it's not. To
> prevent all this from happening, the minimum air pressure should be
> about twice the 14 PSI, which is easily achievable with an air
> compressor, but not a vacuum cleaner.
>
> I'm also trying to imagine how the process will work. I see an air
> compressor pumping madly away as the neighbors kids furiously dig
> around the resultant sand volcano, as sand rapidly refills the conical
> hole. In my never humble opinion, there's no way to prevent sand from
> dropping into the conduit if the duct tape seal is broken before
> excavating the end of the conduit.
>
> Once the sand is in the conduit, just blowing air through the pipe
> isn't going to magically elevate the sand particles 1ft or more in the
> air. The air does not have sufficient mass to convey enough momentum
> to move the sand particles, much less eject them vertically. For
> that, one needs a denser medium, such as water. Shoving a plunger
> through might work, but it's equally likely to jam sand particles into
> the PVC conduit walls.
>
>
>
>
> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

Wow, Jeff, you are a really smart guy. It sure is nice to know that you are able to analyze this sand over conduit problem so thoroughly. Heck, I thought the air would blow out thru the sand. I didnt even consider the sand above the air leak to be immovable. I thought the air would find a path to leak out somewhere between the tape and the conduit. I hadnt thought about using neighbor kids. Why would you consider using kids for this project?
I'll assume you wont recommend the OP use water or air to locate the far end of his conduit.

Jerry KD6JDJ

3657. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 01:54:29 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3A834F71ADEnonenowhere@61.9.191.5>
Source record: 20881

"Antonio Vernucci" <vernucci@tin.it> wrote in
news:48f7a158$0$40308$4fafbaef@reader5.news.tin.it:

> I realized my error!
...
> ARRL is always correct!

The ARRL information on "extra loss due to VSWR" is may be incomplete in that it may not the assumptions that underly the formula used for the graphs.

The very concept that SWR necessarily increases loss from the matched line loss figure is flawed.

Try the line loss calculator at http://www.vk1od.net/tl/tllc.php to calculate the loss in 1m of RG58 at say 2MHz with loads of 5 and 500 ohms (both VSWR=10).

Now refer to the ARRL... does it explain the difference?

Owen

3658. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 04:53:20 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <q36gf4t92inv31ndrkfvb48ggjastgmvqa@4ax.com>
Source record: 20882

On Thu, 16 Oct 2008 14:19:05 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Thu, 16 Oct 2008 13:57:44 -0700, Jeff Liebermann <jeffl@cruzio.com>
>wrote:
>
>> Worse, the back pressure created by the
>>immovable column of sand will force some sand particles into the
>>conduit around the edges with the "reflected" air pressure.

>H E R E S Y

Hershey Bar (Chocolate Rules). Besides, following the orthodoxy lacks
entertainment value.

>Reflected waves do NOT have power in them - or so goes the catechism.
>
>This new and dangerous introduction of a side topic can only lead to
>endless debate about the superposition phase properties of sand in
>vacua (particel theories inhabiting the crevices in the science of
>Equal Librium)

Yeah, but I like playing in the sand. Try this experiment next time
you have an air compressor and nozzle handy. Find a cardboard,
plastic or metal tube at least 3 ft long. A vacuum cleaner extension
pipe will suffice. Plug up the other end with whatever is handy. Blow
air into the center of the tube. Run your fingers around the edges of
the tube and note which way the air is flowing. That's what will
happen if the compressed air is not sufficient to blow 30 lbs of sand
into the air. The air and the sand will flow back into the pipe in
the opposite direction as the compressed air.

>73's
>Richard Clark, KB7QHC

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3659. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 05:08:44 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ui6gf4h2hug9vac3hl7137ptbrlo1u8ctl@4ax.com>
Source record: 20883

On Thu, 16 Oct 2008 22:04:20 GMT, "Jerry" <jerrymartes@verizon.net>
wrote:

> Wow, Jeff, you are a really smart guy. It sure is nice to know that you
>are able to analyze this sand over conduit problem so thoroughly.

Nope. My guesswork is far from exact. Close enough.

>Heck, I
>thought the air would blow out thru the sand. I didnt even consider the
>sand above the air leak to be immovable.

It is immovable, until it moves. That's the real problem. We can
consider the sand to be a solid plug until it starts to break up. As
soon as that happens, it leaks like a sieve. As soon as it starts
leaking, the air pressure available for lifting the sand is
dissipated, resulting in the collapse of the sand pile. Think of it
like a real volcano. As soon as the volcano stops erupting and
belching gasses, the eruption column of airborne rock collapses, heads
for the ground, and creates a messy pyroplastic flow.

>I thought the air would find a
>path to leak out somewhere between the tape and the conduit.

There's plenty of opportunities for air leaks. If the PVC joints
aren't glued, the air pressure will probably separate the lengths of
PVC pipe.

>I hadnt
>thought about using neighbor kids.

Anyone that uses 3/4" PVC for antenna conduit, and then buries and
loses one end, is certainly not a professional underground
construction contractor. He certainly isn't going to use high prices
professional union ditch diggers. The cheapest alternative are the
neighbors kids. I currently have a horde of them working on removing
the blackberries from my hillside. It may take months and result in a
few non-fatal injuries, but it's still cheaper than hiring a landscape
contractor. Also, more fun to watch.

>Why would you consider using kids for
>this project?

They work cheaply. They're familiar with playing in the sand using
shovels and pails. Just tell them it's kinda like at the beach. They
also bounce instead of break at a young age, which makes them suitable
for dangerous tasks.

>I'll assume you wont recommend the OP use water or air to locate the far
>end of his conduit.

I posted some serious recommendations in previous rants. I like
dropping a boson's whistle down the pipe at the end of a small
diameter air hose. Apply air pressure and it should be hear through a
foot of sand. If not, it will surely scare the gophers, which might
be useful.

> Jerry KD6JDJ

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3660. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 05:26:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <iu6gf41mnn1s98mgnl781mjrtohjea36ml@4ax.com>
Source record: 20884

On Thu, 16 Oct 2008 21:53:20 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>Plug up the other end with whatever is handy. Blow
>air into the center of the tube. Run your fingers around the edges of
>the tube and note which way the air is flowing. That's what will
>happen if the compressed air is not sufficient to blow 30 lbs of sand
>into the air. The air and the sand will flow back into the pipe in
>the opposite direction as the compressed air.

Hi Jeff,

Well, it's been a coon's age since I've seen vacuum cleaners that
would let me attach to their exhaust - so that's out.

As for driving compressed air into a short (or open). I've done that,
but not for sand excavation. Rather, I've used what was commercially
called the "vortex effect" which separates the two air current flows
you allude to above to create a hot stream and a chilled stream of
air. (Elevated or depressed from the average of the inlet
temperature.) I used this for cooling electronics in a paper mill.
Not particularly efficient, but compressed air was available, and the
VorTec nozzle was a quick and easy solution to their NEMA enclosures.

See:
http://www.vortec.com/support_casestudies.php
or
https://secure.vortec.com/store_products.php?catID=9&prodID=6

This, and some of my fluidic applications constitute a specialized
niche in alternative logic systems. Notably, they all work off
principles of reflected power that demonstrate palpable examples.

73's
Richard Clark, KB7QHC

3661. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 06:05:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <g5mls5-1n7.ln1@mail.specsol.com>
Source record: 20885

Richard Clark <kb7qhc@comcast.net> wrote:

> Well, it's been a coon's age since I've seen vacuum cleaners that
> would let me attach to their exhaust - so that's out.

Have you ever heard of a shop vacuum?

Usually only available at highly specialized stores such as Walmart.

--
Jim Pennino

Remove .spam.sux to reply.

3662. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 06:39:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vtbgf4h1oi0gba2aeq7gvtgoq424bcge64@4ax.com>
Source record: 20886

On Fri, 17 Oct 2008 06:05:01 GMT, jimp@specsol.spam.sux.com wrote:

>Richard Clark <kb7qhc@comcast.net> wrote:
>
>> Well, it's been a coon's age since I've seen vacuum cleaners that
>> would let me attach to their exhaust - so that's out.
>
>Have you ever heard of a shop vacuum?
>
>Usually only available at highly specialized stores such as Walmart.

Hi Jim,

Unfortunately my shopping nature turns me more towards Fry's and I certainly have very little interest in yet another vacuum cleaner (if they offer them). Market forces long (decades) ago convinced me that Hardware skills were in a declining employment segment in proportion to software.

There may not be a software solution to this current problem of locating a buried pipe, but I wouldn't have buried it without some simple binary marker (it's here!). The analog solutions offered are inventive, and I do appreciate them however. One or several are probably far more effective than going to Walmart for a shop-vac (that would only become a permanent altar attesting to my need to use it in justification for its expense).

73's
Richard Clark, KB7QHC

3663. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 10:23:15 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <fb8c02bd-26b5-4d9e-a269-5f41ae5eeaeb@v53g2000hsa.googlegroups.com>
Source record: 20887

On Oct 15, 2:28 am, Roy Lewallen <w...@eznec.com> wrote:
> A suggestion for other folks who will be burying a conduit: Take a bunch
> of pictures before the trench is filled. It's good to include distances
> to some fixed reference points -- you can write them with a marker on
> big pieces of paper laid on the ground to get them in the picture. I
> haven't yet used the pictures I took of mine, but I sure have made a lot
> of use of the pictures I took of the uncovered walls of a home addition,
> showing the locations of all the studs and wiring.
>
> Roy Lewallen, W7EL

We always do this at work and lately started doing GPS surveys of new
buried cables marking GPS and survey data on the pictures, This comes
in real handy when you are paying for 4 guys and a rented backhoe to
stand around and wait for you to find a cable,

Jimmie

3664. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 11:03:09 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Mh_Jk.3512$x%.2861@nlpi070.nbdc.sbc.com>
Source record: 20888

Owen Duffy wrote:
> The ARRL information on "extra loss due to VSWR" is may be incomplete in
> that it may not the assumptions that underly the formula used for the
> graphs.

It is possible for a feedline with a high SWR to have
lower loss than the matched-line loss. For instance,
if we have 1/8WL of feedline with a current miminum
in the middle of the line, the losses at HF will be
lower than matched line loss because I^2*R losses tend
to dominate at HF.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3665. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 13:02:04 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <f02hf4d5jr3mu8r933rnvkojm7bmj4qu3m@4ax.com>
Source record: 20889

On Thu, 16 Oct 2008 22:26:10 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>Well, it's been a coon's age since I've seen vacuum cleaners that
>would let me attach to their exhaust - so that's out.

The problem with vacuum cleaners is that they all suck. I have an
ancient Electrolux and a Shop Vac that both have usable exhaust ports.
I also have a Hoover upright and a Hoover cannister in the office that
do not. Y'er right that it's a vanishing breed.

However, you re-read what I scribbled, you might notice that I
suggested that one use the air compressor to pressurize the 3/4" PVC
pipe. That's because the average vacuum cleaner can barely generate
more than a few PSI. They also leak badly. If you're trying to lift
a column of sand or demonstrate backpressure, it's much easier with a
proper air compressor.

>As for driving compressed air into a short (or open). I've done that,
>but not for sand excavation.

I have. The clumsy backhoe operator (me) once dropped a load of dirt
on top of the steel 3" conduit end during construction. I'm also the
idiot that forgot to shove a protective rag into the conduit end. I
spent the next two days trying to figure out how to get the dirt out
of the pipe. I eventually fabricated a cylinder shaped rubber plug
with an eyebolt down the center, dumped some water into the conduit,
and dragged the plug through the pipe with a winch. It took about 5
passes for the water to come out clear. I then pumped out the
remaining water, dragged a sponge through the pipe a few dozen times,
and then let evaporation do the final cleanup. Compressed air was
attempted just for fun, but it was obvious that it wasn't going to
lift the dirt out of the pipe.

>Rather, I've used what was commercially
>called the "vortex effect" which separates the two air current flows
>you allude to above to create a hot stream and a chilled stream of
>air. (Elevated or depressed from the average of the inlet
>temperature.) I used this for cooling electronics in a paper mill.
>Not particularly efficient, but compressed air was available, and the
>VorTec nozzle was a quick and easy solution to their NEMA enclosures.
>
>See:
>http://www.vortec.com/support_casestudies.php
>or
>https://secure.vortec.com/store_products.php?catID=9&prodID=6

Nice. I built several out of the original Amateur Scientist book (which I still have on my bookshelf) in the early 1960's. It worked amazingly well. Much later, I built one out of PVC pipe, which melted. Now I know why they're made out of metal. Never mind the inefficiency. It's the noise they make that drives me nuts. At one point, we had 4 of them in series, with 4 assorted air compressors pumping about 4 SCFM into each, and got it down to about -100C. We started with a group of about 10 lab students, and ended up with a crowd of about 100 nosey students wondering why someone was trying to operate a jet engine on campus.

>This, and some of my fluidic applications constitute a specialized
>niche in alternative logic systems. Notably, they all work off
>principles of reflected power that demonstrate palpable examples.

I'll pass. I don't believe in logic any more. Everything can be explained in terms of politics, psychology, and conspriacies. Logic is obsolete.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3666. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 13:36:04 UTC
From: Dave <noone@nowhere.com>
Message-ID: <8x0Kk.1687$r_3.1161@nwrddc02.gnilink.net>
Source record: 20890

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B3A834F71ADEnonenowhere@61.9.191.5...
> "Antonio Vernucci" <vernucci@tin.it> wrote in
> news:48f7a158$0$40308$4fafbaef@reader5.news.tin.it:
>
>> I realized my error!
> ...
>> ARRL is always correct!
>
> The ARRL information on "extra loss due to VSWR" is may be incomplete in
> that it may not the assumptions that underly the formula used for the
> graphs.
>
> The very concept that SWR necessarily increases loss from the matched line
> loss figure is flawed.
>
> Try the line loss calculator at http://www.vk1od.net/tl/tllc.php to
> calculate the loss in 1m of RG58 at say 2MHz with loads of 5 and 500 ohms
> (both VSWR=10).
>
> Now refer to the ARRL... does it explain the difference?
>
> Owen

yeah, when you use the full complex Z0 and probably the full transmission
line equations it gets a bit more complex. but for amateur use that graph
is close enough. the difference between 5 and 500 ohm loads of .07db or so
for 100m just ain't worth quibbling about for normal amateur hf use. unless
you want to argue it out with cecil.

3667. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 16:07:29 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <4L2Kk.4493$yr3.2020@nlpi068.nbdc.sbc.com>
Source record: 20891

Dave wrote:
> ... unless you want to argue it out with cecil.

Sorry, I have no argument with Owen. I do have
an argument with people who say replacing the
RG-213 on a G5RV with 300 ohm twinlead all the
way to the tuner will reduce losses on 80m -
tain't so.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3668. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 16:19:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bvdhf4dc4o3tmok48eglg6jmnht9dpigvq@4ax.com>
Source record: 20892

On Fri, 17 Oct 2008 06:02:04 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>However, you re-read what I scribbled, you might notice that I
>suggested that one use the air compressor to pressurize the 3/4" PVC
>pipe.

Hi Jeff,

I was responding to the broad assortment of methods which included
what was the closest option for me of a vacuum cleaner.

>That's because the average vacuum cleaner can barely generate
>more than a few PSI. They also leak badly. If you're trying to lift
>a column of sand or demonstrate backpressure, it's much easier with a
>proper air compressor.

No doubt and no argument. At one point in my career, I found myself
with a dead weight tester, calibrating a pressure gauge to 10,000 PSI
when the coupling line spit sending a fine spray of pressurized oil
past my face. Took me half an hour to shake off the thought of it
hitting me square.

>>As for driving compressed air into a short (or open). I've done that,
>>but not for sand excavation.
>
>I have. The clumsy backhoe operator (me) once dropped a load of dirt
>on top of the steel 3" conduit end during construction. I'm also the
>idiot that forgot to shove a protective rag into the conduit end. I
>spent the next two days trying to figure out how to get the dirt out
>of the pipe. I eventually fabricated a cylinder shaped rubber plug
>with an eyebolt down the center, dumped some water into the conduit,
>and dragged the plug through the pipe with a winch. It took about 5
>passes for the water to come out clear. I then pumped out the
>remaining water, dragged a sponge through the pipe a few dozen times,
>and then let evaporation do the final cleanup. Compressed air was
>attempted just for fun, but it was obvious that it wasn't going to
>lift the dirt out of the pipe.

I've done that too. For a summer of my youth (when dinosaurs ruled
the earth) I would plunge down a manhole with a tethered ball. I'd
plug it into the downhill side, clamber out, and fill the manhole with
water. Then go to the next manhole, clamber down and dig out all the
muck that had been plunged ahead of the tether ball. Repeat for
weeks.

Substituting one central phrase of "Apocalypse Now":
"The aroma of it all! The AROMA of it all!"

>I'll pass. I don't believe in logic any more. Everything can be
>explained in terms of politics, psychology, and conspriacies. Logic
>is obsolete.

Last night I went to a reception for Joseph Stiglitz where he mentioned being a liberal too much (he was apologizing to the group at that point) and I drew him aside to comment that he had no need to explain his bias as this was the first time in our political history when we had two candidates BOTH running against the administration AND the Republican Party. We laughed at that logic.

73's
Richard Clark, KB7QHC

3669. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 16:20:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1pehf4lfjjeql8eo1nqoehpeplj2r67frg@4ax.com>
Source record: 20893

On Fri, 17 Oct 2008 13:36:04 GMT, "Dave" <noone@nowhere.com> wrote:

>> Try the line loss calculator at http://www.vk1od.net/tl/tllc.php to
>> calculate the loss in 1m of RG58 at say 2MHz with loads of 5 and 500 ohms
>> (both VSWR=10).
>>
>> Now refer to the ARRL... does it explain the difference?
>>
>> Owen
>
>yeah, when you use the full complex Z0 and probably the full transmission
>line equations it gets a bit more complex. but for amateur use that graph
>is close enough. the difference between 5 and 500 ohm loads of .07db or so
>for 100m just ain't worth quibbling about for normal amateur hf use. unless
>you want to argue it out with cecil.

To catch Owen's drift, you really need to perform his suggested
exercise.

73's
Richard Clark, KB7QHC

3670. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 16:35:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <2arms5-mlb.ln1@mail.specsol.com>
Source record: 20894

Richard Clark <kb7qhc@comcast.net> wrote:
> On Fri, 17 Oct 2008 06:05:01 GMT, jimp@specsol.spam.sux.com wrote:
>
>>Richard Clark <kb7qhc@comcast.net> wrote:
>>
>>> Well, it's been a coon's age since I've seen vacuum cleaners that
>>> would let me attach to their exhaust - so that's out.
>>
>>Have you ever heard of a shop vacuum?
>>
>>Usually only available at highly specialized stores such as Walmart.
>
> Hi Jim,
>
> Unfortunately my shopping nature turns me more towards Fry's and I
> certainly have very little interest in yet another vacuum cleaner (if
> they offer them). Market forces long (decades) ago convinced me that
> Hardware skills were in a declining employment segment in proportion
> to software.
>
> There may not be a software solution to this current problem of
> locating a buried pipe, but I wouldn't have buried it without some
> simple binary marker (it's here!). The analog solutions offered are
> inventive, and I do appreciate them however. One or several are
> probably far more effective than going to Walmart for a shop-vac (that
> would only become a permanent altar attesting to my need to use it in
> justification for its expense).
>
> 73's
> Richard Clark, KB7QHC

Everyone needs a shop vac, especially a wet and dry one.

Unless you really like spending a long time mopping floors.

--
Jim Pennino

Remove .spam.sux to reply.

3671. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 17:00:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rvghf4l5hqnfo329n3p0ea9qn8arckrudm@4ax.com>
Source record: 20895

On Fri, 17 Oct 2008 16:35:02 GMT, jimp@specsol.spam.sux.com wrote:

>Everyone needs a shop vac, especially a wet and dry one.
>
>Unless you really like spending a long time mopping floors.

I was once a swab jockey. Mind? when there was no choice you turn
that off.

Hi Jim,

I prefer dry floors. That's why I invested in a French drain. And I
have more floor space than that which would have been lost to a barrel
that sucks.

73's
Richard Clark, KB7QHC

3672. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 18:02:48 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <52jhf45d1s1fa3di9p2p5ki26mkr905798@4ax.com>
Source record: 20896

On Fri, 17 Oct 2008 09:19:00 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>At one point in my career, I found myself
>with a dead weight tester, calibrating a pressure gauge to 10,000 PSI
>when the coupling line spit sending a fine spray of pressurized oil
>past my face. Took me half an hour to shake off the thought of it
>hitting me square.

Ouch. At that pressure, the first few drops of oil will give you an
instant tattoo. An acquaintance recently had that happen to him. He's
now recovering from the skin grafts and laser ablative cleanup.

The closest I came to that was getting a hydraulic fluid shower while
riding as an operator inside a Rose Float (in about 1968). The floats
animation was run by a pony engine and hydraulic pumps. The coupling
directly over me started to leak. After 2 hours in the float
lumbering through Pasadena, I arrived thoroughly soaked.
<http://802.11junk.com/jeffl/pics/jeffl/slides/RoseFloat01.html>
That's me testing the chair position (which was arc welded in place so
it had to be perfect). My feet are resting on top of the electrical
animation switching panel.

>For a summer of my youth (when dinosaurs ruled
>the earth) I would plunge down a manhole with a tethered ball. I'd
>plug it into the downhill side, clamber out, and fill the manhole with
>water. Then go to the next manhole, clamber down and dig out all the
>muck that had been plunged ahead of the tether ball. Repeat for
>weeks.

Well, I missed such fun when I was younger. I worked for the same
monopoly. While you were playing in the muck, I was "re-enforcing"
100 pair bundles and working in the battery room.

>Substituting one central phrase of "Apocalypse Now":
> "The aroma of it all! The AROMA of it all!"

These days, the installers doing FTTS (Fiber Through the Sewers) have
all the fun. Instead of summer interns, the dirty work is done by a
robot which installs a SAM (sewer access module):
<http://www.kate-pmo.ch/pages/en/fast.html>
Despite the robotics and improved handling, the packets delivered
still seem to smell of effluvia.

>... as this was the first time in our political history
>when we had two candidates BOTH running against the administration AND
>the Republican Party. We laughed at that logic.

Chuckle. Very true. Worse, the "real" agendas of both parties are almost identical. I noticed that both parties are also against the status quo (which is generally considered awful). That makes me wonder just what they are in favor of actually doing. I would prefer they do absolutely nothing and let the economy fix itself, but that's too much to hope for. Let the lesser evil win in Nov and never mind trying to decode their logic.

I should feel guilty for encouraging this off topic discussion, complete with topic drift, but I don't.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3673. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 18:11:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8vkhf4dst1k2fjdvr84cugg6mcbrshnl94@4ax.com>
Source record: 20897

On Fri, 17 Oct 2008 11:02:48 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>I should feel guilty for encouraging this off topic discussion,
>complete with topic drift, but I don't.

Hi Jeff,

I count it as adding value - even if it is for political education,
sewer management (I didn't mean for that juxtaposition, but Karma
seeks its own balance), and the parade of roses systems control. That
photo was a blast. Did you actually have to cross your feet as part
of the control heuristics?

At the end of Stiglitz's discussion on the cost of the war ($3 to $5
Trillion at a minimum), someone asked plaintively "Don't you have
something positive to offer us?" He responded "We will have a new
president soon."

73's
Richard Clark, KB7QHC

3674. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 19:36:08 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3B432A11931nonenowhere@61.9.191.5>
Source record: 20898

"Dave" <noone@nowhere.com> wrote in
news:8x0Kk.1687$r_3.1161@nwrddc02.gnilink.net:

...
> yeah, when you use the full complex Z0 and probably the full
> transmission line equations it gets a bit more complex. but for
> amateur use that graph is close enough. the difference between 5 and
> 500 ohm loads of .07db or so for 100m just ain't worth quibbling about
> for normal amateur hf use. unless you want to argue it out with
> cecil.

You either misread my example (it was 1m not 100m) or you labour under the misapprehension that loss per unit length under mismatched conditions is constant at all displacements along the cable.

When approximations that hold under some conditions replace the underlying principles, we dumb down. The formula and graphs for "additional loss due to VSWR" without statement of the assumptions under which it is valid are an example... where now, so many people accept the concept that VSWR necessarily increases loss.

The OP was trying to reconcile calculated losses in a particular scenario, and one of the contributions to error was the "additional loss due to VSWR". It is fine with me that understanding doesn't appeal to you Dave, but you don't need to press that approach on the rest of us.

Owen

(PS: if we take a length of 50 ohm coax sufficiently short that current distribution is approximately uniform, and consider the losses under matched conditions and under a 500 ohm load with same load power where voltage is three times and current is one third, it is intuitive that since most of the loss in practical coax cables is due to I^2R loss (compared to V^2G), that loss will be LESS (than Matched Line Loss)... approximately one tenth in that case... so why swallow the ROT that high VSWR necessarily increases loss.)

3675. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 20:17:49 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <48f8f2d6$0$41654$4fafbaef@reader4.news.tin.it>
Source record: 20899

> since most of the loss in practical coax cables is due to I^2R loss
> (compared to V^2G)

A quick question. If most of the the cable loss is due to I^2R, how can one explain that the foam versions of common coaxial cables show a much lower loss than versions having solid PE insulation?

For instance RG-213 is rated at 8.5dB loss for 100 meters at 144 MHz, while RG-213 foam at only 4.5 dB. If G is relatively unimportant with regard to loss, how can one explain that a change of insulation material yields such a tremendous change in loss?

Thanks and 73

Tiony I0JX

3676. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 20:31:03 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <su6IIaRHYP+IFwcF@g3ohx.demon.co.uk>
Source record: 20900

In message <48f8f2d6$0$41654$4fafbaef@reader4.news.tin.it>, Antonio Vernucci <vernucci@tin.it> writes
>> since most of the loss in practical coax cables is due to I^2R loss
>> (compared to V^2G)
>
>A quick question. If most of the the cable loss is due to I^2R, how can
>one explain that the foam versions of common coaxial cables show a much
>lower loss than versions having solid PE insulation?
>
>For instance RG-213 is rated at 8.5dB loss for 100 meters at 144 MHz,
>while RG-213 foam at only 4.5 dB. If G is relatively unimportant with
>regard to loss, how can one explain that a change of insulation
>material yields such a tremendous change in loss?
>
>Thanks and 73
>
>Tiony I0JX

Lower k dielectric > larger diameter inner conductor > lower resistance
> lower loss.
--
Ian

3677. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 20:33:54 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3B4CF5141F9nonenowhere@61.9.191.5>
Source record: 20902

"Antonio Vernucci" <vernucci@tin.it> wrote in
news:48f8f2d6$0$41654$4fafbaef@reader4.news.tin.it:

>> since most of the loss in practical coax cables is due to I^2R loss
>> (compared to V^2G)
>
> A quick question. If most of the the cable loss is due to I^2R, how
> can one explain that the foam versions of common coaxial cables show a
> much lower loss than versions having solid PE insulation?

If you construct a cable of similar outside dimensions but using a foam
dielectric, it needs a larger diameter inner conductor. That accounts for
the lower loss at lower frequencies (typically below the GHz range.)

>
> For instance RG-213 is rated at 8.5dB loss for 100 meters at 144 MHz,
> while RG-213 foam at only 4.5 dB. If G is relatively unimportant with
> regard to loss, how can one explain that a change of insulation
> material yields such a tremendous change in loss?

See above.

If you use my calculator (link in earlier posting), it gives you the
coefficients of two terms of the loss model, one is due to I^2R and the
other V^2G. You can evaluate them at any given frequency and determine
the contribution that conductor and dielectric losses make at that
frequency for that cable type.

Does that help?

Owen

>
> Thanks and 73
>
> Tiony I0JX
>
>

3678. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 20:34:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <zF6Kk.3543$x%.2843@nlpi070.nbdc.sbc.com>
Source record: 20901

Antonio Vernucci wrote:
> For instance RG-213 is rated at 8.5dB loss for 100 meters at 144 MHz,
> while RG-213 foam at only 4.5 dB. If G is relatively unimportant with
> regard to loss, how can one explain that a change of insulation material
> yields such a tremendous change in loss?

Those statements about most loss being due to I^2*R
losses are at *HF* frequencies. 144 MHz is NOT HF.
The difference in RG-213 and RG-213 foam is only 0.2
dB at 10 MHz while the difference between RG-58 and
RG-213 is about 0.7 dB at 10 MHz.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3679. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 20:46:16 UTC
From: Dave <noone@nowhere.com>
Message-ID: <sQ6Kk.1770$r_3.1052@nwrddc02.gnilink.net>
Source record: 20903

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B3B432A11931nonenowhere@61.9.191.5...
> "Dave" <noone@nowhere.com> wrote in
> news:8x0Kk.1687$r_3.1161@nwrddc02.gnilink.net:
>
> ...
>> yeah, when you use the full complex Z0 and probably the full
>> transmission line equations it gets a bit more complex. but for
>> amateur use that graph is close enough. the difference between 5 and
>> 500 ohm loads of .07db or so for 100m just ain't worth quibbling about
>> for normal amateur hf use. unless you want to argue it out with
>> cecil.
>
> You either misread my example (it was 1m not 100m) or you labour under
> the misapprehension that loss per unit length under mismatched conditions
> is constant at all displacements along the cable.
>
> When approximations that hold under some conditions replace the
> underlying principles, we dumb down. The formula and graphs for
> "additional loss due to VSWR" without statement of the assumptions under
> which it is valid are an example... where now, so many people accept the
> concept that VSWR necessarily increases loss.
>
> The OP was trying to reconcile calculated losses in a particular
> scenario, and one of the contributions to error was the "additional loss
> due to VSWR". It is fine with me that understanding doesn't appeal to you
> Dave, but you don't need to press that approach on the rest of us.
>
> Owen
>
> (PS: if we take a length of 50 ohm coax sufficiently short that current
> distribution is approximately uniform, and consider the losses under
> matched conditions and under a 500 ohm load with same load power where
> voltage is three times and current is one third, it is intuitive that
> since most of the loss in practical coax cables is due to I^2R loss
> (compared to V^2G), that loss will be LESS (than Matched Line Loss)...
> approximately one tenth in that case... so why swallow the ROT that high
> VSWR necessarily increases loss.)

why should i swallow your rot that shows when you push the limits of the
equations you get results that 'seem' to defy logic. I understand perfectly
well what you are saying, and i do understand the full complex forms of the
transmission line equations. what i am saying is that for most 'normal'
amateur use the graph presented in the arrl book is adequate. if you insist

on pushing computerized calculations to the absurd limits i'll lump you in
with art and his over optimized ball of wire antenna.

3680. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 21:06:05 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <ULeOK$f94P+IFAoX@ifwtech.co.uk>
Source record: 20904

Antonio Vernucci wrote:
>> since most of the loss in practical coax cables is due to I^2R loss
>> (compared to V^2G)
>
>A quick question. If most of the the cable loss is due to I^2R, how can
>one explain that the foam versions of common coaxial cables show a much
>lower loss than versions having solid PE insulation?
>
>For instance RG-213 is rated at 8.5dB loss for 100 meters at 144 MHz,
>while RG-213 foam at only 4.5 dB. If G is relatively unimportant with
>regard to loss, how can one explain that a change of insulation
>material yields such a tremendous change in loss?
>

In reasonably well constructed coax cables, the main source of loss up to about 1GHz is the I^2R loss in the centre conductor. The inside of the shield carries an equal (and opposite) current, but the current density is lower so the I^2R loss there is less important. Dielectric loss is usually less important still.

In low-loss cables that have the same outside diameter as the classic PE cables they are replacing, the reduction in loss is almost entirely due to a larger centre conductor. But that change cannot be made on its own. In order to maintain a 50 ohm impedance and keep the same outside diameter too, it is necessary to reduce the dielectric constant of the insulation material.

In other words, they're using foam or semi-airspaced construction because they *have* to. Replacing some of the solid PE with gas may make a small contribution to the lower losses, but nowhere near so much as the advertisers would have you believe. The main contributor is always the reduced I^2R loss in a larger centre conductor.

--

73 from Ian GM3SEK

3681. Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 21:23:05 UTC
From: Bill Ogden <billogden@optonline.net>
Message-ID: <48f902d5$0$4898$607ed4bc@cv.net>
Source record: 20905

I seem to remember reading that running coax underground acts like a current choke. However, my memory has many missing bits these days. Is this a true statement about coax underground? In my case the run is about 40' (in a conduit that is about 10" under ground). I am interested only in the normal HF bands.

Bill
W2WO

3682. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 21:30:43 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3B56972FB83nonenowhere@61.9.191.5>
Source record: 20906

Owen Duffy <none@no.where> wrote in
news:Xns9B3B4CF5141F9nonenowhere@61.9.191.5:

...
> If you use my calculator (link in earlier posting), it gives you the
> coefficients of two terms of the loss model, one is due to I^2R and
> the other V^2G. You can evaluate them at any given frequency and
> determine the contribution that conductor and dielectric losses make
> at that frequency for that cable type.

Lest someone confuses this with an incorrect calculation or estimate:

From TLLC, the matched line loss in dB of LMR400 (a foam coax of similar OD to RG213) is 3.941e-6*f^0.5+1.031e-11*f. The first term is due to R and the second due to G.

At 144MHz, the percentage of power lost per meter due to R is (1-10^-(3.941e-6*f^0.5)/10)*100 is 1.08%. If you do similar for G, the loss is 0.034%, so loss in R is more than 30 times loss in G.

The numbers lead to a better understanding.

Does this make sense? Did I get it correct?

Owen

(BTW for RG213 at 144MHz, the percentage of power lost per meter due to R is more than 6 times loss in G. Most of the loss advantage of LMR400 comes from reduction of the R loss component per metre from 1.6% to 1.1% due to the larger diameter inner conductor.)

Owen

3683. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 21:45:44 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3B5922FE256nonenowhere@61.9.191.5>
Source record: 20930

"Bill Ogden" <billogden@optonline.net> wrote in
news:48f902d5$0$4898$607ed4bc@cv.net:

> I seem to remember reading that running coax underground acts like a
> current choke. However, my memory has many missing bits these days.
> Is this a true statement about coax underground? In my case the run
> is about 40' (in a conduit that is about 10" under ground). I am
> interested only in the normal HF bands.

A conductor carrying RF currents and immersed in soil behaves like a lossy transmission line. The bahavior depends on the parameters of the soil (amongst other things), so the effect is different in dry sand than in wet clay. Current entering the line will be attenuated along the line.

Your coax is similar to some extent in respect to the common mode current. Placing a single coax in a plastic conduit reduces the loss to some extent compared to surrounding the cable directly with soil.

Owen

3684. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 22:04:33 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdb25i$bs5$1@news.jpl.nasa.gov>
Source record: 20909

Antonio Vernucci wrote:
>> since most of the loss in practical coax cables is due to I^2R loss
>> (compared to V^2G)
>
> A quick question. If most of the the cable loss is due to I^2R, how can
> one explain that the foam versions of common coaxial cables show a much
> lower loss than versions having solid PE insulation?
>
> For instance RG-213 is rated at 8.5dB loss for 100 meters at 144 MHz,
> while RG-213 foam at only 4.5 dB. If G is relatively unimportant with
> regard to loss, how can one explain that a change of insulation material
> yields such a tremendous change in loss?
>
> Thanks and 73
>
> Tiony I0JX

144 MHz isn't HF, which is where the original statement is valid. At frequencies above around 50 MHz, depending on the dielectric, the dielectric loss starts to be more significant.

Another trap for the unwary, when comparing coax losses, has to do with skin effect and the thickness of the copper or silver cladding on the center conductor. You could have an air insulated coax with silver plated over stainless steel where the loss is actually greater at low frequencies than higher, because the skin depth is greater at low frequencies and the current is flowing mostly in the SS, rather than the copper. (such coax is used in cryogenic applications, lest one think it's overly contrived as an example)

3685. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 22:39:20 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <48f91401$0$41661$4fafbaef@reader4.news.tin.it>
Source record: 20907

> In reasonably well constructed coax cables, the main source of loss up
> to about 1GHz is the I^2R loss in the centre conductor. The inside of the
> shield carries an equal (and opposite) current, but the current density is
> lower so the I^2R loss there is less important. Dielectric loss is usually
> less important still.

Ian and others,

thanks for your clear explanation, but I still have a doubt that you may kindly clarify.

The 300-ohm TV flat ribbon specifications show an attenuation generally lower than that of plain RG-8, despite the conductors of the ribbon are by far thinner than those of RG-8 (especially than the cable shield).

What am I missing now?

Thanks & 73

Tony I0JX

3686. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 22:55:07 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3B64E6A6E60nonenowhere@61.9.191.5>
Source record: 20908

"Antonio Vernucci" <vernucci@tin.it> wrote in
news:48f91401$0$41661$4fafbaef@reader4.news.tin.it:

> The 300-ohm TV flat ribbon specifications show an attenuation
> generally lower than that of plain RG-8, despite the conductors of the
> ribbon are by far thinner than those of RG-8 (especially than the
> cable shield).

Under matched line conditions, the 300 ohm line transfers the power at higher voltage and lower current, one sixth of the current, so even though the conductors might seem relatively thin (RF R is proportional to diameter for wide spaced line), I^2R loss is lower.

Owen

3687. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 22:55:43 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdb55f$6fc$1@news.jpl.nasa.gov>
Source record: 20910

Antonio Vernucci wrote:
>
>> In reasonably well constructed coax cables, the main source of loss up
>> to about 1GHz is the I^2R loss in the centre conductor. The inside of
>> the shield carries an equal (and opposite) current, but the current
>> density is lower so the I^2R loss there is less important. Dielectric
>> loss is usually less important still.
>
> Ian and others,
>
> thanks for your clear explanation, but I still have a doubt that you may
> kindly clarify.
>
> The 300-ohm TV flat ribbon specifications show an attenuation generally
> lower than that of plain RG-8, despite the conductors of the ribbon are
> by far thinner than those of RG-8 (especially than the cable shield).
>
> What am I missing now?

300 ohms vs 50 ohms.

Since IR losses dominate at these frequencies, reducing current reduces
loss. The higher Z means more voltage and less current for the same
power. Loss will be 1/36th, assuming all the conductor sizes are the same.

3688. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 23:20:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k27if45skv17msbptb83trmhiq9k6ectme@4ax.com>
Source record: 20911

On Fri, 17 Oct 2008 17:23:05 -0400, "Bill Ogden"
<billogden@optonline.net> wrote:

>I seem to remember reading that running coax underground acts like a current
>choke. However, my memory has many missing bits these days. Is this a true
>statement about coax underground? In my case the run is about 40' (in a
>conduit that is about 10" under ground). I am interested only in the normal
>HF bands.

Hi Bill,

The coax shield is no different in loss as is a ground radial wire of
the same dimension. Visit any site that offers the data of Brown,
Lewis, and Epstein to observe that for their experiments at 3MHz, the
amount of radial conductivity drops like a rock well in advance of the
end of the wire (where it would be forced to zero by being open).

You might get it to conduct a bit further by having insulated it from
ground (the conduit), but it is still easily within ground's deadly
embrace.

73's
Richard Clark, KB7QHC

3689. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-17 23:21:07 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3B694F5DBB8nonenowhere@61.9.191.5>
Source record: 20912

Owen Duffy <none@no.where> wrote in
news:Xns9B3B64E6A6E60nonenowhere@61.9.191.5:

...
> though the conductors might seem relatively thin (RF R is proportional
> to diameter for wide spaced line), I^2R loss is lower.

Of course, that should read "RF R is inversely proportional to diameter for
wide spaced line"

Owen

3690. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 03:19:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <A4mdnc3GketJyGTVnZ2dnUVZ_gednZ2d@posted.easystreetonline>
Source record: 20913

Jim Lux wrote:

> 144 MHz isn't HF, which is where the original statement is valid. At
> frequencies above around 50 MHz, depending on the dielectric, the
> dielectric loss starts to be more significant.
>

The analyses I've done using published and realistic values for dielectric (PE and PTFE) and conductor loss indicate that dielectric loss doesn't become significant until the 1 - 10 GHz region, well above VHF.

> Another trap for the unwary, when comparing coax losses, has to do with
> skin effect and the thickness of the copper or silver cladding on the
> center conductor. You could have an air insulated coax with silver
> plated over stainless steel where the loss is actually greater at low
> frequencies than higher, because the skin depth is greater at low
> frequencies and the current is flowing mostly in the SS, rather than the
> copper. (such coax is used in cryogenic applications, lest one think
> it's overly contrived as an example)

It's unusual to find a plating thickness that's less than several skin depths thick except at MF and below, or perhaps the low end of HF. It does happen, though. I have some 0.1 inch diameter 75 ohm cable which has a very small center conductor which is made of several strands of even smaller Copperweld wire (thick copper over steel). Even though the copper is probably a sizable fraction of the total wire diameter, the wire is so small in diameter that the copper isn't several skin depths thick at lower HF. It has very noticeably excessive loss at 7 MHz, something I discovered the hard way one Field Day.

Roy Lewallen, W7EL

3691. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 04:47:47 UTC
From: ltdoc@yahoo.com
Message-ID: <f256c0b4-8c85-4305-977c-61951d689629@d70g2000hsc.googlegroups.com>
Source record: 20914

If you can run a metal 'snake' through that conduit, use a metal detector to find the 'snake'. Ought'a be able to find a metal detector some where...
- 'Doc

(Tape a bottle cap to the end of that 'snake', they're easy to find.)

3692. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 07:07:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <082jf4l3e20pi1rrl5867id2knrshti8gk@4ax.com>
Source record: 20915

On Fri, 17 Oct 2008 22:30:20 -0700, Bart Bailey <me2@privacy.net>
wrote:

>In catalogs or other places I've heard about a mod to increase the power
>handling capacity of these antennas, anyone know what it entails?

Suckers throwing money at marketeers in vast quantities (otherwise
know as the the theory of the "Greater Fool"). Fear is currently
trading at $700 Billion in DC.

If those antennas are made of tinsel with paper thin dielectric, then
you should look elsewhere for vendors. Even a $35 all channel TV
antenna from WalMart would probably take a couple of KW. You could
probably torch the Republican party with 5W from an HT.

73's
Richard Clark, KB7QHC

3693. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 07:35:19 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <L8GhM9C3GZ+IFw41@g3ohx.demon.co.uk>
Source record: 20916

In message <gdb25i$bs5$1@news.jpl.nasa.gov>, Jim Lux
<james.p.lux@jpl.nasa.gov> writes
>Antonio Vernucci wrote:
>>> since most of the loss in practical coax cables is due to I^2R loss
>>> (compared to V^2G)
>> A quick question. If most of the the cable loss is due to I^2R, how
>>can one explain that the foam versions of common coaxial cables show a
>>much lower loss than versions having solid PE insulation?
>> For instance RG-213 is rated at 8.5dB loss for 100 meters at 144
>>MHz, while RG-213 foam at only 4.5 dB. If G is relatively unimportant
>>with regard to loss, how can one explain that a change of insulation
>>material yields such a tremendous change in loss?
>> Thanks and 73
>> Tiony I0JX
>
>144 MHz isn't HF, which is where the original statement is valid. At
>frequencies above around 50 MHz, depending on the dielectric, the
>dielectric loss starts to be more significant.
>
>Another trap for the unwary, when comparing coax losses, has to do with
>skin effect and the thickness of the copper or silver cladding on the
>center conductor. You could have an air insulated coax with silver
>plated over stainless steel where the loss is actually greater at low
>frequencies than higher, because the skin depth is greater at low
>frequencies and the current is flowing mostly in the SS, rather than
>the copper. (such coax is used in cryogenic applications, lest one
>think it's overly contrived as an example)

Indeed. If you compare a frequency response of a reel of coax with a
plated centre conductor (say, copper on steel) with one with a solid
inner conductor, the former often has a noticeable kink at around 40 or
50MHz. A long time ago, we found this out at work when trying to find
drop cables and miniature cables which we could be used as simulations
of large-diameter, low-loss CATV trunk cables (for use in the design
lab).

At least one major CATV supplier had lots of very large reels of various
lengths the 'real thing' (no pun intended) in a massive trailer parked
immediately on the other side of lab wall. These were patched through
the wall to the test benches. The engineer could then test and adjust
the flatness of the frequency response of wideband amplifiers against
the length of appropriate cable. Thankfully, this technology has largely
been superseded by optical fibre/fiber equipment!
--
Ian

3694. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 07:43:36 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <WMRmwoDoOZ+IFw4I@g3ohx.demon.co.uk>
Source record: 20917

In message <Mh_Jk.3512$x%.2861@nlpi070.nbdc.sbc.com>, Cecil Moore
<nospam@w5dxp.com> writes
>Owen Duffy wrote:
>> The ARRL information on "extra loss due to VSWR" is may be incomplete
>>in that it may not the assumptions that underly the formula used for
>>the graphs.
>
>It is possible for a feedline with a high SWR to have
>lower loss than the matched-line loss. For instance,
>if we have 1/8WL of feedline with a current miminum
>in the middle of the line, the losses at HF will be
>lower than matched line loss because I^2*R losses tend
>to dominate at HF.

I'd never thought of that. I suppose it applies to any situation where
the feeder is electrically short, and the majority of the current is
less than it would be when matched. I presume that the moral is that
formulas only really work when the feeder is electrically long enough
for you to be concerned about what the losses might be.
--
Ian.

3695. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 08:14:51 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <48f99ae4$0$40306$4fafbaef@reader5.news.tin.it>
Source record: 20918

> I'd never thought of that. I suppose it applies to any situation where the
> feeder is electrically short, and the majority of the current is less than it
> would be when matched. I presume that the moral is that formulas only really
> work when the feeder is electrically long enough for you to be concerned about
> what the losses might be.
> --

Conversely, for a very short line closed on 5 ohm (instead of 500 ohm), the extra loss caused by SWR would be higher than that shown on the ARRL graph (apart from the fact that, when attenuation is so low, the extra attenuation is generally not of much interest, nor it can be read on the ARRL chart).

Evidently the ARRL chart shows some average between the two cases. On the other hand they probably had no better way to synthetically illustrate a concept without giving too many details.

73

Tony I0JX

3696. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 08:17:52 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <48f99b99$0$40306$4fafbaef@reader5.news.tin.it>
Source record: 20919

>> The 300-ohm TV flat ribbon specifications show an attenuation
>> generally lower than that of plain RG-8, despite the conductors of the
>> ribbon are by far thinner than those of RG-8 (especially than the
>> cable shield).
>
> Under matched line conditions, the 300 ohm line transfers the power at
> higher voltage and lower current, one sixth of the current, so even though
> the conductors might seem relatively thin (RF R is proportional to diameter
> for wide spaced line), I^2R loss is lower.

Thanks, but shouldn't the current ratio be the square root of 6 instead of 6?

73

Tony I0JX

3697. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 08:21:19 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <48f99c68$0$40308$4fafbaef@reader5.news.tin.it>
Source record: 20920

> Since IR losses dominate at these frequencies, reducing current reduces loss.
> The higher Z means more voltage and less current for the same power. Loss
> will be 1/36th, assuming all the conductor sizes are the same.

On another thread I was arguing that, if I am correct, the current ratio should be the square root of 6, not 6. Accordingly the loss would be 1/6, instead of 1/36.

73

Tony I0JX

3698. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 08:45:24 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <xGtIqWJkIa+IFA9b@ifwtech.co.uk>
Source record: 20921

Ian Jackson wrote:
>In message <Mh_Jk.3512$x%.2861@nlpi070.nbdc.sbc.com>, Cecil Moore
><nospam@w5dxp.com> writes
>>Owen Duffy wrote:
>>> The ARRL information on "extra loss due to VSWR" is may be
>>>incomplete in that it may not the assumptions that underly the
>>>formula used for the graphs.
>>
>>It is possible for a feedline with a high SWR to have
>>lower loss than the matched-line loss. For instance,
>>if we have 1/8WL of feedline with a current miminum
>>in the middle of the line, the losses at HF will be
>>lower than matched line loss because I^2*R losses tend
>>to dominate at HF.
>
>I'd never thought of that. I suppose it applies to any situation where
>the feeder is electrically short, and the majority of the current is
>less than it would be when matched. I presume that the moral is that
>formulas only really work when the feeder is electrically long enough
>for you to be concerned about what the losses might be.

That's a good way of putting it, but it only applies to the generalized ARRL chart which takes no account of the actual load impedance or the actual feedline length.

Owen's explicit method should get it right in all cases. If you select say 0.125 wavelengths of RG213 in Owen's online calculator, the predicted loss with a 100 ohm load resistance is *less* than the matched loss. If you change the load to 25 ohms, the predicted loss is *greater* than the matched loss.

Both of these results make perfect physical sense because the largest part of the loss is proportional to the square of the current, which will be greater with the lower-resistance load. The two different resistances correctly give different results, yet they both have a VSWR of 2 (based on the 50-ohm system impedance). This shows that VSWR does not contain sufficient information to give an explicit single-valued result.

Owen's program will accept a VSWR input, but it correctly posts a bold red warning that the result is an estimate. If you let the program select the worst-case load impedance for the supplied value of VSWR, you're back on track and it can calculate an explicit result.

Although we're debating fractions of a milliBel here, the debate has shown how often the terms "VSWR" and "load impedance" are used

interchangeably - which they aren't. It isn't a big mistake here, but it can be in other applications. For example, a solid-state PA designed for a 50 ohm load will respond very differently to load *impedances* of 100 or 25 ohms, yet the load *VSWR* is the same in both cases.

--

73 from Ian GM3SEK

3699. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 11:36:41 UTC
From: Howard K0ACF <howardk0acf@cox.net>
Message-ID: <cTjKk.5189$TX6.2753@newsfe06.iad>
Source record: 20922

Do you know anyone who works with phone lines..Run a wire in the pvc and
hook a toner to one end & with the reciever you will here it & find the
end....I have had to trace phone lines a few blocks long & underground also.
They do work....
"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9B37E2BFF7B46Huckleberrybigvalley@198.186.192.196...
>
> I know this is slightly off topic, but since I am intending to run
> some RF cable in the conduit, and since there are a lot of intelligent
> hams on this group, I will proceed anyway:
>
> Last year at the beginning of construction of a new house I buried
> about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
> the property perimeter. Now that I am ready to use it, I can not
> locate the perimeter end.... it is somewhere in about a 10' area, and the
> end curves up to probably about a foot underground.
>
> The ground is nearly pure sand, and is well landscaped now to the
> point that I do not want to randomly dig it up.
>
> The end terminated in an elbow curving up and is well duct taped
> shut.
>
> Can anyone suggest a method or equipment I might use to locate that
> far end?
>
> Tnx.
>
> Ed K7AAT

3700. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 13:43:25 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <XGlKk.3443$D32.2614@flpi146.ffdc.sbc.com>
Source record: 20923

Ian Jackson wrote:
> I'd never thought of that. I suppose it applies to any situation where
> the feeder is electrically short, and the majority of the current is
> less than it would be when matched. I presume that the moral is that
> formulas only really work when the feeder is electrically long enough
> for you to be concerned about what the losses might be.

I suspect the ARRL additional loss due to SWR charts
are based on 1/2WL increments of feedlines.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

3701. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 14:08:55 UTC
From: ltdoc@yahoo.com
Message-ID: <a83ac8c6-cf98-4aa4-9679-d396a1a47044@t54g2000hsg.googlegroups.com>
Source record: 20924

Richard,
At the risk of turning this into something it isn't to start with,
I just can't resist!

It would take much less than 5W to turn either party into a torch.
Think that may be why taking an HT to a political convention is
frowned on?
- 'Doc

3702. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 15:23:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gdcv21$v65$1@news.albasani.net>
Source record: 20925

Bill Ogden wrote:
> I seem to remember reading that running coax underground acts like a current
> choke. However, my memory has many missing bits these days. Is this a true
> statement about coax underground? In my case the run is about 40' (in a
> conduit that is about 10" under ground). I am interested only in the normal
> HF bands.
>
> Bill
> W2WO

I believe Richards' comment is 100% correct. However, I would still run
a current-choke/balun/unun, unless the antennas radiation pattern was
designed around the outer shield acting as a counterpoise ...

Regards,
JS

3703. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 16:18:40 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <luujf4drsmr3kqjj30de4mveoefag1rb6o@4ax.com>
Source record: 20926

On Fri, 17 Oct 2008 22:30:20 -0700, Bart Bailey <me2@privacy.net>
wrote:

>In catalogs or other places I've heard about a mod to increase the power
>handling capacity of these antennas, anyone know what it entails?

200 watts into an omni isn't enough?
<http://www.rfparts.com/diamond/dpgh62.html>

I assume you mean this comment on the bottom of the page:
"Remarks: Adjustable 50-54 MHz. 500 Watts FM
with minor modification."

Try calling RF Parts at (770)614-7443 and ask.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3704. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 17:02:41 UTC
From: Tad Danley <tdanley@nospamatverizon.net>
Message-ID: <REoKk.1977$r_3.876@nwrddc02.gnilink.net>
Source record: 20927

Bart Bailey wrote:
> In catalogs or other places I've heard about a mod to increase the power
> handling capacity of these antennas, anyone know what it entails?

I can't imagine what mod might increase the 100%
duty cycle power handling capability by 150%,
but here is what the instruction sheet for the
antenna says:

For 500 watt (FM only; 52-54 MHz) capability,
contact Diamond Customer Service at
(770)614-7443 for further information.

Good luck and 73,
Tad Danley, K3TD
EM10dq

3705. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 19:18:35 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <b7ckf4lgk4ga2hrk13vu5tkqp4t6i1mjqq@4ax.com>
Source record: 20928

On Sat, 18 Oct 2008 17:02:41 GMT, Tad Danley
<tdanley@nospamatverizon.net> wrote:

>Bart Bailey wrote:
>> In catalogs or other places I've heard about a mod to increase the power
>> handling capacity of these antennas, anyone know what it entails?
>
>I can't imagine what mod might increase the 100%
>duty cycle power handling capability by 150%,

Well, if your imagination has failed, simple guessing might suffice.
How many different ways can you make an antenna fail from too much
power? Well, there's arcing across insulators, heating through high
resistance wires, fusing from insufficient wire guage, dissimilar
metals (zinc hardware vs aluminum elements), junction heating or
arcing, and surface conductivity heating (due to poor choice of
element plating).

I'll guess(tm) arcing across the matching xformer as the first to
break things. To match a 5/8 wave antenna, you need a 50 ohm to about
3000 ohm xformer in the base.
Power = Volts^2 / R
500 watts = V^2 / 3000 ohms
V = 1200 volts rms
That will arc nicely through 600v magnet wire insulation. Probably
worse when wet. My guess(tm) is that the secret minor modifications
consists of potting the matching transformer in anti-corona dope or
RTV.

Incidentally, here's a 5/8 wave 6m base antenna that claims to handle
1000 watts:
<http://www.fmbroadcastantenna.com/6meter.html>
<http://www.fmbroadcastantenna.com/images/6M_Coil-Closeup.jpg>
Note the non-soldered coil connections and beefy wire guages.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3706. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 19:42:44 UTC
From: Tad Danley <tdanley@nospamatverizon.net>
Message-ID: <U_qKk.2018$r_3.1398@nwrddc02.gnilink.net>
Source record: 20929

Jeff Liebermann wrote:
> On Sat, 18 Oct 2008 17:02:41 GMT, Tad Danley
> <tdanley@nospamatverizon.net> wrote:
>
>> Bart Bailey wrote:
>>> In catalogs or other places I've heard about a mod to increase the power
>>> handling capacity of these antennas, anyone know what it entails?
>> I can't imagine what mod might increase the 100%
>> duty cycle power handling capability by 150%,
>
> Well, if your imagination has failed, simple guessing might suffice.
> How many different ways can you make an antenna fail from too much
> power? Well, there's arcing across insulators, heating through high
> resistance wires, fusing from insufficient wire guage, dissimilar
> metals (zinc hardware vs aluminum elements), junction heating or
> arcing, and surface conductivity heating (due to poor choice of
> element plating).
>
> I'll guess(tm) arcing across the matching xformer as the first to
> break things. To match a 5/8 wave antenna, you need a 50 ohm to about
> 3000 ohm xformer in the base.
> Power = Volts^2 / R
> 500 watts = V^2 / 3000 ohms
> V = 1200 volts rms
> That will arc nicely through 600v magnet wire insulation. Probably
> worse when wet. My guess(tm) is that the secret minor modifications
> consists of potting the matching transformer in anti-corona dope or
> RTV.

Interesting, Jeff. I wonder why Diamond would
specify the mod is good for 52 - 54 MHz, FM only?

73,
Tad Danley, K3TD
EM10dq

3707. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 20:13:10 UTC
From: JB <nospam@goofball.net>
Message-ID: <qrrKk.2024$r_3.1022@nwrddc02.gnilink.net>
Source record: 20931

I reiterate:

Try stuffing your coax past the first 90 degree bend. If this won't work,
you KNOW you will have to tear it all out again and redo it.

3708. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 20:15:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e5gkf4lb79gqc9bamqpioker5j1v16c9t0@4ax.com>
Source record: 20932

On Sat, 18 Oct 2008 12:18:35 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>To match a 5/8 wave antenna, you need a 50 ohm to about
>3000 ohm xformer in the base.

You would?

> V = 1200 volts rms
>That will arc nicely through 600v magnet wire insulation.

If you had layered wiring, or overlapping turns - first and last
turns.

73's
Richard Clark, KB7QHC

3709. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 20:43:01 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3C4E80B5E5Dnonenowhere@61.9.191.5>
Source record: 20933

"Antonio Vernucci" <vernucci@tin.it> wrote in
news:48f99b99$0$40306$4fafbaef@reader5.news.tin.it:

...
>> Under matched line conditions, the 300 ohm line transfers the power
>> at higher voltage and lower current, one sixth of the current, so
>> even though the conductors might seem relatively thin (RF R is
>> proportional to diameter for wide spaced line), I^2R loss is lower.
>
> Thanks, but shouldn't the current ratio be the square root of 6
> instead of 6?

Yes, of course... my mistake.

Owen

3710. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-18 21:01:31 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3C51A3DE948nonenowhere@61.9.191.5>
Source record: 20934

Ian White GM3SEK <gm3sek@ifwtech.co.uk> wrote in
news:xGtIqWJkIa+IFA9b@ifwtech.co.uk:

> Ian Jackson wrote:
>>In message <Mh_Jk.3512$x%.2861@nlpi070.nbdc.sbc.com>, Cecil Moore
>><nospam@w5dxp.com> writes
>>>Owen Duffy wrote:
>>>> The ARRL information on "extra loss due to VSWR" is may be
>>>>incomplete in that it may not the assumptions that underly the
>>>>formula used for the graphs.
>>>
>>>It is possible for a feedline with a high SWR to have
>>>lower loss than the matched-line loss. For instance,
>>>if we have 1/8WL of feedline with a current miminum
>>>in the middle of the line, the losses at HF will be
>>>lower than matched line loss because I^2*R losses tend
>>>to dominate at HF.
>>
>>I'd never thought of that. I suppose it applies to any situation where
>>the feeder is electrically short, and the majority of the current is
>>less than it would be when matched. I presume that the moral is that
>>formulas only really work when the feeder is electrically long enough
>>for you to be concerned about what the losses might be.
>
> That's a good way of putting it, but it only applies to the generalized
> ARRL chart which takes no account of the actual load impedance or the
> actual feedline length.

I think the ARRL graph is based on a well known, but apparently not well
understood formula.

The only text book that I can recall spelling out the assumptions that
underly the integral that produces the formula is Philip Smith's 'The
Electronic Applications of the Smith Chart'.

On terminology, I prefer to not use the term 'extra loss due to VSWR'
because the name implies to many, that it is always positive. IMHO a
better way to speak of the loss is as line loss under mismatched
conditions... and those conditions are more specific than just a VSWR
figure.

In a lot of cases, the approximation is sufficiently accurate... but you
lose visibility of the error when you assume that the approximation is
ALWAYS sufficiently accurate, a Rule of Thumb or ROT for short.

Owen

3711. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 02:19:34 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <qo4lf4drb0a7bsdg83oif6bdbvedpr0bmu@4ax.com>
Source record: 20935

On Sat, 18 Oct 2008 13:15:36 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sat, 18 Oct 2008 12:18:35 -0700, Jeff Liebermann <jeffl@cruzio.com>
>wrote:
>
>>To match a 5/8 wave antenna, you need a 50 ohm to about
>>3000 ohm xformer in the base.
>
>You would?

Yes, I would. Instead of speculating, want me to do an NEC2 model of
the antenna to demonstrate that the characteristic impedance of an
unmatched 5/8 wave ground plane antenna is somewhere between 1000 and
3000 ohms depending on ground radial droop? (Say no.... I'm busy
tonite).

Incidentally, note the photo at:
<http://www.fmbroadcastantenna.com/images/6M_Coil-Closeup.jpg>
5 turns total with a tap at 2 turns. That's a 7:2 turns ratio and a
12.3:1 impedance ratio. 50 ohms in and 613 ohms out. That seems on
the low side, but possibly justifiable to prevent arcing at the top.

>> V = 1200 volts rms
>>That will arc nicely through 600v magnet wire insulation.
>
>If you had layered wiring, or overlapping turns - first and last
>turns.

Nope. It might be the aluminum sleeve outside of the matching
transformer that could provide the necessary spark gap. No need for
designing a complexicated transformer in order to have it fail under
power. However, not having a clue what's inside the base, I'll admit
that I'm guessing.

>73's
>Richard Clark, KB7QHC

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3712. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 03:00:08 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3C8E710D494nonenowhere@61.9.191.5>
Source record: 20936

Owen Duffy <none@no.where> wrote in
news:Xns9B3C51A3DE948nonenowhere@61.9.191.5:

...
> I think the ARRL graph is based on a well known, but apparently not
> well understood formula.
>
> The only text book that I can recall spelling out the assumptions that
> underly the integral that produces the formula is Philip Smith's 'The
> Electronic Applications of the Smith Chart'.

The formula is developed by integrating I^2 over an electrical half wave of line on one side or the other from the observation point, according to PS. (I don't know the origin of the formula, I am not suggesting that PS invented it, not that he didn't.)

Straight away, that tells you that the VSWR must be almost the same at both ends for it to not matter which end is the observation point, so therefore the first assumption is that VSWR is approximately equal at both ends of the half wave. A requirement for this is that line loss must be relatively low, that the exponential real term in the transmission line equations is close to zero.

If the line section is not exactly a half wave, then the real loss factor might be higher or lower depending on the location of the current and voltage maxima and minima and the relative contribution of R and G to loss. So, the formula may have significant error for short lines that are not exactly a half wave.

For a line that is many half waves, the formula is fine so long as VSWR is approximately constant (now a very low loss line). If the line is longer than many half waves, but not an exact integral number of half waves, then the error in the partial section will be somewhat diminished relatively by the loss in the complete half wave sections.

If a practical line is very long, it cannot qualify as having a constant VSWR (unless it is 1, in which case the formula is unnecessary), so the formula is not suited.

So, in summary, the formula is good for low loss half wave lines, or even longish random length low loss lines, but not good for short random length lines or very long lines.

So, why is the formula so popular?

Could it be that it underpins one of the popular myths of ham radio, that VSWR necessarily increases line loss?

Modern computation tools are better than the 70 year old graphical method. Publication of the formula without qualification with the underlying assumptions treats the reader as a dummy.

Owen

3713. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 03:26:14 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <sc7lf458euobf448ps8e2gnps8cb11km1q@4ax.com>
Source record: 20937

On Sat, 18 Oct 2008 17:30:15 -0700, Bart Bailey <me2@privacy.net>
wrote:

>In Message-ID:<b7ckf4lgk4ga2hrk13vu5tkqp4t6i1mjqq@4ax.com> posted on
>Sat, 18 Oct 2008 12:18:35 -0700, Jeff Liebermann wrote: Begin
>
>>
>>Incidentally, here's a 5/8 wave 6m base antenna that claims to handle
>>1000 watts:
>><http://www.fmbroadcastantenna.com/6meter.html>
>
>Their price is more and the gain is less, do the math

Yeah, I know. I just wanted a photo of the typical matching
transformer. I'm not suggesting that the two antennas are in any way
comparable.

Incidentally, there's a slightly better detail of the Diamond DPGH62
antenna at:
<http://www.rfparts.com/diamond/pdfdocs/Parts%20Lists/DPGH62%20list.pdf>
It appears that the lower section has an adjustable length, which
should be useful for tuning to the desired range.

>Interesting, Jeff. I wonder why Diamond would
>specify the mod is good for 52 - 54 MHz, FM only?

I have some guesses as to why chopping a capacitor in the phasing
section might reduce the bandwidth somewhat. However, my guess(tm) is
that there might be some heating at the bandwidth edges which is
aggravated by the higher power levels. Double the input power, all
else being the same, and there's twice as much heating.

The FM only in an interesting oddity. My guess(tm) is that if you use
if for SSB, your peak power might be more than 500 watts, which would
create more high voltage at the insulators, and therefore more arcing.
As always, just a guess(tm).

Also, I'm a bit worried about the 78 mph wind speed rating (which has
magically increased to 80 mph in this chart):
<http://www.rfparts.com/diamond/Product_Catalog/base_station.html>
If you're in hurricane or tornado country, it might be on the low
side. I'm also suspicious about the "heavy-duty aluminum" but with a
shipping weight of only 6 lbs. That seems a bit light for a 21ft long
antenna. It's probably ok, but I like to worry.

I guess I should do an NEC2 model of the antenna, but I'm still
learning modeling and just hate reading more documentation. More gain

means a correspondingly narrower vertical radiation angle. With only
6dBi gain, the vertical radiation angle is going to be fairly wide, so
I wouldn't expect changes in uptilt to be much of a problem.

--
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3714. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 04:42:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ts6lf41mbehrtjf3bpepvrkio2jui9ci19@4ax.com>
Source record: 20938

On Sat, 18 Oct 2008 19:19:34 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>>>To match a 5/8 wave antenna, you need a 50 ohm to about
>>>3000 ohm xformer in the base.
>>
>>You would?
>
>Yes, I would. Instead of speculating, want me to do an NEC2 model of
>the antenna to demonstrate that the characteristic impedance of an
>unmatched 5/8 wave ground plane antenna is somewhere between 1000 and
>3000 ohms depending on ground radial droop? (Say no.... I'm busy
>tonite).

If you mean native Z (no special secret sauce matching), no, not even
close. If you mean with a simple series L, about 70 Ohms in the ones
that I've built or have kicking around. Add a shunt L to that (not
that it is needed), about 50 Ohms.

What price SWR?

>
>Incidentally, note the photo at:
><http://www.fmbroadcastantenna.com/images/6M_Coil-Closeup.jpg>
>5 turns total with a tap at 2 turns. That's a 7:2 turns ratio and a
>12.3:1 impedance ratio. 50 ohms in and 613 ohms out. That seems on
>the low side, but possibly justifiable to prevent arcing at the top.

Off by up to an order of 5? To prevent arcing to what? Now that's
what I call marketing - sell in pairs only, phase them, and warn about
possible arcing. Now, that will build lines around the block to buy
them! Antennas for real men throw sparks. (Sparticels for Art's
sake.)

>>> V = 1200 volts rms
>>>That will arc nicely through 600v magnet wire insulation.
>>
>>If you had layered wiring, or overlapping turns - first and last
>>turns.
>
>Nope. It might be the aluminum sleeve outside of the matching
>transformer that could provide the necessary spark gap.

Failure designed in - special order to get the one designed not to
fail. Sounds like a bailout candidate.

73's
Richard Clark, KB7QHC

3715. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 07:31:17 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <3enlf41au1knmdqjpuso8gdcm1hujgh8v3@4ax.com>
Source record: 20939

On Sat, 18 Oct 2008 21:42:35 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sat, 18 Oct 2008 19:19:34 -0700, Jeff Liebermann <jeffl@cruzio.com>
>wrote:
>
>>>>To match a 5/8 wave antenna, you need a 50 ohm to about
>>>>3000 ohm xformer in the base.
>>>
>>>You would?
>>
>>Yes, I would. Instead of speculating, want me to do an NEC2 model of
>>the antenna to demonstrate that the characteristic impedance of an
>>unmatched 5/8 wave ground plane antenna is somewhere between 1000 and
>>3000 ohms depending on ground radial droop? (Say no.... I'm busy
>>tonite).
>
>If you mean native Z (no special secret sauce matching), no, not even
>close. If you mean with a simple series L, about 70 Ohms in the ones
>that I've built or have kicking around. Add a shunt L to that (not
>that it is needed), about 50 Ohms.

Well, we're both wrong. It seems to be around 350 ohms for the ideal
model. I ran the model of the single 5/8 wave ground plane. See:
<http://802.11junk.com/jeffl/antennas/gnd-plane-02/>
The NEC2 file is tacked onto the bottom of:
<http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/gnd-plane-02.html>
if you wanna play with it (or find my screwups). Argh, I just found a
small error.

My guess is that the double 5/8 wave with 1/2 wave phasing section
will be about the same impedance. I'll run it tomorrow (when I'm
awake). If ambitious, I'll let the optimizer grind it into something
useful (takes forever on my PIII/933MHz). Stay tuned...

OF course, all this is idealized guesswork. If I had the real
dimensions for the Diamond antenna, the results might make more sense.

>What price SWR?

Zero. Customers pay for gain and leave the VSWR for the techy types
to argue over.

>>Incidentally, note the photo at:
>><http://www.fmbroadcastantenna.com/images/6M_Coil-Closeup.jpg>
>>5 turns total with a tap at 2 turns. That's a 7:2 turns ratio and a

>>12.3:1 impedance ratio. 50 ohms in and 613 ohms out. That seems on
>>the low side, but possibly justifiable to prevent arcing at the top.
>
>Off by up to an order of 5?

Which one of my numbers is off by a factor of 5 ?

>To prevent arcing to what? Now that's
>what I call marketing - sell in pairs only, phase them, and warn about
>possible arcing. Now, that will build lines around the block to buy
>them! Antennas for real men throw sparks. (Sparticels for Art's
>sake.)

Right on. Teflon coated to help the waves flow off the antenna
easier. Maybe some surf wax to lubricate the waves. Be sure to use
magnetic stainless so that it can be sold as a "wave magnet". A pair
of large balls to form an adjustable spark gap for "over power
protection" for the Telsa lightning effect. Tilt and swivel base to
adjust the takeoff angle. I can go on forever doing this....

That's what I like about antennas. The end users have no clue how
they work, no standards for comparison, no test equipment to make
measurements, and no Consumer Reports articles on which to bias their
opinions. Comparisons are almost impossible as everything from the
test site to the position of the moon have huge effects. Antennas are
magic.

>Failure designed in - special order to get the one designed not to
>fail. Sounds like a bailout candidate.

Nope. Only big failures get a government bailout. Small failures,
like what I just lost on the stock market, don't get bailed out.

>73's
>Richard Clark, KB7QHC

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3716. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 12:40:45 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <c9900fec-a6f4-4568-81a4-a5e82672aa58@e17g2000hsg.googlegroups.com>
Source record: 20940

On Oct 19, 3:31 am, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sat, 18 Oct 2008 21:42:35 -0700, Richard Clark <kb7...@comcast.net>
> wrote:
>
>
>
>
>
> >On Sat, 18 Oct 2008 19:19:34 -0700, Jeff Liebermann <je...@cruzio.com>
> >wrote:
>
> >>>>To match a 5/8 wave antenna, you need a 50 ohm to about
> >>>>3000 ohm xformer in the base.
>
> >>>You would?
>
> >>Yes, I would. Instead of speculating, want me to do an NEC2 model of
> >>the antenna to demonstrate that the characteristic impedance of an
> >>unmatched 5/8 wave ground plane antenna is somewhere between 1000 and
> >>3000 ohms depending on ground radial droop? (Say no.... I'm busy
> >>tonite).
>
> >If you mean native Z (no special secret sauce matching), no, not even
> >close. If you mean with a simple series L, about 70 Ohms in the ones
> >that I've built or have kicking around. Add a shunt L to that (not
> >that it is needed), about 50 Ohms.
>
> Well, we're both wrong. It seems to be around 350 ohms for the ideal
> model.   I ran the model of the single 5/8 wave ground plane. See:
> <http://802.11junk.com/jeffl/antennas/gnd-plane-02/>
> The NEC2 file is tacked onto the bottom of:
> <http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/gnd-plane-02...>
> if you wanna play with it (or find my screwups). Argh, I just found a
> small error.
>
> My guess is that the double 5/8 wave with 1/2 wave phasing section
> will be about the same impedance. I'll run it tomorrow (when I'm
> awake). If ambitious, I'll let the optimizer grind it into something
> useful (takes forever on my PIII/933MHz). Stay tuned...
>
> OF course, all this is idealized guesswork. If I had the real
> dimensions for the Diamond antenna, the results might make more sense.
>
> >What price SWR?

>
> Zero. Customers pay for gain and leave the VSWR for the techy types
> to argue over.
>
> >>Incidentally, note the photo at:
> >><http://www.fmbroadcastantenna.com/images/6M_Coil-Closeup.jpg>
> >>5 turns total with a tap at 2 turns. That's a 7:2 turns ratio and a
> >>12.3:1 impedance ratio. 50 ohms in and 613 ohms out. That seems on
> >>the low side, but possibly justifiable to prevent arcing at the top.
>
> >Off by up to an order of 5?
>
> Which one of my numbers is off by a factor of 5 ?
>
> >To prevent arcing to what? Now that's
> >what I call marketing - sell in pairs only, phase them, and warn about
> >possible arcing. Now, that will build lines around the block to buy
> >them! Antennas for real men throw sparks. (Sparticels for Art's
> >sake.)
>
> Right on. Teflon coated to help the waves flow off the antenna
> easier. Maybe some surf wax to lubricate the waves. Be sure to use
> magnetic stainless so that it can be sold as a "wave magnet". A pair
> of large balls to form an adjustable spark gap for "over power
> protection" for the Telsa lightning effect. Tilt and swivel base to
> adjust the takeoff angle. I can go on forever doing this....
>
> That's what I like about antennas. The end users have no clue how
> they work, no standards for comparison, no test equipment to make
> measurements, and no Consumer Reports articles on which to bias their
> opinions. Comparisons are almost impossible as everything from the
> test site to the position of the moon have huge effects. Antennas are
> magic.
>
> >Failure designed in - special order to get the one designed not to
> >fail. Sounds like a bailout candidate.
>
> Nope. Only big failures get a government bailout. Small failures,
> like what I just lost on the stock market, don't get bailed out.
>
> >73's
> >Richard Clark, KB7QHC
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558- Hide quoted text -
>
> - Show quoted text -

The last couple of 5/8ths antennas i made I estimated the series coil ,no tap, at being about 1/8th wl long then prunned a little to tune. This seems to work fairly well but maybe it was just dumb luck.

Jimmie

3717. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 12:43:30 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <d697762d-985f-4708-a06e-f15de343c7aa@k13g2000hse.googlegroups.com>
Source record: 20941

On Oct 18, 3:18 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sat, 18 Oct 2008 17:02:41 GMT, Tad Danley
>
> <tdan...@nospamatverizon.net> wrote:
> >Bart Bailey wrote:
> >> In catalogs or other places I've heard about a mod to increase the power
> >> handling capacity of these antennas, anyone know what it entails?
>
> >I can't imagine what mod might increase the 100%
> >duty cycle power handling capability by 150%,
>
> Well, if your imagination has failed, simple guessing might suffice.
> How many different ways can you make an antenna fail from too much
> power? Well, there's arcing across insulators, heating through high
> resistance wires, fusing from insufficient wire guage, dissimilar
> metals (zinc hardware vs aluminum elements), junction heating or
> arcing, and surface conductivity heating (due to poor choice of
> element plating).
>
> I'll guess(tm) arcing across the matching xformer as the first to
> break things. To match a 5/8 wave antenna, you need a 50 ohm to about
> 3000 ohm xformer in the base.
>   Power = Volts^2 / R
>   500 watts = V^2 / 3000 ohms
>   V = 1200 volts rms
> That will arc nicely through 600v magnet wire insulation. Probably
> worse when wet. My guess(tm) is that the secret minor modifications
> consists of potting the matching transformer in anti-corona dope or
> RTV.
>
> Incidentally, here's a 5/8 wave 6m base antenna that claims to handle
> 1000 watts:
> <http://www.fmbroadcastantenna.com/6meter.html>
> <http://www.fmbroadcastantenna.com/images/6M_Coil-Closeup.jpg>
> Note the non-soldered coil connections and beefy wire guages.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

The pics give me some ideas, Ive been reading about doing some DIY
Aluminum castings. Something like this may make for a good first

project.

Jimmie

3718. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 14:23:26 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <90f3f191-a296-4062-a27b-d95f9e4b7146@64g2000hsm.googlegroups.com>
Source record: 20942

On Oct 17, 5:45 pm, Owen Duffy <n...@no.where> wrote:
> "Bill Ogden" <billog...@optonline.net> wrote innews:48f902d5$0$4898$607ed4bc@cv.net:
>
> > I seem to remember reading that running coax underground acts like a
> > current choke. However, my memory has many missing bits these days.
> > Is this a true statement about coax underground? In my case the run
> > is about 40' (in a conduit that is about 10" under ground). I am
> > interested only in the normal HF bands.
>
> A conductor carrying RF currents and immersed in soil behaves like a lossy
> transmission line. The bahavior depends on the parameters of the soil
> (amongst other things), so the effect is different in dry sand than in wet
> clay. Current entering the line will be attenuated along the line.
>
> Your coax is similar to some extent in respect to the common mode current.
> Placing a single coax in a plastic conduit reduces the loss to some extent
> compared to surrounding the cable directly with soil.
>
> Owen

I have heard that burying your cable will keep RF from coming back in
the shack. From what you say it seems like this is possible but at the
expense of using some of your precious watts to warm the ground.

Jimmie

3719. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 15:11:57 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <48fb4e39$0$1081$4fafbaef@reader2.news.tin.it>
Source record: 20944

I full agree with your statement:

> If the line section is not exactly a half wave, then the real loss
> factor might be higher or lower depending on the location of the current
> and voltage maxima and minima and the relative contribution of R and G
> to loss. So, the formula may have significant error for short lines that
> are not exactly a half wave.

But I am not certain about this other statement:

> Straight away, that tells you that the VSWR must be almost the same at
> both ends for it to not matter which end is the observation point, so
> therefore the first assumption is that VSWR is approximately equal at
> both ends of the half wave.
> If a practical line is very long, it cannot qualify as having a constant
> VSWR (unless it is 1, in which case the formula is unnecessary), so the
> formula is not suited.

I have a feeling that the ARRL chart makes reference to the SWR at the antenna, and that it DOES take into account that, for a lossy line, the line portions closer to the transmitter are subjected to a lower SWR.

I try to explain my argument. Let us assume that the line consists of the cascade of many identical line pieces, each having a 1-dB loss, that one can freely add or remove. Adding a piece causes an increase of line loss by 1dB + some extra loss due to SWR. If you add many 1-dB pieces (that corresponds to increasing the total line loss), the chart shows that the extra loss caused by the last added pieces gets smaller and smaller (the chart curves all tend to saturate for an increasing line loss), and this could be explained by the fact that the ARRL formula does take into account the fact that the last added pieces are subjected to a lower SWR (and hence yield a lower extra loss) .

What do you think about that?

73

Tony I0JX

3720. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 15:12:14 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <48fb4e3c$0$1081$4fafbaef@reader2.news.tin.it>
Source record: 20943

I full agree with your statement:

> If the line section is not exactly a half wave, then the real loss
> factor might be higher or lower depending on the location of the current
> and voltage maxima and minima and the relative contribution of R and G
> to loss. So, the formula may have significant error for short lines that
> are not exactly a half wave.

But I am not certain about this other statement:

> Straight away, that tells you that the VSWR must be almost the same at
> both ends for it to not matter which end is the observation point, so
> therefore the first assumption is that VSWR is approximately equal at
> both ends of the half wave.
> If a practical line is very long, it cannot qualify as having a constant
> VSWR (unless it is 1, in which case the formula is unnecessary), so the
> formula is not suited.

I have a feeling that the ARRL chart makes reference to the SWR at the antenna, and that it DOES take into account that, for a lossy line, the line portions closer to the transmitter are subjected to a lower SWR.

I try to explain my argument. Let us assume that the line consists of the cascade of many identical line pieces, each having a 1-dB loss, that one can freely add or remove. Adding a piece causes an increase of line loss by 1dB + some extra loss due to SWR. If you add many 1-dB pieces (that corresponds to increasing the total line loss), the chart shows that the extra loss caused by the last added pieces gets smaller and smaller (the chart curves all tend to saturate for an increasing line loss), and this could be explained by the fact that the ARRL formula does take into account the fact that the last added pieces are subjected to a lower SWR (and hence yield a lower extra loss) .

What do you think about that?

73

Tony I0JX

3721. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 16:49:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <takmf4ta4c5q1suq3hnnujg8b4k3dgtbb1@4ax.com>
Source record: 20945

On Sun, 19 Oct 2008 00:31:17 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>>>>Incidentally, note the photo at:
>>>><http://www.fmbroadcastantenna.com/images/6M_Coil-Closeup.jpg>
>>>>5 turns total with a tap at 2 turns. That's a 7:2 turns ratio and a
>>>>12.3:1 impedance ratio. 50 ohms in and 613 ohms out. That seems on
>>>>the low side, but possibly justifiable to prevent arcing at the top.
>>>
>>Off by up to an order of 5?
>
>Which one of my numbers is off by a factor of 5 ?
3000 Ohms divided by 613 is one example from above
3000 Ohms divided by 350 is more from the example below

Where 1000 to 3000 Ohms (below) comes from is an utter mystery to me.

>>>Yes, I would. Instead of speculating, want me to do an NEC2 model of
>>>the antenna to demonstrate that the characteristic impedance of an
>>>unmatched 5/8 wave ground plane antenna is somewhere between 1000 and
>>>3000 ohms depending on ground radial droop? (Say no.... I'm busy
>>>tonite).
>>
>>If you mean native Z (no special secret sauce matching), no, not even
>>close. If you mean with a simple series L, about 70 Ohms in the ones
>>that I've built or have kicking around. Add a shunt L to that (not
>>that it is needed), about 50 Ohms.
>
>Well, we're both wrong. It seems to be around 350 ohms for the ideal
>model. I ran the model of the single 5/8 wave ground plane. See:
><http://802.11junk.com/jeffl/antennas/gnd-plane-02/>

No where in any of your panes do I see anything close to 350 Ohms (R?
X? Z?) and certainly none are close to 1000 to 3000 Ohms

>The NEC2 file is tacked onto the bottom of:
><http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/gnd-plane-02.html>
>if you wanna play with it (or find my screwups). Argh, I just found a
>small error.

What error? I am not fluent in Card data, but it looks like you've
built a 5/4ths radiator over 4 1/4ths radials.

Either way, a 5/8ths is not a fire breather mismatch and with a small
inductor in the base feed presents a very modest Z and a tolerable
match.

73's
Richard Clark, KB7QHC

3722. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 17:29:23 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <trqmf45ja73gt2sbg6rtqalpqfo1n8db2j@4ax.com>
Source record: 20946

On Sun, 19 Oct 2008 05:43:30 -0700 (PDT), JIMMIE
<JIMMIEDEE123@yahoo.com> wrote:

>The pics give me some ideas, Ive been reading about doing some DIY
>Aluminum castings. Something like this may make for a good first
>project.

I've done my own sand castings at home. It's not easy and requires
considerable prep and cleanup time. Building a burner, crucible, sand
box, and pre-form are time burners. It took several false starts and
finally some expert advice to get something usable. Don't ask what I
was making.

See:
<http://www.backyardmetalcasting.com>
You can do it in a barbeque with charcoal, but propane is easier.
<http://www.backyardmetalcasting.com/bestfuel.html>
Good luck, but I suspect you can buy the base parts from Comet or
Diamond.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3723. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 17:33:05 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <sjrmf45km56vm8n9coe6tvk7lb2nmi34ip@4ax.com>
Source record: 20947

On Sun, 19 Oct 2008 00:31:17 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>Well, we're both wrong. It seems to be around 350 ohms for the ideal
>model. I ran the model of the single 5/8 wave ground plane. See:
><http://802.11junk.com/jeffl/antennas/gnd-plane-02/>
>The NEC2 file is tacked onto the bottom of:
><http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/gnd-plane-02.html>
(...)

Grumble. I can't seem to figure out what to use for the phasing
contrivance located between the two 5/8 wave sections. The gain
pattern looks awful. Duz anyone have any info/guess/clue/hint on
what's inside the DP-GH62 antenna?

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3724. Re: Question on SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 20:17:14 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3D4A2203033nonenowhere@61.9.191.5>
Source record: 20948

"Antonio Vernucci" <vernucci@tin.it> wrote in
news:48fb4e39$0$1081$4fafbaef@reader2.news.tin.it:

> I full agree with your statement:
>
>> If the line section is not exactly a half wave, then the real loss
>> factor might be higher or lower depending on the location of the
>> current and voltage maxima and minima and the relative contribution
>> of R and G to loss. So, the formula may have significant error for
>> short lines that are not exactly a half wave.
>
> But I am not certain about this other statement:
>
>> Straight away, that tells you that the VSWR must be almost the same
>> at both ends for it to not matter which end is the observation point,
>> so therefore the first assumption is that VSWR is approximately equal
>> at both ends of the half wave.
>> If a practical line is very long, it cannot qualify as having a
>> constant VSWR (unless it is 1, in which case the formula is
>> unnecessary), so the formula is not suited.
>
> I have a feeling that the ARRL chart makes reference to the SWR at
> the antenna, and that it DOES take into account that, for a lossy
> line, the line portions closer to the transmitter are subjected to a
> lower SWR.

Approximations that depend on VSWR as a load metric can:
1. depend on the integral over a half wave of very low loss line then
apply it as a constant loss loss per unit length; or
2. treat the forward and reflected waves as waves independently subject
to a constant loss per unit length.

I explained the sources of error in extending (1) to the general case in
my earlier post.

Case (2) assumes that the attenuation is the result of (vector) addition
of the power that is lost independently from each travelling wave at any
point, whereas the power lost is due to the effect of currents and
voltage resulting from vector addition of the voltages and currents of
the two waves at each point.

In some scenarios, they may be good approximations, but there are also
scenarios where they are poor approximations. (I gave an example in an
earlier posting where they both fail.)

The reality is that on a practical mismatched line, loss per unit length is not constant with displacement. See my notes on VSWR at varying displacement on a practical line, see http://www.vk1od.net/VSWR/displacement.htm .

Look at Fig 9.

Note that the loss vs displacement line does not have a constant slope, and anything that ignores that is ignoring an aspect of the problem.

Note that in the example, the red line dips below the blue line (meaning loss under mismatched conditions is LESS than matched line loss at some lengths). Any method that prevents that result is ignoring an aspect of the problem.

The loss under mismatch conditions does depend on load impedance, and if you throw away some of the detail and reduce it to load VSWR, then you increase the scope for error.

Is there application for the approximations? Certainly, I use them... but in the knowledge that they are approximations and an awareness of where they are not good approximations and may not produce an adequate answer for the current problem.

Your original posting was about reconciling the chart with some examples, and I noted that the chart itself is a source of significant error in some scenarios.

BTW, your calculations seem to fall into case (2), and if so, are subject to the same errors... though they may reconcile well with a chart based on that approximation.

Owen

3725. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 20:21:51 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3D4AEA77E7Fnonenowhere@61.9.191.5>
Source record: 20950

JIMMIE <JIMMIEDEE123@yahoo.com> wrote in
news:90f3f191-a296-4062-a27b-d95f9e4b7146@64g2000hsm.googlegroups.com:

> I have heard that burying your cable will keep RF from coming back in
> the shack. From what you say it seems like this is possible but at the
> expense of using some of your precious watts to warm the ground.

The effect of the buried cable will be to influence the magnitude and
distibution of the common mode current on the feedline.

Yes, the common mode current flowing on the feedline in the ground will be
mostly converted to heat if the line is sufficiently long. Minimising the
current flowing into the underground section helps system efficiency.

But the measure has been effective in reducing RF levels in the shack.

Owen

3726. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 20:22:53 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <1661e912-7f48-467a-834e-335e439b0b52@26g2000hsk.googlegroups.com>
Source record: 20949

On Oct 19, 1:29 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 19 Oct 2008 05:43:30 -0700 (PDT), JIMMIE
>
> <JIMMIEDEE...@yahoo.com> wrote:
> >The pics give me some ideas, Ive been reading about doing some DIY
> >Aluminum castings. Something like this may make for a good first
> >project.
>
> I've done my own sand castings at home. It's not easy and requires
> considerable prep and cleanup time. Building a burner, crucible, sand
> box, and pre-form are time burners. It took several false starts and
> finally some expert advice to get something usable. Don't ask what I
> was making.
>
> See:
> <http://www.backyardmetalcasting.com>
> You can do it in a barbeque with charcoal, but propane is easier.
> <http://www.backyardmetalcasting.com/bestfuel.html>
> Good luck, but I suspect you can buy the base parts from Comet or
> Diamond.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

My father in law did it a little and had a homemade forge
made from a cast iron pot belly stove and a blower.
Hopfully this will give me a head start. Most everything
like this I do is mostly for the learning . I try to learn a
couple of new skills every year. Last year I learned to
juggle and finally learned to roller skate. Whether or
not anything practical comes of it only time will tell

Jimmie

3727. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 20:26:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <od5nf4pd4frio8uflkhka25bl95t1c68va@4ax.com>
Source record: 20801

On Sun, 19 Oct 2008 12:58:27 -0700, Bart Bailey <me2@privacy.net>
wrote:

>> With only
>>6dBi gain, the vertical radiation angle is going to be fairly wide, so
>>I wouldn't expect changes in uptilt to be much of a problem.
>
>Is it dBi or dB?
>about 2 something dB difference IIRC
>http://www.rfparts.com/diamond/dpgh62.html

Hi All,

Add dBd to the mix (or as they write it, dbd):
http://www.rfparts.com/diamond/pdfdocs/DPGH62%20instructions.pdf

"With only 6dBi gain...." where my modeling of a simple 5/8ths eeks
out 2.4dBi, and if we hoped for the best from a doubling due to a
stacked element of equal gain giving us 5.4dBi; then 6 of anything is
gravy on that turkey. Imagine going further with 6dBd! You get
dressing and cranberry sauce too.

And then it arcs over. :-(

Roasted turkey.

It should be enough that it loads up, doesn't warm up, and all the
dimensions are within 1% ballpark or so of everyone else's - or
adjustable to them. Look at the quality of construction, push your
money across the counter to the clerk (can't rightly call them techs),
and take it home.

73's
Richard Clark, KB7QHC

3728. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 21:23:03 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <uradnVpIYJeuOGbVnZ2dnUVZ_uOdnZ2d@comcast.com>
Source record: 20802

"Tad Danley" <tdanley@nospamatverizon.net> wrote in message
news:U_qKk.2018$r_3.1398@nwrddc02.gnilink.net...
> Jeff Liebermann wrote:
>> On Sat, 18 Oct 2008 17:02:41 GMT, Tad Danley
>> <tdanley@nospamatverizon.net> wrote:
>>
>>> Bart Bailey wrote:
>>>> In catalogs or other places I've heard about a mod to increase the
>>>> power
>>>> handling capacity of these antennas, anyone know what it entails?
>>> I can't imagine what mod might increase the 100% duty cycle power
>>> handling capability by 150%,
>>
>> Well, if your imagination has failed, simple guessing might suffice.
>> How many different ways can you make an antenna fail from too much
>> power? Well, there's arcing across insulators, heating through high
>> resistance wires, fusing from insufficient wire guage, dissimilar
>> metals (zinc hardware vs aluminum elements), junction heating or
>> arcing, and surface conductivity heating (due to poor choice of
>> element plating). I'll guess(tm) arcing across the matching xformer as
>> the first to
>> break things. To match a 5/8 wave antenna, you need a 50 ohm to about
>> 3000 ohm xformer in the base. Power = Volts^2 / R
>> 500 watts = V^2 / 3000 ohms
>> V = 1200 volts rms
>> That will arc nicely through 600v magnet wire insulation. Probably
>> worse when wet. My guess(tm) is that the secret minor modifications
>> consists of potting the matching transformer in anti-corona dope or
>> RTV.
>
> Interesting, Jeff. I wonder why Diamond would specify the mod is good for
> 52 - 54 MHz, FM only?
>

Kind of moot. It's a vertical.

Tam

> 73,
> Tad Danley, K3TD
> EM10dq

3729. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 21:23:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <p6idnaSmpo_ZOGbVnZ2dnUVZ_sjinZ2d@posted.easystreetonline>
Source record: 20803

JIMMIE wrote:
>
> I have heard that burying your cable will keep RF from coming back in
> the shack. From what you say it seems like this is possible but at the
> expense of using some of your precious watts to warm the ground.
>
> Jimmie

The same is true of any other kind of resistive common mode choke. But it's an impedance matching situation, so the loss doesn't necessarily have to be significant. Remember that the loss is I^2 * R where I is the common mode current and R is the choke resistance. If R is low, the loss will obviously be low. The choke won't be very effective, however, unless it also has a substantial amount of reactance. If R is very high, the loss will also be low because it will cause I to be low. The only time that loss really becomes a significant fraction of those "precious watts" is when R is in the vicinity of the effective common mode source and load impedance. A properly designed common mode choke will have a high enough impedance (resistive, reactive, or some combination) to reduce common mode current I to a low value -- that's the objective after all.

Roy Lewallen, W7EL

3730. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 21:27:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1PGdnYuSjef_O2bVnZ2dnUVZ_jGdnZ2d@posted.easystreetonline>
Source record: 20804

Owen Duffy wrote:
>
> A conductor carrying RF currents and immersed in soil behaves like a lossy
> transmission line. The bahavior depends on the parameters of the soil
> (amongst other things), so the effect is different in dry sand than in wet
> clay. Current entering the line will be attenuated along the line. . .

Please permit me to amplify on what Owen said, because it looks like it might be interpreted. Burying coax in soil has no effect on the signal inside the coax -- the loss of the coax transmission line isn't increased. The lossy transmission line Owen refers to is the line made up of the outside of the coax and, for the other conductor, the Earth. This is the transmission line which carries the common mode current and the one which will be made lossy by burying the coax.

Roy Lewallen, W7EL

3731. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 21:51:05 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3D5A0B2EF68nonenowhere@61.9.191.5>
Source record: 20805

Roy Lewallen <w7el@eznec.com> wrote in
news:1PGdnYuSjef_O2bVnZ2dnUVZ_jGdnZ2d@posted.easystreetonline:

> Owen Duffy wrote:
>>
>> A conductor carrying RF currents and immersed in soil behaves like a
>> lossy transmission line. The bahavior depends on the parameters of
>> the soil (amongst other things), so the effect is different in dry
>> sand than in wet clay. Current entering the line will be attenuated
>> along the line. . .
>
> Please permit me to amplify on what Owen said, because it looks like
> it might be interpreted. Burying coax in soil has no effect on the
> signal inside the coax -- the loss of the coax transmission line isn't
> increased. The lossy transmission line Owen refers to is the line made
> up of the outside of the coax and, for the other conductor, the Earth.
> This is the transmission line which carries the common mode current
> and the one which will be made lossy by burying the coax.

Roy, one of the lingering gaps in my post was that I spoke of a single coax in a plastic conduit. As many readers will recognise, that is an important qualification.

If you put the coax cable inside a metallic conduit, attenuation of common mode current on the coax is much lower because it forms a coaxial TL with the conduit. The next question is what is the CM current on the outside of the conduit, and that requires examination of the end conditions on the conduit.

The other issue, is that people often install multiple coaxs in one non metallic conduit. If they are not bonded together, they may convey energy with relatively lower attenuation by driving the coax outers in differential mode.

I recall a project where understanding the configuration of underground medium voltage and high voltage power entry to a comms facililty was real important in modelling EMP impact. A neutral screened medium voltage cable worked differently to three conductors in trefoil or flat. HV cables were invariably armoured, and the armouring was relevant, depending on how it was treated at both ends. In some situations, 30m of underground power entry cleaned it of EMP, in others, it made almost no difference (though still relevant in modelling).

Owen

3732. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 22:39:16 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ijcnf45h0ohc9sldsu344n9993sbcagou3@4ax.com>
Source record: 20806

On Sun, 19 Oct 2008 12:58:27 -0700, Bart Bailey <me2@privacy.net>
wrote:

>My house on the MS Gulf Coast didn't withstand Katrina but I doubt this
>current SoCal shack site will ever encounter such robust weather.

True. However, if you were upwind from Sacramento, the hot air rising
during an election year is certain to produce violent gusts. In L.A.,
it's called the Santa Ana winds. In the Monterey Bay area, it's
called sailing weather.

>If we get that much wind here, an antenna will be the least of issues.

Friday was the 19th anniversary of the 1989 earthquake. I celebrated
in town with a neighborhood block party. Fasten your seat belt and
try not to worry too much.

>>More gain
>>means a correspondingly narrower vertical radiation angle.
>
>That's what has me wondering about the claim of reduced bandwidth after
>the phasing components are dithered with

Yep. I'm also suspicious.

>> With only
>>6dBi gain, the vertical radiation angle is going to be fairly wide, so
>>I wouldn't expect changes in uptilt to be much of a problem.
>
>Is it dBi or dB?
>about 2 something dB difference IIRC
>http://www.rfparts.com/diamond/dpgh62.html

I can't tell for sure. Worse, the table at:
<http://www.rfparts.com/diamond/Product_Catalog/base_station.html>
also uses dB with one 2.4GHz antenna labeled dBi. The difference
between dBd (dipole) and dBi (isotropic) is 2.15dB. Just dB is a
ratio and is meaningless (or ambiguous) for antenna gains because it
lacks a reference level.

My model of a single 5/8 wave yielded 2dBi gain:
<http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/vertical.html>
At best, a 2nd element will add 3dB more gain to this resulting in
5dBi gain. My guess(tm) is that the rated gain is really 6dBi (after
a bit of rounding up by Diamond or possibly some screwups in my
model).

Also, I'm still having a difficult time modeling the 2nd 5/8 wave radiator because I have no clue what's inside the phasing section. If you talk to Diamond tech support, I would be interested in this info so I can finish what I started.

Question: How are your going to mount this antenna? I wanna throw in the mounting pole and height above the roof.

I'll work on this more tonite.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3733. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 22:51:45 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <lpdnf4hhhftrv4ro51is815u56gkseii0n@4ax.com>
Source record: 20807

On Sun, 19 Oct 2008 13:22:53 -0700 (PDT), JIMMIE
<JIMMIEDEE123@yahoo.com> wrote:

>My father in law did it a little and had a homemade forge
>made from a cast iron pot belly stove and a blower.
>Hopfully this will give me a head start. Most everything
>like this I do is mostly for the learning . I try to learn a
> couple of new skills every year. Last year I learned to
> juggle and finally learned to roller skate. Whether or
>not anything practical comes of it only time will tell

Allow me to reassure you that you're doing the right thing. There's
nothing worse than someone that knows exactly one thing well, and
everything else is a lost cause. Such versatility has served me well.
In college, I majored in electrical (not electronic) engineering.
However, to took classes in cooking, tractor driving, tractor
mechanics, music, psychology, and whatever else I could get. There
was little rhyme or reason behind my selection other than to get
enough class units to officially a student and maintain my draft
deferment. All of these accidentally acquired skills have served me
well in the last 40 years. It's also not beneath my dignity to jump
into something new, sometimes RTFM, learn from my mistakes, and
blunder onward to my next learning exercise. When we stop learning
and growing, we die.

The pot belly stove and blower sound like they will work. I did
something similar using refractory brick and a leaf blower. Try to
get a blower that has several speeds as the first one I used blew hot
embers all over the yard and nearly set fire to the deck. Make sure
you have goggles, gloves, tongs, face mask, helmet, chaps, and
whatever else it takes to protect you from mistakes. Learn a bit
about fire safety and how to extinguish various fires. (Hint: don't
use water. The steam will scald you. Use sand instead). If your
father in law is a good teacher, you should do fine.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3734. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 23:22:20 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <5oenf45bgguduuv4lglbtdolfmbns1kab4@4ax.com>
Source record: 20808

On Sun, 19 Oct 2008 09:49:49 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>>Which one of my numbers is off by a factor of 5 ?
> 3000 Ohms divided by 613 is one example from above
> 3000 Ohms divided by 350 is more from the example below

I goofed. It was near midnight, I was tired, (insert standard
excuses), etc. I even asked for the OP to say "no" to my offer to do
a model.

The coil in the photo has 5 turns and a tap at 2 turns.
<http://www.fmbroadcastantenna.com/images/6M_Coil-Closeup.jpg>
That's a turns ratio of 5:2 or 2.5:1. The impedance ratio is the
square of that or 6.25:1. For a 50 ohm input, that tranforms into a
313 ohm characteristic impedance.

>Where 1000 to 3000 Ohms (below) comes from is an utter mystery to me.

From my faulty memory. It's wrong. Sorry.

>>Well, we're both wrong. It seems to be around 350 ohms for the ideal
>>model. I ran the model of the single 5/8 wave ground plane. See:
>><http://802.11junk.com/jeffl/antennas/gnd-plane-02/>
>
>No where in any of your panes do I see anything close to 350 Ohms (R?
>X? Z?) and certainly none are close to 1000 to 3000 Ohms

See:
<http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/impedance.html>
The green line is the magnitude of the impedance. I ran the numbers
at 50MHz which yields about 300 ohms. It's somewhat less at higher
frequencies.

See:
<http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/gnd-plane-02.html>
which shows a vector impedance of 84.6 -j285 at 50Mhz. That tranforms
into:
Z = (84.6^2 + 285^2)^0.5
Z = 297 ohms

>>The NEC2 file is tacked onto the bottom of:
>><http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/gnd-plane-02.html>
>>if you wanna play with it (or find my screwups). Argh, I just found a
>>small error.
>
>What error?

A typo in the notes on the deck indicating that it's a dipole.
The gain graph is actually the VSWR graph.
The vswr graphs is shown twice.
The drive point on segment #1 is to high above the ground radials.
I'll fix all this later tonite.

>I am not fluent in Card data, but it looks like you've
>built a 5/4ths radiator over 4 1/4ths radials.

Nope. I'll double check later. If run the calcs at 300MHz which has
a wavelength = 1 meter, which causes all the dimensions come out in
wavelength. The GS card then scales it to the exact frequency. I
like to do it this way so that a given design can be rapidly modified
to any other frequency without massive recalculations of the geometry
values.

<http://www.nec2.org/other/nec2prt3.pdf>
"If a frequency card does not appear in the data deck, a
single frequency of 299.8 MHz is assumed. Since the wavelength
at 299.8 MHz is one meter, the geometry is in units of
wavelengths for this case."

Also, I use SY cards to define element lengths, thus allowing the
optimizer to work with these values.

>Either way, a 5/8ths is not a fire breather mismatch and with a small
>inductor in the base feed presents a very modest Z and a tolerable
>match.

Ummm.... 300 ohms is a 6:1 mismatch. Not exactly my idea of modest.

>73's
>Richard Clark, KB7QHC

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3735. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-19 23:55:47 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <ZLPKk.44449$IB6.26033@bignews8.bellsouth.net>
Source record: 20809

"JIMMIE" wrote

Most everything like this I do is mostly for the learning.
I try to learn a couple of new skills every year.
Last year I learned to juggle and finally learned to
roller skate. Whether or not anything practical comes
of it only time will tell

Jimmie

Can you juggle while skating??? If not, there's your
next opportunity to learn a new skill!

Mike W5CHR
Memphis

3736. Re: Locating underground conduit - solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 02:10:13 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B3CC3027A64EHuckleberrybigvalley@198.186.192.196>
Source record: 20810

My thanks to the entire group for the excellent responses (mostly :^)
) on my problem. It was only yesterday that I finally had opportunity
to address it.

The RF on the fish line did not work.... just did not seem to couple
and radiate. However, a very very simple procedure (one of you
mentioned this) did work. I had my wife pull and push the fish tape
back and forth while I listened very closely for any sound of it thumping
against the end of the pvc at the far end. It worked. I did not
actually hear it hittingi the duct tape, but I did hear it as it moved
back and forth on the last sweep at the end. It was only about 8 inches
under the surface of the sand (much less than I had thought) and was
located farily easily.

You guys came up with a plethora of solutions which would have been fun
to try.... one of the reasons I posted the question to this group,
even though a bit off topic.

To answer one question, the PVC will only be used for electrical, not
antenna, so the 3/4" is quite sufficient for my needs.

Again, thanks to all. I won't forget some of these methods suggested.

Ed K7AAT

3737. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 02:53:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <nO-dnbo9kNwmb2bVnZ2dnUVZ_qDinZ2d@posted.easystreetonline>
Source record: 20811

Bart Bailey wrote:
>
> I thought the simple nomenclature of dB rating
> was apparent gain in comparison to a dipole,
> and meant the same as if being expressed dBd,
> and typically obtained by distorting the radiation pattern.

This confusion has been to the great benefit of antenna manufacturers as a tool to mislead customers. A gain figure in dB could mean:

1. Gain relative to isotropic (dBi)
2. Gain relative to a half wave dipole in free space (2.15 dBi)
3. Gain relative to a dipole at the same height over ground (~6-7 dBi typ.)
4. Gain relative to anything else

Furthermore, a gain in dBi could be the free space gain or the gain when mounted at some height over ground, a difference typically around 4-5 dB.

Unless the reference and conditions are clearly stated, the gain figure means really nothing at all. And, even when the reference and conditions are clearly stated, can you trust the source of the claim?

Roy Lewallen, W7EL

Roy Lewallen, W7EL

3738. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 03:16:45 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <mrsnf4tbda2nngfofcrtu84dq64s83b8ag@4ax.com>
Source record: 20812

On Sun, 19 Oct 2008 18:00:05 -0700, Bart Bailey <me2@privacy.net>
wrote:

>I've located a lightly used one a guy sold under financial duress,
>if it pans out I'll take a peek at its innards, maybe post a link to a
>pic or two.

My guess(tm) is that the phasing section is an inductor. If you have
an LRC meter, a measurement might be helpful. If you want a decent
model, get out your tape measure and post some accurate measurements.
Incidentally, when measuring the ground radial lengths, measure from
the vertical center axis. If you take a photo, plant a yard stick or
ruler somewhere in the photo.

>screwed a couple feet into the ground. Total HAAT of the antenna's base
>should come out to about 12 feet,

Ok, I'll use 12 ft above a "typical" ground. See:
<http://11junk.com/jeffl/antennas/gnd-plane-05/>
This is my latest attempt at 2nd guessing what's in your slightly used
DP-GH62 Diamond antenna. Instead of a proper phasing section, I just
used a quarter wave stub. Seems to work (although far from optimum).

So far, the results are:
Freq = 50-54 MHz
Gain = 7dBi
Takeoff angle = 12 degrees
Impedance = 120 ohms @ 50 Mhz, 300 ohms @ 54MHz. This needs work.

The ugly vertical radiation pattern can be surely improved by feeding
this mess into the optimizer in 4NEC2. I'll do this, along with all
the other things I promised to do, when I have more time.

I still don't have an answer as to whether the spec sheet 6dB gain is
dBi or dBd. No way to tell from the model.

--
Jeff Liebermann jeffl@cruzio.com
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3739. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 04:23:25 UTC
From: richardharrison@webtv.net
Message-ID: <6285-48FC07BD-241@storefull-3252.bay.webtv.net>
Source record: 20813

Richard Clark wrote:
"Off by an order of 5?"

A perfect match may be easily obtained by adjustment.

Such antennas, colinear or Franklin Arrays, have long been used by broadcasters to increase their signal intensities. As antenna height increases, the radiation is first concentrated increasingly along the horizontal until the antenna reaches a length between one half and five eights wavelength, after which high-angle lobes appear.

A clever way to adjust the antenna`s drivepoint impedance to match its feedline is shown on page 15-25 of the 20th edition of the ARRL Antenna Book. The lower half of the colinear is connected to a quarter-wavelength short-circuited stub to create a J-Pole Array of sorts. The array is called "The Super-J Maritime Antenna", It is notable for its gain and lack of radials to poke eyes when the boat pitches and rolls.

5/8-wavelength gives about 1 dB gain over 1/2 wavelength and a stack of two gives a maximum of about 3 dB gain over a single 5/8-wave radiator.

The book says:
"The Super-J offers a gain of about 6 dB over a quarter-wave whip and about 3 dB over a 5/8-wave antenna

Best regards, Richard Harrison, KB5WZI

3740. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 04:59:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ru3of4d5hrbc9i9k14hjkgne1qaq956bst@4ax.com>
Source record: 20815

On Sun, 19 Oct 2008 16:22:20 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>>Either way, a 5/8ths is not a fire breather mismatch and with a small
>>inductor in the base feed presents a very modest Z and a tolerable
>>match.
>
>Ummm.... 300 ohms is a 6:1 mismatch. Not exactly my idea of modest.

Something so easily fixed for the extra gain? We've seen titanic
struggles for less here.

73's
Richard Clark, KB7QHC

3741. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 05:00:31 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <nh3of41f07ggcho91kln5ret4l0hk3bjok@4ax.com>
Source record: 20814

On Sun, 19 Oct 2008 20:16:45 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>So far, the results are:
>Freq = 50-54 MHz
>Gain = 7dBi
>Takeoff angle = 12 degrees
>Impedance = 120 ohms @ 50 Mhz, 300 ohms @ 54MHz. This needs work.
>
>The ugly vertical radiation pattern can be surely improved by feeding
>this mess into the optimizer in 4NEC2. I'll do this, along with all
>the other things I promised to do, when I have more time.

So.... I fed it to the optimizer (chomp, chomp, etc), this time
remembering to set it to only optimize at one frequency, not the
entire swept range (which would have taken 9 times as long to grind).
I set the center frequency to 52Mhz (so I can the results on the
frequency sweep). The only thing I changed was the length of the two
5/8 wave elements. The pattern looks much much much better. Good
enough.
<http://11junk.com/jeffl/antennas/gnd-plane-05/>

Freq = 50-54 MHz
Gain = 7dBi
Takeoff angle = 10 degrees
Impedance = 130 to 180 ohm.

--
Jeff Liebermann jeffl@cruzio.com
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3742. Re: Locating underground conduit - solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 05:25:00 UTC
From: richardharrison@webtv.net
Message-ID: <6285-48FC162C-252@storefull-3252.bay.webtv.net>
Source record: 20816

Ed wrote:
"The RF on the fish line did not work."

Problem is that loss is proportional to signal frequency through the earth, A low audio tone is much more appropriate. With a low audio tone on an insulated conductor buried in the earth with reference to a ground rod or ground bed, the conductor can be traced for miles. I`ve traced 4-ft. diameter poorly insulated steel pipelines for 8 miles or more and they were buried several feet down for protection.

Reception can use a relay coil to sense the audio signal which is fed to an audio amplifier and earphones. The coil core points toward the conductor.

From the angles made by the core on both sides of the conductor the depth of its cover can be closely estimated.

Best regards, Richard Harrison, KB5WZI

3743. Re: Locating underground conduit - solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 07:45:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <oubof41sn97m4rn3gv9lvl3617vql9v8o3@4ax.com>
Source record: 20817

On Mon, 20 Oct 2008 00:25:00 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>With a low audio tone
>on an insulated conductor buried in the earth with reference to a ground
>rod or ground bed, the conductor can be traced for miles.

During WWI, Heinrich Barkhausen was working with army field telephones that exhibited strange whistling sounds, unrelated to the war communications. These sounds were the RF emissions of lightning in the AF band. What is more interesting is that the mode of propagation was along Earth's magnetic flux lines, and the scale of propagation was hemispheric.

As a byproduct of this research, Barkhausen suggested subterranean communication employing a widely separated pair of rods in the earth, and driving them with audio frequency communications. Range was reportedly a function of the distance between the rods. The receiver used the same earth connection method.

This was the subject of a Popular Electronics article in the mid 60s.

Not reported in that journal, Beverage of antenna fame was working at the same time trying to develop a reliable RF communication system for sending orders to troops in the field in Europe, from the US. His system was a ground level wire of several 10s of miles long, oriented end-on towards Europe. Troops could hear the US broadcasts in the field with unsophisticated equipment. However, transmissions back to the US didn't fare as well. They were overwhelmed on receive by the back side orientation of the long wire towards the Caribbean and its summer electrical storms. Dr. Beverage solved that by extending the wire in that direction too and with termination.

Those frequencies were easily 30 times, or more, higher than Barkhausen's suggestion - hence the very looooooong wire.

73's
Richard Clark, KB7QHC

3744. Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 12:40:35 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gdhu83$1abo$1@f04n12.cac.psu.edu>
Source record: 20818

While looking for a way to get a little more bandwidth out of an 80 meter antenna, I mocked up an antenna in EZNEC that was thick. I plan on making an antenna with spreaders and run 4 wires on each leg of the dipole.

I emulated this in EZNEC by simply making the wire thickness quite thick, ranging from 4 inches to a foot.

The interesting thing was that as the thickness increased, the antenna length decreased for min VSWR.

Is this a real thing?

3745. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 13:17:46 UTC
From: ltdoc@yahoo.com
Message-ID: <c81e9e0d-ce9d-47d7-9215-5d3ce2ac0e69@r15g2000prh.googlegroups.com>
Source record: 20819

Yes.
- 'Doc

3746. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 13:33:19 UTC
From: Dave <dave@dave.dave>
Message-ID: <AM%Kk.3549$Zd.566@newsfe10.iad>
Source record: 20820

Richard Harrison wrote:
> Richard Clark wrote:
> "Off by an order of 5?"
>
> A perfect match may be easily obtained by adjustment.
>
> Such antennas, colinear or Franklin Arrays, have long been used by
> broadcasters to increase their signal intensities.

Franklin antennas at MW broadcast frequencies are quite tall, and aren't really that common. A notable exception is KFBK, which at 1530 kHz, has a short enough wavelength to make it practical. McClatchy was a very engineering savvy company.

http://www.oldradio.com/archives/stations/ccs/kfbkpix.htm

3747. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 13:59:38 UTC
From: Bill Ogden <billogden@optonline.net>
Message-ID: <48fc8e76$0$4919$607ed4bc@cv.net>
Source record: 20821

I am the original poster of the question about the current-choke effect of underground coax. I mentioned HF bands, with multiple coax runs (and control cable runs) inside a 3" PVC conduit about 10" (top of PVC) underground. The conduit is about 50' long. This is probably a very common situation.

Do I understand the sum of the comments correctly?
- A single buried coax (not inside a conduit) will experience a significant current choke effect.
- Multiple coaxes (and other cables) inside a non-metalic conduit will experience widely varying effects, depending on lots of parameters that would be difficult to quantify in common usage.

One of my coax runs is for a half-sloper that is not very well matched at any frequency. I detect no RF feedback into the shack (checking with the little MFJ RF current meter, among other things). I had been wondering if I should place current choke(s) on the coax on the tower, but I gather there is probably no need for them.

Bill - W2WO

3748. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 14:09:16 UTC
From: Dave <dave@dave.dave>
Message-ID: <hi0Lk.11922$4u2.101@newsfe01.iad>
Source record: 20822

Bill Ogden wrote:
> I am the original poster of the question about the current-choke effect of
> underground coax. I mentioned HF bands, with multiple coax runs (and control
> cable runs) inside a 3" PVC conduit about 10" (top of PVC) underground. The
> conduit is about 50' long. This is probably a very common situation.
>
> Do I understand the sum of the comments correctly?
> - A single buried coax (not inside a conduit) will experience a
> significant current choke effect.
> - Multiple coaxes (and other cables) inside a non-metalic conduit will
> experience widely varying effects, depending on lots of parameters that
> would be difficult to quantify in common usage.
>
> One of my coax runs is for a half-sloper that is not very well matched at
> any frequency. I detect no RF feedback into the shack (checking with the
> little MFJ RF current meter, among other things). I had been wondering if I
> should place current choke(s) on the coax on the tower, but I gather there
> is probably no need for them.
>
> Bill - W2WO
>
>
The instructions for my half-sloper (Alpha Delta DX-B) say that an RF
Choke (6-8 turns of the cable in an 8" coil) should be used at the
feedpoint (6-8 feet from the top-hat).

http://www.qrz.com/hampix/l/i/k6dil.1221924885.jpg

3749. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 15:39:48 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <a89pf4h7mui3h3ttbe2ktmlsalbvce87ka@4ax.com>
Source record: 20823

On Mon, 20 Oct 2008 08:40:35 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>While looking for a way to get a little more bandwidth out of an 80
>meter antenna, I mocked up an antenna in EZNEC that was thick. I plan on
>making an antenna with spreaders and run 4 wires on each leg of the dipole.
>
>I emulated this in EZNEC by simply making the wire thickness quite
>thick, ranging from 4 inches to a foot.
>
>The interesting thing was that as the thickness increased, the antenna
>length decreased for min VSWR.
>
>Is this a real thing?

Yep. It's called a "cage dipole". See:
<http://www.smeter.net/antennas/wire-cage-dipole.php>
with a program to help with the numbers:
<http://www.smeter.net/software/dipcage2.exe>

Even the ARRL uses them:
<http://www.arrl.org/news/stories/2001/05/03/2/>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3750. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 15:48:09 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <oL1Lk.3996$UD6.1696@newsfe07.iad>
Source record: 20824

Yes, Mike, both Jeff and Doc are correct, the thicker dipole will be shorter than a thin one for resonance at the same frequency..

Walt, W2DU

3751. Re: Locating underground conduit - solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 15:53:11 UTC
From: richardharrison@webtv.net
Message-ID: <997-48FCA967-459@storefull-3253.bay.webtv.net>
Source record: 20825

Richard Clark wrote:
"These sounds were the RF emissions of lightning in the AF band."

Richard also noted whistling sounds in army field telephones. I`ve seen these audio radiations called "whistlers".

My efforts were to locate buried pipelines by a more convenient method than bouncing a metal pick off of them. Pipeline rights of way can be wide and pipes are often not where one may think but may be at odd distances from the center of the right of way.

Connecting a signal to the pipe is much more effective than bouncing signals off the pipe or detuning a metal locator with the pipe. Another pipe tracing method in use is a vehicle (pig) launched into the pipe. The pig contains a pneumatic hammer which produces so much noise that it is easily heard through all the ground covering the pipe. Effective, but it is not cheap to launch and recover pigs.

I`ve found broken pipes at the bottom of the Brazos River in Texas and around offshore platforms in the Gulf of Mexico.

My efforts began with the availability of cheap SCR`s. I placed them to key the output of cathodic protection rectifiers at a low audio frequency rate. It worked well.

For more portability, I constructed a complimentary symmetry bipolar power transistor generator which incorporated a 400-cycle Variac. The generator was adjusted to produce a 12-Hz switching rate which proved to work well. Output of the Variac was adjusted to give maximum power tnto the pipeline wherever it was used from the switched 12 V automobile battery. Connections to the pipeline are readily available at the cathodic protection test points at intervals of several miles all along the pipe.

Best regards, Richard Harrison, KB5WZI

3752. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 16:12:45 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdialt$99p$2@news.jpl.nasa.gov>
Source record: 20828

Michael Coslo wrote:
> While looking for a way to get a little more bandwidth out of an 80
> meter antenna, I mocked up an antenna in EZNEC that was thick. I plan on
> making an antenna with spreaders and run 4 wires on each leg of the
> dipole.
>
> I emulated this in EZNEC by simply making the wire thickness quite
> thick, ranging from 4 inches to a foot.
>
> The interesting thing was that as the thickness increased, the antenna
> length decreased for min VSWR.
>
> Is this a real thing?

yes.

It's often explained as "extra capacitance from the bigger size", but I
think that's not what's really going on.

3753. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 16:25:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <82cpf4pmt3ps7uefpg737fua5b05vppfc5@4ax.com>
Source record: 20826

On Mon, 20 Oct 2008 09:59:38 -0400, "Bill Ogden"
<billogden@optonline.net> wrote:

> I detect no RF feedback into the shack (checking with the
>little MFJ RF current meter, among other things).

Hi Bill,

That should be the end of it, then.

>I had been wondering if I
>should place current choke(s) on the coax on the tower, but I gather there
>is probably no need for them.

It would define a plane beyond which current is substantially reduced
which would raise the current available for contributing to radiation.

73's
Richard Clark, KB7QHC

3754. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 16:35:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cocpf4dj6p562iurmjpi8fp6i585jch671@4ax.com>
Source record: 20827

On Mon, 20 Oct 2008 08:40:35 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>Is this a real thing?

Hi Mike,

Push it further. There is a copy of my EZNEC file at:
http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm

73's
Richard Clark, KB7QHC

3755. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 17:19:05 UTC
From: richardharrison@webtv.net
Message-ID: <23366-48FCBD89-565@storefull-3251.bay.webtv.net>
Source record: 20829

Jeff Liebermann wrote:
"---calibrating a pressure gauge to 10,000 PSI when the coupling line split sending a fine spray of pressurized oil past my face."

I had a similar experience but at about 1/10 the pressure. It was exciting nonetheless.

I was on watch in the engine room of an LSM in the middle of the Pacific during WW-2 and we were cruising at our usual 10 or 12 knots but alone, that is not in a convoy.

We were equipped with (2) 1800 HP 10-cyl opposed piston Fairbanks Morse engines. To reverse an engine it is stopped then restarted with reversed rotation. This is accomplished by shifting the position of the camshaft within the engine with the engine controller. There is an automatically operated electric engine brake which clamps the engine shaft to stop its rotation during its rotation change. It has an enormous solenoid which holds the brake off while the engine is running but this can be defeated with a mechanical stop and a switch to save solenoid power if direction changes are unlikely. That`s how we were running to conserve power unescorted at sea.

Suddenly the annunciator in front of me jinggled and ordered "Full Speed Astern". Without switching shaft brake power back on I complied. Suddenly the engine room was full of diesel oil mist, water mist, and smoke. I couldn`t imagine what had happened, but the engine started fine, thank you. in the reverse direction but I couldn`t see my hand in front of my face. After awhile, it dawned on me what had happened. Compresson pressure had fedback into the air compressor system blowing its pressure relief valve and filling the engine room with water from the compressor tank and diesel fuel from the engine cylinders. It was a mess but the exhaust air curculation soon cleared the atmosphere and no harm was done. Never again did I forget to enable the shaft brake before reversing engine directions. I was promoted to MoMM 3rd class and put in charge of my watch. My battle station was gun loader on the 40mm anti-aircraft guns.

Best regards, Richard Harrison, KB5WZI

3756. Re: Locating underground conduit - solved

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 18:06:26 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B3D70FB9A91AHuckleberrybigvalley@198.186.192.196>
Source record: 20830

>
> Problem is that loss is proportional to signal frequency through the
> earth, A low audio tone is much more appropriate. With a low audio tone
> on an insulated conductor buried in the earth with reference to a ground
> rod or ground bed, the conductor can be traced for miles. I`ve traced
> 4-ft. diameter poorly insulated steel pipelines for 8 miles or more and
> they were buried several feet down for protection.

Thats a suggestion that I would have liked to have tried. I have the
generator, and could have easily fabricated a "receiver". Oh well.
Another technique to add to the repertoire !

Ed K7AAT

3757. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 19:41:09 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <6YWdnf9Y9alGQ2HVnZ2dnUVZ8umdnZ2d@bt.com>
Source record: 20831

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:gdialt$99p$2@news.jpl.nasa.gov...
> Michael Coslo wrote:
>> While looking for a way to get a little more bandwidth out of an 80 meter
>> antenna, I mocked up an antenna in EZNEC that was thick. I plan on making
>> an antenna with spreaders and run 4 wires on each leg of the dipole.
>>
>> I emulated this in EZNEC by simply making the wire thickness quite thick,
>> ranging from 4 inches to a foot.
>>
>> The interesting thing was that as the thickness increased, the antenna
>> length decreased for min VSWR.
>>
>> Is this a real thing?
>
> yes.
>
> It's often explained as "extra capacitance from the bigger size", but I
> think that's not what's really going on.

The effect is clearly shown in Hallen's curves which appear in many of the
standard text books (e.g. Jordan & Balmain, Electromagnetic waves and
radiating systems). There's certainly a likelihood of greater shunt
capacitance at the feed point, but if the limbs are made conical - radiating
geometrically from the feedpoint - then this doesn't apply. In that case,
Schelkunoff might be of some help.

Chris

3758. Re: Current chokes

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 19:59:34 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B3E4722C86F8nonenowhere@61.9.191.5>
Source record: 20832

"Bill Ogden" <billogden@optonline.net> wrote in
news:48fc8e76$0$4919$607ed4bc@cv.net:

> I am the original poster of the question about the current-choke
> effect of underground coax. I mentioned HF bands, with multiple coax
> runs (and control cable runs) inside a 3" PVC conduit about 10" (top
> of PVC) underground. The conduit is about 50' long. This is probably
> a very common situation.

Bill,

Go back and read your post. I don't think there is anything that states
or hints multiple cables, nor did you state the size and type of conduit.

The larger the conduit, the lower the common mode attenuation for a given
conductor size as more of the dielectric subject to the highest field
strengths is low loss air.

>
> Do I understand the sum of the comments correctly?
> - A single buried coax (not inside a conduit) will experience a
> significant current choke effect.
> - Multiple coaxes (and other cables) inside a non-metalic conduit
> will
> experience widely varying effects, depending on lots of parameters
> that would be difficult to quantify in common usage.

Broadly, don't expect that multiple cables work as a single coax. I gave
some reasons in my earlier post.

>
> One of my coax runs is for a half-sloper that is not very well matched
> at any frequency. I detect no RF feedback into the shack (checking
> with the little MFJ RF current meter, among other things). I had been
> wondering if I should place current choke(s) on the coax on the tower,
> but I gather there is probably no need for them.

The common mode current is a standing wave. (Confusing concept for some!)
That means that measuring its amplitude at one point using the "little
MFJ RF current meter" gives only a limited perspective.

Nevertheless, you have other indications that there is not a problem.
Perhaps you should leave it alone if it is working adequately.

A further benefit of a buried feedline not already mentioned is that it
does protect the conductors somewhat from radiated energy

Owen

3759. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-20 22:14:37 UTC
From: richardharrison@webtv.net
Message-ID: <6286-48FD02CD-76@storefull-3252.bay.webtv.net>
Source record: 20833

Jim Lux wrote:
"It`s often explained as "extra capacitance from the bigger size", but I think that`s not what`s really going on."

Arnold B. Bailey in "TV and Other Receiving Antennas" agrees with Jim. Bailey writes on page 317:
"We should expect such thin rods to be resonant when their physical length is slightly less than a free-space half-wave length. When the rod is thick, the effective velocity along the rod is considerably less than the free-space velocity, thus reducing the wavelength proportionally."

The above may be grist for Arthur`s mill.

Bailey produces emperical equations (equilibrium?), graphs, and worked examples for various cross sections.

Best regards, Richard Harrison, KB5WZI

3760. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 00:57:03 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdj9cv$qq3$2@news.jpl.nasa.gov>
Source record: 20834

Richard Harrison wrote:
> Jim Lux wrote:
> "It`s often explained as "extra capacitance from the bigger size", but I
> think that`s not what`s really going on."
>
> Arnold B. Bailey in "TV and Other Receiving Antennas" agrees with Jim.
> Bailey writes on page 317:
> "We should expect such thin rods to be resonant when their physical
> length is slightly less than a free-space half-wave length. When the rod
> is thick, the effective velocity along the rod is considerably less than
> the free-space velocity, thus reducing the wavelength proportionally."
>

Some might argue, though, that the reason the effective velocity is less is because the sqrt(1/LC) term is smaller because C is bigger because of the increased surface area. And that might not be far from the truth for a restricted subset of antennas.

All of this kind of confusion is trying to make one sort of model (a transmission line) fit something else (a radiator). Just like the things that treat the antenna as a lumped RLC.

3761. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 07:05:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ktsqf45tmo9c5t2j0o2nqg871j32eoptsv@4ax.com>
Source record: 20835

On Mon, 20 Oct 2008 17:57:03 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>All of this kind of confusion is trying to make one sort of model (a
>transmission line) fit something else (a radiator).

Hi Jim,

I've seen this kind of assertion made before, generally as a blanket
prohibition/warning/incantation/supplication/condemnation - but never
with any demonstrable problem that wasn't an example of designed-in
failure suited to the argument.

Lest there be any confusion: an antenna IS a transmission line.

The clarity to this confusion starts with the Biconical Dipole. S. A.
Schelkunoff describes it as a "Linear" antenna and used transmission
line math to build the mathematical model for the thin wire dipole in
his classic publication "Theory of antennas of arbitrary size and
shape," Proc. I.R.E., 29, 493, 1941 and S. A. Schelkunoff, "Advanced
Antenna Theory, " John Wiley and Sons, Inc., New York, (1952) I'm
inclined to allow the weight of his work stand until someone tips it -
or can demonstrate I incorrectly read his thesis. Somehow given the
weight of authorities (Ronold King being one) that cite him for this
very reading (specific to the correlation) are abundant, I will await
heavier lifting to tip the math.

Accessible reference work can be found by searching the PTO with his
patent number: 2235506.

73's
Richard Clark, KB7QHC

3762. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 10:55:10 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <uviLk.1311$8_3.1094@flpi147.ffdc.sbc.com>
Source record: 20836

Richard Clark wrote:
> Lest there be any confusion: an antenna IS a transmission line.

In fact, there is a formula for calculating the Z0 of
a single horizontal transmission line wire above ground.
#14 wire at 30 feet is very close to 600 ohms. #14 wire
at 30 feet describes a lot of dipoles.
--
73, Cecil http://www.w5dxp.com

3763. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 12:30:39 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <95h89IDvtc$IFwHX@g3ohx.demon.co.uk>
Source record: 20837

In message <uviLk.1311$8_3.1094@flpi147.ffdc.sbc.com>, Cecil Moore
<nospam@w5dxp.com> writes
>Richard Clark wrote:
>> Lest there be any confusion: an antenna IS a transmission line.
>
>In fact, there is a formula for calculating the Z0 of
>a single horizontal transmission line wire above ground.
>#14 wire at 30 feet is very close to 600 ohms. #14 wire
>at 30 feet describes a lot of dipoles.

Are there any calculations or charts for centre impedance of a dipole in
free space, starting from zero length, and going out to infinity?
--
Ian

3764. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 13:24:00 UTC
From: dplatt@radagast.org
Message-ID: <go11t5-gba.ln1@radagast.org>
Source record: 20838

In article <95h89IDvtc$IFwHX@g3ohx.demon.co.uk>,
Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:

>Are there any calculations or charts for centre impedance of a dipole in
>free space, starting from zero length, and going out to infinity?

I think that what you're looking for is in Kraus "Antennas for All
Applications", page 446 - "Self-impedance of a thin linear antenna".
The formula given is based on the induced-EMF method... it's an
approximation which apparently works well for cylindrical antennas
whose length is at least 100x the diameter.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3765. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 15:23:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gtsrf41k07fcfi3s3qj2vu1ap1l77m71u6@4ax.com>
Source record: 20839

On Tue, 21 Oct 2008 13:30:39 +0100, Ian Jackson
<ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:

>Are there any calculations or charts for centre impedance of a dipole in
>free space, starting from zero length, and going out to infinity?

Institutional memory here is so slight:

"Theory of antennas of arbitrary size and
shape," Proc. I.R.E., 29, 493, 1941 and S. A. Schelkunoff, "Advanced
Antenna Theory, " John Wiley and Sons, Inc., New York, (1952)

Accessible reference work can be found by searching the PTO with his
patent number: 2235506.

73's
Richard Clark, KB7QHC

3766. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 15:36:10 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <muQKo8Rqbf$IFw0V@g3ohx.demon.co.uk>
Source record: 20840

In message <go11t5-gba.ln1@radagast.org>, Dave Platt
<dplatt@radagast.org> writes
>In article <95h89IDvtc$IFwHX@g3ohx.demon.co.uk>,
>Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>
>>Are there any calculations or charts for centre impedance of a dipole in
>>free space, starting from zero length, and going out to infinity?
>
>I think that what you're looking for is in Kraus "Antennas for All
>Applications", page 446 - "Self-impedance of a thin linear antenna".
>The formula given is based on the induced-EMF method... it's an
>approximation which apparently works well for cylindrical antennas
>whose length is at least 100x the diameter.
>
Thanks for that. I've found a free download of a PDF copy (18MB) at:
http://www.badongo.com/file/9893801
I'll have a look to see if it is what I want.

I would have thought that the feed impedance of a dipole at a wide range
of frequencies/lengths (ie 'very short' to 'very long') would have been
fairly typical rule-of-thumb required information for those interested
in antennas. However, it does not seem to be!
--
Ian

3767. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 16:05:28 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <4P4dg2WI3f$IFw03@g3ohx.demon.co.uk>
Source record: 20841

In message <gtsrf41k07fcfi3s3qj2vu1ap1l77m71u6@4ax.com>, Richard Clark
<kb7qhc@comcast.net> writes
>On Tue, 21 Oct 2008 13:30:39 +0100, Ian Jackson
><ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>
>>Are there any calculations or charts for centre impedance of a dipole in
>>free space, starting from zero length, and going out to infinity?
>
>Institutional memory here is so slight:
>
>"Theory of antennas of arbitrary size and
>shape," Proc. I.R.E., 29, 493, 1941 and S. A. Schelkunoff, "Advanced
>Antenna Theory, " John Wiley and Sons, Inc., New York, (1952)
>
>Accessible reference work can be found by searching the PTO with his
>patent number: 2235506.
>
>73's
>Richard Clark, KB7QHC

Thanks. As I said in my reply to Dave Platt, I would have thought that
the feed impedance of a dipole over a wide range of frequencies/lengths
(ie 'very short' to 'very long') would have been fairly typical
rule-of-thumb required information for those interested in antennas.
However, this does not seem to be the case.
--
Ian

3768. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 17:05:53 UTC
From: dplatt@radagast.org
Message-ID: <hoe1t5-647.ln1@radagast.org>
Source record: 20842

In article <muQKo8Rqbf$IFw0V@g3ohx.demon.co.uk>,
Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:

>I would have thought that the feed impedance of a dipole at a wide range
>of frequencies/lengths (ie 'very short' to 'very long') would have been
>fairly typical rule-of-thumb required information for those interested
>in antennas. However, it does not seem to be!

Oh... if rule-of-thumb is good enough for your needs, then it's not too difficult to summarize. There's a nice chart on page 2-3 of the ARRL Antenna Book.

You should consider the resistive, and reactive portions of the feedpoint impedance separately.

The resistive part rises from zero, up through a nominal 50 ohms or so at resonance (just under 1/2 wavelength), up to several thousand ohms at second (or anti-) resonance. If you plot the impedance-vs.-resistance relationship with the doublet length on a linear scale and the resistance on a logarithmic scale, it's not too far from being a straight line through much of this range.

Between second and third resonance, the resistance drops back down to around 100 ohms... between third and fourth, up to several thousand ohms again, and so forth. As the doublet continues to get longer, the feedpoint resistance oscillates between low (odd-resonant) and high (even- or anti-resonant) values, with the oscillation becoming less and less as the doublet gets longer (think of a damped sine wave). In theory it'll eventually settle down to 377 ohms.

The reactive portion of the impedance also oscillates as the doublet gets longer and longer. Between an even-numbered and odd-numbered resonance it's capacitive, dropping from thousands of ohms of negative reactance, to zero at the odd resonance. It then becomes inductive, rising to several thousand ohms just before the next even (anti-) resonant length is reached. As the even-numbered resonance length is passed it falls abruptly from very positive (inductive) to very negative (capacitive), and then begins to return slowly to zero at the next odd resonance.

These excursions from positive (inductive) to negative (capacitive) continue, and also fall in their absolute value as the doublet gets longer and longer. Once the doublet is "sufficiently long" its reactance pretty much vanishes and it looks like a 377-ohm resistance.

Near the resonant lengths, the value of the reactance is changing rather more rapidly than the value of the resistance.

The same basic principles apply fairly well to doublets that aren't in free space, but ground reflections, mutual coupling with other antenna elements, etc. have a big effect on the actual values. Few of us have the luxury of stringing up an 80-meter longwire doublet in free space, alas :-)

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3769. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 18:05:07 UTC
From: richardharrison@webtv.net
Message-ID: <997-48FE19D3-819@storefull-3253.bay.webtv.net>
Source record: 20843

Ian wrote:
"Are there any calculations or charts for centre impedance of a dipole in free space, starting from zero length, and going out to infinity?"

It gets repetitive after a while.

Arnold B. Bailey has "Graph of the resistance of a center-fed antenna near first resonance and below" on page 343 in "TV and Other Receiving Antennas". Then on page 348 Bailey has: "Various orders of resonance of thin center-fed antennas, showing the current loops and approximate radiation and antenna resistance in each case.".

Best regards, Richard Harrison, KB5WZI

3770. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 18:30:20 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdl73r$3bl$1@news.jpl.nasa.gov>
Source record: 20845

Richard Clark wrote:
> On Mon, 20 Oct 2008 17:57:03 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
> wrote:
>
>> All of this kind of confusion is trying to make one sort of model (a
>> transmission line) fit something else (a radiator).
>
> Hi Jim,
>
> I've seen this kind of assertion made before, generally as a blanket
> prohibition/warning/incantation/supplication/condemnation - but never
> with any demonstrable problem that wasn't an example of designed-in
> failure suited to the argument.
>
> Lest there be any confusion: an antenna IS a transmission line.
>

You're right, but in many situations, it's not a uniform transmission
line, by any means. The Schelkunoff analysis is quite elegant.

3771. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 18:33:11 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdl796$3bl$2@news.jpl.nasa.gov>
Source record: 20846

Dave Platt wrote:
>
> I think that what you're looking for is in Kraus "Antennas for All
> Applications", page 446 - "Self-impedance of a thin linear antenna".
> The formula given is based on the induced-EMF method... it's an
> approximation which apparently works well for cylindrical antennas
> whose length is at least 100x the diameter.

And, interestingly, a LOT of amateur antennas don't meet this slenderness constraint. Wire dipoles hanging in the air do. Fans, cages, etc., often don't.

No problem with the model, just awareness of the footnotes and limitations (which often get omitted in the less rigorously reviewed internet literature..)

>

3772. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 18:34:10 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <BXiTGECiCi$IFwC4@g3ohx.demon.co.uk>
Source record: 20844

In message <hoe1t5-647.ln1@radagast.org>, Dave Platt
<dplatt@radagast.org> writes
>In article <muQKo8Rqbf$IFw0V@g3ohx.demon.co.uk>,
>Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>
>>I would have thought that the feed impedance of a dipole at a wide range
>>of frequencies/lengths (ie 'very short' to 'very long') would have been
>>fairly typical rule-of-thumb required information for those interested
>>in antennas. However, it does not seem to be!
>
>Oh... if rule-of-thumb is good enough for your needs, then it's not
>too difficult to summarize. There's a nice chart on page 2-3 of the
>ARRL Antenna Book.
>
>You should consider the resistive, and reactive portions of the
>feedpoint impedance separately.
>
>The resistive part rises from zero, up through a nominal 50 ohms or so
>at resonance (just under 1/2 wavelength), up to several thousand ohms
>at second (or anti-) resonance. If you plot the impedance-vs.-
>resistance relationship with the doublet length on a linear scale and
>the resistance on a logarithmic scale, it's not too far from being a
>straight line through much of this range.
>
>Between second and third resonance, the resistance drops back down to
>around 100 ohms... between third and fourth, up to several thousand
>ohms again, and so forth. As the doublet continues to get longer, the
>feedpoint resistance oscillates between low (odd-resonant) and high
>(even- or anti-resonant) values, with the oscillation becoming less
>and less as the doublet gets longer (think of a damped sine wave). In
>theory it'll eventually settle down to 377 ohms.
>
>The reactive portion of the impedance also oscillates as the doublet
>gets longer and longer. Between an even-numbered and odd-numbered
>resonance it's capacitive, dropping from thousands of ohms of
>negative reactance, to zero at the odd resonance. It then becomes
>inductive, rising to several thousand ohms just before the next even
>(anti-) resonant length is reached. As the even-numbered resonance
>length is passed it falls abruptly from very positive (inductive) to
>very negative (capacitive), and then begins to return slowly to zero
>at the next odd resonance.
>
>These excursions from positive (inductive) to negative (capacitive)
>continue, and also fall in their absolute value as the doublet gets

>longer and longer. Once the doublet is "sufficiently long" its
>reactance pretty much vanishes and it looks like a 377-ohm resistance.
>
>Near the resonant lengths, the value of the reactance is changing
>rather more rapidly than the value of the resistance.
>
>The same basic principles apply fairly well to doublets that aren't in
>free space, but ground reflections, mutual coupling with other antenna
>elements, etc. have a big effect on the actual values. Few of us
>have the luxury of stringing up an 80-meter longwire doublet in free
>space, alas :-)
>

Yes, rule-of-thumb is more than good enough for me! I has a sneaky feeling that the feed impedance would end up at 377 ohms (impedance of free space).

Many years ago, from some tables compiled by one of the many Wu's involved with antenna theory and design, I plotted Zin vs antenna length on a Smith chart. As the spiral progressively wound its way inwards with increasing antenna length, it seemed that it was heading for something between 200 and 600 ohms, so I thought to myself, "377 ohms?" Unfortunately, the table stopped when the antenna was about 5 wavelengths. I haven't seen similar tables since.
--
Ian

3773. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 19:22:44 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <c23bf65a-8bd0-45b3-9ad4-7951e4c740de@i20g2000prf.googlegroups.com>
Source record: 20847

On Oct 20, 5:57 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
...
> Some might argue, though, that the reason the effective velocity is less
> is because the sqrt(1/LC) term is smaller because C is bigger because of
> the increased surface area. And that might not be far from the truth
> for a restricted subset of antennas.

On the other hand, the propagation velocity of coaxial cable of constant outer conductor ID is independent of the inner conductor diameter, even though the capacitance per unit length increases as the inner conductor diameter is increased. Clearly one must be careful about attributing the effect to a single cause like increased capacitance.

I haven't noticed in this thread any reference to Ronold W. P. King's work. His writings should give more insight into the subject, if you can get deeply enough into them. It's discussed empirically in "Transmission Lines, Antennas and Waveguides," (with lots and lots of interesting graphs showing the effect from various viewpoints) but you can probably go deeper into the theory than you need in his other books and papers on linear antennas.

Cheers,
Tom

3774. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 20:15:41 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ivbsf41avp0ta4lvcoi1g8rriskq1177p2@4ax.com>
Source record: 20848

On Fri, 17 Oct 2008 11:11:13 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>...and the parade of roses systems control. That
>photo was a blast. Did you actually have to cross your feet as part
>of the control heuristics?

I'm slightly bow legged so crossing my feet is a more natural resting position. The resting position was very important at the start of the Rose Parade. The floats, horses, cars, etc all start getting organized at about 4AM. The parade starts at 8AM. The floats are never totally completed by New Year's day, so frantic last minute work at the starting point was normal. At this point, none of those involved have had more than one or two hours sleep, so a functional sleeping position is a basic requirement. I installed padding on top of the control panel for my feet.

I think I only managed to get about 30 minutes of sleep before the unexpected happened. In 1968, we were behind an equestrian unit. After standing in essentially the same spot for about 3 hours, the horses deposited quite a pile of droppings on the pavement. There was a false start somewhat before 8AM. All the floats and horses lurched forward a few feet, placing our float directly over the pile. Besides the smell, the real worry was what would happen if the leaky hydraulic coupling mixed hot hydraulic fluid with horse dung. I was ready with a large fire extinguisher. Fortunately, nothing happened but we all nearly vomited from the stench.

If you look a the photo:
<http://802.11junk.com/jeffl/pics/jeffl/slides/RoseFloat01.html>
you'll notice a large hinge point directly above my sleeping form. Part of the animation was a young boy, sleeping in bed, who raises up and scratches his eyes, when he sees the toys at the foot of the bed come alive. The kid was huge, thus the giant hinge. It worked fairly well throughout the parade. However, when drove the float back to Pomona for disassembly, it was discovered that all the 5/8"(???) bolts holding the boy to the hinge frame had halfway sheared through.

This is the current animation system:
<http://cpprosefloat.org/site/page.php?23>
In 1968, it was several partly insane students, flipping switches and toggling valves by hand. Cal Poly tended to win the animation prizes.

To bring things back to ham radio antennas, we had a Motorola Breakie-Backie "portable" radio in the float on 2 meters. Tubes, vibrators, wet cells, and muscle. It sorta worked, but the chicken

wire covering the float made a very effective shield. The antenna ended up hanging under the float as we didn't want it visible on top. Someone saw the "loose wire" and clipped it off just before the start of the parade. I made a replacement out of some baling wire. It worked, but about half way through the parade, the vibrator power supply quit. Oh well.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3775. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 20:17:35 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdldcv$2dl$1@news.jpl.nasa.gov>
Source record: 20849

K7ITM wrote:
> On Oct 20, 5:57 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> ...
>> Some might argue, though, that the reason the effective velocity is less
>> is because the sqrt(1/LC) term is smaller because C is bigger because of
>> the increased surface area. And that might not be far from the truth
>> for a restricted subset of antennas.
>
> On the other hand, the propagation velocity of coaxial cable of
> constant outer conductor ID is independent of the inner conductor
> diameter, even though the capacitance per unit length increases as the
> inner conductor diameter is increased. Clearly one must be careful
> about attributing the effect to a single cause like increased
> capacitance.
>
Which was the original intent of my comment. Fat radiators are shorter
at resonance than thin ones, and the details of why are not simply
explained by something like "capacitance effects", although such an
explanation may sort of work over a limited range.

3776. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 20:22:33 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdldm8$72b$1@news.jpl.nasa.gov>
Source record: 20850

Jeff Liebermann wrote:
> On Fri, 17 Oct 2008 11:11:13 -0700, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
>> ...and the parade of roses systems control. That
>> photo was a blast. Did you actually have to cross your feet as part
>> of the control heuristics?
>

> To bring things back to ham radio antennas, we had a Motorola
> Breakie-Backie "portable" radio in the float on 2 meters.

It's a challenge to put antennas on floats and meet the TORC
requirements for only vegetable matter to be exposed. We got a special
dispensation for our 23cm ATV from the JPL float.

http://www.luxfamily.com/events/rose2005/roseatv.htm

3777. Re: diugay antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 22:37:24 UTC
From: mopeyzakween@yahoo.com
Message-ID: <05452064-ebf6-4e34-9008-777f0fe76f82@75g2000hso.googlegroups.com>
Source record: 20751

On Oct 5, 4:03 am, "Lelnad C Snott" <lel...@owned.com> wrote:
> ever hear of it?
>
> kc8ldo

THIS IS KB5URP's crack dealing conviction

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)

PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

3778. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 22:38:46 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <mlksf45e5gvj3saks0o2n2e61dkt5k7v8h@4ax.com>
Source record: 20752

On Tue, 21 Oct 2008 13:22:33 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>Jeff Liebermann wrote:
>> To bring things back to ham radio antennas, we had a Motorola
>> Breakie-Backie "portable" radio in the float on 2 meters.

>It's a challenge to put antennas on floats and meet the TORC
>requirements for only vegetable matter to be exposed. We got a special
>dispensation for our 23cm ATV from the JPL float.
>
>http://www.luxfamily.com/events/rose2005/roseatv.htm

Things sure have changed in 40 years.

Nicely done float. How tall is it? We had stability problems with
some of the floats. The parade route was fine, but entering Victory
Park at the end was tricky. One year, some of the floats almost
tipped over.

Also, my fault tolerant memory has failed me once again. The snoozing
photo of me is from of the 1970 float:
<http://cpprosefloat.org/site/plugins/autogallery/autogallery.php?show=7.Past%20Floats%2F350.1970.jpg>
The float consisted of 3 islands, connected with big long throw
hydraulic rams. The float could be contracted to about 35 ft or
extended to 59.99999 ft. The fun part was turning the Orange Grove to
Colorado corner in front of the cameras, while simultaneously
extending the float. Some officials didn't know which way the float
was going to go and ran for cover.

The sheared hinge bolts were from the 1971 float:
<http://cpprosefloat.org/site/plugins/autogallery/autogallery.php?show=7.Past%20Floats%2F340.1971.jpg>
It also features an elephant toy, with targeting controls for a small
water pump and nozzle in the trunk. That was banned the following
year.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

3779. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-21 23:45:59 UTC
From: Gary Pewitt <n9zsv@magtel.com>
Message-ID: <jdpsf4d4mm5a1m2bj129109von357a2ne2@4ax.com>
Source record: 20753

I guess I wasn't too clear. I wanted to use one switch each for two ladder line lead ins. Since no one I can find makes arrestors for ladder line I am building my own from spark plugs threaded into a big copper plate which is grounded with copper strap to 5 ground rods in a fairly small circle outside the shack window. It's about 70 ft to the 200 amp service box from the bedroom I am using for my shack.
I just won a bid on ech bay for a double throw make before break knife switch which I'll be using also. I'm going to buy one of those MFJ window lead through plates with multiple ladder line connectors or maybe make my own version.
I am wondering, instead of using just two spark plugs, if it might be more effective to use 3 pairs in line with the first pair having really wide gaps, the second having a medium gap, and the third having a small gap around .035"? I am going to enclose them to keep them dry and they will be grounded to the same rods as everything else.
I'll also have a Drake R-8 receiver in my bedroom hooked to an Evesdropper trap dipole with a Zap Trap arrestor on the co-ax. It's too far to run a ground to the other end of the house so I plan to ground it outside of my window. I know that's not the best way but I don't want to run an 80 foot ground cable to the shack ground.
Thanks for all the good advice. 73 Gary N9ZSV

On Sat, 11 Oct 2008 22:12:20 -0500, Gary Pewitt <n9zsv@magtel.com> wrote:

>Here's a simple question. I want to connect my transceiver to several
>antennas using 450 ohm ladder line and a balanced tuner. I found a
>couple of small double pole double throw knife switches for the ladder
>line. There are only two ways to hook these up. I can hook the tuner
>output to the center with the ground on the bottom and the antenna on
>the top connectors. This will allow me to connect the transceiver to
>the antenna or to ground. The second way is to connect the
>transceiver to the top contacts, the antenna to the center, and ground
>to the bottom contacts. This will let me connect the antenna to the
>radio or to ground. Is it better to ground the radio and let the
>antenna float? Or to ground the antenna and let the radio float?
>Of course if I leave the switch handle sticking straight up nothing is
>connected to anything.
>I am inclined to think grounding the antenna is better but I have been
>wrong before.
>
>Thanks and 73 Gary N9ZSV

3780. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 00:03:33 UTC
From: ltdoc@yahoo.com
Message-ID: <b5b5791a-cb5c-42a1-a72b-8386fc02a76d@q26g2000prq.googlegroups.com>
Source record: 20754

Gary,
The 'spark gap' type arrestor is about the most worthless you could possibly use. More than one reason for that, the simplest being that by the time it ever bridges that 'gap', it's already gotten to the radio (path of least resistance). Diverting 'some' of that lightning strike is probably better than none though, maybe. Good luck.
- 'Doc

3781. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 01:00:38 UTC
From: Gary Pewitt <n9zsv@magtel.com>
Message-ID: <fhusf450oi7uh5n8uv4376qtn5gmn5ofld@4ax.com>
Source record: 20755

Doc, what else can you use for ladder line? Everything I've found is
for co-ax only. Parallel two co-ax arrestors?
I definetly want to run open line as I am going to have a long run to
the antennas. I live on a 29 acre heavily wooded 100 foot hill top in
western Arkansas so I have lots of room for -big- antennas but can
only afford homemade wire designs.
Thanks and 73 Gary N9ZSV

On Tue, 21 Oct 2008 17:03:33 -0700 (PDT), ltdoc@yahoo.com wrote:

>Gary,
> The 'spark gap' type arrestor is about the most worthless you could
>possibly use. More than one reason for that, the simplest being that
>by the time it ever bridges that 'gap', it's already gotten to the
>radio (path of least resistance). Diverting 'some' of that lightning
>strike is probably better than none though, maybe. Good luck.
> - 'Doc
>

3782. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 02:24:38 UTC
From: Rick <ricknj10@hotmail.com>
Message-ID: <48fe8eed$0$4970$607ed4bc@cv.net>
Source record: 20756

> I know that's not the best way but I
> don't want to run an 80 foot ground cable to the shack ground.
> Thanks for all the good advice. 73 Gary N9ZSV

I see why you want to ground close to the shack for your single point ground. This is good. But you will then have two grounds. One being the ground outside your window and the other being the service entrance ground with all the "green wire" grounds connected to it (the 3rd conductor in all your ac line cords). When there is a strike there WILL be a potential difference between these two grounds. That means for those few microseconds they will NOT act as one ground and therefore there will be currents flowing between these two points. You don't want this happening. The NEC code requires you to bond your external grounds together, meaning you should run a conductor outside your house from the shack ground to the service entrance ground. It is a good idea to install ground rods every 16 feet along this run. And the same conductor should be connected to any tower ground you have as well.
There's tons of information on this subect. The antenna email reflector archives is a good one, as well as the QST series about 4-5 years ago.
I know you don't want to do it, but the purpose of that 80 feet of wire is important. Without it, all of your other work could be for naught.

Rick K2XT

3783. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 02:55:08 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <u74tf454kinf2g4sof5lf4ik0lvmnelghp@4ax.com>
Source record: 20757

On Tue, 21 Oct 2008 18:45:59 -0500, Gary Pewitt <n9zsv@magtel.com>
wrote:

>
>I guess I wasn't too clear. I wanted to use one switch each for two
>ladder line lead ins. Since no one I can find makes arrestors for
>ladder line I am building my own from spark plugs threaded into a big
>copper plate which is grounded with copper strap to 5 ground rods in a
>fairly small circle outside the shack window. It's about 70 ft to the
>200 amp service box from the bedroom I am using for my shack.
>I just won a bid on ech bay for a double throw make before break knife
>switch which I'll be using also. I'm going to buy one of those MFJ
>window lead through plates with multiple ladder line connectors or
>maybe make my own version.
>I am wondering, instead of using just two spark plugs, if it might be
>more effective to use 3 pairs in line with the first pair having
>really wide gaps, the second having a medium gap, and the third having
>a small gap around .035"? I am going to enclose them to keep them dry
>and they will be grounded to the same rods as everything else.
>I'll also have a Drake R-8 receiver in my bedroom hooked to an
>Evesdropper trap dipole with a Zap Trap arrestor on the co-ax. It's
>too far to run a ground to the other end of the house so I plan to
>ground it outside of my window. I know that's not the best way but I
>don't want to run an 80 foot ground cable to the shack ground.
>Thanks for all the good advice. 73 Gary N9ZSV
>
>
>
>
>On Sat, 11 Oct 2008 22:12:20 -0500, Gary Pewitt <n9zsv@magtel.com>
>wrote:
>
>>Here's a simple question. I want to connect my transceiver to several
>>antennas using 450 ohm ladder line and a balanced tuner. I found a
>>couple of small double pole double throw knife switches for the ladder
>>line. There are only two ways to hook these up. I can hook the tuner
>>output to the center with the ground on the bottom and the antenna on
>>the top connectors. This will allow me to connect the transceiver to
>>the antenna or to ground. The second way is to connect the
>>transceiver to the top contacts, the antenna to the center, and ground
>>to the bottom contacts. This will let me connect the antenna to the
>>radio or to ground. Is it better to ground the radio and let the
>>antenna float? Or to ground the antenna and let the radio float?
>>Of course if I leave the switch handle sticking straight up nothing is

>>connected to anything.
>>I am inclined to think grounding the antenna is better but I have been
>>wrong before.
>>
>>Thanks and 73 Gary N9ZSV

There is an alternative. Run a #2/0 (67.4 mm^2) bare copper buried 1 foot (300 mm) below grade between them. Bit of a pain, but bonds the two grounds right proper.

3784. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 03:02:00 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <mo5tf4p9kqlalnd665iaem4d6jl2ts4rpf@4ax.com>
Source record: 20758

On Tue, 21 Oct 2008 17:03:33 -0700 (PDT), ltdoc@yahoo.com wrote:

>Gary,
> The 'spark gap' type arrestor is about the most worthless you could
>possibly use. More than one reason for that, the simplest being that
>by the time it ever bridges that 'gap', it's already gotten to the
>radio (path of least resistance). Diverting 'some' of that lightning
>strike is probably better than none though, maybe. Good luck.
> - 'Doc
>

It is also dependant on what kind of equipment is connected as well.
If it is just a Rx, a Telco type would be appropriate. If a high
power Tx perhaps an electric service entrance type would be more
appropriate.

3785. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 03:12:00 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <5c6tf4thh7ugakt2mpkofkpbnksdun5vnh@4ax.com>
Source record: 20759

On Tue, 21 Oct 2008 15:38:46 -0700, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>On Tue, 21 Oct 2008 13:22:33 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
>wrote:
>
>>Jeff Liebermann wrote:
>>> To bring things back to ham radio antennas, we had a Motorola
>>> Breakie-Backie "portable" radio in the float on 2 meters.
>
>>It's a challenge to put antennas on floats and meet the TORC
>>requirements for only vegetable matter to be exposed. We got a special
>>dispensation for our 23cm ATV from the JPL float.
>>
>>http://www.luxfamily.com/events/rose2005/roseatv.htm
>
>Things sure have changed in 40 years.
>
>Nicely done float. How tall is it? We had stability problems with
>some of the floats. The parade route was fine, but entering Victory
>Park at the end was tricky. One year, some of the floats almost
>tipped over.
>
>Also, my fault tolerant memory has failed me once again. The snoozing
>photo of me is from of the 1970 float:
><http://cpprosefloat.org/site/plugins/autogallery/autogallery.php?show=7.Past%20Floats%2F
350.1970.jpg>
>The float consisted of 3 islands, connected with big long throw
>hydraulic rams. The float could be contracted to about 35 ft or
>extended to 59.99999 ft. The fun part was turning the Orange Grove to
>Colorado corner in front of the cameras, while simultaneously
>extending the float. Some officials didn't know which way the float
>was going to go and ran for cover.
>
>The sheared hinge bolts were from the 1971 float:
><http://cpprosefloat.org/site/plugins/autogallery/autogallery.php?show=7.Past%20Floats%2F
340.1971.jpg>
>It also features an elephant toy, with targeting controls for a small
>water pump and nozzle in the trunk. That was banned the following
>year.

70 & 71? Maybe you met Dave Steinfeld of TORRA . I worked with him
for some years back in the day (80's).

3786. Re: DP-GH62 Six Meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 03:34:15 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <on7tf4lr7081a4ujb0tack0qfol4q3lag9@4ax.com>
Source record: 20760

On Sat, 18 Oct 2008 19:42:44 GMT, Tad Danley
<tdanley@nospamatverizon.net> wrote:

>Jeff Liebermann wrote:
>> On Sat, 18 Oct 2008 17:02:41 GMT, Tad Danley
>> <tdanley@nospamatverizon.net> wrote:
>>
>>> Bart Bailey wrote:
>>>> In catalogs or other places I've heard about a mod to increase the power
>>>> handling capacity of these antennas, anyone know what it entails?
>>> I can't imagine what mod might increase the 100%
>>> duty cycle power handling capability by 150%,
>>
>> Well, if your imagination has failed, simple guessing might suffice.
>> How many different ways can you make an antenna fail from too much
>> power? Well, there's arcing across insulators, heating through high
>> resistance wires, fusing from insufficient wire guage, dissimilar
>> metals (zinc hardware vs aluminum elements), junction heating or
>> arcing, and surface conductivity heating (due to poor choice of
>> element plating).
>>
>> I'll guess(tm) arcing across the matching xformer as the first to
>> break things. To match a 5/8 wave antenna, you need a 50 ohm to about
>> 3000 ohm xformer in the base.
>> Power = Volts^2 / R
>> 500 watts = V^2 / 3000 ohms
>> V = 1200 volts rms
>> That will arc nicely through 600v magnet wire insulation. Probably
>> worse when wet. My guess(tm) is that the secret minor modifications
>> consists of potting the matching transformer in anti-corona dope or
>> RTV.
>
>Interesting, Jeff. I wonder why Diamond would
>specify the mod is good for 52 - 54 MHz, FM only?
>
>73,
>Tad Danley, K3TD
>EM10dq

Maybe PEP and breakdown voltages?

3787. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 04:36:04 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <vjatf459ake83hd502ilaodiospbp8hk7a@4ax.com>
Source record: 20761

On Tue, 21 Oct 2008 20:12:00 -0700, JosephKK <quiettechblue@yahoo.com>
wrote:

>70 & 71? Maybe you met Dave Steinfeld of TORRA . I worked with him
>for some years back in the day (80's).

Nope. I don't recall the name. I only associated with radicals,
leftists, protesters, anarchists, dissidents, draft dodgers, and a few
engineers. If he was anything resembling a normal student, I probably
didn't meet him. Also, I don't think that TORRA existed in 1971 and
before:
<http://www.torra.us/id4.html>
There were very few active hams involved in construction of the floats
at Cal Poly Pomona. I think there were only 2 or 3 electrical
engineering students involved. At the time, the design and
construction was dominated by Agricultural Business Mgmt students. It
was easy to tell the difference. Engineers wore cowboy boots and ABM
students wore suits, string ties, and carried brief a case.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3788. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 13:02:43 UTC
From: Dave <dave@dave.dave>
Message-ID: <UvFLk.6715$V35.3224@newsfe14.iad>
Source record: 20762

Gary Pewitt wrote:
> I guess I wasn't too clear. I wanted to use one switch each for two
> ladder line lead ins. Since no one I can find makes arrestors for
> ladder line I am building my own from spark plugs threaded into a big
> copper plate which is grounded with copper strap to 5 ground rods in a
> fairly small circle outside the shack window. It's about 70 ft to the
> 200 amp service box from the bedroom I am using for my shack.
> I just won a bid on ech bay for a double throw make before break knife
> switch which I'll be using also. I'm going to buy one of those MFJ
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> Evesdropper trap dipole with a Zap Trap arrestor on the co-ax. It's
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> ground it outside of my window. I know that's not the best way but I
> don't want to run an 80 foot ground cable to the shack ground.
> Thanks for all the good advice. 73 Gary N9ZSV
>
>
>
>
> On Sat, 11 Oct 2008 22:12:20 -0500, Gary Pewitt <n9zsv@magtel.com>
> wrote:
>
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>> antennas using 450 ohm ladder line and a balanced tuner. I found a
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>> line. There are only two ways to hook these up. I can hook the tuner
>> output to the center with the ground on the bottom and the antenna on
>> the top connectors. This will allow me to connect the transceiver to
>> the antenna or to ground. The second way is to connect the
>> transceiver to the top contacts, the antenna to the center, and ground
>> to the bottom contacts. This will let me connect the antenna to the
>> radio or to ground. Is it better to ground the radio and let the
>> antenna float? Or to ground the antenna and let the radio float?
>> Of course if I leave the switch handle sticking straight up nothing is
>> connected to anything.
>> I am inclined to think grounding the antenna is better but I have been
>> wrong before.

>>
>> Thanks and 73 Gary N9ZSV

I'd just use 2 coaxial gas tube suppressors, keeping the parallel spacing the same as your ladder line. The coaxial suppressors just have the center conductors going straight through, the little gas pellet barely making contact inside.

3789. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 14:18:04 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gdncms$6pg$1@f04n12.cac.psu.edu>
Source record: 20763

Jim Lux wrote:
> K7ITM wrote:
>> On Oct 20, 5:57 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>> ...
>>> Some might argue, though, that the reason the effective velocity is less
>>> is because the sqrt(1/LC) term is smaller because C is bigger because of
>>> the increased surface area. And that might not be far from the truth
>>> for a restricted subset of antennas.
>>
>> On the other hand, the propagation velocity of coaxial cable of
>> constant outer conductor ID is independent of the inner conductor
>> diameter, even though the capacitance per unit length increases as the
>> inner conductor diameter is increased. Clearly one must be careful
>> about attributing the effect to a single cause like increased
>> capacitance.
>>
> Which was the original intent of my comment. Fat radiators are shorter
> at resonance than thin ones, and the details of why are not simply
> explained by something like "capacitance effects", although such an
> explanation may sort of work over a limited range.

Sorry, been away for a while, but I'm back.

Certainly the capacitance may play some small part. But does added
capacitance increase bandwidth to the extent - or at all - that is
achieved by the cage or very thick dipole?

Richard Harrison's reference to Baily regarding velocity is interesting.
Why would the velocity be less at increased width? And would that
increase the Bandwidth?

- 73 de Mike N3LI -

3790. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 16:50:28 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdnlkk$j81$1@news.jpl.nasa.gov>
Source record: 20765

Michael Coslo wrote:
> Jim Lux wrote:
>> K7ITM wrote:
>>> On Oct 20, 5:57 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>>> ...
>>>> Some might argue, though, that the reason the effective velocity is
>>>> less
>>>> is because the sqrt(1/LC) term is smaller because C is bigger
>>>> because of
>>>> the increased surface area. And that might not be far from the truth
>>>> for a restricted subset of antennas.
>>>
>>> On the other hand, the propagation velocity of coaxial cable of
>>> constant outer conductor ID is independent of the inner conductor
>>> diameter, even though the capacitance per unit length increases as the
>>> inner conductor diameter is increased. Clearly one must be careful
>>> about attributing the effect to a single cause like increased
>>> capacitance.
>>>
>> Which was the original intent of my comment. Fat radiators are
>> shorter at resonance than thin ones, and the details of why are not
>> simply explained by something like "capacitance effects", although
>> such an explanation may sort of work over a limited range.
>
> Sorry, been away for a while, but I'm back.
>
> Certainly the capacitance may play some small part. But does added
> capacitance increase bandwidth to the extent - or at all - that is
> achieved by the cage or very thick dipole?

Nope.. that's why "increased capacitance" is a bad model.

>
>
> Richard Harrison's reference to Baily regarding velocity is interesting.
> Why would the velocity be less at increased width? And would that
> increase the Bandwidth?

larger C per unit length makes 1/sqrt(LC) smaller
no for the BW

3791. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 16:55:18 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdnltm$ni9$1@news.jpl.nasa.gov>
Source record: 20764

Rick wrote:
>> I know that's not the best way but I
>> don't want to run an 80 foot ground cable to the shack ground.
>> Thanks for all the good advice. 73 Gary N9ZSV
>
>
> I see why you want to ground close to the shack for your single point
> ground. This is good. But you will then have two grounds. One being the
> ground outside your window and the other being the service entrance ground
> with all the "green wire" grounds connected to it (the 3rd conductor in all
> your ac line cords). When there is a strike there WILL be a potential
> difference between these two grounds. That means for those few microseconds
> they will NOT act as one ground and therefore there will be currents flowing
> between these two points. You don't want this happening. The NEC code
> requires you to bond your external grounds together, meaning you should run
> a conductor outside your house from the shack ground to the service entrance
> ground. It is a good idea to install ground rods every 16 feet along this
> run.

It's not clear why you'd need ground rods along your NEC bonding jumper.
If you're trying to make it do double duty as part of a grounding
ring, maybe? But then, it's the "grounding electrode", and can't serve
as the jumper.

Depending on the distance, too, the bonding wire's not going to help
with the microseconds of transient (as the transient propagates down
that bonding wire)...

Electrical safety ground (green wire) is one thing, Lightning
dissipation is another, and common reference potential is yet another.
The first two have to be connected because of NEC. The first and third
are usually connected because of coax connectors with the shield
connected to the chassis.

But in terms of minimizing transient damage to your equipment, whether
or not it happens to be grounded isn't as important as whether all the
equipment goes up and down together. You could put it all in a metal
cage and suspend it from an insulator and let lightning hit it, without
problems. (people do this for HV measurements on tesla coils and EMP
testing)

And the same conductor should be connected to any tower ground you
> have as well.

> There's tons of information on this subect. The antenna email reflector
> archives is a good one, as well as the QST series about 4-5 years ago.

> I know you don't want to do it, but the purpose of that 80 feet of wire is
> important. Without it, all of your other work could be for naught.
>
> Rick K2XT
>
>

3792. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 17:25:25 UTC
From: JB <nospam@goofball.net>
Message-ID: <9mJLk.2963$Rx2.1130@nwrddc01.gnilink.net>
Source record: 20766

Better to run fat Copperweld AROUND the house and clamp to several ground rods then rather than having lightning going THROUGH the house from one ground point to the other. Everything you do should make Primary, secondary strikes and surges want to drain outside and away from the house/shack/site.

A large coil or high value resistor is a good thing for bleeding off static charges on a line so that when you throw the switch, nothing goes through you to ground. It is common for antennas that don't have some DC grounding feature to build static charges if open. Your antenna tuner or the input transformer of your receiver has to drain that. Polyphaser makes good coaxial type surge protectors, but I'm not sure about Ladder line. The gap type arrestor does have limitations because you have to keep the gap wide enough to avoid problems with the transmitter. Multiple series gaps only raises the firing voltage, but the breakdown voltage will be set by the largest gap in the series. A gap at .035 will fire at about 2-10kv depending on humidity. You only want it wide enough so that it won't arc when keying the transmitter. If there is a direct hit they will probably explode or at least blow the electrodes away.

I would seriously read up on the situation in addition to asking questions on a newsgroup. Polyphaser may still have a free publication you can order that explains things in depth.

"Gary Pewitt" <n9zsv@magtel.com> wrote in message
news:jdpsf4d4mm5a1m2bj129109von357a2ne2@4ax.com...
>
> I guess I wasn't too clear. I wanted to use one switch each for two
> ladder line lead ins. Since no one I can find makes arrestors for
> ladder line I am building my own from spark plugs threaded into a big
> copper plate which is grounded with copper strap to 5 ground rods in a
> fairly small circle outside the shack window. It's about 70 ft to the
> 200 amp service box from the bedroom I am using for my shack.
> I just won a bid on ech bay for a double throw make before break knife
> switch which I'll be using also. I'm going to buy one of those MFJ
> window lead through plates with multiple ladder line connectors or
> maybe make my own version.
> I am wondering, instead of using just two spark plugs, if it might be
> more effective to use 3 pairs in line with the first pair having
> really wide gaps, the second having a medium gap, and the third having
> a small gap around .035"? I am going to enclose them to keep them dry
> and they will be grounded to the same rods as everything else.
> I'll also have a Drake R-8 receiver in my bedroom hooked to an
> Evesdropper trap dipole with a Zap Trap arrestor on the co-ax. It's
> too far to run a ground to the other end of the house so I plan to
> ground it outside of my window. I know that's not the best way but I

> don't want to run an 80 foot ground cable to the shack ground.
> Thanks for all the good advice. 73 Gary N9ZSV
>
>
>
>
> On Sat, 11 Oct 2008 22:12:20 -0500, Gary Pewitt <n9zsv@magtel.com>
> wrote:
>
> >Here's a simple question. I want to connect my transceiver to several
> >antennas using 450 ohm ladder line and a balanced tuner. I found a
> >couple of small double pole double throw knife switches for the ladder
> >line. There are only two ways to hook these up. I can hook the tuner
> >output to the center with the ground on the bottom and the antenna on
> >the top connectors. This will allow me to connect the transceiver to
> >the antenna or to ground. The second way is to connect the
> >transceiver to the top contacts, the antenna to the center, and ground
> >to the bottom contacts. This will let me connect the antenna to the
> >radio or to ground. Is it better to ground the radio and let the
> >antenna float? Or to ground the antenna and let the radio float?
> >Of course if I leave the switch handle sticking straight up nothing is
> >connected to anything.
> >I am inclined to think grounding the antenna is better but I have been
> >wrong before.
> >
> >Thanks and 73 Gary N9ZSV

3793. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 18:07:22 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdnq4q$27r$1@news.jpl.nasa.gov>
Source record: 20768

JosephKK wrote:
> On Tue, 21 Oct 2008 15:38:46 -0700, Jeff Liebermann <jeffl@cruzio.com>
> wrote:
>
>> On Tue, 21 Oct 2008 13:22:33 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
>> wrote:
>>
>>> Jeff Liebermann wrote:
>>>> To bring things back to ham radio antennas, we had a Motorola
>>>> Breakie-Backie "portable" radio in the float on 2 meters.
>>> It's a challenge to put antennas on floats and meet the TORC
>>> requirements for only vegetable matter to be exposed. We got a special
>>> dispensation for our 23cm ATV from the JPL float.
>>>
>>> http://www.luxfamily.com/events/rose2005/roseatv.htm
>> Things sure have changed in 40 years.
>>
>> Nicely done float. How tall is it? We had stability problems with
>> some of the floats. The parade route was fine, but entering Victory
>> Park at the end was tricky. One year, some of the floats almost
>> tipped over.

Don't recall how tall it was, but it laid back down to get under the
overpass at the end of the route. It was built by professional float
builders (Phoenix)
http://floatcam.caltech.edu/ has a link to video clips during
construction, etc.

>
> 70 & 71? Maybe you met Dave Steinfeld of TORRA . I worked with him
> for some years back in the day (80's).

Would that be WA6ZVE? He works in the RF Cal lab here at JPL.
>

3794. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 18:16:01 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdnql1$76q$1@news.jpl.nasa.gov>
Source record: 20767

JB wrote:

>
> enough to avoid problems with the transmitter. Multiple series gaps only
> raises the firing voltage, but the breakdown voltage will be set by the
> largest gap in the series. A gap at .035 will fire at about 2-10kv
> depending on humidity. You only want it wide enough so that it won't arc

Humidity doesn't change the breakdown voltage very much. In fact, increasing humidity increases the breakdown voltage. One correction table for a "rod gap" with 1/2" square electrodes has a 10% correction going from 15 torr to 30 torr water vapor pressure and a -16% correction going from 15 to 2.5 torr, which is nowhere near the 5:1 variation cited above. Interestingly, on this basis water vapor is a better insulator than nitrogen, since density of the humid air is actually less. Typical breakdown voltage tolerance on a rod gap is +/- 8%.

3795. Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 19:25:07 UTC
From: "Bruce W. Ellis" <ellis@means.net>
Message-ID: <n3vuf4t4nkhsvbbgrd0ndtu3vli6bjrteq@4ax.com>
Source record: 20769

The various automatic antenna tuner/matcher manufacturers list a tuning range in Ohms - e.g., 6 - 1000 Ohms. The question I have is to whether that value is the magnitude of the impedance (which correlates to SWR) or the real part of the impedance (since the tuner should be able to cancel out the reactive part of the impedance). W0BF

3796. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 19:59:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <b40vf41uafl1slg2iq76d64hdd5fa6um17@4ax.com>
Source record: 20770

On Wed, 22 Oct 2008 11:07:22 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>Don't recall how tall it was, but it laid back down to get under the
>overpass at the end of the route. It was built by professional float
>builders (Phoenix)
>http://floatcam.caltech.edu/ has a link to video clips during
>construction, etc.

My Real Media player is having its usual bad day. I'll look at it
later.

I forgot about the overpass. That would be a problem. One year,
someone built a float over a large fork lift. The plan was to lower
it at the overpass and again at the park entrance (due to overhanging
wires). When the forks were lowered, the skin of the float was
shredded. Someone used baling wire to tie together the ends of the
chicken wire skin at the junction. Oops.

Cal Poly traded space in the Rose Palace with D.E. Bent and Sons. I
think he retired in about 1978. We supplied him with surplus labor
(mostly for decorating and handling flowers) in trade for floor space
and "borrowing" tools. It was a very professional operation.

One of the funniest things was watching Disney Animation attempt to
build their first animated float. Everyone expected big things from
them due to their experience at Disneyland. As expected, the float
had more moving parts than stationary. Just one problem; Disney ran
on pneumatics instead of hydraulics.

The centerpiece of their design was a rather large globe with a
satellite spinning around it. The globe was bisected at the equator
with a cantilever rod supporting the satellite. It, and other moving
parts, sorta worked. Then, they added the flowers and watered them.
That added lots of weight, which they hadn't expected. The support
rod bent and had to be reinforced. Instead of smoothly orbiting the
planet, the satellite lurched and jerked its way around the globe. The
pneumatics could not overcome the added friction. The pressure just
built up and up until the satellite suddenly lurched free. This was
repeated every minute or so. I vaguely recall that it finally died
about half way through the parade when some hose or fitting finally
broke from the concussions. By then, all the flowers had been
catapulted off anyway.

--
Jeff Liebermann jeffl@cruzio.com

150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3797. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-22 20:36:25 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdo2s9$n2b$1@news.jpl.nasa.gov>
Source record: 20771

Bruce W. Ellis wrote:
> The various automatic antenna tuner/matcher manufacturers list a
> tuning range in Ohms - e.g., 6 - 1000 Ohms. The question I have is to
> whether that value is the magnitude of the impedance (which correlates
> to SWR) or the real part of the impedance (since the tuner should be
> able to cancel out the reactive part of the impedance). W0BF

neither, really. What it probably means is that, theoretically it can transform a resistive load of 6-1000 ohms to 50 ohms.

You actually have to look at the available L and C and decide if it can tune a particular reactive load at a particular frequency. The step size for L and C will also determine how good the final match is.

You can write a little program (or spend some serious time with a smith chart) to iterate through the various possibilities, essentially working backwards from a 50 ohm load impedance to see the possible input Zs it can match.

3798. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 00:29:35 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <9ccf907f-043f-44c1-982b-177b6232430e@k13g2000hse.googlegroups.com>
Source record: 20772

On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
> I know this is slightly off topic, but since I am intending to run
> some RF cable in the conduit, and since there are a lot of intelligent
> hams on this group, I will proceed anyway:
>
> Last year at the beginning of construction of a new house I buried
> about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
> the property perimeter. Now that I am ready to use it, I can not
> locate the perimeter end.... it is somewhere in about a 10' area, and the
> end curves up to probably about a foot underground.
>
> The ground is nearly pure sand, and is well landscaped now to the
> point that I do not want to randomly dig it up.
>
> The end terminated in an elbow curving up and is well duct taped
> shut.
>
> Can anyone suggest a method or equipment I might use to locate that
> far end?
>
> Tnx.
>
> Ed K7AAT

I have some pipe that I had run for an outdoor spigot that I never
finished installing. To test a method of finding it I shot some air
into it the other end was pretty easy to find by listening. I could
hear the rush of air and a lot of gurgling. My dog actually found it
in the roses bushes before I did.

Jimmie

3799. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 03:23:58 UTC
From: JB <nospam@goofball.net>
Message-ID: <i7SLk.3112$r_3.1193@nwrddc02.gnilink.net>
Source record: 20773

> > enough to avoid problems with the transmitter. Multiple series gaps only
> > raises the firing voltage, but the breakdown voltage will be set by the
> > largest gap in the series. A gap at .035 will fire at about 2-10kv
> > depending on humidity. You only want it wide enough so that it won't arc
>
> Humidity doesn't change the breakdown voltage very much. In fact,
> increasing humidity increases the breakdown voltage. One correction
> table for a "rod gap" with 1/2" square electrodes has a 10% correction
> going from 15 torr to 30 torr water vapor pressure and a -16%
> correction going from 15 to 2.5 torr, which is nowhere near the 5:1
> variation cited above. Interestingly, on this basis water vapor is a
> better insulator than nitrogen, since density of the humid air is
> actually less. Typical breakdown voltage tolerance on a rod gap is +/- 8%.
>
That was off the top of my head so I stand corrected but there ARE variations based on other real world stuff like air pressure and dirt on the insulators. 5-20kv for inside an engine is real world but that depends on other stuff too, like what kind of spark-plug, compression, resistors, mixture, timing, but I digress. The point is the gap may have to be adjusted for best results and might be too wide for protection. I invited him to read up on the subject because I have other projects I have my head into

So what are your experiences with spark gap transmission line arresters? Perhaps you have the precise gap he should be using? My dim recollection is of a chart for the transmitter power in use.

3800. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 03:40:15 UTC
From: richardharrison@webtv.net
Message-ID: <9256-48FFF21F-268@storefull-3252.bay.webtv.net>
Source record: 20774

Mike, N3LI wrote:
"Why would the velocity be less at increased (antenna element) width?"

Let B = the phase velocity on the antenna element, in radians per unit length. 2pi/B = wavelength on the element.
Therefore, 2pi/B=velocity of phase propagation.
Due to the behavior of of open-circuited transmission lines and open-circuited antennas:
B=2pif times sq.rt. of LC radians / unit length.

2 pi f / B = velocity of propagation.

It is intuitive that a fat antenna element has more L & C than a thin element and thus a lower velocity of propagation.

Best regards, Richard Harrisob, KB5WZI

3801. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 04:02:37 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <xHSLk.3119$r_3.2462@nwrddc02.gnilink.net>
Source record: 20775

"JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
news:9ccf907f-043f-44c1-982b-177b6232430e@k13g2000hse.googlegroups.com...
On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
> I know this is slightly off topic, but since I am intending to run
> some RF cable in the conduit, and since there are a lot of intelligent
> hams on this group, I will proceed anyway:
>
> Last year at the beginning of construction of a new house I buried
> about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
> the property perimeter. Now that I am ready to use it, I can not
> locate the perimeter end.... it is somewhere in about a 10' area, and the
> end curves up to probably about a foot underground.
>
> The ground is nearly pure sand, and is well landscaped now to the
> point that I do not want to randomly dig it up.
>
> The end terminated in an elbow curving up and is well duct taped
> shut.
>
> Can anyone suggest a method or equipment I might use to locate that
> far end?
>
> Tnx.
>
> Ed K7AAT

I have some pipe that I had run for an outdoor spigot that I never
finished installing. To test a method of finding it I shot some air
into it the other end was pretty easy to find by listening. I could
hear the rush of air and a lot of gurgling. My dog actually found it
in the roses bushes before I did.

Jimmie

Hi Jimmie

That "air" idea wont work, Jeff told me so

Quote Jeff --

"Welcome to rec.radio.amateur.antenna.physics

Ok, let's do the math. Dry sand weighs 100 lb/cubic-foot. There's
about 1 ft of sand above the end of the 3/4" conduit. The weight
action is roughly conical, so the volume of sand involved is (my
guess) about:

100 lbs/ft^3 * 1/3 = 33 lbs of sand.
All that it acting on a 3/4" diameter pipe, with a cross sectional
area of about:
Pi * 0.75" = 2.4 in^2
Therefore, the pressure exerted by the sand is:
33 lbs / 2.4 in^2 = 14 PSI
So, if he can pressurize the pipe to more than 14 PSI, he can lift the
column of sand sufficiently to keep it from dribbling into the pipe.

Of course, it's not that simple. Laminar air flow, pressure gradients
across the conduit, and the effects of the duct tape will ruin my
simplistic guesswork. Worse, the back pressure created by the
immovable column of sand will force some sand particles into the
conduit around the edges with the "reflected" air pressure. In the
middle of the conduit, the air flow is all out of the conduit, but
near the edges, it could easily be the other direction. I'm also
assuming that the sand is a perfect air seal, which it's not. To
prevent all this from happening, the minimum air pressure should be
about twice the 14 PSI, which is easily achievable with an air
compressor, but not a vacuum cleaner.

I'm also trying to imagine how the process will work. I see an air
compressor pumping madly away as the neighbors kids furiously dig
around the resultant sand volcano, as sand rapidly refills the conical
hole. In my never humble opinion, there's no way to prevent sand from
dropping into the conduit if the duct tape seal is broken before
excavating the end of the conduit.

Once the sand is in the conduit, just blowing air through the pipe
isn't going to magically elevate the sand particles 1ft or more in the
air. The air does not have sufficient mass to convey enough momentum
to move the sand particles, much less eject them vertically. For
that, one needs a denser medium, such as water. Shoving a plunger
through might work, but it's equally likely to jam sand particles into
the PVC conduit walls.

--
Jeff Liebermann jeffl@cruzio.com
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558"

Jerry KD6JDJ

3802. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 04:52:01 UTC
From: John KD5YI <groups2_dot_jocjo@xoxy.net>
Message-ID: <RpTLk.3098$Rx2.2840@nwrddc01.gnilink.net>
Source record: 20776

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:9256-48FFF21F-268@storefull-3252.bay.webtv.net...
> Mike, N3LI wrote:
> "Why would the velocity be less at increased (antenna element) width?"
>
> Let B = the phase velocity on the antenna element, in radians per unit
> length. 2pi/B = wavelength on the element.
> Therefore, 2pi/B=velocity of phase propagation.
> Due to the behavior of of open-circuited transmission lines and
> open-circuited antennas:
> B=2pif times sq.rt. of LC radians / unit length.
>
> 2 pi f / B = velocity of propagation.
>
> It is intuitive that a fat antenna element has more L & C than a thin
> element and thus a lower velocity of propagation.
>
> Best regards, Richard Harrisob, KB5WZI

Hmmmm... my straight wire inductance equation from the ARRL handbook
indicates smaller wire diameters have larger inductance.

???

73,
John

3803. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 05:52:54 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <c1668368-da86-497e-aa33-a1c311c0a621@f37g2000pri.googlegroups.com>
Source record: 20777

On Oct 22, 9:52 pm, "John KD5YI" <groups2_dot_jo...@xoxy.net> wrote:
> "Richard Harrison" <richardharri...@webtv.net> wrote in message
>
> news:9256-48FFF21F-268@storefull-3252.bay.webtv.net...
>
>
>
> > Mike, N3LI wrote:
> > "Why would the velocity be less at increased (antenna element) width?"
>
> > Let B = the phase velocity on the antenna element, in radians per unit
> > length. 2pi/B = wavelength on the element.
> > Therefore, 2pi/B=velocity of phase propagation.
> > Due to the behavior of of open-circuited transmission lines and
> > open-circuited antennas:
> > B=2pif times sq.rt. of LC radians / unit length.
>
> > 2 pi f / B = velocity of propagation.
>
> > It is intuitive that a fat antenna element has more L & C than a thin
> > element and thus a lower velocity of propagation.
>
> > Best regards, Richard Harrisob, KB5WZI
>
> Hmmmm... my straight wire inductance equation from the ARRL handbook
> indicates smaller wire diameters have larger inductance.
>
> ???
>
> 73,
> John

Not surprisingly, that's what E&M texts say too--or leave as an
exercise. With a larger diameter, there's less net magnetic field for
a given current, so less energy stored, so less inductance.

Cheers,
Tom

3804. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 11:01:18 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-2310080701180001@jbw-mac.itd.nrl.navy.mil>
Source record: 20778

In article <ktsqf45tmo9c5t2j0o2nqg871j32eoptsv@4ax.com>, Richard Clark <kb7qhc@comcast.net> wrote:

> Lest there be any confusion: an antenna IS a transmission line.
>

Hello, and I think one would have to include two antennas and the intervening medium(s) for the above statement to make sense. In any event, the behavior of an antenna-medium-antenna as a passive 2-port device can be considered as a transmission line at a given frequency. The "loss" associated with this topology can be mitigated by keeping the two antennas within a near, rather than far, field separation. Over a range of frequencies the behavior of this 2-port can easily differ from that of a transmission line, though.

In some electromagnetics textbooks an antenna is developed mathematically via the gradual unfolding of a twin-lead transmission line. And many hams know that a quick and dirty dipole can be created by simply folding the braid back on a length of coax so that the braid and the exposed center conductor become the radiating elements.

A more correct statement might be that a transmission line can be an antenna. This can include unintended radiotion (e.g. RF flowing on the outside of caox due to imbalance and/or stray coupling) or intended such as Andrew's "Radiax" brand of leaky transmission line for installation in tunnels and elevator shafts as a convenient means to extend the reach of over-the-air broadcasts. Sincerely, and 73s from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

3805. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 12:49:57 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gdprtl$rg6$1@f04n12.cac.psu.edu>
Source record: 20779

Richard Harrison wrote:
> Mike, N3LI wrote:
> "Why would the velocity be less at increased (antenna element) width?"
>
> Let B = the phase velocity on the antenna element, in radians per unit
> length. 2pi/B = wavelength on the element.
> Therefore, 2pi/B=velocity of phase propagation.
> Due to the behavior of of open-circuited transmission lines and
> open-circuited antennas:
> B=2pif times sq.rt. of LC radians / unit length.
>
> 2 pi f / B = velocity of propagation.
>
> It is intuitive that a fat antenna element has more L & C than a thin
> element and thus a lower velocity of propagation.

I thought that the inductance tends downward as the diameter of the wire
increases. I can understand your calculation after the wavelength part,
but don't quite get the increased inductance part.

- 73 de Mike N3LI -

3806. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 13:01:09 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gdpsil$1j3o$1@f04n12.cac.psu.edu>
Source record: 20780

Jerry wrote:
> "JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
> news:9ccf907f-043f-44c1-982b-177b6232430e@k13g2000hse.googlegroups.com...
> On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
>> I know this is slightly off topic, but since I am intending to run
>> some RF cable in the conduit, and since there are a lot of intelligent
>> hams on this group, I will proceed anyway:
>>
>> Last year at the beginning of construction of a new house I buried
>> about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
>> the property perimeter. Now that I am ready to use it, I can not
>> locate the perimeter end.... it is somewhere in about a 10' area, and the
>> end curves up to probably about a foot underground.
>>
>> The ground is nearly pure sand, and is well landscaped now to the
>> point that I do not want to randomly dig it up.
>>
>> The end terminated in an elbow curving up and is well duct taped
>> shut.
>>
>> Can anyone suggest a method or equipment I might use to locate that
>> far end?
>>
>> Tnx.
>>
>> Ed K7AAT
>
> I have some pipe that I had run for an outdoor spigot that I never
> finished installing. To test a method of finding it I shot some air
> into it the other end was pretty easy to find by listening. I could
> hear the rush of air and a lot of gurgling. My dog actually found it
> in the roses bushes before I did.
>
> Jimmie
>
> Hi Jimmie
>
> That "air" idea wont work, Jeff told me so
>
> Quote Jeff --
>
> "Welcome to rec.radio.amateur.antenna.physics

It can work, because what you are trying to do is not to move a lot of air and sand, but try to make some noise. And you don't have to move a whole lot of sand to do that. As long as the pipes stay together, some air will make it out of the open end and make some noise.

- 73 de Mike N3LI -

3807. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 15:09:15 UTC
From: John KD5YI <groups2_dot_jocjo@xoxy.net>
Message-ID: <vs0Mk.3261$r_3.1189@nwrddc02.gnilink.net>
Source record: 20781

"K7ITM" <k7itm@msn.com> wrote in message
news:c1668368-da86-497e-aa33-a1c311c0a621@f37g2000pri.googlegroups.com...
On Oct 22, 9:52 pm, "John KD5YI" <groups2_dot_jo...@xoxy.net> wrote:
> "Richard Harrison" <richardharri...@webtv.net> wrote in message
>
> news:9256-48FFF21F-268@storefull-3252.bay.webtv.net...
>
>
>
> > Mike, N3LI wrote:
> > "Why would the velocity be less at increased (antenna element) width?"
>
> > Let B = the phase velocity on the antenna element, in radians per unit
> > length. 2pi/B = wavelength on the element.
> > Therefore, 2pi/B=velocity of phase propagation.
> > Due to the behavior of of open-circuited transmission lines and
> > open-circuited antennas:
> > B=2pif times sq.rt. of LC radians / unit length.
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> > 2 pi f / B = velocity of propagation.
>
> > It is intuitive that a fat antenna element has more L & C than a thin
> > element and thus a lower velocity of propagation.
>
> > Best regards, Richard Harrisob, KB5WZI
>
> Hmmmm... my straight wire inductance equation from the ARRL handbook
> indicates smaller wire diameters have larger inductance.
>
> ???
>
> 73,
> John

Not surprisingly, that's what E&M texts say too--or leave as an
exercise. With a larger diameter, there's less net magnetic field for
a given current, so less energy stored, so less inductance.

Cheers,
Tom

So, then, it isn't intuitive (to me, at least) that a fat antenna has more
inductance. Intuitive to me is that the reverse may be true.

Cheers to you, too, Tom.

John

3808. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 15:26:34 UTC
From: richardharrison@webtv.net
Message-ID: <6930-490097AA-79@storefull-3253.bay.webtv.net>
Source record: 20782

John Wood, N4GGO wrote:
"---or intended such as Andrew`s "Radiax" brand of leaky transmission line for installation in tunnels and elevator shafts as a convenient means to extend the reach of over-the-air broadcasts."

Similar results are obtained more cheaply by replacing the Radiax with 300-ohm twin-lead.

Best regards, Richard Harrison, KB5WZI

3809. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 15:58:26 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B405B498A122Huckleberrybigvalley@198.186.192.196>
Source record: 20783

> It can work, because what you are trying to do is not to move a
> lot
> of air and sand, but try to make some noise. And you don't have to
> move a whole lot of sand to do that. As long as the pipes stay
> together, some air will make it out of the open end and make some
> noise.
>

Yes, making noise was key in locating my underground PVC. In my case, I was able to locate the end by listening closely NEAR where I thought it should have been while someone else was running a snake fully inserted in the pvc back and forth a few inches.... the noise it made at the last sweep was evident with no other background noise to interfere with it.

Ed K7AAT

3810. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 17:35:13 UTC
From: richardharrison@webtv.net
Message-ID: <9256-4900B5D1-386@storefull-3252.bay.webtv.net>
Source record: 20784

Mike, N3LI wrote:
"I thought that the inductance tends donward as the diameter of the wire increases. I can understand your calculation after the wavelength part, but don`t quite get the increased inductance part."

Good observation.

Wire inductance decreases with the circumference increase as this effectively places more parallel inductors in place along the surface of the wire.

Wire capacitance increases proportionally with the square of the circunference of the wire as it is proportional to the wire`s surface area.

The fatter wire grows capacitance faster than it changes inductance.

Reactance along a wire antenna element varies quickly near resonant and antiresonant points so is not uniformly distributed. This complicates calculations and requires average values for some. Bailey says of surge impedance: "Nevertheless, this variation in theoretical surge impedance shall not deter us from setting uup practical "average" values of surge impedance.
Best regards, Richard Harrison, KB5WZI

3811. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 17:58:03 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gdqdvb$6ug$1@f04n12.cac.psu.edu>
Source record: 20785

Ed wrote:
>> It can work, because what you are trying to do is not to move a
>> lot
>> of air and sand, but try to make some noise. And you don't have to
>> move a whole lot of sand to do that. As long as the pipes stay
>> together, some air will make it out of the open end and make some
>> noise.
>>
>
> Yes, making noise was key in locating my underground PVC. In my case,
> I was able to locate the end by listening closely NEAR where I thought it
> should have been while someone else was running a snake fully inserted in
> the pvc back and forth a few inches.... the noise it made at the last
> sweep was evident with no other background noise to interfere with it.

And if Jimmie will let us borrow his dog, we'll be all set!

- 73 de Mike N3LI -

3812. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 18:26:40 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <duGdnVN45rl7XJ3UnZ2dnUVZ8tfinZ2d@bt.com>
Source record: 20786

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:9256-48FFF21F-268@storefull-3252.bay.webtv.net...
> Mike, N3LI wrote:
> "Why would the velocity be less at increased (antenna element) width?"
>
> Let B = the phase velocity on the antenna element, in radians per unit
> length. 2pi/B = wavelength on the element.
> Therefore, 2pi/B=velocity of phase propagation.
> Due to the behavior of of open-circuited transmission lines and
> open-circuited antennas:
> B=2pif times sq.rt. of LC radians / unit length.
>
> 2 pi f / B = velocity of propagation.
>
> It is intuitive that a fat antenna element has more L & C than a thin
> element and thus a lower velocity of propagation.
>
> Best regards, Richard Harrisob, KB5WZI

If B is the 'phase velocity' then surely it's also the 'velocity of phase propagation' so that's not 2pi/B? The velocity of propagation of an electromagnetic wave, be it the phase or group velocity, is most-strongly dependent on the permittivity and permeability of the medium in which the wave is propagating.

Another clue to resolution of this issue is that the terminal impedance of an open circuit stub has a slope with respect to frequency that depends on the characteristic impedance of the stub. For the case of a cylindrical dipole, the characteristic impedance is not constant but increases progressively along the lengths of the limbs, but the slope of the terminal impedance can be related to an 'average characteristic impedance' and the value of this parameter depends on the average distributed inductance and capacitance, as has been said here before. Z = sqrt(L/C) in general terms.

The self-inductance of a conducting cylinder has been shown fairly rigorously by some (e.g. Rosa, and used by Terman) to be inversely proportional to its radial 'thickness' but this appears to be a contentious issue and can lead the unwary user into a paradox!

Chris

3813. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 18:32:25 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <c39d907b-d0e1-447b-9b1a-697dfa1e3887@p58g2000hsb.googlegroups.com>
Source record: 20787

After making a post early on this topic, what goes around came around and I had to identify a coax that passed under the driveway... Ye old wire tracer and 30 seconds is all it took to find it...

denny - k8do

3814. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 18:59:01 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gdqhhm$ab4$1@news.jpl.nasa.gov>
Source record: 20788

JB wrote:
>>> enough to avoid problems with the transmitter. Multiple series gaps
> only
>>> raises the firing voltage, but the breakdown voltage will be set by the
>>> largest gap in the series. A gap at .035 will fire at about 2-10kv
>>> depending on humidity. You only want it wide enough so that it won't
> arc
>> Humidity doesn't change the breakdown voltage very much. In fact,
>> increasing humidity increases the breakdown voltage. One correction
>> table for a "rod gap" with 1/2" square electrodes has a 10% correction
>> going from 15 torr to 30 torr water vapor pressure and a -16%
>> correction going from 15 to 2.5 torr, which is nowhere near the 5:1
>> variation cited above. Interestingly, on this basis water vapor is a
>> better insulator than nitrogen, since density of the humid air is
>> actually less. Typical breakdown voltage tolerance on a rod gap is +/-
> 8%.
> That was off the top of my head so I stand corrected but there ARE
> variations based on other real world stuff like air pressure and dirt on the
> insulators. 5-20kv for inside an engine is real world but that depends on
> other stuff too, like what kind of spark-plug, compression, resistors,
> mixture, timing, but I digress. The point is the gap may have to be
> adjusted for best results and might be too wide for protection. I invited
> him to read up on the subject because I have other projects I have my head
> into
>
> So what are your experiences with spark gap transmission line arresters?
> Perhaps you have the precise gap he should be using? My dim recollection is
> of a chart for the transmitter power in use.
>
A good rule of thumb for small gaps with large radius of curvature
electrodes is 30kV/cm (e.g. a 1cm gap between 10cm diameter spheres).

In strongly non uniform field gaps (e.g. needle gaps), the breakdown is
typically 1/3 or less.. that is, 10kV/cm

70kV/inch or 25 kV/inch, respectively.

A sparkplug with a 0.035inch gap would breakdown around 1-2kV in normal
air. In an engine, where the density at firing is probably 5-10 times
higher, the voltage is 10-20kV as you've given.

The usual way to set spark gaps for this kind of thing would be to make
it adjustable, fire up the transmitter at worst case max power and
reflection, and set the gap to be somewhat bigger than causes the gap to
break down. A good worst case would be 2x peak RF voltage (i.e. 2.8

Vrms), since that's what you'd get with a 100% reflection at just the wrong phase. (unless the source can supply reactive power.. then it's a lot more complex, because of the potential for resonant rise) You could use a current limited DC power supply or something like a neon sign transformer to set the spacing.

But making things practical..

say 2 kW and a 450 ohm transmission line. Erms = sqrt(2000*450) = about 950Vrms.. call it 1350V peak. With sharp ended electrodes (like the sheet metal V shapes shown in old ARRL handbooks) one might want a spacing of 0.050 inches?

3815. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 19:18:24 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <4900cde6$0$1080$4fafbaef@reader1.news.tin.it>
Source record: 20789

"Bruce W. Ellis" <ellis@means.net> ha scritto nel messaggio
news:n3vuf4t4nkhsvbbgrd0ndtu3vli6bjrteq@4ax.com...
> The various automatic antenna tuner/matcher manufacturers list a
> tuning range in Ohms - e.g., 6 - 1000 Ohms. The question I have is to
> whether that value is the magnitude of the impedance (which correlates
> to SWR) or the real part of the impedance (since the tuner should be
> able to cancel out the reactive part of the impedance). W0BF

Firstly, it should be noted that the magnitude of the impedance (Z) does NOT correlate to SWR. As a matter of fact, the formula giving SWR as a function of resistance (R) and reactance is such that R-X pairs corresponding to the same Z magnitude may well yield different SWR figures and, conversely,.R-X pairs yielding the same SWR figure generally correspond to different Z magnitudes. This can be readily visualized on the Smith chart.

For instance the pair R=30 ohm, X=40 ohm yields an SWR of 3, that is the same SWR produced by the pair R=150 ohm, X=0 ohm, despite the two Z magnitudes are different (50 ohm in the first case, 150 ohm in the second one).

That said, an excerpt of the MFJ-993B autotuner manual reads: "... it is rated at 300 watts to match 6 to 1600 ohms antennas (SWR up to 32:1)"

In my opinion, as a load of 1600 ohm would actually yield an SWR of just 32, the MFJ sentence makes reference to a pure R of 1600 ohm (that is with X=0). As a matter of fact, a Z magnitude of 1600 ohm, if not purely resistive, could correspond to quite a wide range of SWR figures, and not necessarily to 32..

The cited sentence excerpt then tells nothing about the tuner ability to neutralize the reactance of reactive loads.

On the other hand one must consider that, for the sake of limiting the internal switching arrangement complexity, automatic tuners usually adopt an L-type network in which the reactive element connected at the antenna (either in series or in parallel, depending on whether a step-up or a step-down transformation of the R is required) is not switcheable, i.e. it is either an inductor or as a capacitor. This means that a tuner may inherently be more tolerant of capacitve loads with respect to inductive loads, or viceversa, depending on the way it is designed.

73

Tony I0JX

3816. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 20:34:24 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B414D0AE53FCnonenowhere@61.9.191.5>
Source record: 20790

Bruce W. Ellis <ellis@means.net> wrote in
news:n3vuf4t4nkhsvbbgrd0ndtu3vli6bjrteq@4ax.com:

> The various automatic antenna tuner/matcher manufacturers list a
> tuning range in Ohms - e.g., 6 - 1000 Ohms. The question I have is to
> whether that value is the magnitude of the impedance (which correlates
> to SWR) or the real part of the impedance (since the tuner should be
> able to cancel out the reactive part of the impedance). W0BF

Bruce,

Where an impedance range is loosely specified as you quote (dimensioned in ohms without identification of the R and X parts), and in the absence of applicable frequency constraints and loss figures, I think you can safely disregard the information as unprovable advertising hype.

It is intended to look technical, something to impress the new wave of hams who don't have the understanding, and not enough to reliably determine the suitability of the ATU to a specific application.

Owen

3817. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 20:41:27 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <fd5cb3aa-bf1c-4380-98b3-ee0b838b6407@l64g2000hse.googlegroups.com>
Source record: 20791

On Oct 23, 12:02 am, "Jerry" <jerrymar...@verizon.net> wrote:
> "JIMMIE" <JIMMIEDEE...@yahoo.com> wrote in message
>
> news:9ccf907f-043f-44c1-982b-177b6232430e@k13g2000hse.googlegroups.com...
> On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
>
>
>
>
>
> > I know this is slightly off topic, but since I am intending to run
> > some RF cable in the conduit, and since there are a lot of intelligent
> > hams on this group, I will proceed anyway:
>
> > Last year at the beginning of construction of a new house I buried
> > about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
> > the property perimeter. Now that I am ready to use it, I can not
> > locate the perimeter end.... it is somewhere in about a 10' area, and the
> > end curves up to probably about a foot underground.
>
> > The ground is nearly pure sand, and is well landscaped now to the
> > point that I do not want to randomly dig it up.
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> > The end terminated in an elbow curving up and is well duct taped
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> > far end?
>
> > Tnx.
>
> > Ed K7AAT
>
> I have some pipe that I had run for an outdoor spigot that I never
> finished installing. To test a method of finding it I shot some air
> into it the other end was pretty easy to find by listening. I could
> hear the rush of air and a lot of gurgling. My dog actually found it
> in the roses bushes before I did.
>
> Jimmie
>
>   Hi Jimmie
>
>   That "air" idea wont work, Jeff told me so

>
> Quote Jeff --
>
> "Welcome to rec.radio.amateur.antenna.physics
>
> Ok, let's do the math. Dry sand weighs 100 lb/cubic-foot. There's
> about 1 ft of sand above the end of the 3/4" conduit. The weight
> action is roughly conical, so the volume of sand involved is (my
> guess) about:
> 100 lbs/ft^3 * 1/3 = 33 lbs of sand.
> All that it acting on a 3/4" diameter pipe, with a cross sectional
> area of about:
> Pi * 0.75" = 2.4 in^2
> Therefore, the pressure exerted by the sand is:
> 33 lbs / 2.4 in^2 = 14 PSI
> So, if he can pressurize the pipe to more than 14 PSI, he can lift the
> column of sand sufficiently to keep it from dribbling into the pipe.
>
> Of course, it's not that simple. Laminar air flow, pressure gradients
> across the conduit, and the effects of the duct tape will ruin my
> simplistic guesswork. Worse, the back pressure created by the
> immovable column of sand will force some sand particles into the
> conduit around the edges with the "reflected" air pressure. In the
> middle of the conduit, the air flow is all out of the conduit, but
> near the edges, it could easily be the other direction. I'm also
> assuming that the sand is a perfect air seal, which it's not. To
> prevent all this from happening, the minimum air pressure should be
> about twice the 14 PSI, which is easily achievable with an air
> compressor, but not a vacuum cleaner.
>
> I'm also trying to imagine how the process will work. I see an air
> compressor pumping madly away as the neighbors kids furiously dig
> around the resultant sand volcano, as sand rapidly refills the conical
> hole. In my never humble opinion, there's no way to prevent sand from
> dropping into the conduit if the duct tape seal is broken before
> excavating the end of the conduit.
>
> Once the sand is in the conduit, just blowing air through the pipe
> isn't going to magically elevate the sand particles 1ft or more in the
> air. The air does not have sufficient mass to convey enough momentum
> to move the sand particles, much less eject them vertically. For
> that, one needs a denser medium, such as water. Shoving a plunger
> through might work, but it's equally likely to jam sand particles into
> the PVC conduit walls.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558"

>
>   Jerry   KD6JDJ- Hide quoted text -
>
> - Show quoted text -

Obviously you're an engineer. LOL

Jimmie

3818. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 21:26:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <olp1g49eir4qr2h949bgur0fc54oa9llb9@4ax.com>
Source record: 20792

On Thu, 23 Oct 2008 07:01:18 -0400, wood@itd.nrl.navy.mil (J. B. Wood)
wrote:

>In article <ktsqf45tmo9c5t2j0o2nqg871j32eoptsv@4ax.com>, Richard Clark
><kb7qhc@comcast.net> wrote:
>
>> Lest there be any confusion: an antenna IS a transmission line.
>>
>
>Hello, and I think one would have to include two antennas and the
>intervening medium(s) for the above statement to make sense.
...
>Over a range
>of frequencies the behavior of this 2-port can easily differ from that of
>a transmission line, though.

It would appear your first sentence is contested by your last sentence
in your reply. It follows, then, that changing my statement through a
speculative inclusion introduced a problem not already in the
original. When we withdraw your inclusion to suit your complaint, we
are again left with my original.

What you are arguing is a failure of application, not a failure of the
device. I've seen similar arguments that forced terms of transformer
or transducer into the mix to show how they fail. I find the terms
suitable in a casual discussion, but the new minted failures occur on
the basis of forcing definitions when the casual applications worked
just fine.

One can, by a simple twist of the oscillator's frequency knob, find
failure in all analogues of antennas, lumped circuits, and
transmission lines. Those failures are not exotic perturbations in
the 5th decimal place, but simple and utter refusals to conform to a
general rule (such as my bald statement). For any attempt to refute
my bald statement with "proven concepts" will reveal those challenging
concepts built on a foundation of sand by a similar token of counter
proof.

73's
Richard Clark, KB7QHC

3819. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 22:30:24 UTC
From: "D. Stussy" <spam@bde-arc.ampr.org>
Message-ID: <gdqtub$5j6$1@snarked.org>
Source record: 20793

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:gdpsil$1j3o$1@f04n12.cac.psu.edu...
> Jerry wrote:
> > "JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
> >
news:9ccf907f-043f-44c1-982b-177b6232430e@k13g2000hse.googlegroups.com...
> > On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
> >> I know this is slightly off topic, but since I am intending to run
> >> some RF cable in the conduit, and since there are a lot of intelligent
> >> hams on this group, I will proceed anyway:
> >>
> >> Last year at the beginning of construction of a new house I buried
> >> about 50 feet of 3/4" Sched. 40 PVD between the house and a location on
> >> the property perimeter. Now that I am ready to use it, I can not
> >> locate the perimeter end.... it is somewhere in about a 10' area, and
the
> >> end curves up to probably about a foot underground.
> >>
> >> The ground is nearly pure sand, and is well landscaped now to the
> >> point that I do not want to randomly dig it up.
> >>
> >> The end terminated in an elbow curving up and is well duct taped
> >> shut.
> >>
> >> Can anyone suggest a method or equipment I might use to locate that
> >> far end?
> >>
> >> Tnx.
> >>
> >> Ed K7AAT
> >
> > I have some pipe that I had run for an outdoor spigot that I never
> > finished installing. To test a method of finding it I shot some air
> > into it the other end was pretty easy to find by listening. I could
> > hear the rush of air and a lot of gurgling. My dog actually found it
> > in the roses bushes before I did.
> >
> > Jimmie
> >
> > Hi Jimmie
> >
> > That "air" idea wont work, Jeff told me so
> >
> > Quote Jeff --

> >
> > "Welcome to rec.radio.amateur.antenna.physics
>
> It can work, because what you are trying to do is not to move a lot
> of air and sand, but try to make some noise. And you don't have to move
> a whole lot of sand to do that. As long as the pipes stay together, some
> air will make it out of the open end and make some noise.

And where is the air going to escape? He said he duct-taped the end shut. With enough pressure, he'll have a blow-out, but that could also result in getting dirt inside the pipe, which I believe wouldn't be good. However, short of that, there's no hole for the air make noise....

He knows the length and direction. He should be able to make an educated guess as where to dig.

3820. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-23 23:02:34 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <eo7Mk.3218$Rx2.222@nwrddc01.gnilink.net>
Source record: 20794

"D. Stussy" <spam@bde-arc.ampr.org> wrote in message
news:gdqtub$5j6$1@snarked.org...
> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:gdpsil$1j3o$1@f04n12.cac.psu.edu...
>> Jerry wrote:
>> > "JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
>> >
> news:9ccf907f-043f-44c1-982b-177b6232430e@k13g2000hse.googlegroups.com...
>> > On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
>> >> I know this is slightly off topic, but since I am intending to run
>> >> some RF cable in the conduit, and since there are a lot of intelligent
>> >> hams on this group, I will proceed anyway:
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>> >> Last year at the beginning of construction of a new house I buried
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>> >> on
>> >> the property perimeter. Now that I am ready to use it, I can not
>> >> locate the perimeter end.... it is somewhere in about a 10' area, and
> the
>> >> end curves up to probably about a foot underground.
>> >>
>> >> The ground is nearly pure sand, and is well landscaped now to the
>> >> point that I do not want to randomly dig it up.
>> >>
>> >> The end terminated in an elbow curving up and is well duct taped
>> >> shut.
>> >>
>> >> Can anyone suggest a method or equipment I might use to locate that
>> >> far end?
>> >>
>> >> Tnx.
>> >>
>> >> Ed K7AAT
>> >
>> > I have some pipe that I had run for an outdoor spigot that I never
>> > finished installing. To test a method of finding it I shot some air
>> > into it the other end was pretty easy to find by listening. I could
>> > hear the rush of air and a lot of gurgling. My dog actually found it
>> > in the roses bushes before I did.
>> >
>> > Jimmie
>> >
>> > Hi Jimmie
>> >

>> > That "air" idea wont work, Jeff told me so
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>> > Quote Jeff --
>> >
>> > "Welcome to rec.radio.amateur.antenna.physics
>>
>> It can work, because what you are trying to do is not to move a lot
>> of air and sand, but try to make some noise. And you don't have to move
>> a whole lot of sand to do that. As long as the pipes stay together, some
>> air will make it out of the open end and make some noise.
>
> And where is the air going to escape? He said he duct-taped the end shut.
> With enough pressure, he'll have a blow-out, but that could also result in
> getting dirt inside the pipe, which I believe wouldn't be good. However,
> short of that, there's no hole for the air make noise....
>
> He knows the length and direction. He should be able to make an educated
> guess as where to dig.

Hi D

You and Jeff may know something I didnt realize about sealing. I cant imagine being able to make duct tape seal off the open end of a PVC pipe with tuct tape, How much pressure can be sealed with the tape on the side of the PVC? I would have expected the tape to have been applied to prevent sand from entering. That wouldnt seal against much air pressure. Furthermore, it is very easy to apply only adequate pressure to initiate some air flow , not a sudden blast at high pressure to cause a crater. As you know, a small amount of air flowing thru a small passage can produce plenty of sound.
You are right, he has found the end of the pipe. I am curious to know why it is necessary to write that the air leak method *wont* work when I am sure it will work, Jimmy has demonstrated that.

Jerry
>
>

3821. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 00:39:48 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <efed96cd-d67a-492d-b3d2-4fe63e69bb92@b31g2000prb.googlegroups.com>
Source record: 20795

On Oct 23, 10:35 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Mike, N3LI wrote:
>
> "I thought that the inductance tends donward as the diameter of the wire
> increases. I can understand your calculation after the wavelength part,
> but don`t quite get the increased inductance part."
>
> Good observation.
>
> Wire inductance decreases with the circumference increase as this
> effectively places more parallel inductors in place along the surface of
> the wire.
>
> Wire capacitance increases proportionally with the square of the
> circunference of the wire as it is proportional to the wire`s surface
> area.
>
> The fatter wire grows capacitance faster than it changes inductance.
>
> Reactance along a wire antenna element varies quickly near resonant and
> antiresonant points so is not uniformly distributed. This complicates
> calculations and requires average values for some. Bailey says of surge
> impedance: "Nevertheless, this variation in theoretical surge impedance
> shall not deter us from setting uup practical "average" values of surge
> impedance.
> Best regards, Richard Harrison, KB5WZI

I know we're talking about linear antennas here, but even in that
case, it's surely not true that capacitance increases as the square of
the wire diameter (or radius or circumference); nor inductance
proportional to 1/diameter. Consider that if both those were true,
doubling the wire diameter would quadruple the capacitance and halve
the inductance, and the propagation velocity along that wire would be
1/sqrt(4*0.5) or about .707 times as great as with the thinner wire.
Clearly things change much more gradually than that.

In the controlled environment of a coaxial capacitor, the capacitance
per unit length is proportional to 1/log(b/a), where a is the inner
conductor diameter and b is the inside diameter of the outer
conductor. If you change b/a from 10000 to 5000 (huge outer diameter,
like a thin wire well away from ground), the capacitance increases by
about 8 percent. Going from b/a = 100000 to 50000, the capacitance
increases by a little over 6 percent. Similarly, inductance in coax
is proportional to log(b/a), so in coax as you change the inner

conductor diameter, the capacitance change offsets the inductance change exactly and the propagation velocity is unchanged. The environment of an antenna wire is different than that, but not so different that doubling the wire diameter has a drastic 30% effect on the resonant frequency.

Cheers,
Tom

3822. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 00:40:09 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <6981dfca-f1e5-4322-9644-1358d7c78181@y79g2000hsa.googlegroups.com>
Source record: 20796

On Oct 23, 7:02 pm, "Jerry" <jerrymar...@verizon.net> wrote:
> "D. Stussy" <s...@bde-arc.ampr.org> wrote in message
>
> news:gdqtub$5j6$1@snarked.org...
>
>
>
>
>
> > "Michael Coslo" <m...@psu.edu> wrote in message
> >news:gdpsil$1j3o$1@f04n12.cac.psu.edu...
> >> Jerry wrote:
> >> > "JIMMIE" <JIMMIEDEE...@yahoo.com> wrote in message
>
> >news:9ccf907f-043f-44c1-982b-177b6232430e@k13g2000hse.googlegroups.com...
> >> > On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
> >> >> I know this is slightly off topic, but since I am intending to run
> >> >> some RF cable in the conduit, and since there are a lot of intelligent
> >> >> hams on this group, I will proceed anyway:
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> >> >> Last year at the beginning of construction of a new house I buried
> >> >> about 50 feet of 3/4" Sched. 40 PVD between the house and a location
> >> >> on
> >> >> the property perimeter. Now that I am ready to use it, I can not
> >> >> locate the perimeter end.... it is somewhere in about a 10' area, and
> > the
> >> >> end curves up to probably about a foot underground.
>
> >> >> The ground is nearly pure sand, and is well landscaped now to the
> >> >> point that I do not want to randomly dig it up.
>
> >> >> The end terminated in an elbow curving up and is well duct taped
> >> >> shut.
>
> >> >> Can anyone suggest a method or equipment I might use to locate that
> >> >> far end?
>
> >> >> Tnx.
>
> >> >> Ed K7AAT
>
> >> > I have some pipe that I had run for an outdoor spigot that I never
> >> > finished installing. To test a method of finding it I shot some air
> >> > into it the other end was pretty easy to find by listening. I could

> >> > hear the rush of air and a lot of gurgling. My dog actually found it
> >> > in the roses bushes before I did.
>
> >> > Jimmie
>
> >> >   Hi Jimmie
>
> >> >   That "air" idea wont work, Jeff told me so
>
> >> >   Quote Jeff --
>
> >> > "Welcome to rec.radio.amateur.antenna.physics
>
> >> It can work, because what you are trying to do is not to move a   lot
> >> of air and sand, but try to make some noise. And you don't have to move
> >> a whole lot of sand to do that. As long as the pipes stay together, some
> >> air will make it out of the open end and make some noise.
>
> > And where is the air going to escape? He said he duct-taped the end shut.
> > With enough pressure, he'll have a blow-out, but that could also result in
> > getting dirt inside the pipe, which I believe wouldn't be good. However,
> > short of that, there's no hole for the air make noise....
>
> > He knows the length and direction. He should be able to make an educated
> > guess as where to dig.
>
>   Hi D
>
>   You and Jeff may know something I didnt realize about sealing.   I cant
> imagine being able to make duct tape seal off the open end of a PVC pipe
> with tuct tape,   How much pressure can be sealed with the tape on the side
> of the PVC?   I would have expected the tape to have been applied to prevent
> sand from entering. That wouldnt seal against much air pressure.
> Furthermore, it is very easy to apply only adequate pressure to initiate
> some air flow , not a sudden blast at high pressure to cause a crater. As
> you know, a small amount of air flowing thru a small passage can produce
> plenty of sound.
>   You are right, he has found the end of the pipe.   I am curious to know
> why it is necessary to write that the air leak method *wont* work when I am
> sure it will work, Jimmy has demonstrated that.
>
>   Jerry
>
>
>
> - Hide quoted text -
>
> - Show quoted text -- Hide quoted text -
>
> - Show quoted text -

I must admit that sand could get into the pipe but I cant see that would be all that bad. My pipe had water in it that is really why I was able to find it. If i want to clean it out I would just blow some strips of cloth through it or in the case of sand rinse it out with water then dry it out with warm air. Shop vacs are great for this. I should have left the damned thing alone. Now my wife wants me to finish putting in the spigot. She gave me a Thanksgiving suspense date.

Jimmie

3823. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 01:31:52 UTC
From: "D. Stussy" <spam@bde-arc.ampr.org>
Message-ID: <gdt59g$e37$1@snarked.org>
Source record: 20729

"Jerry" <jerrymartes@verizon.net> wrote in message
news:eo7Mk.3218$Rx2.222@nwrddc01.gnilink.net...
> "D. Stussy" <spam@bde-arc.ampr.org> wrote in message
> news:gdqtub$5j6$1@snarked.org...
> > "Michael Coslo" <mjc5@psu.edu> wrote in message
> > news:gdpsil$1j3o$1@f04n12.cac.psu.edu...
> >> Jerry wrote:
> >> > "JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
> >> >
> >
news:9ccf907f-043f-44c1-982b-177b6232430e@k13g2000hse.googlegroups.com...
> >> > On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
> >> >> I know this is slightly off topic, but since I am intending to run
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> >> >> hams on this group, I will proceed anyway:
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> >> >> about 50 feet of 3/4" Sched. 40 PVD between the house and a location
> >> >> on
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> >> >> locate the perimeter end.... it is somewhere in about a 10' area,
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> >> >> end curves up to probably about a foot underground.
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> >> >> The ground is nearly pure sand, and is well landscaped now to the
> >> >> point that I do not want to randomly dig it up.
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> >> >> The end terminated in an elbow curving up and is well duct taped
> >> >> shut.
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> >> >> Can anyone suggest a method or equipment I might use to locate that
> >> >> far end?
> >> >>
> >> >> Tnx.
> >> >>
> >> >> Ed K7AAT
> >> >
> >> > I have some pipe that I had run for an outdoor spigot that I never
> >> > finished installing. To test a method of finding it I shot some air
> >> > into it the other end was pretty easy to find by listening. I could
> >> > hear the rush of air and a lot of gurgling. My dog actually found it
> >> > in the roses bushes before I did.

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> >> > Jimmie
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> >> > Hi Jimmie
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> >> > That "air" idea wont work, Jeff told me so
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> >> > Quote Jeff --
> >> >
> >> > "Welcome to rec.radio.amateur.antenna.physics
> >>
> >> It can work, because what you are trying to do is not to move a lot
> >> of air and sand, but try to make some noise. And you don't have to move
> >> a whole lot of sand to do that. As long as the pipes stay together,
some
> >> air will make it out of the open end and make some noise.
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> > And where is the air going to escape? He said he duct-taped the end
shut.
> > With enough pressure, he'll have a blow-out, but that could also result
in
> > getting dirt inside the pipe, which I believe wouldn't be good.
However,
> > short of that, there's no hole for the air make noise....
> >
> > He knows the length and direction. He should be able to make an
educated
> > guess as where to dig.
>
> Hi D
>
> You and Jeff may know something I didnt realize about sealing. I cant
> imagine being able to make duct tape seal off the open end of a PVC pipe
> with tuct tape, How much pressure can be sealed with the tape on the
side
> of the PVC? I would have expected the tape to have been applied to
prevent
> sand from entering. That wouldnt seal against much air pressure.
> Furthermore, it is very easy to apply only adequate pressure to initiate
> some air flow , not a sudden blast at high pressure to cause a crater. As
> you know, a small amount of air flowing thru a small passage can produce
> plenty of sound.
> You are right, he has found the end of the pipe. I am curious to know
> why it is necessary to write that the air leak method *wont* work when I
am
> sure it will work, Jimmy has demonstrated that.

Well, let's see:

3/4" pipe, and duct tape is usually 2" wide. That means the entire end will
be covered with a single piece with its sides folded down. Duct tape is

designed NOT to let air pass. That means there's a good chance that the seal was air-tight.

3824. 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 09:14:24 UTC
From: dgleeson422111 <dgleeson3@eircom.net>
Message-ID: <159dee31-5436-4f46-ae9d-48214eec09ca@k37g2000hsf.googlegroups.com>
Source record: 20797
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

Hello All

We have a propagation issue that is confusing us. We have two 868MHz modules on test, each capable of 500mW transmission.

We are testing to find the range of communication. We are testing them as follows. One remains in our office while the other is taken to the street outside. we are communicating charecter strings such as "Im at the lamp post number 1" etc. There is somebody at each end sending text strings in a continuous conversation. There is no protocol, error checking or error recovery.

What we have repetadly found is that the radio in the office can receive long after the radio in the street has stopped receiving. (The person with the radio in the street is moving away from the office.)

The radios are the same and the power supplies to the radios are the same. Indeed switching the radios gives the same effect.

The propagation paths between the two radios are the same in terms of distance. However the radio signal transmitted from the office travels through walls first before then traveling through open space. Its the opposite for the radio in the street, firstly traveling through space and then through the walls in the office.

We did think we had identified an interfeering source in one direction (when moving away from the office) so we started moving in the opposite direction. We found exactly the same effect.

Are we getting interfeerance from GSM, ISM or Paging?

As far as GSM bands go in Europe 890–915 MHz OR 1710–1785 MHz So these shouldnt be our problem.

ISM is where we intend to operate and the greatest band occupancy should be 10%. So we should get communication even though we would get some interfeerance.

Paging - well this has very much gone out of fashion in Europe. But even if it was the cause then wouldnt it be intermittant communication. We have a constant problem.

Can anyone shed light on this phenomonon? Is it an issue of wireless propagation that Im not familiar with or is it Interfeerance?

Best regards, and thanks for any input.

Denis

---
http://www.CentronSolutions.com

3825. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 10:57:40 UTC
From: oopere <me@somewhere.net>
Message-ID: <gds9n4$2vl$1@defalla.upc.es>
Source record: 20798
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

dgleeson422111 wrote:
> Hello All
>
> We have a propagation issue that is confusing us. We have two 868MHz
> modules on test, each capable of 500mW transmission.
>
> We are testing to find the range of communication. We are testing them
> as follows. One remains in our office while the other is taken to the
> street outside. we are communicating charecter strings such as "Im at
> the lamp post number 1" etc. There is somebody at each end sending
> text strings in a continuous conversation. There is no protocol, error
> checking or error recovery.
>
> What we have repetadly found is that the radio in the office can
> receive long after the radio in the street has stopped receiving. (The
> person with the radio in the street is moving away from the office.)
>
> The radios are the same and the power supplies to the radios are the
> same. Indeed switching the radios gives the same effect.
>
> The propagation paths between the two radios are the same in terms of
> distance. However the radio signal transmitted from the office travels
> through walls first before then traveling through open space. Its the
> opposite for the radio in the street, firstly traveling through space
> and then through the walls in the office.
>
> We did think we had identified an interfeering source in one direction
> (when moving away from the office) so we started moving in the
> opposite direction. We found exactly the same effect.
>
> Are we getting interfeerance from GSM, ISM or Paging?
>
> As far as GSM bands go in Europe 890ï¿½915 MHz OR 1710ï¿½1785 MHz So these
> shouldnt be our problem.
>
> ISM is where we intend to operate and the greatest band occupancy
> should be 10%. So we should get communication even though we would get
> some interfeerance.
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> Paging - well this has very much gone out of fashion in Europe. But
> even if it was the cause then wouldnt it be intermittant
> communication. We have a constant problem.
>

> Can anyone shed light on this phenomonon? Is it an issue of wireless
> propagation that Im not familiar with or is it Interfeerance?
>
> Best regards, and thanks for any input.
>
> Denis
> _____________________
> http://www.CentronSolutions.com

You may experience receiver desensitization from a strong out-of-band interferer which is not penetrating well into your office and hence not interferring there.

Pere

3826. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 11:16:49 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-2410080716490001@jbw-mac.itd.nrl.navy.mil>
Source record: 20799

In article <olp1g49eir4qr2h949bgur0fc54oa9llb9@4ax.com>, Richard Clark
<kb7qhc@comcast.net> wrote:

> On Thu, 23 Oct 2008 07:01:18 -0400, wood@itd.nrl.navy.mil (J. B. Wood)
> wrote:
>
> >In article <ktsqf45tmo9c5t2j0o2nqg871j32eoptsv@4ax.com>, Richard Clark
> ><kb7qhc@comcast.net> wrote:
> >
> >> Lest there be any confusion: an antenna IS a transmission line.
> >>
> >
> >Hello, and I think one would have to include two antennas and the
> >intervening medium(s) for the above statement to make sense.
> ...
> >Over a range
> >of frequencies the behavior of this 2-port can easily differ from that of
> >a transmission line, though.
>
> It would appear your first sentence is contested by your last sentence
> in your reply.
<snip>
Hello, Richard, and all. And as I previously pointed out the 2-port model might not be the equivalent of a line in a broadband sense. Another way to put it would be that the 2-port could have the electrical characteristics (characteristic impedance, delay, loss) of a particular line at one frequency but of a different line at another frequency.

Please excuse my snipping of the remainder of your comments but they sound more of philosophy than science and quite frankly I have no idea what you're talking about. You emphatically stated an antenna "IS" a transmission line without a few words on why this should be so.

My take on a transmission line (or waveguide) is that it is a medium (ideally lossless) used to convey electromagnetic energy from one place to another. An antenna (or antenna array) is used to introduce or extract electromagnetic energy from a medium. Unlike the power available at the output of a low-loss transmission line, a receiving antenna operating at a far-field distance from a transmitter can only extract a macimum of 1/2 the power available from an incident electromagnetic wave.

Now, if you meant that antennas and transmission lines share phenomena in common (e.g. standing waves) that would be a correct statement. And Maxwell's equations certainly apply to both. But I don't see an equivalency of a single antenna and a non-radiating (at least intended by

design) transmission line and I don't recall any of my many
electromagnetics texts making such a statement. Sincerely,

> What you are arguing is a failure of application, not a failure of the
> device. I've seen similar arguments that forced terms of transformer
> or transducer into the mix to show how they fail. I find the terms
> suitable in a casual discussion, but the new minted failures occur on
> the basis of forcing definitions when the casual applications worked
> just fine.
>
> One can, by a simple twist of the oscillator's frequency knob, find
> failure in all analogues of antennas, lumped circuits, and
> transmission lines. Those failures are not exotic perturbations in
> the 5th decimal place, but simple and utter refusals to conform to a
> general rule (such as my bald statement). For any attempt to refute
> my bald statement with "proven concepts" will reveal those challenging
> concepts built on a foundation of sand by a similar token of counter
> proof.
>
> 73's
> Richard Clark, KB7QHC

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

3827. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 11:33:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <TmiMk.3156$Ei5.2425@flpi143.ffdc.sbc.com>
Source record: 20800

Owen Duffy wrote:
> Where an impedance range is loosely specified as you quote (dimensioned in
> ohms without identification of the R and X parts), and in the absence of
> applicable frequency constraints and loss figures, I think you can safely
> disregard the information as unprovable advertising hype.
>
> It is intended to look technical, something to impress the new wave of hams
> who don't have the understanding, and not enough to reliably determine the
> suitability of the ATU to a specific application.

The matching range of a typical tuner can be estimated
by playing with the simulated tuner at:
http://fermi.la.asu.edu/w9cf/tuner/tuner.html
Select the frequency and load needing to be matched,
click auto, and see if the tuner can match it.

I wonder if Kevin would be interested in making the
tuner's CLC values user specifiable?

I have modeled tuners with Microsmith (an old DOS
program) and varied the C1, L, C2 values while watching
the trace on the Smith Chart. Given all possible
combination of CLC values, the result would be the
matching envelope of the tuner at a specified frequency.

What would be nice is a program that would automatically
plot the tuner's matching envelope on a Smith Chart given
the input parameters.
--
73, Cecil http://www.w5dxp.com

3828. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 11:38:05 UTC
From: dgleeson422111 <dgleeson3@eircom.net>
Message-ID: <898752cd-4cd6-4e2e-8d25-5f57f14e0067@h60g2000hsg.googlegroups.com>
Source record: 20701
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

Hi Guys

Thanks for your input on this.

The idea of height being a problem is interesting. The radio in the
office is on the 1st floor (i.e above the ground by one floor).

If the antenna were at the same height would the problem go away?

We will test and see

On Oct 24, 11:57 am, oopere <m...@somewhere.net> wrote:
> dgleeson422111 wrote:
> > Hello All
>
> > We have a propagation issue that is confusing us. We have two 868MHz
> > modules on test, each capable of 500mW transmission.
>
> > We are testing to find the range of communication. We are testing them
> > as follows. One remains in our office while the other is taken to the
> > street outside. we are communicating charecter strings such as "Im at
> > the lamp post number 1" etc. There is somebody at each end sending
> > text strings in a continuous conversation. There is no protocol, error
> > checking or error recovery.
>
> > What we have repetadly found is that the radio in the office can
> > receive long after the radio in the street has stopped receiving. (The
> > person with the radio in the street is moving away from the office.)
>
> > The radios are the same and the power supplies to the radios are the
> > same. Indeed switching the radios gives the same effect.
>
> > The propagation paths between the two radios are the same in terms of
> > distance. However the radio signal transmitted from the office travels
> > through walls first before then traveling through open space. Its the
> > opposite for the radio in the street, firstly traveling through space
> > and then through the walls in the office.
>
> > We did think we had identified an interfeering source in one direction
> > (when moving away from the office) so we started moving in the
> > opposite direction. We found exactly the same effect.
>
> > Are we getting interfeerance from GSM, ISM or Paging?
>
> > As far as GSM bands go in Europe 890–915 MHz OR 1710–1785 MHz So these

> > shouldnt be our problem.
>
> > ISM is where we intend to operate and the greatest band occupancy
> > should be 10%. So we should get communication even though we would get
> > some interfeerance.
>
> > Paging - well this has very much gone out of fashion in Europe. But
> > even if it was the cause then wouldnt it be intermittant
> > communication. We have a constant problem.
>
> > Can anyone shed light on this phenomonon? Is it an issue of wireless
> > propagation that Im not familiar with or is it Interfeerance?
>
> > Best regards, and thanks for any input.
>
> > Denis
> > _____________________
> >http://www.CentronSolutions.com
>
> You may experience receiver desensitization from a strong out-of-band
> interferer which is not penetrating well into your office and hence not
> interferring there.
>
> Pere- Hide quoted text -
>
> - Show quoted text -

3829. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 11:49:13 UTC
From: osr@uakron.edu
Message-ID: <ee49a64c-dca6-4389-8f6c-c41d2c9eca64@l42g2000hsc.googlegroups.com>
Source record: 20702
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

higher antennas = longer range. Thats your issue.
Also lack of error correction, poor antenna pattern to meet the low
power regulations, and a less then robust protocol, ie your probably
using some form of on/off modulation where the receiver does not have
a continious wave signal to locl on and track. Try sending a preamble
character that is 10101010 a few times, assuming your receiver is
sophisticated enough to use AGC. This sets the DC level in the
discriminator more accurately and reduces errors.

your using a radio with intentionally designed in limited range to
allow reuse of the frquency.

Steve

3830. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 12:02:24 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <T5CdncnwyZfOJJzUnZ2dnUVZ_obinZ2d@giganews.com>
Source record: 20703
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

"dgleeson422111" <dgleeson3@eircom.net> wrote in message
news:159dee31-5436-4f46-ae9d-48214eec09ca@k37g2000hsf.googlegroups.com...

What we have repetadly found is that the radio in the office can
receive long after the radio in the street has stopped receiving. (The
person with the radio in the street is moving away from the office.)

The radios are the same and the power supplies to the radios are the
same. Indeed switching the radios gives the same effect.

Is your office in a concrete building? Or one with any steel reinforcement
or steel or aluminum studs? If so, it could well be that there is a
standing wave issue, so that a portion of your transmitted signal is being
reflected back, and so not making it to the receiver. This would not
necessarily affect the reception on the radio in the office from the outside
radio.

3831. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 12:03:57 UTC
From: Anthony Fremont <nobody@noplace.net>
Message-ID: <i82dnTmmXOMzJJzUnZ2dnUVZ_t7inZ2d@supernews.com>
Source record: 20704
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

dgleeson422111 wrote:
\> What we have repetadly found is that the radio in the office can
> receive long after the radio in the street has stopped receiving. (The
> person with the radio in the street is moving away from the office.)
>
> The radios are the same and the power supplies to the radios are the
> same. Indeed switching the radios gives the same effect.

The radio outside is likely being desensitized by some other signal.

3832. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 12:12:33 UTC
From: 1hogrider <nitespark@cox.net>
Message-ID: <RYiMk.4801$I8.1980@newsfe03.iad>
Source record: 20705
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

dgleeson422111 wrote:
> Hello All
>
> We have a propagation issue that is confusing us. We have two 868MHz
> modules on test, each capable of 500mW transmission.
>
> We are testing to find the range of communication. We are testing them
> as follows. One remains in our office while the other is taken to the
> street outside. we are communicating charecter strings such as "Im at
> the lamp post number 1" etc. There is somebody at each end sending
> text strings in a continuous conversation. There is no protocol, error
> checking or error recovery.
>
> What we have repetadly found is that the radio in the office can
> receive long after the radio in the street has stopped receiving. (The
> person with the radio in the street is moving away from the office.)
>

I see you have other responses. One test that would establish that is environmental (adjacent signal, receiver desense, etc), if BOTH units could be moved to a relative RF free environment such as a rural setting and then test the range.

If this eliminates the problem, then its probably time to break out a spectrum analyzer and take a look at what is around your operating frequency.

Andy

3833. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 12:14:04 UTC
From: Jon Slaughter <Jon_Slaughter@Hotmail.com>
Message-ID: <BYiMk.3157$Ei5.2077@flpi143.ffdc.sbc.com>
Source record: 20706
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

It's because the paths are not the same. Think of a silvered mirror. It can transmit light much easier in one direction than the other. Take both outside and see if it has the same problem. (extremely doubtful because the path's is virtually identical)

3834. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 12:29:50 UTC
From: EE123 <onyx49@juno.com>
Message-ID: <b033a457-e210-4c0e-b0ba-8a5d5cf8abf3@p49g2000hsd.googlegroups.com>
Source record: 20707
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

On Oct 24, 8:14 am, "Jon Slaughter" <Jon_Slaugh...@Hotmail.com> wrote:
> It's because the paths are not the same. Think of a silvered mirror. It can
> transmit light much easier in one direction than the other. Take both
> outside and see if it has the same problem. (extremely doubtful because the
> path's is virtually identical)

Did you design the receive software?
Or did buy the receiver "off the shelve"?

Perhaps there is a problem
with the receivers and how they are
receiving the data.

3835. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 12:53:04 UTC
From: Jon Slaughter <Jon_Slaughter@Hotmail.com>
Message-ID: <SyjMk.1284$%11.842@flpi144.ffdc.sbc.com>
Source record: 20708
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

"EE123" <onyx49@juno.com> wrote in message
news:b033a457-e210-4c0e-b0ba-8a5d5cf8abf3@p49g2000hsd.googlegroups.com...
On Oct 24, 8:14 am, "Jon Slaughter" <Jon_Slaugh...@Hotmail.com> wrote:
> It's because the paths are not the same. Think of a silvered mirror. It
> can
> transmit light much easier in one direction than the other. Take both
> outside and see if it has the same problem. (extremely doubtful because
> the
> path's is virtually identical)

Did you design the receive software?
Or did buy the receiver "off the shelve"?

Perhaps there is a problem
with the receivers and how they are
receiving the data.

um, did you read his message? He said that it was independent of the
receiver because they exchanged them and the same problem. i.e., it helps to
read the original post.

3836. Re: small omnidirectional mobile butt plugs by John Smith aka assemblywizard@gamil.com

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 12:57:12 UTC
From: John Smith <assemblywizzard@gmail.com>
Message-ID: <7f6c4cac-306d-4634-adbe-8b4128f1f827@c60g2000hsf.googlegroups.com>
Source record: 20709
Cross-posted to: rec.radio.amateur.antenna,alt.callahans,alt.support.boy-lovers,alt.politics.homosexual,rec.ponds

>On Oct 16, 3:08 am, John Smith <assemblywizard@gmail.com> wrote:
> :
>
> Check out a dildo / butt plug shortened to about 3" ... good performance
> and small size ... you can get smaller, but performance will decline. If you like small as in kiddies and puppy dogs best go with the real thing like John Smith from California does.
>
> Beats catching the clap or venereasl warts like John Smith did! (or, a California Fag Catcher!)
>
> Regards,
> JS- Hide quoted text -
>
> - Show quoted text -

3837. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 13:12:50 UTC
From: Dave <dave@dave.dave>
Message-ID: <mRjMk.17671$bK.16944@newsfe04.iad>
Source record: 20710
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

dgleeson422111 wrote:
> Hello All
>
> We have a propagation issue that is confusing us. We have two 868MHz
> modules on test, each capable of 500mW transmission.
>
> We are testing to find the range of communication. We are testing them
> as follows. One remains in our office while the other is taken to the
> street outside. we are communicating charecter strings such as "Im at
> the lamp post number 1" etc. There is somebody at each end sending
> text strings in a continuous conversation. There is no protocol, error
> checking or error recovery.

Do you have a license?

3838. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 13:48:43 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gdsjnr$179q$1@f04n12.cac.psu.edu>
Source record: 20711

K7ITM wrote:
> On Oct 23, 10:35 am, richardharri...@webtv.net (Richard Harrison)
> wrote:
>> Mike, N3LI wrote:
>>
>> "I thought that the inductance tends donward as the diameter of the wire
>> increases. I can understand your calculation after the wavelength part,
>> but don`t quite get the increased inductance part."
>>
>> Good observation.
>>
>> Wire inductance decreases with the circumference increase as this
>> effectively places more parallel inductors in place along the surface of
>> the wire.
>>
>> Wire capacitance increases proportionally with the square of the
>> circunference of the wire as it is proportional to the wire`s surface
>> area.
>>
>> The fatter wire grows capacitance faster than it changes inductance.
>>
>> Reactance along a wire antenna element varies quickly near resonant and
>> antiresonant points so is not uniformly distributed. This complicates
>> calculations and requires average values for some. Bailey says of surge
>> impedance: "Nevertheless, this variation in theoretical surge impedance
>> shall not deter us from setting uup practical "average" values of surge
>> impedance.
>> Best regards, Richard Harrison, KB5WZI
>
> I know we're talking about linear antennas here, but even in that
> case, it's surely not true that capacitance increases as the square of
> the wire diameter (or radius or circumference); nor inductance
> proportional to 1/diameter. Consider that if both those were true,
> doubling the wire diameter would quadruple the capacitance and halve
> the inductance, and the propagation velocity along that wire would be
> 1/sqrt(4*0.5) or about .707 times as great as with the thinner wire.
> Clearly things change much more gradually than that.

Trying to make a "readers Digest" version here....

If I'm following so far:

The lowered frequency of resonance is due to changes in the velocity factor.

The lowered vf is somewhat due to increased capacitance, and an increase in inductance - the latter part I'm still trying to grok. I think there is likely something more going on.

I'm still left with the increased bandwidth phenomenon. None of the above would seem to account for this.

I've been working with mobile antennas for the past several months, and I might be going astray, because I keep thinking about increased bandwidth as a partner of lowered efficiency. Not likely the case here.

Thanks to everyone for the help, while I'm happy to accept the obvious real results, It is even better if I can understand what is going on.

- 73 de Mike N3LI -

3839. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 14:59:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gdsntpkne1@news.albasani.net>
Source record: 20712

J. B. Wood wrote:

>
> Hello, and I think one would have to include two antennas and the
> intervening medium(s) for the above statement to make sense. In any
> ...
> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

Absolutely, such as two antennas stuck into a superconducting media,
which extends in all directions to the point of seemingly infinite
distances.

A rather unique way of viewing the phenomenon, and rarely presented in
such terms. Yet, quite valid, nonetheless.

Regards,
JS

3840. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 15:04:34 UTC
From: JB <nospam@goofball.net>
Message-ID: <6ulMk.3$225.2@nwrddc02.gnilink.net>
Source record: 20713

> Yes, making noise was key in locating my underground PVC. In my
case,
> I was able to locate the end by listening closely NEAR where I thought it
> should have been while someone else was running a snake fully inserted in
> the pvc back and forth a few inches.... the noise it made at the last
> sweep was evident with no other background noise to interfere with it.
>
> Ed K7AAT

Congrats!

That's probably the best answer, as you are going to fish something or not and it's always more expedient to use the most handy tool first before hauling out the hardware store or the drawing board. This is how it usually plays out, that there is plenty of noise when you are trying to bang the fishtape past the 90's. This is how I learned to use 45 degree sweeps and pull boxes at every opportunity. Anything to avoid the frustration of breaking wire or fish tape and wasting my own time.

3841. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 15:39:52 UTC
From: richardharrison@webtv.net
Message-ID: <6661-4901EC48-108@storefull-3251.bay.webtv.net>
Source record: 20714

Tom, K7ITM wrote:
"The environment of an antenna wire is different from that, but not so different that doubling the diameter has a drastic 30% effect on the resonant frequency."

Thanks to Tom for his observation. It makes sense to me. I was wrong.

Best regards, Richard Harrison, KB5WZI

3842. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 16:00:23 UTC
From: JB <nospam@goofball.net>
Message-ID: <rimMk.44$Jv2.32@nwrddc01.gnilink.net>
Source record: 20715
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

>What we have repetadly found is that the radio in the office can
receive long after the radio in the street has stopped receiving. (The
person with the radio in the street is moving away from the office.)

You don't say if you are using the same antenna on both ends, but the environment is very different at each end. Consider that Transmitting is about putting signal into an area, while receiving is about capturing the signals in near field of the antenna, then discerning the intellegence. You would have to analyze the output to be sure, but it may be localized reflections, shading or noise at the street level. Because of this it is so difficult to quantify range. There is equipment and software specifically designed to do what you are trying to do but it is expensive. The result is highly detailed signal strength graphic output overlaid on 3d mapping for each fixed site at various frequencies. Most commercial antenna sites have gone to great expense to generate those maps in order to show what their tower does because it is very different for each location.

3843. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 16:19:03 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <frs3g4ltnlun2ne5str6veq10rr1t1nmcr@4ax.com>
Source record: 20716
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

On Fri, 24 Oct 2008 02:14:24 -0700 (PDT), dgleeson422111
<dgleeson3@eircom.net> wrote:

>What we have repetadly found is that the radio in the office can
>receive long after the radio in the street has stopped receiving. (The
>person with the radio in the street is moving away from the office.)

Is the moving station manually portable or is it mounted on a vehicle?

If the moving operator is bored and continuously talks on a GSM phone
or if the (vehicle) generates some other kind of interference, this
would reduce the SNR at the moving station.

>The radios are the same and the power supplies to the radios are the
>same. Indeed switching the radios gives the same effect.
>
>The propagation paths between the two radios are the same in terms of
>distance. However the radio signal transmitted from the office travels
>through walls first before then traveling through open space. Its the
>opposite for the radio in the street, firstly traveling through space
>and then through the walls in the office.

Does the transmitter have some kind of SWR protection ?

If the Tx antenna is close to the wall, it might detune the antenna,
increasing the SWR and the SWR protection drops the transmitter power.

Paul OH3LWR

3844. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 17:00:36 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <9d1984e5-114e-4daa-a13d-87262da4483d@2g2000hsn.googlegroups.com>
Source record: 20717

On Oct 24, 7:33 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Owen Duffy wrote:
> > Where an impedance range is loosely specified as you quote (dimensioned in
> > ohms without identification of the R and X parts), and in the absence of
> > applicable frequency constraints and loss figures, I think you can safely
> > disregard the information as unprovable advertising hype.
>
> > It is intended to look technical, something to impress the new wave of hams
> > who don't have the understanding, and not enough to reliably determine the
> > suitability of the ATU to a specific application.
>
> The matching range of a typical tuner can be estimated
> by playing with the simulated tuner at:http://fermi.la.asu.edu/w9cf/tuner/tuner.html
> Select the frequency and load needing to be matched,
> click auto, and see if the tuner can match it.
>
> I wonder if Kevin would be interested in making the
> tuner's CLC values user specifiable?
>
> I have modeled tuners with Microsmith (an old DOS
> program) and varied the C1, L, C2 values while watching
> the trace on the Smith Chart. Given all possible
> combination of CLC values, the result would be the
> matching envelope of the tuner at a specified frequency.
>
> What would be nice is a program that would automatically
> plot the tuner's matching envelope on a Smith Chart given
> the input parameters.
> --
> 73, Cecil http://www.w5dxp.com

There used to be a ham near me that use an auto tuner to feed a
doublet. I dont think the antenna was cut for any particular frequency
just the most wie he could get strung from corner to corner of his
yard. He found he could get it to tune up on all the HF bands but only
by changing the length of his feedline between the tuner and antenna.
I was thinking it may be nice to have a tuner that could control an
external relay to switch in/out custom networks for adapting it to
site specific operating conditons.

Jimmie

3845. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 17:07:19 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <YcnMk.50803$XT1.43666@bignews5.bellsouth.net>
Source record: 20718
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

"oopere" <me@somewhere.net> wrote in message
news:gds9n4$2vl$1@defalla.upc.es...
>
>
> dgleeson422111 wrote:
>> Hello All
>>
>> We have a propagation issue that is confusing us. We have two 868MHz
>> modules on test, each capable of 500mW transmission.
>>
>> We are testing to find the range of communication. We are testing them
>> as follows. One remains in our office while the other is taken to the
>> street outside. we are communicating charecter strings such as "Im at
>> the lamp post number 1" etc. There is somebody at each end sending
>> text strings in a continuous conversation. There is no protocol, error
>> checking or error recovery.
>>
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>> person with the radio in the street is moving away from the office.)
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>>
>> The propagation paths between the two radios are the same in terms of
>> distance. However the radio signal transmitted from the office travels
>> through walls first before then traveling through open space. Its the
>> opposite for the radio in the street, firstly traveling through space
>> and then through the walls in the office.
>>
>> We did think we had identified an interfeering source in one direction
>> (when moving away from the office) so we started moving in the
>> opposite direction. We found exactly the same effect.
>>
>> Are we getting interfeerance from GSM, ISM or Paging?
>>
>> As far as GSM bands go in Europe 890 915 MHz OR 1710 1785 MHz So these
>> shouldnt be our problem.
>>
>> ISM is where we intend to operate and the greatest band occupancy
>> should be 10%. So we should get communication even though we would get
>> some interfeerance.

>>
>> Paging - well this has very much gone out of fashion in Europe. But
>> even if it was the cause then wouldnt it be intermittant
>> communication. We have a constant problem.
>>
>> Can anyone shed light on this phenomonon? Is it an issue of wireless
>> propagation that Im not familiar with or is it Interfeerance?
>>
>> Best regards, and thanks for any input.
>>
>> Denis
>> _____
>> http://www.CentronSolutions.com
>
> You may experience receiver desensitization from a strong out-of-band
> interferer which is not penetrating well into your office and hence not
> interferring there.
>
> Pere

Such as traffic light electronics.

Without error correction protocols being employed, you are also at the mercy
of multipath interference. You're QRMing your own signal. 8>)

Ed, NM2K

3846. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 17:26:57 UTC
From: "Helmut Wabnig"
Message-ID: <m714g4dcib22h58lk2dnq5dlap15ru9qon@4ax.com>
Source record: 20720
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

On Fri, 24 Oct 2008 02:14:24 -0700 (PDT), dgleeson422111
<dgleeson3@eircom.net> wrote:

>
>What we have repetadly found is that the radio in the office can
>receive long after the radio in the street has stopped receiving. (The
>person with the radio in the street is moving away from the office.)
>

Polarization could be a factor.
Reflections change the polarization appr. 90 degrees.

Rotate the antennas left & right to find out.

(you did not mention your type of antennas)

w.

3847. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 17:29:33 UTC
From: jimlux@earthlink.net
Message-ID: <b8a9ad17-e2cf-4215-a5be-3dd8703d33ce@o40g2000prn.googlegroups.com>
Source record: 20719

On Oct 24, 6:48 am, Michael Coslo <m...@psu.edu> wrote:

> Trying to make a "readers Digest" version here....
>
> If I'm following so far:
>
> The lowered frequency of resonance is due to changes in the velocity factor.
>
> The lowered vf is somewhat due to increased capacitance, and an increase
> in inductance - the latter part I'm still trying to grok. I think there
> is likely something more going on.

No to all of that... the changes in apparent C and L are a poor
model.

Consider that each little section of the antenna has a EM field that
interacts with each other section. Say you sliced the antenna up into
little strips lengthwise, and measured the inductance of one strip by
itself and then measured the inductance of all in parallel. If the
little strips are "far away" from each other the inductance will be
less (i.e. 1/Nstrips)... but they're not "far away".. the field from
strip 1 couples to strip 2. So there's a nonzero mutual inductance you
have to take into account. You need to calculate the M between strip 1
and strip 2 and strip 3, etc.

Same thing applies to capacitance. There's a capacitance of each
little chunk of the antenna to the surroundings. There's also a
capacitance to adjacent chunks. And to chunks that are 1 chunk away.
So, you can't just say.. I know the C of one long strip, and there are
N strips, so the C is N*C..

In the case of an infinitely thin wire, you CAN make some simplifying
assumptions AND use some analytical approximations (i.e. the
inductance between a segment of an infinitely thin filament and
another segment is well defined, so you integrate over all segments,
which are themselves infinitely small).

There's also the propagation speed issue. Say you slice the antenna
up crossways (like a salami).. there's a L and a C between each slice
(i.e. N^2 Ls and Cs for N slices), although it's symmetric, M12 =
M21. If you put a changing current through an inductor that has some
mutual inductance with another, then some current is induced in the
other. However, since the antenna is a significant fraction of a
wavelength long, there's also a time delay involved, so that current
occurs a bit later. That is, the change in current in segment 1
induces a current in segment 2, but delayed by the distance from 1 to

2. Segment 1 also induces a current in segment 3, but it's delayed
even more.

So, rather than some simple model of a single L & C, or even a simple
distributed LC transmission line, you really have a model that has
lots of pieces, each connected more or less to all the other pieces by
some factor (which includes a time delay).

ANd this is what programs like NEC do. They actually divide the
antenna up into a bunch of segments, calculate the interaction between
every possible pair of segments (making some speed up assumptions for
segments that are very far apart), and then solve the system of linear
equations that results. You can get an arbitrarily accurate model by
making the segments ever smaller and more numerous, restricted only by
numerical precision and computing time. NEC does make some
simplifying assumptions. It assumes that the current along the segment
is represented by a simple model (a basis function), a constant plus
two sinusoids. I believe MiniNEC simplifies even further by assuming
constant current in the segment. The tradeoff is that for the same
accuracy, the rectangular basis function will require more segments
than the NEC basis function, but, it's easier to compute.

>
> I'm still left with the increased bandwidth phenomenon. None of the
> above would seem to account for this.
>

You're right.. it doesn't, because the simple models don't account for
ALL the interactions between subpieces of the antenna. The formula for
the inductance of a rod above ground doesn't know about propagation
speed, so it deals with the mutual interaction of one piece of the rod
with another, but not the time delay.

Think of it like the breakdown of the DC formula for resistance of a
round conductor as you start running AC through it. The DC formula
(resistivity * length/cross sectional area) doesn't account for
inductance, so when you run AC through, the inductance of one current
filament relative to another starts to have an effect.
> I've been working with mobile antennas for the past several months, and
> I might be going astray, because I keep thinking about increased
> bandwidth as a partner of lowered efficiency. Not likely the case here.

No.. Bandwidth does not necessarily go with lower efficiency. That
statement is often the result of misinterpreting the statement about
size and Q and gain being related. A big fat antenna will have high
efficiency AND wide bandwidth.

Jim, W6RMK

3848. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 17:29:55 UTC
From: "Helmut Wabnig"
Message-ID: <le14g4hi8u896c9l9lk0qnb2i7b2jdibr4@4ax.com>
Source record: 20721
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

On Fri, 24 Oct 2008 02:14:24 -0700 (PDT), dgleeson422111
<dgleeson3@eircom.net> wrote:

>
>What we have repetadly found is that the radio in the office can
>receive long after the radio in the street has stopped receiving. (The
>person with the radio in the street is moving away from the office.)
>

This is typical for groundplane antennas.
They radiate upwards.

Polarization could be a factor.
Reflections change the polarization appr. 90 degrees.

Rotate the antennas left & right to find out.

(you did not mention your type of antennas)

w.

3849. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 17:44:09 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <89e3cfad-c877-4be6-8eca-53993e23a9e9@h2g2000hsg.googlegroups.com>
Source record: 20723
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment
Body handling: HTML body converted to readable text

On Oct 24, 2:00 pm, "Paul Hovnanian P.E." wrote:
> dgleeson422111 wrote:
>
> > Hello All
>
> > We have a propagation issue that is confusing us. We have two 868MHz
> > modules on test, each capable of 500mW transmission.
>
> > We are testing to find the range of communication. We are testing them
> > as follows. One remains in our office while the other is taken to the
> > street outside. we are communicating charecter strings such as "Im at
> > the lamp post number 1" etc. There is somebody at each end sending
> > text strings in a continuous conversation. There is no protocol, error
> > checking or error recovery.
>
> > What we have repetadly found is that the radio in the office can
> > receive long after the radio in the street has stopped receiving. (The
> > person with the radio in the street is moving away from the office.)
>
> > The radios are the same and the power supplies to the radios are the
> > same. Indeed switching the radios gives the same effect.
>
> > The propagation paths between the two radios are the same in terms of
> > distance. However the radio signal transmitted from the office travels
> > through walls first before then traveling through open space. Its the
> > opposite for the radio in the street, firstly traveling through space
> > and then through the walls in the office.
>
> > We did think we had identified an interfeering source in one direction
> > (when moving away from the office) so we started moving in the
> > opposite direction. We found exactly the same effect.
>
> > Are we getting interfeerance from GSM, ISM or Paging?
>
> > As far as GSM bands go in Europe 890-915 MHz OR 1710-1785 MHz So these
> > shouldnt be our problem.
>
> > ISM is where we intend to operate and the greatest band occupancy
> > should be 10%. So we should get communication even though we would get
> > some interfeerance.
>
> > Paging - well this has very much gone out of fashion in Europe. But

> > even if it was the cause then wouldnt it be intermittant
> > communication. We have a constant problem.
>
> > Can anyone shed light on this phenomonon? Is it an issue of wireless
> > propagation that Im not familiar with or is it Interfeerance?
>
> > Best regards, and thanks for any input.
>
> > Denis
> > _____
> >http://www.CentronSolutions.com
>
> Have you tried relocating the office transceiver? There might be
> something about the office environment that is interfering with its
> transmission.
>
> --
> Paul Hovnanian mailto:P...@Hovnanian.com
> --
> A mathematician is a machine for converting coffee into theorems.- Hide quoted text -
>
> - Show quoted text -

wow so many of these replies are wrong..

in almost all cases, RF path losses are RECIPROCAL.

(even a 1/2 silvered mirror is reciprocal to light)

As some have said, the cause of your issue is probably interference to
the outside receiver.

Or maybe something about the indoor setup is causing the indoor Tx to
operate at lower power.

It is very unusual for RF path loss to be non-reciprocal.

Mark

3850. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 18:00:24 UTC
From: "Paul Hovnanian P.E." <paul@hovnanian.com>
Message-ID: <49020D38.B232C623@hovnanian.com>
Source record: 20722
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

dgleeson422111 wrote:
>
> Hello All
>
> We have a propagation issue that is confusing us. We have two 868MHz
> modules on test, each capable of 500mW transmission.
>
> We are testing to find the range of communication. We are testing them
> as follows. One remains in our office while the other is taken to the
> street outside. we are communicating charecter strings such as "Im at
> the lamp post number 1" etc. There is somebody at each end sending
> text strings in a continuous conversation. There is no protocol, error
> checking or error recovery.
>
> What we have repetadly found is that the radio in the office can
> receive long after the radio in the street has stopped receiving. (The
> person with the radio in the street is moving away from the office.)
>
> The radios are the same and the power supplies to the radios are the
> same. Indeed switching the radios gives the same effect.
>
> The propagation paths between the two radios are the same in terms of
> distance. However the radio signal transmitted from the office travels
> through walls first before then traveling through open space. Its the
> opposite for the radio in the street, firstly traveling through space
> and then through the walls in the office.
>
> We did think we had identified an interfeering source in one direction
> (when moving away from the office) so we started moving in the
> opposite direction. We found exactly the same effect.
>
> Are we getting interfeerance from GSM, ISM or Paging?
>
> As far as GSM bands go in Europe 890-915 MHz OR 1710-1785 MHz So these
> shouldnt be our problem.
>
> ISM is where we intend to operate and the greatest band occupancy
> should be 10%. So we should get communication even though we would get
> some interfeerance.
>
> Paging - well this has very much gone out of fashion in Europe. But
> even if it was the cause then wouldnt it be intermittant
> communication. We have a constant problem.

>
> Can anyone shed light on this phenomonon? Is it an issue of wireless
> propagation that Im not familiar with or is it Interfeerance?
>
> Best regards, and thanks for any input.
>
> Denis
> _____________________
> http://www.CentronSolutions.com

Have you tried relocating the office transceiver? There might be
something about the office environment that is interfering with its
transmission.

--
Paul Hovnanian mailto:Paul@Hovnanian.com

A mathematician is a machine for converting coffee into theorems.

3851. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 18:01:53 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <0d62ad6b-8da0-48e8-9820-0a1c4d5351e2@u46g2000hsc.googlegroups.com>
Source record: 20725

On Oct 24, 1:29 pm, jim...@earthlink.net wrote:
> On Oct 24, 6:48 am, Michael Coslo <m...@psu.edu> wrote:
>
> > Trying to make a "readers Digest" version here....
>
> > If I'm following so far:
>
> > The lowered frequency of resonance is due to changes in the velocity factor.
>
>
so as the wire gets thicker the C per unit length goes up at some rate
and the L per unit length goes down at some other rate, fine so that
reduces the characteistic Z by some rate....but none of that changes
the wave velocity as was pointed out above in the coax example.

I think the shortening effect may all be due to the extra C of the end
surface, i.e it iss end effect. For a thick wire, the end is a circle
that has C and this is all extra C that is not present for the thin
wire. Is this extra C alone enough to create the shortening effect?

Mark

3852. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 18:19:17 UTC
From: "Paul Hovnanian P.E." <paul@hovnanian.com>
Message-ID: <490211A5.5AE4BB68@hovnanian.com>
Source record: 20724
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

dgleeson422111 wrote:
>
> Hi Guys
>
> Thanks for your input on this.
>
> The idea of height being a problem is interesting. The radio in the
> office is on the 1st floor (i.e above the ground by one floor).
>
> If the antenna were at the same height would the problem go away?
>
> We will test and see

If I remember my antenna/propagation theory correctly, such a change should affect both the transmit and receive gains equally. That is to say, if moving the office antenna lower will reduce its transmit range, it will also reduce its receive range.

What you are looking for is something that is reducing the office end transmit power while leaving its receive sensitivity intact. Someone else suggested an SWR problem due to near field interference with the antenna.

--
Paul Hovnanian mailto:Paul@Hovnanian.com

Don't anthropomorphize computers. They hate that.

3853. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 18:22:05 UTC
From: RFI-EMI-GUY <Rhyolite@NETTALLY.COM>
Message-ID: <49021242$0$4931$9a6e19ea@unlimited.newshosting.com>
Source record: 20726
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

Dave wrote:
> dgleeson422111 wrote:
>> Hello All
>>
>> We have a propagation issue that is confusing us. We have two 868MHz
>> modules on test, each capable of 500mW transmission.
>>
>> We are testing to find the range of communication. We are testing them
>> as follows. One remains in our office while the other is taken to the
>> street outside. we are communicating charecter strings such as "Im at
>> the lamp post number 1" etc. There is somebody at each end sending
>> text strings in a continuous conversation. There is no protocol, error
>> checking or error recovery.
>
> Do you have a license?

Not required in EU for 868 MHz

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3854. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 18:24:25 UTC
From: RFI-EMI-GUY <Rhyolite@NETTALLY.COM>
Message-ID: <490212D9.7020605@NETTALLY.COM>
Source record: 20727
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

Anthony Fremont wrote:
> dgleeson422111 wrote:
> \> What we have repetadly found is that the radio in the office can
>> receive long after the radio in the street has stopped receiving. (The
>> person with the radio in the street is moving away from the office.)
>>
>> The radios are the same and the power supplies to the radios are the
>> same. Indeed switching the radios gives the same effect.
>
> The radio outside is likely being desensitized by some other signal.
>
>

Most likely scenario.

Also make sure that in your design you are powering down the transmitter
fully in the receive mode. In some radios there can be a residual
carrier from the PLL causing self interference ar interference to other
nearby nodes.

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3855. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 18:26:59 UTC
From: Anthony Fremont <nobody@noplace.net>
Message-ID: <tt2dnUrzaMnojp_UnZ2dnUVZ_uWdnZ2d@supernews.com>
Source record: 20728
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment
Body handling: HTML body converted to readable text

Mark wrote:
> On Oct 24, 2:00 pm, "Paul Hovnanian P.E." wrote:

> wow so many of these replies are wrong..

This is normal when antenna "theory" comes up.

> in almost all cases, RF path losses are RECIPROCAL.

I agree, including the antenna gains (meaning that the antennas at each end
don't have to match).

> (even a 1/2 silvered mirror is reciprocal to light)

Well that guy is usually on a differet page.

> As some have said, the cause of your issue is probably interference to
> the outside receiver.

That's what I think is the most likely cause. The guy outside probably has
his Nextel phone with him. ;-)

> Or maybe something about the indoor setup is causing the indoor Tx to
> operate at lower power.

I suppose that's possible too. The OP should make sure the power supplies
are equivalent (meaning that the output power would suffer more than the
receiver gain with a drooping supply). So check the indoor supply.

> It is very unusual for RF path loss to be non-reciprocal.

3856. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 18:48:42 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B417827F1F39Huckleberrybigvalley@198.186.192.196>
Source record: 20730

>
> You and Jeff may know something I didnt realize about sealing. I
> cant
> imagine being able to make duct tape seal off the open end of a PVC
> pipe with tuct tape, How much pressure can be sealed with the tape
> on the side of the PVC? I would have expected the tape to have been
> applied to prevent sand from entering. That wouldnt seal against much
> air pressure.

For the record, I duct taped the end well, when it was initially buried, in order to keep out sand and even water. It was applied well enough to prevent any reasonable air pressure from moving it, in my opinion. Duct Tape is awful sturdy stuff, and sticks quite well, too.

As I already said earlier, a bunch of you guys posted some excellent ideas I could have used.... and I probably would have if my first simple try with making noise with my fish tape hadn't worked.

Thanks again to all.

Ed K7AAT

3857. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 18:53:45 UTC
From: "R. Fry" <rfry@adams.net>
Message-ID: <gdt5jt$5ci$1@aioe.org>
Source record: 20731

"Michael Coslo"
> I'm still left with the increased bandwidth phenomenon. None of the above
> would seem to account for this.

The reactance of a conductor with a relatively large cross-section changes
slower with a change in frequency than one having a small cross-section.

Therefore its impedance bandwidth remains below a given limit over a greater
frequency span than one of a smaller cross-section.

RF

3858. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 19:05:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <u_oMk.3195$Ei5.3127@flpi143.ffdc.sbc.com>
Source record: 20732

JIMMIE wrote:
> He found he could get it to tune up on all the HF bands but only
> by changing the length of his feedline between the tuner and antenna.
> I was thinking it may be nice to have a tuner that could control an
> external relay to switch in/out custom networks for adapting it to
> site specific operating conditons.

Why even have a tuner if you are going to switch the length
of the feedline?

http://www.w5dxp.com/notuner.htm

In my Arizona implementation of this antenna, I used
relays driven by a 80C51 microcontroller to achieve
an autotuner function.
--
73, Cecil http://www.w5dxp.com

3859. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 19:07:22 UTC
From: jimlux@earthlink.net
Message-ID: <d5b5e716-ad09-49f6-9cfe-f0037d968b0c@r37g2000prr.googlegroups.com>
Source record: 20733

On Oct 24, 11:53 am, "R. Fry" <r...@adams.net> wrote:
> "Michael Coslo"> I'm still left with the increased bandwidth phenomenon. None of the
above
> > would seem to account for this.
>
> ____________
>
> The reactance of a conductor with a relatively large cross-section changes
> slower with a change in frequency than one having a small cross-section.
>
> Therefore its impedance bandwidth remains below a given limit over a greater
> frequency span than one of a smaller cross-section.
>
> RF

If you plot the feedpoint Z over frequency as R and X on a
rectangular scale (not a Smith chart), you get a spiral. thin
antennas have a big spiral crossing the R axis at X=0 very steeply
(implying narrow match bandwidth), while fat antennas have a smaller
diameter spiral.

As someone else has pointed out, the spiral eventually converges to
something like R=377 when frequency is very high.

The "why" for all of this does not admit of a simple explanation.
(thereby providing nice grist for EM textbook writers, and brain
bending work for EM students)
It's the trying to understand why (the actual measured data has been
around for at least a century) is what prompted the work of folks like
Schelkunoff, Hallen, King, and others. They came up with good answers
for very specialized cases (inifinitely thin wires, conical antennas,
etc.). The fact that "real" antennas tend not to look like the
idealized ones with the analytical models led to the development of
finite element methods, in particular, the Method of Moments, which
NEC and it's ilk are based on. The idea had been around for a while,
but fast computers made it possible to do for interesting non-trivial
cases.

There are similar analytic models that are "pretty close" for Yagis,
for instance.

3860. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 19:11:11 UTC
From: jimlux@earthlink.net
Message-ID: <030f806d-5882-4895-ba82-e8f55987cc07@s9g2000prg.googlegroups.com>
Source record: 20734

On Oct 24, 11:01 am, Mark <makol...@yahoo.com> wrote:
> On Oct 24, 1:29 pm, jim...@earthlink.net wrote:> On Oct 24, 6:48 am, Michael Coslo
<m...@psu.edu> wrote:
>
> > > Trying to make a "readers Digest" version here....
>
> > > If I'm following so far:
>
> > > The lowered frequency of resonance is due to changes in the velocity factor.
>
> so as the wire gets thicker the C per unit length goes up at some rate
> and the L per unit length goes down at some other rate, fine so that
> reduces the characteistic Z by some rate....but none of that changes
> the wave velocity as was pointed out above in the coax example.
>
> I think the shortening effect may all be due to the extra C of the end
> surface, i.e it iss end effect. For a thick wire, the end is a circle
> that has C and this is all extra C that is not present for the thin
> wire. Is this extra C alone enough to create the shortening effect?
>
> Mark

No.
And, "end capacitance effect" is a poor model for what's really going
on. It's been used as an "explanation" for the observation that an
antenna that is slightly shorter than half a wavelength is resonant(as
in has no reactive component at the feedpoint). The problem is that an
infinitely thin dipole is resonant at less than 1/2 wavelength, and in
that case, there's no real "end" to have an effect.

3861. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 19:14:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2b04g4tq9tk370vqlsl993d3ci99vbckr6@4ax.com>
Source record: 20735

On Fri, 24 Oct 2008 07:16:49 -0400, wood@itd.nrl.navy.mil (J. B. Wood) wrote:

>Hello, Richard, and all. And as I previously pointed out the 2-port model
>might not be the equivalent of a line in a broadband sense. Another way
>to put it would be that the 2-port could have the electrical
>characteristics (characteristic impedance, delay, loss) of a particular
>line at one frequency but of a different line at another frequency.

Hi John,

Your statement above is as much a rambling philosophy as you argue I write. The difference is in pride of authorship alone.

>Please excuse my snipping of the remainder of your comments but they sound
>more of philosophy than science and quite frankly I have no idea what
>you're talking about.

We can agree your motivation wasn't to go there. Some little portion of this is going to be about that motivation.

> You emphatically stated an antenna "IS" a
>transmission line without a few words on why this should be so.

Again, a contradiction. You note my brief statement, and then you complain of length - "without a few words" which is as archaic a construct as any I've employed. In light of charges of rambling philosophies, I enjoy irony too. It is very hard to answer a "damned if you do, damned if you don't" rebuttal, so I pursue your semantics that invite their focus.

>My take on a transmission line (or waveguide) is that it is a medium
>(ideally lossless) used to convey electromagnetic energy from one place to
>another. An antenna (or antenna array) is used to introduce or extract
>electromagnetic energy from a medium.

A transmission line is not a medium in the strict usage of the term medium. Terms are important, or they become your own philosophy. The ï¿½ther fully qualifies under your application and it is multiport beyond count. So, predictably, this medium you speak of fails upon the basis of exhibiting more ports than is necessary.

Perhaps "fails" is too strong, but it is enough to note that your inclusion stumbles against your premise at the top of this quote.

>Now, if you meant that antennas and transmission lines share phenomena
>in common (e.g. standing waves) that would be a correct statement.

I generally write what I mean. I take responsibility for it. If
there is doubt, then a question offered will erase that in following
rounds of discussion. Volunteering tea leaves reading only adds to
the murk.

>And
>Maxwell's equations certainly apply to both. But I don't see an
>equivalency of a single antenna and a non-radiating (at least intended by
>design) transmission line and I don't recall any of my many
>electromagnetics texts making such a statement. Sincerely,

That is why I offered three sources (posted twice in this thread) that
speak to the matter at great length and with enough elaboration in
math to resolve problems of what you complain of in my "philosophy."

So, as popular culture maintains that "the third time is a charm":
>>On Tue, 21 Oct 2008 08:23:32 -0700, Richard Clark <kb7qhc@comcast.net> wrote:
>>
>>>Institutional memory here is so slight:
>>>
>>>"Theory of antennas of arbitrary size and
>>>shape," Proc. I.R.E., 29, 493, 1941 and S. A. Schelkunoff, "Advanced
>>>Antenna Theory, " John Wiley and Sons, Inc., New York, (1952)
>>>
>>>Accessible reference work can be found by searching the PTO with his
>>>patent number: 2235506.

I am happy to parse philosophies expressed here, but a visit to the
PTO would serve informed discussion far more. Schelkunoff expressly
chose to extend the transmission line into antennas for a very good
reason, and that reason has served conventional antenna design quite
well.

73's
Richard Clark, KB7QHC

3862. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 19:21:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <en74g49auechcbp5c873tu19mhjpt90880@4ax.com>
Source record: 20736

On Fri, 24 Oct 2008 09:48:43 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>I've been working with mobile antennas for the past several months, and
>I might be going astray, because I keep thinking about increased
>bandwidth as a partner of lowered efficiency. Not likely the case here.

Hi Mike,

Only if you think of the vehicle body as the fat radiator and the
"mobile antenna" as a tuned radial. Unfortunately, that tuned radial
restricts the capacity of the fat radiator to achieve wide band
operation. Wide bandedness is a function of the complete system.
Unfortunately most look at the "radiator" and miss the necessity of
the counterpoise which demands an equally "large" contribution.

73's
Richard Clark, KB7QHC

3863. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 20:25:58 UTC
From: jimmie68@gmail.com
Message-ID: <86256efd-9b07-412c-ac39-c886d2b42ec6@m74g2000hsh.googlegroups.com>
Source record: 20737
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment
Body handling: HTML body converted to readable text

On Oct 24, 2:26 pm, "Anthony Fremont" wrote:
> Mark wrote:
> > On Oct 24, 2:00 pm, "Paul Hovnanian P.E." wrote:
> > > wow so many of these replies are wrong..
>
> This is normal when antenna "theory" comes up.
>
> > in almost all cases, RF path losses are RECIPROCAL.
>
> I agree, including the antenna gains (meaning that the antennas at each end
> don't have to match).
>
> > (even a 1/2 silvered mirror is reciprocal to light)
>
> Well that guy is usually on a differet page.
>
> > As some have said, the cause of your issue is probably interference to
> > the outside receiver.
>
> That's what I think is the most likely cause. The guy outside probably has
> his Nextel phone with him. ;-)
>
> > Or maybe something about the indoor setup is causing the indoor Tx to
> > operate at lower power.
>
> I suppose that's possible too. The OP should make sure the power supplies
> are equivalent (meaning that the output power would suffer more than the
> receiver gain with a drooping supply). So check the indoor supply.
>
>
>
> > It is very unusual for RF path loss to be non-reciprocal.- Hide quoted text -
>
> - Show quoted text -

It is assumed that the path to and from the office should be inferior
to the line of sight path out on the street. This may or may not be
true. The building may actually be offering gain in certain
directions. I would start by seeing if the same condition existed at
many more locations. If it does then other ideas need to be examined,
I would start by examining the RF environment outside the building.

Jimmie

3864. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 20:37:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4pb4g41och7e9d1ggp2cjhdv2m9lhk8r72@4ax.com>
Source record: 20738
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

On Fri, 24 Oct 2008 02:14:24 -0700 (PDT), dgleeson422111
<dgleeson3@eircom.net> wrote:

>Hello All
>
>We have a propagation issue that is confusing us. We have two 868MHz
>modules on test, each capable of 500mW transmission.

Hi Denis,

That is a lot of power for a problem of losing contact in the space of
blocks.

>What we have repetadly found is that the radio in the office can
>receive long after the radio in the street has stopped receiving. (The
>person with the radio in the street is moving away from the office.)
>
>The radios are the same and the power supplies to the radios are the
>same. Indeed switching the radios gives the same effect.
>
>The propagation paths between the two radios are the same in terms of
>distance. However the radio signal transmitted from the office travels
>through walls first before then traveling through open space. Its the
>opposite for the radio in the street, firstly traveling through space
>and then through the walls in the office.

A very good description of the symptoms and relations.

>We did think we had identified an interfeering source in one direction
>(when moving away from the office) so we started moving in the
>opposite direction. We found exactly the same effect.

A good test for reducing variables. If you identified an
interference, I would presume you could do that again in the other
direction.

>Are we getting interfeerance from GSM, ISM or Paging?

Only if the remote set was nearer to an undiscovered interferer. You
seemed to have resolved that once, and you should be able to detect
the similar occurrence again.

>As far as GSM bands go in Europe 890ï¿½915 MHz OR 1710ï¿½1785 MHz So these
>shouldnt be our problem.

This is a flaw in the logic. Your frequency of operation is very
close to these bands - unless your sets have been designed with

elaborate front end tuning (which seems unlikely).

>Can anyone shed light on this phenomonon? Is it an issue of wireless
>propagation that Im not familiar with or is it Interfeerance?

One component not discussed is the remote set's proximity to the operator. The operator could disturb the local field (aka shield). Going beyond is the effect of a Fresnel Zone, but your descriptions describe a complete black-out. To test this requires you to go further away to see if you pick up the signal again. This is a long shot, however, as the effect would be distinct within the space of a meter or so. For mobile operation, the Fresnel Zone creates what is called "Picket Fencing" as the signal comes and goes quickly with distance traveled.

Perhaps it is the proximity of a Pub, and your operator stopped in for a Guinness.

73's
Richard Clark, KB7QHC

3865. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 20:42:24 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <acc703ce-40cc-4c01-b5fc-09526ad7d063@t42g2000hsg.googlegroups.com>
Source record: 20739

On Oct 24, 3:05 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> JIMMIE wrote:
> > He found he could get it to tune up on all the HF bands but only
> > by changing the length of his feedline between the tuner and antenna.
> > I was thinking it may be nice to have a tuner that could control an
> > external relay to switch in/out custom networks for adapting it to
> > site specific operating conditons.
>
> Why even have a tuner if you are going to switch the length
> of the feedline?
>
Because it would require only one external switch, be useful on random
lengths of antenna, probably a few more I could think of if I didnt
have to get to work.

Jimmie

3866. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 21:05:32 UTC
From: richardharrison@webtv.net
Message-ID: <15786-4902389C-157@storefull-3253.bay.webtv.net>
Source record: 20740

Mark wrote:
"It is very unusual for the RF path loss to be non-reciprocal".

Yes. I believe the radios and antennas were exchanged with the same results. So, even if separate frequencies are used in opposite directions, the impaired direction, which was reported as unchanged, indicates something wrong with transmission not reception at the fixed building location. Any street location seems deaf. Perhaps there is interference up and down the street.

Best regards, Richard Harrison, KB5WZI

3867. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 21:12:43 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <iTqMk.5863$be.5632@nlpi061.nbdc.sbc.com>
Source record: 20741
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

dgleeson422111 wrote:
> Hello All
>
> We have a propagation issue that is confusing us. We have two 868MHz
> modules on test, each capable of 500mW transmission.
>
> We are testing to find the range of communication. We are testing them
> as follows. One remains in our office while the other is taken to the
> street outside. we are communicating charecter strings such as "Im at
> the lamp post number 1" etc. There is somebody at each end sending
> text strings in a continuous conversation. There is no protocol, error
> checking or error recovery.
>
> What we have repetadly found is that the radio in the office can
> receive long after the radio in the street has stopped receiving. (The
> person with the radio in the street is moving away from the office.)
>
> The radios are the same and the power supplies to the radios are the
> same. Indeed switching the radios gives the same effect.
>
> The propagation paths between the two radios are the same in terms of
> distance. However the radio signal transmitted from the office travels
> through walls first before then traveling through open space. Its the
> opposite for the radio in the street, firstly traveling through space
> and then through the walls in the office.
>
> We did think we had identified an interfeering source in one direction
> (when moving away from the office) so we started moving in the
> opposite direction. We found exactly the same effect.
>
> Are we getting interfeerance from GSM, ISM or Paging?
>
> As far as GSM bands go in Europe 890ï¿½915 MHz OR 1710ï¿½1785 MHz So these
> shouldnt be our problem.
>
> ISM is where we intend to operate and the greatest band occupancy
> should be 10%. So we should get communication even though we would get
> some interfeerance.
>
> Paging - well this has very much gone out of fashion in Europe. But
> even if it was the cause then wouldnt it be intermittant
> communication. We have a constant problem.
>

> Can anyone shed light on this phenomonon? Is it an issue of wireless
> propagation that Im not familiar with or is it Interfeerance?
>
> Best regards, and thanks for any input.
>

I'll second Pere and Anthony. Strong out-of-band signals is what I found mostly in situations where path losses seemed strangely non-reciprocal.

Post a schematic. One possibility is that your receive input filter is wide open like a barn door and GSM swamps the receiver.

Another option if you have a spectrum analyzer: Hang a large near-field probe into a long cable, tape it to a broomstick and hold that out the window for a while. See what pops up on the screen. If this is in a city be prepared for some commotion among the pedestrians down there :-)

--
Regards, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

3868. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 23:13:43 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <562c8f9b-654e-4565-94db-28c275992da2@d10g2000pra.googlegroups.com>
Source record: 20742
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

Hey:

My crystal balls are saying:

Multipath where a reflected signal from the source
is being cancelled out in the zone sort of like
standing waves. It's like waves in a bath tub
they bounce of the sides and produce more inter-
ference waves, and so on. Or FM broadcast stations
signal in the big city with tall buildings, all of a sudden
the signal just goes puff while you're driving along down-
town.

I'd say gits your antenna near a window or put up an
outdoor antenna.

73 OM

n8zu

3869. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 23:21:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <cYmdnehoHbgYxZ_UnZ2dnUVZ_qadnZ2d@posted.easystreetonline>
Source record: 20743

jimlux@earthlink.net wrote:
>
> If you plot the feedpoint Z over frequency as R and X on a
> rectangular scale (not a Smith chart), you get a spiral. thin
> antennas have a big spiral crossing the R axis at X=0 very steeply
> (implying narrow match bandwidth), while fat antennas have a smaller
> diameter spiral.
>
> As someone else has pointed out, the spiral eventually converges to
> something like R=377 when frequency is very high.
> . . .

377 ohms is the impedance of free space, which is the ratio of E to H fields of a planar TEM wave. People keep looking for this value when dealing with antenna impedances, apparently due to the common misconception that antennas are "transformers" of some sort to "match" the impedance of free space (an E/H ratio) to a transmitter impedance (a V/I ratio).

Quite a few people have tackled the problem of the impedance of an infinitely long dipole. In _Antennas and Waves_, King & Harrison conclude (p. 234) that the impedance is approximately 214 - j189 ohms. However, this requires extrapolation from calculated and measured results, since convergence is extremely slow. In _Antennas_, Kraus's analysis doesn't show convergence, but it's based on a simpler theory which I don't believe is as complete. Because it's not of much practical interest, most of the analyses appear in academic papers rather than antenna textbooks. It's not at all a trivial problem.

Roy Lewallen, W7EL

3870. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-24 23:31:13 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <bd75a8bf-e9fa-4aaf-915a-b641e18ced0c@u29g2000pro.googlegroups.com>
Source record: 20744

On Oct 24, 12:11 pm, jim...@earthlink.net wrote:
> On Oct 24, 11:01 am, Mark <makol...@yahoo.com> wrote:
>
>
>
> > On Oct 24, 1:29 pm, jim...@earthlink.net wrote:> On Oct 24, 6:48 am, Michael Coslo
<m...@psu.edu> wrote:
>
> > > > Trying to make a "readers Digest" version here....
>
> > > > If I'm following so far:
>
> > > > The lowered frequency of resonance is due to changes in the velocity factor.
>
> > so as the wire gets thicker the C per unit length goes up at some rate
> > and the L per unit length goes down at some other rate, fine so that
> > reduces the characteistic Z by some rate....but none of that changes
> > the wave velocity as was pointed out above in the coax example.
>
> > I think the shortening effect may all be due to the extra C of the end
> > surface, i.e it iss end effect. For a thick wire, the end is a circle
> > that has C and this is all extra C that is not present for the thin
> > wire. Is this extra C alone enough to create the shortening effect?
>
> > Mark
>
> No.
> And, "end capacitance effect" is a poor model for what's really going
> on. It's been used as an "explanation" for the observation that an
> antenna that is slightly shorter than half a wavelength is resonant(as
> in has no reactive component at the feedpoint). The problem is that an
> infinitely thin dipole is resonant at less than 1/2 wavelength, and in
> that case, there's no real "end" to have an effect.

?? I have been under the impression that in the limit as the
conductor radius goes to zero, the resonance does go to a freespace
half wavelength. You have to make the antenna _really_ thin to get
anywhere near that, though. Even a million to one length to diameter
ratio won't do it.

There's another empirical point, though, that may be worthwhile
considering to convince folk that Jim's exactly right that you can NOT
just figure things from "capacitance" and "inductance" and the
resultant propagation velocity. For the resonance of a nominally half-
wave dipole in freespace, the resonance changes by only a small amount

as the wire becomes thicker. With the wire length/diameter ratio at 10,000:1, resonance is about 2.5% below freespace half wave. For l/d = 1,000:1, it's about 3.7%. At l/d = 100:1, it's about 6.1%. But for the same l/d ratios operated at full-wave (anti)resonance, the factors are respectively 7%, 9.3% and 17.5%. It would be tough to reconcile that difference using the simple L and C per unit length model.

Ronold King made a career out of developing the theory of linear antennas. I find the "Antennas" chapter he wrote for "Transmission Lines, Antennas and Waveguides" to be a valuable source of insight about antennas. It's presentation is more empirical than theoretical, but I've found that his explanations there pretty much always give me better insights into what's going on. It can be tough to find the book, but I do have a PDF photocopy... If you want to get seriously into the theory and math, one of his other books might be just the ticket. Though I like the way he presents the material, I know of others who are turned off by it, so "ymmv" as they say.

Cheers,
Tom

3871. Re: Antenna ground or rig ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 00:11:22 UTC
From: Gary Pewitt <n9zsv@magtel.com>
Message-ID: <q4o4g4hd82u3vt2vp6odh0eq9qtgamlad5@4ax.com>
Source record: 20745

OK, thanks again for all the good advice. After concidering all the
suggestions and re-reading 3 different ARRL antenna manuals I have
decided to go with a buried cable (uninsulated of course) all around
the house and extending out to my vertical antenna base. I will run
ground straps from the electrical service box, my bedroom receiver,
and the entrypoint for my feed lines to the buried cable. I am going
to go with the spark plug (non resistor type) protection combined with
knife switches to disconnect the rig -and- ground the ballanced
antennas to the buried cable. All co-ax will have commercial gas type
protectors grounded to the cable. There will be a copper bus on the
back of the shack bench with -all- gear grounded through it to the
buried cable.
I will also put spark gaps on the base of the tower grounded to the
cable. There will be a large expensive surge protector in line with a
power distributing strip on the bench which will be unplugged at the
first indication of electrical storms.
The inspiration for all this is a large Oak tree out back with the top
15 or 20 feet blown off by a lightning strike.
If there is anything I have missed please call it to my attention.
Thanks Gary N9ZSV

On Sat, 11 Oct 2008 22:12:20 -0500, Gary Pewitt <n9zsv@magtel.com>
wrote:

>Here's a simple question. I want to connect my transceiver to several
>antennas using 450 ohm ladder line and a balanced tuner. I found a
>couple of small double pole double throw knife switches for the ladder
>line. There are only two ways to hook these up. I can hook the tuner
>output to the center with the ground on the bottom and the antenna on
>the top connectors. This will allow me to connect the transceiver to
>the antenna or to ground. The second way is to connect the
>transceiver to the top contacts, the antenna to the center, and ground
>to the bottom contacts. This will let me connect the antenna to the
>radio or to ground. Is it better to ground the radio and let the
>antenna float? Or to ground the antenna and let the radio float?
>Of course if I leave the switch handle sticking straight up nothing is
>connected to anything.
>I am inclined to think grounding the antenna is better but I have been
>wrong before.
>
>Thanks and 73 Gary N9ZSV

3872. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 02:33:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vLGdnVljFZ4NGJ_UnZ2dnUVZ_tninZ2d@posted.easystreetonline>
Source record: 20746

K7ITM wrote:
>
> Ronold King made a career out of developing the theory of linear
> antennas. I find the "Antennas" chapter he wrote for "Transmission
> Lines, Antennas and Waveguides" to be a valuable source of insight
> about antennas. It's presentation is more empirical than theoretical,
> but I've found that his explanations there pretty much always give me
> better insights into what's going on. It can be tough to find the
> book, but I do have a PDF photocopy...

Not too tough. Amazon has 7 copies from $9.96 -
http://www.amazon.com/gp/offer-listing/B000V097D0/ref=sr_1_olp_8?ie=UTF8&s=books&qid=1224901677&sr=1-8
They appear to be the original 1945 hardcover book. Mine is a soft cover
Dover reprint published in 1965. Alibris has 17 copies, for $7.00 up -
http://www.alibris.com/search/books/qwork/6788112/used/Transmission%20lines,%20antennas%20and%20wave%20guides.

The quick web search that found these also found others. I picked mine
up at Powell's some time ago for $15.00.

I also highly recommend this book.

Roy Lewallen, W7EL

3873. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 02:39:34 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <582238de-2e04-4c17-be3e-e543f275ce01@c60g2000hsf.googlegroups.com>
Source record: 20747

On Oct 24, 5:05 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Mark wrote:
>
> "It is very unusual for the RF path loss to be non-reciprocal".
>
> Yes. I believe the radios and antennas were exchanged with the same
> results. So, even if separate frequencies are used in opposite
> directions, the impaired direction, which was reported as unchanged,
> indicates something wrong with transmission not reception at the fixed
> building location. Any street location seems deaf. Perhaps there is
> interference up and down the street.
>
> Best regards, Richard Harrison, KB5WZI

In regards to non reciprocal operation, the only time I have ever
experienced this during LOS communication was during some form of
interference . Most recently this took the form of a pair of UHF
telemetry transceivers where the local end worked well with 5 other
remote transceivers but not with one at one particular location. it
turned out to be caused by an oscilator in some equipment used in a
nearby business. Normally the oscilator was keyed of and on when the
equipment was used but for a few weeks it had been constantly keyed.
Apparently this did not effect the operation of their equipment.

Jimmie

3874. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 05:27:14 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B42EE4294EFmcoslocomcastnet@216.196.97.136>
Source record: 20748

Richard Clark <kb7qhc@comcast.net> wrote in
news:en74g49auechcbp5c873tu19mhjpt90880@4ax.com:

> On Fri, 24 Oct 2008 09:48:43 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>>I've been working with mobile antennas for the past several months, and
>>I might be going astray, because I keep thinking about increased
>>bandwidth as a partner of lowered efficiency. Not likely the case here.
>
> Hi Mike,
>
> Only if you think of the vehicle body as the fat radiator and the
> "mobile antenna" as a tuned radial. Unfortunately, that tuned radial
> restricts the capacity of the fat radiator to achieve wide band
> operation. Wide bandedness is a function of the complete system.
> Unfortunately most look at the "radiator" and miss the necessity of
> the counterpoise which demands an equally "large" contribution.

Agreed. while messing with my installation, I spent much more time with
bonding all my vehicle - did you know a Suzuki Vitara has an actual frame?
Many dozens of braid straps. It was all worth it though.

- 73 de Mike N3LI -

3875. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 05:42:13 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B42116E69A6mcoslocomcastnet@216.196.97.136>
Source record: 20749

"D. Stussy" <spam@bde-arc.ampr.org> wrote in
news:gdqtub$5j6$1@snarked.org:

> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:gdpsil$1j3o$1@f04n12.cac.psu.edu...
>> Jerry wrote:
>> > "JIMMIE" <JIMMIEDEE123@yahoo.com> wrote in message
>> >
> news:9ccf907f-043f-44c1-982b-177b6232430e@k13g2000hse.googlegroups.com.
> ..
>> > On Oct 15, 1:17 am, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
>> >> I know this is slightly off topic, but since I am intending to run
>> >> some RF cable in the conduit, and since there are a lot of
>> >> intelligent hams on this group, I will proceed anyway:
>> >>
>> >> Last year at the beginning of construction of a new house I buried
>> >> about 50 feet of 3/4" Sched. 40 PVD between the house and a
>> >> location on the property perimeter. Now that I am ready to use it,
>> >> I can not locate the perimeter end.... it is somewhere in about a
>> >> 10' area, and
> the
>> >> end curves up to probably about a foot underground.
>> >>
>> >> The ground is nearly pure sand, and is well landscaped now to the
>> >> point that I do not want to randomly dig it up.
>> >>
>> >> The end terminated in an elbow curving up and is well duct taped
>> >> shut.
>> >>
>> >> Can anyone suggest a method or equipment I might use to locate
>> >> that far end?
>> >>
>> >> Tnx.
>> >>
>> >> Ed K7AAT
>> >
>> > I have some pipe that I had run for an outdoor spigot that I never
>> > finished installing. To test a method of finding it I shot some
>> > air into it the other end was pretty easy to find by listening. I
>> > could hear the rush of air and a lot of gurgling. My dog actually
>> > found it in the roses bushes before I did.
>> >
>> > Jimmie
>> >

>> > Hi Jimmie
>> >
>> > That "air" idea wont work, Jeff told me so
>> >
>> > Quote Jeff --
>> >
>> > "Welcome to rec.radio.amateur.antenna.physics
>>
>> It can work, because what you are trying to do is not to move a lot
>> of air and sand, but try to make some noise. And you don't have to
>> move a whole lot of sand to do that. As long as the pipes stay
>> together, some air will make it out of the open end and make some
>> noise.
>
> And where is the air going to escape? He said he duct-taped the end
> shut. With enough pressure, he'll have a blow-out, but that could also
> result in getting dirt inside the pipe, which I believe wouldn't be
> good. However, short of that, there's no hole for the air make
> noise....
>
> He knows the length and direction. He should be able to make an
> educated guess as where to dig.

That duct tape isn't at all likely to seal the pipe; some air will
escape - One of the reason's we don't repair flat tires with duct tape.
8^)

As an example of sound traveling underground, here in the
battleground state of PA, there are a lot of places where there are
streams underground. A tiny trickle of water can be heard even by my bad
ears, several feet underground.

- 73 de Mike N3LI

3876. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 14:13:09 UTC
From: ltdoc@yahoo.com
Message-ID: <07bed116-f5c8-466d-8c05-baf681640489@k30g2000hse.googlegroups.com>
Source record: 20750

> Because it would require only one external switch, be useful on random
> lengths of antenna, probably a few more I could think of if I didnt
> have to get to work.
>
> Jimmie

Good reason. How many variations of feed line length can you have?
Enough to handle all the frequencies you might want to use? Possible,
but that's a lot of switches/switching. Oh well, a tuner just seems
simpler.
I gotta do that 'four letter word' too...
- 'Doc

3877. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 15:28:25 UTC
From: jimlux@earthlink.net
Message-ID: <42f05749-5bdf-4acc-9f22-128b03ad9ee3@r37g2000prr.googlegroups.com>
Source record: 20601

On Oct 24, 4:31 pm, K7ITM <k7...@msn.com> wrote:
> On Oct 24, 12:11 pm, jim...@earthlink.net wrote:

> > And, "end capacitance effect" is a poor model for what's really going
> > on. It's been used as an "explanation" for the observation that an
> > antenna that is slightly shorter than half a wavelength is resonant(as
> > in has no reactive component at the feedpoint). The problem is that an
> > infinitely thin dipole is resonant at less than 1/2 wavelength, and in
> > that case, there's no real "end" to have an effect.
>
> ?? I have been under the impression that in the limit as the
> conductor radius goes to zero, the resonance does go to a freespace
> half wavelength. You have to make the antenna _really_ thin to get
> anywhere near that, though. Even a million to one length to diameter
> ratio won't do it.
>

Half wavelength of zero radius has a feedpoint impedance of about
73.1+j42.5 ohms
(see, e.g. page 639 of Orfanidis's online electromagnetics book
(chapter 16), which gives a one page derivation)
(http://www.ece.rutgers.edu/~orfanidi/ewa/)

Roy's right about the spiral not converging to 377+j0.. I misread the
graph.

Jim

3878. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 16:36:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gdvhvarkm1@news.albasani.net>
Source record: 20602

Roy Lewallen wrote:

> ...
> 377 ohms is the impedance of free space, which is the ratio of E to H
> fields of a planar TEM wave. People keep looking for this value when
> dealing with antenna impedances, apparently due to the common
> misconception that antennas are "transformers" of some sort to "match"
> the impedance of free space (an E/H ratio) to a transmitter impedance (a
> V/I ratio).
> ...
> Roy Lewallen, W7EL

I believe the "misconception" is that the E/H fields induced by the injection of an electromagnetic signal into the media (ether) ARE the properties of the ether; I don't believe they are.

Rather, these fields are only the effect of the affect ...

Regards,
JS

3879. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 21:15:44 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <m0MMk.5597$3w.704@newsfe19.iad>
Source record: 20603
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

"Mark" <makolber@yahoo.com> wrote in message news:89e3cfad-c877-4be6-8eca-
wow so many of these replies are wrong..

in almost all cases, RF path losses are RECIPROCAL.

(It is very unusual for RF path loss to be non-reciprocal.

Mark

I agree. But, one thing that should be proven is that both modules
are working as intended. The one being used for the remote
application *could* be defective. Swap modules and see if the
receiving problem also switches locations, or remains the
same.

Pete

3880. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 21:43:18 UTC
From: mark.aren.nz@gmail.com
Message-ID: <e3b3f28c-4e39-485d-9b6e-3120840bf34e@q30g2000prq.googlegroups.com>
Source record: 20604
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment
Body handling: HTML body converted to readable text

Hello,

There should be a reciprocal relationship between the modules
regardless of height, antennas etc. as long as TX power and RX
sensitivity of the modules are the same (which they appear to be).

The modules are unlikely to have very good input filters at 868MHz, so
any adjacent channel interference (GSM etc.) is likely to cause the
out of balance behaviour.

Try heading in a different direction outside, or go somewhere else
with your experiment.

For your real world application, are you likely to have any site close
to adjacent channel transmitters (cell or broadcast) ? If so, think
about a decant front end filters. This could be costly, but might save
you...

Regards,

Mark

On Oct 25, 9:25 am, jimmi...@gmail.com wrote:
> On Oct 24, 2:26 pm, "Anthony Fremont" wrote:
>
>
>
>
>
> > Mark wrote:
> > > On Oct 24, 2:00 pm, "Paul Hovnanian P.E." wrote:
> > > wow so many of these replies are wrong..
>
> > This is normal when antenna "theory" comes up.
>
> > > in almost all cases, RF path losses are RECIPROCAL.
>
> > I agree, including the antenna gains (meaning that the antennas at each end
> > don't have to match).
>
> > > (even a 1/2 silvered mirror is reciprocal to light)
>
> > Well that guy is usually on a differet page.
>

> > > As some have said, the cause of your issue is probably interference to
> > > the outside receiver.
>
> > That's what I think is the most likely cause. The guy outside probably has
> > his Nextel phone with him. ;-)
>
> > > Or maybe something about the indoor setup is causing the indoor Tx to
> > > operate at lower power.
>
> > I suppose that's possible too. The OP should make sure the power supplies
> > are equivalent (meaning that the output power would suffer more than the
> > receiver gain with a drooping supply). So check the indoor supply.
>
> > > It is very unusual for RF path loss to be non-reciprocal.- Hide quoted text -
>
> > - Show quoted text -
>
> It is assumed that the path to and from the office should be inferior
> to the line of sight path out on the street. This may or may not be
> true. The building may actually be offering gain in certain
> directions. I would start by seeing if the same condition existed at
> many more locations. If it does then other ideas need to be examined,
> I would start by examining the RF environment outside the building.
>
> Jimmie- Hide quoted text -
>
> - Show quoted text -

3881. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-25 23:21:12 UTC
From: W3CQH <hsgorden@comcast.net>
Message-ID: <qfqdnZYsC6J3NJ7UnZ2dnUVZ_g2dnZ2d@comcast.com>
Source record: 20605
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

"dgleeson422111" <dgleeson3@eircom.net> wrote in message
news:159dee31-5436-4f46-ae9d-48214eec09ca@k37g2000hsf.googlegroups.com...
Hello All

We have a propagation issue that is confusing us. We have two 868MHz
modules on test, each capable of 500mW transmission.

We are testing to find the range of communication. We are testing them
as follows. One remains in our office while the other is taken to the
street outside. we are communicating charecter strings such as "Im at
the lamp post number 1" etc. There is somebody at each end sending
text strings in a continuous conversation. There is no protocol, error
checking or error recovery.

What we have repetadly found is that the radio in the office can
receive long after the radio in the street has stopped receiving. (The
person with the radio in the street is moving away from the office.)

The radios are the same and the power supplies to the radios are the
same. Indeed switching the radios gives the same effect.

The propagation paths between the two radios are the same in terms of
distance. However the radio signal transmitted from the office travels
through walls first before then traveling through open space. Its the
opposite for the radio in the street, firstly traveling through space
and then through the walls in the office.

We did think we had identified an interfeering source in one direction
(when moving away from the office) so we started moving in the
opposite direction. We found exactly the same effect.

Are we getting interfeerance from GSM, ISM or Paging?

As far as GSM bands go in Europe 890&#65533;915 MHz OR 1710&#65533;1785 MHz So these
shouldnt be our problem.

ISM is where we intend to operate and the greatest band occupancy
should be 10%. So we should get communication even though we would get
some interfeerance.

Paging - well this has very much gone out of fashion in Europe. But
even if it was the cause then wouldnt it be intermittant
communication. We have a constant problem.

Can anyone shed light on this phenomonon? Is it an issue of wireless
propagation that Im not familiar with or is it Interfeerance?

Best regards, and thanks for any input.

Denis

---
http://www.CentronSolutions.com

its interesting that a commercial company would bring a problem such as this to a bunch of amateur radio operators... true some of the amateurs may be professional engineers, but the remainder are not! I guess that in today's market place we try to gain information on the dirt and cheap way.

3882. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 00:14:27 UTC
From: RFI-EMI-GUY <Rhyolite@NETTALLY.COM>
Message-ID: <4903b656$0$4918$9a6e19ea@unlimited.newshosting.com>
Source record: 20606
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

dgleeson422111 wrote:
> Hello All
>
> We have a propagation issue that is confusing us. We have two 868MHz
> modules on test, each capable of 500mW transmission.
>
> We are testing to find the range of communication. We are testing them
> as follows. One remains in our office while the other is taken to the
> street outside. we are communicating charecter strings such as "Im at
> the lamp post number 1" etc. There is somebody at each end sending
> text strings in a continuous conversation. There is no protocol, error
> checking or error recovery.
>
> What we have repetadly found is that the radio in the office can
> receive long after the radio in the street has stopped receiving. (The
> person with the radio in the street is moving away from the office.)
>
> The radios are the same and the power supplies to the radios are the
> same. Indeed switching the radios gives the same effect.
>
> The propagation paths between the two radios are the same in terms of
> distance. However the radio signal transmitted from the office travels
> through walls first before then traveling through open space. Its the
> opposite for the radio in the street, firstly traveling through space
> and then through the walls in the office.
>
> We did think we had identified an interfeering source in one direction
> (when moving away from the office) so we started moving in the
> opposite direction. We found exactly the same effect.
>
> Are we getting interfeerance from GSM, ISM or Paging?
>
> As far as GSM bands go in Europe 890ï¿½915 MHz OR 1710ï¿½1785 MHz So these
> shouldnt be our problem.
>
> ISM is where we intend to operate and the greatest band occupancy
> should be 10%. So we should get communication even though we would get
> some interfeerance.
>
> Paging - well this has very much gone out of fashion in Europe. But
> even if it was the cause then wouldnt it be intermittant
> communication. We have a constant problem.
>

> Can anyone shed light on this phenomonon? Is it an issue of wireless
> propagation that Im not familiar with or is it Interfeerance?
>
> Best regards, and thanks for any input.
>
> Denis
> _____________________
> http://www.CentronSolutions.com

What is the modulation type and data rate? Could be a delay spread issue. Maybe the outside unit is receiving a reflected signal from the surface of a nearby structure and is experiencing inter-symbol interference that by chance the base unit is shielded from. This would occur only if a high symbol rate was being used.

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

3883. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 00:21:28 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <hKOMk.4404$as4.2658@nlpi069.nbdc.sbc.com>
Source record: 20607
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

W3CQH wrote:

[...]

> its interesting that a commercial company would bring a problem such as this
> to a bunch of amateur radio operators... true some of the amateurs may be
> professional engineers, but the remainder are not! I guess that in today's
> market place we try to gain information on the dirt and cheap way.
>

Nah, that's ok. Every one of us occasionally runs into an unusual
situation. Then one can either stew on it for days without getting to
the ground of it, or ask. IMHO it is a sign of maturity if somebody has
the guts to say "Hey, guys, this problem here really has us puzzled".

That is especially true for EMI cases and this sure looks like one.
Sometimes a brief hint by someone who has been in the trenches for
decades can get things going again. And most older ham radio operators
had that exposure, fixing the neighbor's electronics because their
manufacturers messed up.

--
Regards, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

3884. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 01:10:26 UTC
From: Bob <biascomms@invalid.inv>
Message-ID: <6mhuceFgoaqdU1@mid.individual.net>
Source record: 20608
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

Tio Pedro wrote:

> I agree. But, one thing that should be proven is that both modules
> are working as intended. The one being used for the remote
> application *could* be defective. Swap modules and see if the
> receiving problem also switches locations, or remains the
> same.

The OP said that he did that, and the problem remained. It's certainly a desensing problem due to local interference at one end. That's the only possible cause.

3885. Re: Antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 02:24:08 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9B42E3FD6CEDDmcoslocomcastnet@216.196.97.136>
Source record: 20609

"R. Fry" <rfry@adams.net> wrote in news:gdt5jt$5ci$1@aioe.org:

> "Michael Coslo"
>> I'm still left with the increased bandwidth phenomenon. None of the
>> above would seem to account for this.
> ____________
>
> The reactance of a conductor with a relatively large cross-section
> changes slower with a change in frequency than one having a small
> cross-section.
>
> Therefore its impedance bandwidth remains below a given limit over a
> greater frequency span than one of a smaller cross-section.

I understand all that. I am however getting the feeling that we don't understand just "why" that happens.

- 73 d eMike N3LI -

3886. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 03:00:45 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B42CB966C9D8Huckleberrybigvalley@198.186.192.196>
Source record: 20610

>
> As an example of sound traveling underground, here in the
> battleground state of PA, there are a lot of places where there are
> streams underground. A tiny trickle of water can be heard even by my
> bad ears, several feet underground.

One little thing in my situation, we're about 1/3 mile away from the
Pacific North West Ocean surf and believe me, it is genearlly quite
loud.... enough to preclude hearing delicate sounds in the soil at times.
It took a relatively quiet day just to hear the fish tape rattling.

Ed :^)

3887. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 10:19:38 UTC
From: ml <m@di.net>
Message-ID: <m-59381A.06193826102008@news.optonline.net>
Source record: 20611
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

In article <4903b656$0$4918$9a6e19ea@unlimited.newshosting.com>,
RFI-EMI-GUY <Rhyolite@NETTALLY.COM> wrote:

> dgleeson422111 wrote:
> > Hello All
> >
> > We have a propagation issue that is confusing us. We have two 868MHz
> > modules on test, each capable of 500mW transmission.
> >
> > We are testing to find the range of communication. We are testing them
> > as follows. One remains in our office while the other is taken to the
> > street outside. we are communicating charecter strings such as "Im at
> > the lamp post number 1" etc. There is somebody at each end sending
> > text strings in a continuous conversation. There is no protocol, error
> > checking or error recovery.
> >
> > What we have repetadly found is that the radio in the office can
> > receive long after the radio in the street has stopped receiving. (The
> > person with the radio in the street is moving away from the office.)
> >
> > The radios are the same and the power supplies to the radios are the
> > same. Indeed switching the radios gives the same effect.
> >
> > The propagation paths between the two radios are the same in terms of
> > distance. However the radio signal transmitted from the office travels
> > through walls first before then traveling through open space. Its the
> > opposite for the radio in the street, firstly traveling through space
> > and then through the walls in the office.
> >
> > We did think we had identified an interfeering source in one direction
> > (when moving away from the office) so we started moving in the
> > opposite direction. We found exactly the same effect.
> >
> > Are we getting interfeerance from GSM, ISM or Paging?
> >
> > As far as GSM bands go in Europe 890 915 MHz OR 1710 1785 MHz So these
> > shouldnt be our problem.
> >
> > ISM is where we intend to operate and the greatest band occupancy
> > should be 10%. So we should get communication even though we would get
> > some interfeerance.
> >
> > Paging - well this has very much gone out of fashion in Europe. But

> > even if it was the cause then wouldnt it be intermittant
> > communication. We have a constant problem.
> >
> > Can anyone shed light on this phenomonon? Is it an issue of wireless
> > propagation that Im not familiar with or is it Interfeerance?
> >
> > Best regards, and thanks for any input.
> >
> > Denis
> > _____
> > http://www.CentronSolutions.com
>
> What is the modulation type and data rate? Could be a delay spread
> issue. Maybe the outside unit is receiving a reflected signal from the
> surface of a nearby structure and is experiencing inter-symbol
> interference that by chance the base unit is shielded from. This would
> occur only if a high symbol rate was being used.

what type of amateur radio application is this for? Or is it a commercial application posted in this amateur radio group? just wondering

3888. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 10:24:24 UTC
From: ml <m@di.net>
Message-ID: <m-668BCB.06242426102008@news.optonline.net>
Source record: 20612

In article
<07bed116-f5c8-466d-8c05-baf681640489@k30g2000hse.googlegroups.com>,
ltdoc@yahoo.com wrote:

> > Because it would require only one external switch, be useful on random
> > lengths of antenna, probably a few more I could think of if I didnt
> > have to get to work.
> >
> > Jimmie
> ---
>
> Good reason. How many variations of feed line length can you have?
> Enough to handle all the frequencies you might want to use? Possible,
> but that's a lot of switches/switching. Oh well, a tuner just seems
> simpler.
> I gotta do that 'four letter word' too...
> - 'Doc

i'd suggest contacting the manufacture and describe your situation
and ask what the range is

I saw a LDG tuner i was looking at had a 10:1 the ones in my
rigs claim up to 3:1

3889. Re: Automatic tuner range

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 15:49:25 UTC
From: JB <nospam@goofball.net>
Message-ID: <9k0Nk.485$225.248@nwrddc02.gnilink.net>
Source record: 20613

> i'd suggest contacting the manufacture and describe your situation
> and ask what the range is
>
> I saw a LDG tuner i was looking at had a 10:1 the ones in my
> rigs claim up to 3:1

Internal tuners are limited by size.
My LDG and MFJ 949 do have much greater range than my internal tuner.

I consider the internal tuners to be a convenience for use on fairly well matched antennas. Many serious multiband antennas requiring a tuner benefit from a remote tuner to keep coax losses at bay and disable the internal tuner. I built the LDG 11 kit (no longer available) into an ammo can for automatic remote tuning. I hear the price on the current production remote box is still decent.

Even great big wide range manual tuners can get stumped by impossible matches. Those that seem to be able to, risk arcing or burning components.

3890. shownatovah day 142 lawsuit watch is still MIA as of course it must be since you can't sue anyoone for doing what the laws requires OTOH to sue you still have to give your real names and that you dare not do for fear for what will hapen in return that is ok because your fame as Kooks is slowly spreading accorss the net I guess you like being seem as kooky and impotent, personaly i would not care that but enjoy fellows, it is clear howver that I am the very center of your life and to sue youfor false accusation you must be the target of them meaning allegedly only k3vr and w4nti are able to sue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 17:54:09 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <da08757e-ef1b-47af-a6b4-fed405df29c6@d45g2000hsc.googlegroups.com>
Source record: 20614
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

```
On Oct 5, 2:06 pm, "kb9rq...@hotmail.com" <kb9rq...@hotmail.com>
wrote:
> On Oct 1, 5:35 pm, an old friend <kb9...@hotmail.com> wrote:
>
>
>
> > On Sep 29, 3:13 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:> "
>
> > fake- Hide quoted text -
>
> - Show quoted text -
```

3891. Re: shownatovah day 142 lawsuit watch is still MIA as of course it must be since you can't sue anyoone for doing what the laws requires OTOH to sue you still have to give your real names and that you dare not do for fear for what will hapen in return that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-26 18:11:58 UTC
From: Channel Cop <nedrog@yahoo.com>
Message-ID: <ncudnafUzvZyL5nUnZ2dnUVZ_hSdnZ2d@comcast.com>
Source record: 20615
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

"an old friend" <kb9rqz@hotmail.com> wrote in message
news:da08757e-ef1b-47af-a6b4-fed405df29c6@d45g2000hsc.googlegroups.com...
On Oct 5, 2:06 pm, "kb9rq...@hotmail.com" <kb9rq...@hotmail.com>
wrote:
> On Oct 1, 5:35 pm, an old friend <kb9...@hotmail.com> wrote:
>
>
>
> > On Sep 29, 3:13 pm, "N8WWM" <mrbindw...@n8wwm.com> wrote:> "
>
> > fake- Hide quoted text -
>
> - Show quoted text -

AHHHHHHHHH ! KB9RQZ FROM WHERE-EVER YOU POST - GONE FOREVER IN THE TRAH
CAN

3892. eBay: neat Henry Bird Linear SWR Meter Panel

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-27 21:34:15 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <rtqNk.6132$be.2144@nlpi061.nbdc.sbc.com>
Source record: 20616

http://search.ebay.com/_W0QQsassZwd5jfrQQfrppZ50QQfsopZ32QQfsooZ2QQrdZ0

3893. Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 02:32:02 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <49067994$0$90342$8046368a@newsreader.iphouse.net>
Source record: 20617

Short note.

Worrisome symptoms.

White count normal.

CT Scan tomorrow.

Everyone needs perspective.

tom
K0TAR

3894. Re: Locating underground conduit

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 10:04:21 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <fhodg4tj02c3jrpblegamr4hq30bhihikb@4ax.com>
Source record: 20618

On Wed, 22 Oct 2008 11:07:22 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>JosephKK wrote:
>> On Tue, 21 Oct 2008 15:38:46 -0700, Jeff Liebermann <jeffl@cruzio.com>
>> wrote:
>>
>>> On Tue, 21 Oct 2008 13:22:33 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
>>> wrote:
>>>
>>>> Jeff Liebermann wrote:
>>>>> To bring things back to ham radio antennas, we had a Motorola
>>>>> Breakie-Backie "portable" radio in the float on 2 meters.
>>>> It's a challenge to put antennas on floats and meet the TORC
>>>> requirements for only vegetable matter to be exposed. We got a special
>>>> dispensation for our 23cm ATV from the JPL float.
>>>>
>>>> http://www.luxfamily.com/events/rose2005/roseatv.htm
>>> Things sure have changed in 40 years.
>>>
>>> Nicely done float. How tall is it? We had stability problems with
>>> some of the floats. The parade route was fine, but entering Victory
>>> Park at the end was tricky. One year, some of the floats almost
>>> tipped over.
>
>Don't recall how tall it was, but it laid back down to get under the
>overpass at the end of the route. It was built by professional float
>builders (Phoenix)
>http://floatcam.caltech.edu/ has a link to video clips during
>construction, etc.
>
>>
>> 70 & 71? Maybe you met Dave Steinfeld of TORRA . I worked with him
>> for some years back in the day (80's).
>
>Would that be WA6ZVE? He works in the RF Cal lab here at JPL.
>>

That call sign sounds right. The home / station address matches the
lookup to my address book. That is a good enough match for me.

3895. WWII Direction Finder Fix

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 15:18:33 UTC
From: Jay in the Mojave <Jay123a@qnet.com>
Message-ID: <6MqdnfpmDP3TsJrUnZ2dnUVZ_jadnZ2d@posted.quantumnetworking>
Source record: 20619

Hello All:

I believe there was a posting here or maybe even in QST that talked about problems with Radio Direction Finders in aircraft and ships before WWII time frame. And the fix to repair them so that the Radio Direction Finders (RDF) did not point 180 degree's the wrong direction.

I am researching information on the WWII Aviation Rescue Boats, (AVR's) 83 and 104 Ft long, Boats used by the US Army during WWII.

I spent 5 years on a 104 AVR Boat, converted into a Commercial Fishing Boat for Albacore Tuna from 1966 to 1970 as a teen ager.

Any information would be greatly appreciated. Thanks.

Here's a link that shows some of the AVR Boats and spec's.
http://www.warboats.org/crashboat.htm

Jay

3896. Re: WWII Direction Finder Fix

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 16:55:55 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <lrfeg4h64octbku0f64pi66qsj1m0vjid9@4ax.com>
Source record: 20620

On Tue, 28 Oct 2008 08:18:33 -0700, Jay in the Mojave
<Jay123a@qnet.com> wrote:

>I believe there was a posting here or maybe even in QST that talked
>about problems with Radio Direction Finders in aircraft and ships before
>WWII time frame. And the fix to repair them so that the Radio Direction
>Finders (RDF) did not point 180 degree's the wrong direction.

Which one?
<http://www.angelfire.com/space/proto57/rdf.html>

Search Google for "sense antenna". This is a 2nd antenna that is used
in conjunction with a loop or Adcock type antenna to skew the pattern
on one direction, thus eliminating the 180 degree ambiguity.
<http://books.google.com/books?id=RfzF2-fHJ6MC&pg=PA237&lpg=PA237&dq=df+sense+antenna&sour
ce=web&ots=OrVQdNKmQ-&sig=lF5RRtEjOoyQ22OPvMEFx3Ljrzg&hl=en&sa=X&oi=book_result&resnum=3&c
t=result>
<http://books.google.com/books?id=f3asJreno0YC&pg=PA446&lpg=PA446&dq=rdf+loop+sense+antenn
a&source=bl&ots=068u54gGNR&sig=3R4XkY8aRiOWMv_cWhCRU94s0JQ&hl=en&sa=X&oi=book_result&resnu
m=1&ct=result#PPA447,M1>

Incidentally, much of the pre-WWII DF work was done from fixed
direction finding stations. A pilot would request location info via
HF radio. Several ground stations would do their best to deliver a
bearing using various types of antennas, with which the pilot would
use to calculate an intersecting position. Gross and inefficient
would be a nice term.

Somewhat later, the "homer" was introduced. This was two wing mounted
forward facing directional antennas. The receiver would rapidly
switch between the two antennas. When the signal level from both
antennas was identical, the transmitter direction was dead ahead. This
worked fairly well, but did create problems for airline passengers as
the pilot flew donuts trying to get a brearing.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3897. Re: Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 17:08:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <5286dca8-e4ab-404f-9841-c572915c1b49@c22g2000prc.googlegroups.com>
Source record: 20621

On Oct 27, 9:32 pm, Tom Ring <news0...@taring.org> wrote:
> Short note.
>
> Worrisome symptoms.
>
> White count normal.
>
> CT Scan tomorrow.
>
> Everyone needs perspective.
>
> tom
> K0TAR

I know where you are coming from Tom, you never know what tomorrow
brings.

I wish you well
Art

3898. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 18:20:22 UTC
From: Radio_Dick <rspost@mail.com>
Message-ID: <3103a4b3-9e42-445f-9c4e-0f26997fd19c@x16g2000prn.googlegroups.com>
Source record: 20622
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

On Oct 24, 5:14 am, dgleeson422111 <dglees...@eircom.net> wrote:
> Hello All
>
> We have a propagation issue that is confusing us. We have two 868MHz
> modules on test, each capable of 500mW transmission.
>
> We are testing to find the range of communication. We are testing them
> as follows. One remains in our office while the other is taken to the
> street outside. we are communicating charecter strings such as "Im at
> the lamp post number 1" etc. There is somebody at each end sending
> text strings in a continuous conversation. There is no protocol, error
> checking or error recovery.
>
> What we have repetadly found is that the radio in the office can
> receive long after the radio in the street has stopped receiving. (The
> person with the radio in the street is moving away from the office.)
>
> The radios are the same and the power supplies to the radios are the
> same. Indeed switching the radios gives the same effect.
>
> The propagation paths between the two radios are the same in terms of
> distance. However the radio signal transmitted from the office travels
> through walls first before then traveling through open space. Its the
> opposite for the radio in the street, firstly traveling through space
> and then through the walls in the office.
>
> We did think we had identified an interfeering source in one direction
> (when moving away from the office) so we started moving in the
> opposite direction. We found exactly the same effect.
>
> Are we getting interfeerance from GSM, ISM or Paging?
>
> As far as GSM bands go in Europe 890–915 MHz OR 1710–1785 MHz So these
> shouldnt be our problem.
>
> ISM is where we intend to operate and the greatest band occupancy
> should be 10%. So we should get communication even though we would get
> some interfeerance.
>
> Paging - well this has very much gone out of fashion in Europe. But
> even if it was the cause then wouldnt it be intermittant
> communication. We have a constant problem.
>

> Can anyone shed light on this phenomonon? Is it an issue of wireless
> propagation that Im not familiar with or is it Interfeerance?
>
> Best regards, and thanks for any input.
>
> Denis
> _____http://www.CentronSolutions.com

Denis,

I agree with some of your previous posts - the outside receiver is likely being desensed by a strong signal, perhaps away from or a harmonic of the frequency you're using. I suggest trying the test away from town and at least 10km from strong transmitting towers. Let us know what you find out - may help those of us who do UHF/VHF mobile/ portable hamming.

As a ham I have NOT PROBLEM with the commercial community asking questions on a ham radio group - we can ALL learn from this.

Cheers,

Dick Post, N7EMW
www.repdesign.us

3899. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 19:19:44 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <8a181d97-fbfc-450b-9944-2822ae4f203b@n33g2000pri.googlegroups.com>
Source record: 20623
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

>
> What is the modulation type and data rate? Could be a delay spread
> issue. Maybe the outside unit is receiving a reflected signal from the
> surface of a nearby structure and is experiencing inter-symbol
> interference that by chance the base unit is shielded from. This would
> occur only if a high symbol rate was being used.
>
>

i was thinking about that...but no....

all the multi-path paths are reciprocal as well,,, so whatever the
delay spread is one way should be the same the other way.

Mark

3900. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 19:21:41 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <jeydnam0_4ai-5rUnZ2dnUVZ_vednZ2d@comcast.com>
Source record: 20624
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

"Radio_Dick" <rspost@mail.com> wrote in message
news:3103a4b3-9e42-445f-9c4e-0f26997fd19c@x16g2000prn.googlegroups.com...
On Oct 24, 5:14 am, dgleeson422111 <dglees...@eircom.net> wrote:
> Hello All
>
> We have a propagation issue that is confusing us. We have two 868MHz
> modules on test, each capable of 500mW transmission.
>
> We are testing to find the range of communication. We are testing them
> as follows. One remains in our office while the other is taken to the
> street outside. we are communicating charecter strings such as "Im at
> the lamp post number 1" etc. There is somebody at each end sending
> text strings in a continuous conversation. There is no protocol, error
> checking or error recovery.
>
> What we have repetadly found is that the radio in the office can
> receive long after the radio in the street has stopped receiving. (The
> person with the radio in the street is moving away from the office.)
>
> The radios are the same and the power supplies to the radios are the
> same. Indeed switching the radios gives the same effect.
>
> The propagation paths between the two radios are the same in terms of
> distance. However the radio signal transmitted from the office travels
> through walls first before then traveling through open space. Its the
> opposite for the radio in the street, firstly traveling through space
> and then through the walls in the office.
>
> We did think we had identified an interfeering source in one direction
> (when moving away from the office) so we started moving in the
> opposite direction. We found exactly the same effect.
>
> Are we getting interfeerance from GSM, ISM or Paging?
>
> As far as GSM bands go in Europe 890ï¿½915 MHz OR 1710ï¿½1785 MHz So these
> shouldnt be our problem.
>
> ISM is where we intend to operate and the greatest band occupancy
> should be 10%. So we should get communication even though we would get
> some interfeerance.
>
> Paging - well this has very much gone out of fashion in Europe. But
> even if it was the cause then wouldnt it be intermittant

> communication. We have a constant problem.
>
> Can anyone shed light on this phenomonon? Is it an issue of wireless
> propagation that Im not familiar with or is it Interfeerance?
>
> Best regards, and thanks for any input.
>
> Denis
> _____http://www.CentronSolutions.com

Denis,

I agree with some of your previous posts - the outside receiver is
likely being desensed by a strong signal, perhaps away from or a
harmonic of the frequency you're using. I suggest trying the test away
from town and at least 10km from strong transmitting towers. Let us
know what you find out - may help those of us who do UHF/VHF mobile/
portable hamming.

As a ham I have NOT PROBLEM with the commercial community asking
questions on a ham radio group - we can ALL learn from this.

Cheers,

Dick Post, N7EMW
www.repdesign.us

****
I don't know why I don't get the > on your response, but whatever.
He can get some feel for what is going on by taking *both* radios outside
near his office, and walking around. He should be able to find a particular
area that has poor reception. I don't buy the explanations for antenna gain
and multipath, they should affect both directions of transmission equally.

Tam

3901. It is spreading all over the internet:KB5URP, Randy Chapman is a convicted crack dealer

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 20:33:55 UTC
From: mopeyzakween@yahoo.com
Message-ID: <575cb7ac-a923-4395-b364-d8ae15bdb017@r36g2000prf.googlegroups.com>
Source record: 20625
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)

PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

3902. fake

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 21:25:45 UTC
From: kb9rqz@yahoo.com
Message-ID: <bq0fg4per95rj3rfu0hml41fc5am15tq4a@4ax.com>
Source record: 20626
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Tue, 28 Oct 2008 13:33:55 -0700 (PDT), mopeyzakween@yahoo.com
wrote:

>Batch Search Summary
>SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS

stalker

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

3903. shownatovah day 144 lawsuit watch is still MIA as of course it must be since you can't sue anyoone for doing what the laws requires OTOH to sue you still have to give your real names and that you dare not do for fear for what will hapen in return that is ok because your fame as Kooks is slowly spreading accorss the net I guess you like being seem as kooky and impotent, personaly i would not care that but enjoy fellows, it is clear howver that I am the very center of your life and to sue youfor false accusation you must be the target of them meaning allegedly only k3vr and w4nti are able to sue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-28 21:27:35 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <a42406f0-82a4-4650-af84-4d79a8279c6b@w39g2000prb.googlegroups.com>
Source record: 20627
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Oct 28, 5:25 pm, kb9...@yahoo.com wrote:
> On Tue, 28 Oct 2008 13:33:55 -0700 (PDT), mopeyzakw...@yahoo.com
> wrote:
>
> >Batch Search Summary
> >SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
>
> stalker
>
> "one useless man is disgrace 2 become a law firm 3 or more become a congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
> altopia is never used by KB9RQZ
> nor is Konst...@hotmail.com ever
> btw i can be found at
> 17366 N River Rd
> Chassel Mi
>
> but the cowards asking lack the gut to act

3904. Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 00:52:46 UTC
From: jawod <jawod@fuse.net>
Message-ID: <da952$4907b3e0$48316a9a$7867@FUSE.NET>
Source record: 20628

Well, as an update to my Carolina Windom project, I find that the CW OCF dipole cut to typical dimensions works well WITHOUT a balun but does not work at all WITH a balun.

Specifically, a DX Engineering BAL200-H10-AT 4:1 balun. I bought it to go with a folded dipole from DX Engineering. It worked fine with the folded dipole and a length 300 Ohm ladder line as feed.

When I use the above balun with the CW cut to typical dimensions and using a 300 ohm ladderline feed, even RECEIVE is muted...no change from coax only.

I am fairly sure that the balun is a voltage type and not a choke type. I also installed a series of ferrite beads from Palomar to choke the coax near the bottom of the ladderline.

I guess I'm not all that surprised that the CW works without a balun...the ATU tunes it and sig reports aren't bad. I guess I have some radiation from coax and a mismatch from coax to ladderline but I think I can live with that. It's getting cold and I needed to finish this thing before winter really sets in.

I am clueless as to why the CW failed to work AT ALL when USING a balun. The internals of the balun look fine.

Any thoughts?

(here goes)

John
AB8O

3905. Re: shownatova but stil it is day 118 of the lawsuit watch but the suit is STILL MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 01:01:28 UTC
From: Hoop Dee Doo <konstaan@hotmail.com>
Message-ID: <5a63475d-45f2-4447-88c5-d2a79d39b1c7@b1g2000hsg.googlegroups.com>
Source record: 20629
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Oct 2, 5:34 pm, an old freind <kb9rq...@hotmail.com> wrote:
> On Oct 1, 9:01 pm, "Channel Cop" <ned...@yahoo.com> wrote:
>
> > Its interesting that you answer yourself and call your self "FAKE"!
>
> why tell these lies spamer

shoveanovaupyourass day 3262 of watching a UP retard because his brain is still MIA as of course it must be since you can't act so wacked and stupid, and actual believe that the law enfocement requires you to report anybody you can think of for an alleged pander note that everyone knows you created and sent to yourself, OTOH nobody wants to sue because we would have to give our real names and we don't dare do that because the UP kook Mark will lie and falsely report us too, but in the long run nothing will happen in return as law enforcement is well informed that the UP fool is mentally unstable, that is ok because the kooks fame as a total flake is slowly spreading across the net and in his area, I guess he likes getting banned from web sites and being ejected from ham clubs and is seen as total obtuse impotent buffoon, personally we do not care, but we do enjoy the laughs from the never ending rant, nevertheless it is clear however that the UP kook has no life, except to victimize his own wife by dragging her down socially in the process. Shalom!

3906. shoveanovaupyourass day 3262 of watching a UP retard because his brain is still MIA as of course it must be since you can't act so wacked and stupid, and actual believe that the law enfocement requires you to report anybody you can think of for an alleged pander note that everyone knows you created and sent to yourself, OTOH nobody wants to sue because we would have to give our real names and we don't dare do that because the UP kook Mark will lie and falsely report us too, but in the long run nothing will happen in return as law enforcement is well informed that the UP fool is mentally unstable, that is ok because the kooks fame as a total flake is slowly spreading across the net and in his area, I guess he likes getting banned from web sites and being ejected from ham clubs and is seen as total obtuse impotent buffoon, personally we do not care, but we do enjoy the laughs from the never ending rant, nevertheless it is clear however that the UP kook has no life, except to victimize his own wife by dragging her down socially in the process. Shalom!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 01:01:43 UTC
From: Hoop Dee Doo <konstaan@hotmail.com>
Message-ID: <98c97c37-df46-4982-9808-b72bd9392b37@f77g2000hsf.googlegroups.com>
Source record: 20630
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Oct 2, 5:34 pm, an old freind <kb9rq...@hotmail.com> wrote:
> On Oct 1, 9:01 pm, "Channel Cop" <ned...@yahoo.com> wrote:
>
> > Its interesting that you answer yourself and call your self "FAKE"!
>
> why tell these lies spamer

3907. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 01:14:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ge8de6$6qf$1@news.albasani.net>
Source record: 20631
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

dgleeson422111 wrote:

>> ...
> Best regards, and thanks for any input.
>
> Denis
> _____________________
> http://www.CentronSolutions.com

Since most of the posts, in their "EXPERT OPINIONS", relate to your receiver being "de-sensed", do you have a way of negating/affirming this?

Begin there, and we can get down to "real problems!" :-) i.e., a wide-band field strength meter, freq counter, etc. will either make all this "right" or "wrong."

Regards,
JS

3908. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 01:16:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ge8dhf$6qf$2@news.albasani.net>
Source record: 20632
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

John Smith wrote:

> ...
> Regards,
> JS

And, I should have included, beg one, buy one, borrow one, steal one,
etc. ...

Regards,
JS

3909. Re: Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 02:21:12 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <vMPNk.25902$Tx1.25839@newsfe19.iad>
Source record: 20633

I wish you the best, Tom!!

Walt,W2DU

"Tom Ring" <news0004@taring.org> wrote in message
news:49067994$0$90342$8046368a@newsreader.iphouse.net...
> Short note.
>
> Worrisome symptoms.
>
> White count normal.
>
> CT Scan tomorrow.
>
> Everyone needs perspective.
>
> tom
> K0TAR

3910. new theme Lawsuit countdown 34 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 02:23:09 UTC
From: an old freind <kb9rqz-2@hotmail.com>
Message-ID: <8896320c-d49f-46df-8894-c8b7aa1e0ee1@t65g2000hsf.googlegroups.com>
Source record: 20634
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Oct 28, 9:01 pm, Hoop Dee Doo <konst...@hotmail.com> wrote:
>
fake

3911. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 05:24:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ge8s1imbu1@news.albasani.net>
Source record: 20635

jawod wrote:
> Well, as an update to my Carolina Windom project, I find that the CW OCF
> dipole cut to typical dimensions works well WITHOUT a balun but does not
> work at all WITH a balun.
>
> Specifically, a DX Engineering BAL200-H10-AT 4:1 balun. I bought it to
> go with a folded dipole from DX Engineering. It worked fine with the
> folded dipole and a length 300 Ohm ladder line as feed.
>
> When I use the above balun with the CW cut to typical dimensions and
> using a 300 ohm ladderline feed, even RECEIVE is muted...no change from
> coax only.
>
> I am fairly sure that the balun is a voltage type and not a choke type.
> I also installed a series of ferrite beads from Palomar to choke the
> coax near the bottom of the ladderline.
>
> I guess I'm not all that surprised that the CW works without a
> balun...the ATU tunes it and sig reports aren't bad. I guess I have
> some radiation from coax and a mismatch from coax to ladderline but I
> think I can live with that. It's getting cold and I needed to finish
> this thing before winter really sets in.
>
> I am clueless as to why the CW failed to work AT ALL when USING a balun.
> The internals of the balun look fine.
>
> Any thoughts?
>
> (here goes)
>
> John
> AB8O

Hmmm ...

Cecil is the first one to even get me to try an OCF antenna! I thought I like my life "balanced"; now, I find, I can go though live "unbalanced" and "off center." <grin>

However, the 300 ohm line you are using IS balanced. So, I am assuming you have a 50 ohm UNBALNCED output from your rig OR PA, and this is where you would insert the 4:1 (6:1 would be better), and that you have inserted it there, right? Properly, directly at the rigs output, to engage the 300 ohm line, right? (i.e., between the rigs 50 ohm UNBALANCED out and the 300 ohm balanced line?)

If you have it there, and did not notice an improvement, or at least no change, we have another problem--apparently ...

Warm regards,
JS

3912. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 05:25:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ge8s3ombu2@news.albasani.net>
Source record: 20636

jawod wrote:
> Well, as an update to my Carolina Windom project, I find that the CW OCF
> dipole cut to typical dimensions works well WITHOUT a balun but does not
> work at all WITH a balun.
>
> Specifically, a DX Engineering BAL200-H10-AT 4:1 balun. I bought it to
> go with a folded dipole from DX Engineering. It worked fine with the
> folded dipole and a length 300 Ohm ladder line as feed.
>
> When I use the above balun with the CW cut to typical dimensions and
> using a 300 ohm ladderline feed, even RECEIVE is muted...no change from
> coax only.
>
> I am fairly sure that the balun is a voltage type and not a choke type.
> I also installed a series of ferrite beads from Palomar to choke the
> coax near the bottom of the ladderline.
>
> I guess I'm not all that surprised that the CW works without a
> balun...the ATU tunes it and sig reports aren't bad. I guess I have
> some radiation from coax and a mismatch from coax to ladderline but I
> think I can live with that. It's getting cold and I needed to finish
> this thing before winter really sets in.
>
> I am clueless as to why the CW failed to work AT ALL when USING a balun.
> The internals of the balun look fine.
>
> Any thoughts?
>
> (here goes)
>
> John
> AB8O

Hmmm ...

Cecil is the first one to even get me to try an OCF antenna! I thought I like my life "balanced"; now, I find, I can go though life "unbalanced" and "off center." <grin>

However, the 300 ohm line you are using IS balanced. So, I am assuming you have a 50 ohm UNBALNCED output from your rig OR PA, and this is where you would insert the 4:1 (6:1 would be better), and that you have inserted it there, right? Properly, directly at the rigs output, to engage the 300 ohm line, right? (i.e., between the rigs 50 ohm UNBALANCED out and the 300 ohm balanced line?)

If you have it there, and did not notice an improvement, or at least no change, we have another problem--apparently ...

Warm regards,
JS

3913. Re: Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 05:31:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ge8ses$n11$1@news.albasani.net>
Source record: 20637

Tom Ring wrote:
> Short note.
>
> Worrisome symptoms.
>
> White count normal.
>
> CT Scan tomorrow.
>
> Everyone needs perspective.
>
> tom
> K0TAR

At first, I didn't realize the severity and reality of your post.
Please excuse my ignorance; at first I was looking for a "punch line."

I shall say a prayer, the wife too. We shall bring your matter before
my spiritual group; I only wish you the best, and will attempt to
invoke whatever powers may assist.

Good wishes from both me and the XYL and any powers we may be successful
in bringing to bear ...

Warmest regards possible,
JS

3914. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 05:42:45 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B46AA02E3EF6nonenowhere@61.9.191.5>
Source record: 20638

jawod <jawod@fuse.net> wrote in
news:da952$4907b3e0$48316a9a$7867@FUSE.NET:

> Well, as an update to my Carolina Windom project, I find that the CW
> OCF dipole cut to typical dimensions works well WITHOUT a balun but
> does not work at all WITH a balun.
>
> Specifically, a DX Engineering BAL200-H10-AT 4:1 balun. I bought it
> to go with a folded dipole from DX Engineering. It worked fine with
> the folded dipole and a length 300 Ohm ladder line as feed.
>
> When I use the above balun with the CW cut to typical dimensions and
> using a 300 ohm ladderline feed, even RECEIVE is muted...no change
> from coax only.
>
> I am fairly sure that the balun is a voltage type and not a choke
> type. I also installed a series of ferrite beads from Palomar to choke
> the coax near the bottom of the ladderline.
>
> I guess I'm not all that surprised that the CW works without a
> balun...the ATU tunes it and sig reports aren't bad. I guess I have
> some radiation from coax and a mismatch from coax to ladderline but I
> think I can live with that. It's getting cold and I needed to finish
> this thing before winter really sets in.
>
> I am clueless as to why the CW failed to work AT ALL when USING a
> balun. The internals of the balun look fine.
>
> Any thoughts?
>

1. Doesn't the manufacturer of Carolina Windom's claim one of the
benefits is feed line radiation? (If you can't suppress it, call it out
as a competetive advantage?)

2. DX Engineering are a bit light on info on the balun, like most
manufacturers I guess... but the title bar of the web page says it is a
current balun. Pity the technical details tab doesn't make it clear.

3. If the design is intended to excite feed line common mode current,
then the device at the top of the feed line is probably a 4:1 Ruthroff
balun which has very low common mode impedance (differently to an
effective current balun).

4. What has 300 ohm line got to do with the Carolina Windom?

Owen

3915. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 05:46:49 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <--SdnWQYjp1VZZrUnZ2dnUVZ_sPinZ2d@giganews.com>
Source record: 20639
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ge8de6$6qf$1@news.albasani.net...
> dgleeson422111 wrote:
>
> >> ...
>> Best regards, and thanks for any input.
>>
>> Denis
>> _____________________
>> http://www.CentronSolutions.com
>
> Since most of the posts, in their "EXPERT OPINIONS", relate to your
> receiver being "de-sensed", do you have a way of negating/affirming this?
>

Desense is definately a possibility, but I still believe that it's at least
AS good a chance that it's a standing wave issue on the office end. Others
have said to take the 'office' radio outdoors and test the setup that way.
That's a good (and simple) test.

3916. HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 05:56:22 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <aWSNk.9279$sc2.327@news-server.bigpond.net.au>
Source record: 20640

Some time ago I wrote to Hygain:

Sir,
Our Ham Radio Club owns 2 Hygain 18-AVT vertical antennas.
We are after 2 sets of black plastic shields which fit between the vertical alloy tubing and the outer cover of the traps,
Can you supply them to us?

Harry

Hygain wrote back:

Sir,
The only parts available are tubing pieces.
Thanks,
Jim Shurden
Hygain Customer Service

Question is, what can I use as a substitute, I have tried truck wheel cylinder boots, but the carbon in them upsets the apple cart.

Many thanks
Harry

3917. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 06:17:14 UTC
From: ltdoc@yahoo.com
Message-ID: <39b62764-e2fe-4c5f-9349-ebb6e398d209@u28g2000hsc.googlegroups.com>
Source record: 20641

Harry,
The first thing that comes to mind is an appropriately sized 'heat-shrink' type tubing. Of course, that assumes that you can find such an 'appropriate' size and that it will 'shrink' enough. I have no idea if there is such a size or not.
Another one of those 'off the wall' ideas is to use the stuff that's used in casting small parts in the R/C model hobby. It's a 'rubber-ish' kind of stuff molded/painted around the part, then pealed off when cured and used as a mold for a new part. Don't ask me, I have no idea what it is. No metal content that I'm aware of.
And then, I guess you could always fiberglass it?
- 'Doc

3918. Re: Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 06:35:56 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <wsTNk.53550$kh2.23643@bignews3.bellsouth.net>
Source record: 20642

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ge8ses$n11$1@news.albasani.net...
> Tom Ring wrote:
>> Short note.
>>
>> Worrisome symptoms.
>>
>> White count normal.
>>
>> CT Scan tomorrow.
>>
>> Everyone needs perspective.
>>
>> tom
>> K0TAR
>
> At first, I didn't realize the severity and reality of your post. Please
> excuse my ignorance; at first I was looking for a "punch line."
>
> I shall say a prayer, the wife too. We shall bring your matter before my
> spiritual group; I only wish you the best, and will attempt to invoke
> whatever powers may assist.
>
> Good wishes from both me and the XYL and any powers we may be successful
> in bringing to bear ...
>
> Warmest regards possible,
> JS

******

Hang in there. We're praying for you too.

Ed Cregger

3919. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 08:02:54 UTC
From: Bob <biascomms@invalid.inv>
Message-ID: <6mqjltFe8shpU1@mid.individual.net>
Source record: 20643
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

Brenda Ann wrote:

> Desense is definately a possibility, but I still believe that it's at least
> AS good a chance that it's a standing wave issue on the office end. Others
> have said to take the 'office' radio outdoors and test the setup that way.
> That's a good (and simple) test.

I'm /still/ more inclined towards a desense problem - cities are astonishingly noisy these days throughout the RF spectrum. I've recently had 4.9 GHz data transmission problems that were eventually traced to a harmonic of a nearby surveillance TV transmitter!

Bob

3920. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 09:59:31 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <o7bgg41fq19nuqssnp6mk4h4u4kfeuolqt@4ax.com>
Source record: 20644
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.design,rec.radio.amateur.equipment

On Wed, 29 Oct 2008 14:46:49 +0900, "Brenda Ann"
<brendad@shinbiro.com> wrote:

>
>"John Smith" <assemblywizard@gmail.com> wrote in message
>news:ge8de6$6qf$1@news.albasani.net...

>> Since most of the posts, in their "EXPERT OPINIONS", relate to your
>> receiver being "de-sensed", do you have a way of negating/affirming this?

Desense caused by out of band signals if of course possible when we
talk about such toy receivers as most wireless LAN or wireless
headphones are.

However, since the 868 MHz band is a non-licenced band, it is quite
likely that there might be other transmitters (e.g. wireless
headphones) in the area of the moving transmitter, but not near the
office transmitter.

Give a spectrum analyzer to the moving station operator to monitor the
interference level in that frequency band, when the moving transmitter
is off. A scanner receiver with a decent signal strength indicator
might even suffice.

>Desense is definately a possibility, but I still believe that it's at least
>AS good a chance that it's a standing wave issue on the office end.

This is out of the question for any single frequency half duplex
connection, since the path would be reciprocal. In a full duplex dual
frequency point to point system between two _fixed_ station, this
would be definitively possible. Even in this case, moving the other
station by 10-30 cm, you would find a spot, in which there is a good
connections both ways.

Based on my experience at 1297 MHz with a narrow band (16 kHz) signal
in urban environment, you definitively have a lot of multipath nulls
(several nulls every meter), For speech communication, this is not
much of an issue, the faster you move, you have hundreds of nulls
every second and it does not much affect the readability of the
speech. The only problem is that if you stop at a traffic light, you
usually will end up in a multipath null and the communication is
broken, unless you can slide the car a few centimeters.

>Others
>have said to take the 'office' radio outdoors and test the setup that way.
>That's a good (and simple) test.

The OP did swap the radios, but he did not tell if the power supply was also swapped. If the office power supply was faulty and the office transmitter could not deliver the nominal power, this could explain the situation.

Paul

3921. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 10:57:08 UTC
From: Howard K0ACF <howardk0acf@cox.net>
Message-ID: <3kXNk.37273$YN3.19073@newsfe12.iad>
Source record: 20645

I had that problem with a trap beam. I went to a pipe supply & got some end covers that are on pipes when they are shipped. Cut a hole in the middle to fit over the tubing & silicone it on the trap & tubing. Never leaked.
"Harry H" <harryharms@hotmail.com> wrote in message news:aWSNk.9279$sc2.327@news-server.bigpond.net.au...
> Some time ago I wrote to Hygain:
>
> Sir,
> Our Ham Radio Club owns 2 Hygain 18-AVT vertical antennas.
> We are after 2 sets of black plastic shields which fit between the
> vertical alloy tubing and the outer cover of the traps,
> Can you supply them to us?
>
> Harry
>
>
>
> Hygain wrote back:
>
> Sir,
> The only parts available are tubing pieces.
> Thanks,
> Jim Shurden
> Hygain Customer Service
>
> Question is, what can I use as a substitute, I have tried truck wheel
> cylinder boots, but the carbon in them upsets the apple cart.
>
> Many thanks
> Harry
>

3922. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 11:24:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <4HXNk.2428$8_3.887@flpi147.ffdc.sbc.com>
Source record: 20646

jawod wrote:
> I am clueless as to why the CW failed to work AT ALL when USING a balun.
> The internals of the balun look fine. Any thoughts?

1. Baluns are designed for a narrow range of *resistive*
impedances, e.g. 50/200 ohms (plus or minus). Over what
range of impedances are you asking your balun to function
properly? Baluns don't handle massive reactance very well.

2. A misapplication example: 300 ohm twinlead with a 10:1
SWR can take the impedance seen by the balun down to 30 ohms.
Then the 4:1 balun tries to take 30 ohms down to 7.5 ohms.
That's a lossy situation for a tuner.
--
73, Cecil http://www.w5dxp.com

3923. Re: Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 12:11:59 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <490852f9$0$90345$8046368a@newsreader.iphouse.net>
Source record: 20647

Tom Ring wrote:

<snip>

Thanks all.

I sent that during a moment of depression. I should not have.

Anyway so far so good. CAT scans are interesting, except for the dye IV.

On their own symptoms seem to be lessening, so the guess I and the
doctor agree on may be correct. We'll see.

With that, I think the topic can die, being very much not antenna related.

tom
K0TAR

3924. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 15:10:08 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ge9uch$vq8$1@f04n12.cac.psu.edu>
Source record: 20648

jawod wrote:
> Well, as an update to my Carolina Windom project, I find that the CW OCF
> dipole cut to typical dimensions works well WITHOUT a balun but does not
> work at all WITH a balun.
>
> Specifically, a DX Engineering BAL200-H10-AT 4:1 balun. I bought it to
> go with a folded dipole from DX Engineering. It worked fine with the
> folded dipole and a length 300 Ohm ladder line as feed.
>
> When I use the above balun with the CW cut to typical dimensions and
> using a 300 ohm ladderline feed, even RECEIVE is muted...no change from
> coax only.
>
> I am fairly sure that the balun is a voltage type and not a choke type.
> I also installed a series of ferrite beads from Palomar to choke the
> coax near the bottom of the ladderline.
>
> I guess I'm not all that surprised that the CW works without a
> balun...the ATU tunes it and sig reports aren't bad. I guess I have
> some radiation from coax and a mismatch from coax to ladderline but I
> think I can live with that. It's getting cold and I needed to finish
> this thing before winter really sets in.
>
> I am clueless as to why the CW failed to work AT ALL when USING a balun.
> The internals of the balun look fine.

Hey John,

Trying to make sure that we are on the same page here.

You are using a OCF dipole with a 4:1 Balun, and using ladder line to go
from the balun to the shack?

Most of the OCF's I am familiar with run coax from the balun to the shack.

What are the respective leg lengths here? Height? Something is a little
askew here.

- 73 de Mike N3LI -

3925. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 15:14:53 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ge9uld$1jrg$1@f04n12.cac.psu.edu>
Source record: 20649

Owen Duffy wrote:

> 4. What has 300 ohm line got to do with the Carolina Windom?

True enough. I tried an OCF as a way to be able to run coax and have multi band no-tuning and get rid of the window line.

Tried it, it was interresting, and now I'm back to using window line.

- 73 de Mike N3LI -

3926. Re: Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 16:08:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gea1pl$v0r$1@news.albasani.net>
Source record: 20650

Tom Ring wrote:
> Tom Ring wrote:
>
> <snip>
>
> Thanks all.
>
> I sent that during a moment of depression. I should not have.
>

Don't be silly. That is how we human beings operate, a bit spontaneous
at times.

> Anyway so far so good. CAT scans are interesting, except for the dye IV.
>
> On their own symptoms seem to be lessening, so the guess I and the
> doctor agree on may be correct. We'll see.

Thanks for the good news; XYL and I take great pleasure in this "ray of
light."

>
> With that, I think the topic can die, being very much not antenna related.
>
> tom
> K0TAR

As you wish, of course. However, never feel we are uncaring on this
end; that just ain't so! The battle never ends, until YOU say it does ...

Warm regards,
JS

3927. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 16:48:06 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <go0Ok.55162$bx1.9372@bignews1.bellsouth.net>
Source record: 20651

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:ge9uld$1jrg$1@f04n12.cac.psu.edu...
> Owen Duffy wrote:
>
>> 4. What has 300 ohm line got to do with the Carolina Windom?
>
>
> True enough. I tried an OCF as a way to be able to run coax and have multi
> band no-tuning and get rid of the window line.
>
> Tried it, it was interresting, and now I'm back to using window line.
>
>
> - 73 de Mike N3LI -

Yep, it only takes a few key ups to punch a hole in the dielectric in the
coax.

Ed, NM2K

3928. Re: Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 17:14:15 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <CR0Ok.52307$SH5.14750@newsfe08.iad>
Source record: 20652

Tom Ring wrote:
> Short note.
>
> Worrisome symptoms.
>
> White count normal.
>
> CT Scan tomorrow.
>
> Everyone needs perspective.
>
> tom
> K0TAR

Hang in there Tom. A positive attitude is essential.

Irv VE6BP

3929. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 17:16:52 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3U0Ok.52308$SH5.4590@newsfe08.iad>
Source record: 20653

Howard K0ACF wrote:

> I had that problem with a trap beam. I went to a pipe supply & got some end
> covers that are on pipes when they are shipped. Cut a hole in the middle to
> fit over the tubing & silicone it on the trap & tubing. Never leaked.
> "Harry H" <harryharms@hotmail.com> wrote in message
> news:aWSNk.9279$sc2.327@news-server.bigpond.net.au...
>
>>Some time ago I wrote to Hygain:
>>
>>Sir,
>>Our Ham Radio Club owns 2 Hygain 18-AVT vertical antennas.
>>We are after 2 sets of black plastic shields which fit between the
>>vertical alloy tubing and the outer cover of the traps,
>>Can you supply them to us?
>>
>>Harry
>>
>>
>>
>>Hygain wrote back:
>>
>>Sir,
>>The only parts available are tubing pieces.
>>Thanks,
>>Jim Shurden
>>Hygain Customer Service
>>
>>Question is, what can I use as a substitute, I have tried truck wheel
>>cylinder boots, but the carbon in them upsets the apple cart.
>>
>>Many thanks
>>Harry
>>
>
>
>
Great idea Harry.

Irv VE6BP

3930. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 17:46:36 UTC
From: dplatt@radagast.org
Message-ID: <s4kmt5-8jv.ln1@radagast.org>
Source record: 20654

>Question is, what can I use as a substitute, I have tried truck wheel
>cylinder boots, but the carbon in them upsets the apple cart.

Can you use pieces of suitably-large-diameter heatshrink tubing...
pick a piece comfortably larger in diameter than the innards of the
trap, slide it over, and heat it gently with a hairdryer just
sufficiently to shrink it to the necessary size? The safest size to
use would probably start out at roughly 2x the diameter of the trap
guts... it'd be a snug fit when fully shrunk.

Heatshrink tubing is available in multiple colors... I imagine that
some types of the black variety might have some carbon-black in it,
but it's also available in white and other dyed colors which ought to
have pretty good RF properties.

Otherwise, talk to your local general-purpose professional plastics
supplier, and see what kind of tubing they have in stock.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3931. All over the internet, everyone is learning that Randy Chapman, KB5URP, is a convicted crack dealer

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 20:02:28 UTC
From: mopeyzakween@yahoo.com
Message-ID: <938b3bd2-243d-4281-8017-9320c9f225fc@v15g2000hsa.googlegroups.com>
Source record: 20655
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)

PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

3932. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 21:09:43 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4753073F0C2nonenowhere@61.9.191.5>
Source record: 20656

"Harry H" <harryharms@hotmail.com> wrote in
news:aWSNk.9279$sc2.327@news-server.bigpond.net.au:

> Some time ago I wrote to Hygain:
>
> Sir,
> Our Ham Radio Club owns 2 Hygain 18-AVT vertical antennas.
> We are after 2 sets of black plastic shields which fit between the
> vertical alloy tubing and the outer cover of the traps,
> Can you supply them to us?
>
> Harry
>
>
>
> Hygain wrote back:
>
> Sir,
> The only parts available are tubing pieces.
> Thanks,
> Jim Shurden
> Hygain Customer Service
>
> Question is, what can I use as a substitute, I have tried truck wheel
> cylinder boots, but the carbon in them upsets the apple cart.
>

Harry,

I had a 4BTV that suffered failure of the trap covers, a result of
destructive birds eating them.

I made replacement parts from PVC plumbing fittings, not because Hustler
couldn't supply parts, but there was little point repairing with same
fodder for the birds.

The repair is described at http://www.vk1od.net/H4BTV/hustler4btv.htm .
It might give you some ideas.

BTW, Hustler must have seen the article and sent me gratis a set of
original trap covers, they are still in the shed after twenty years...
the PVC works fine and the birds haven't attacked them (though they seem
to enjoy anthing else with exposed PE or vinyl).

Owen

3933. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 21:50:15 UTC
From: jawod <jawod@fuse.net>
Message-ID: <4908DA97.6040107@fuse.net>
Source record: 20657

I've attached the original article that describes the CW in question. Three versions of the Carolina Windom are presented: Original single wire feed, OCF with twinlead and balun, and OCF with 10' length of coax to a choke balun (1:1). Mine is the middle one. Please see Fig 3A. The balun is at the bottom of the twin lead (I think I mistakenly referred to it as ladder line). I added large ferrite beads just below the balun on the coax as discussed here in the group earlier.

With the DX Engineering balun in place as in the figure, no xmit and no rcv ... i.e., no diff than open-ended (shorted?) coax.

When I bypassed the balun and connected the balanced twin lead directly to the coax...NOW I have good receive and pretty good sig reports.

Yes a 6:1 balun should also work according to what I've read.

The feedline radiation is intended for the 300 ohm twinlead only, not the coax below the balun.

I am pretty sure the balun is the Ruthroff type that Owen mentions (i.e., not a CHOKE balun)

I guess I'll conclude that the balun has failed. However, on inspection the balun looks perfect...it is only 2 yrs old, has5 KW continuous power rating and I run 40 W. Also, it worked perfectly well when used originally with the DX Engineering folded dipole, also using a 300 ohm feedline. (this is why I chose the CW...I had the stuff for it)

I appreciate the discussion

John
AB8O

3934. Re: 868MHz Propagation problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 22:41:57 UTC
From: richardharrison@webtv.net
Message-ID: <22914-4908E6B5-219@storefull-3252.bay.webtv.net>
Source record: 20659

Mark wrote:
"It is very unusual for the RF path loss to be non-reciprocal".

I replied: "Perhaps there is interference up and down the street."

Perhaps the interference is linearly polarized and by changing your polarization (90-deg.?) you can immunize your transmissions.

Best regards, Richard Harrison, KB5WZI

3935. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 22:50:37 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <1N5Ok.9450$sc2.7274@news-server.bigpond.net.au>
Source record: 20658

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B4753073F0C2nonenowhere@61.9.191.5...
> "Harry H" <harryharms@hotmail.com> wrote in
> news:aWSNk.9279$sc2.327@news-server.bigpond.net.au:
>
>> Some time ago I wrote to Hygain:
>>
>> Sir,
>> Our Ham Radio Club owns 2 Hygain 18-AVT vertical antennas.
>> We are after 2 sets of black plastic shields which fit between the
>> vertical alloy tubing and the outer cover of the traps,
>> Can you supply them to us?
>>
>> Harry
>>
>>
>>
>> Hygain wrote back:
>>
>> Sir,
>> The only parts available are tubing pieces.
>> Thanks,
>> Jim Shurden
>> Hygain Customer Service
>>
>> Question is, what can I use as a substitute, I have tried truck wheel
>> cylinder boots, but the carbon in them upsets the apple cart.
>>
>
> Harry,
>
> I had a 4BTV that suffered failure of the trap covers, a result of
> destructive birds eating them.
>
> I made replacement parts from PVC plumbing fittings, not because Hustler
> couldn't supply parts, but there was little point repairing with same
> fodder for the birds.
>
> The repair is described at http://www.vk1od.net/H4BTV/hustler4btv.htm .
> It might give you some ideas.
>
> BTW, Hustler must have seen the article and sent me gratis a set of
> original trap covers, they are still in the shed after twenty years...
> the PVC works fine and the birds haven't attacked them (though they seem

> to enjoy anthing else with exposed PE or vinyl).
>
> Owen
>

Thanks Owen,
I guess it was either the Galahs or the White Cockatoos that did the damage.

I know when I used to sell UHF CB to farmers out west, we used to have trouble with them chewing on the top of the collinear antenna.

We used to slide some white PVC down over the vertical and anything over 3/4 to 7/8" in dia used to stop them.

It annoys me that Hygain will not supply them and must get a high enquiry rate for these shields.

I will see if I can find the right diameter and machine them to fit snugly.

Thanks for the heads up on your experience!

Thanks to all those who have offered their advice too.

73
Harry

3936. Re: Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 23:18:00 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <mcrhg4dcldc7qko7isdn79rkaspfloutti@4ax.com>
Source record: 20660

On Wed, 29 Oct 2008 07:11:59 -0500, Tom Ring <news0004@taring.org>
wrote:

>Tom Ring wrote:
>
><snip>
>
>Thanks all.
>
>I sent that during a moment of depression. I should not have.
>
>Anyway so far so good. CAT scans are interesting, except for the dye IV.
>
>On their own symptoms seem to be lessening, so the guess I and the
>doctor agree on may be correct. We'll see.
>
>With that, I think the topic can die, being very much not antenna related.
>
>tom
>K0TAR
I am glad you brought it up Tom. My wife is scheduled Friday for a
MUGA scan (heart I think) and a PET CT scan (detect spreading) after a
biopsy last week indicated Lymphoma.

We will add you to our prayers.
John Ferrell W8CCW

3937. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 23:33:28 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B476B66CA212nonenowhere@61.9.191.5>
Source record: 20662

"Harry H" <harryharms@hotmail.com> wrote in
news:1N5Ok.9450$sc2.7274@news-server.bigpond.net.au:

...
> Thanks Owen,
> I guess it was either the Galahs or the White Cockatoos that did the
> damage.

Sulphur Crested Cockatoos!

Still, I have sympathy for the ZLs where Keas eat the rubber seals out of
car windows.

>
> I know when I used to sell UHF CB to farmers out west, we used to have
> trouble with them chewing on the top of the collinear antenna.
>
> We used to slide some white PVC down over the vertical and anything
> over 3/4 to 7/8" in dia used to stop them.

Yes, I have built radomes from white PVC plumbing fittings to protect
antennas, eg MobileOne's 2m end fed which has a balun made from coax
wound around the outside of the antenna... good tucker for birs.
>
> It annoys me that Hygain will not supply them and must get a high
> enquiry rate for these shields.

I have had experience with Hy-Gain, and it was very poor... wound up
making the parts myself... http://www.vk1od.net/VB214/index.htm .

Mindful of that, I limit my exposure to products of the MFJ group.

>
> I will see if I can find the right diameter and machine them to fit
> snugly.

I am sure you will come up with a working solution, and possibly a better
one.

Owen

3938. Re: WWII Direction Finder Fix

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 23:34:03 UTC
From: richardharrison@webtv.net
Message-ID: <22722-4908F2EB-205@storefull-3253.bay.webtv.net>
Source record: 20661

Jeff wrote:
"Somewhat later, the "homer" was introduced."

The last topic in Terman`s 1955 opus is "Radio Direction Finding". On page 1048 Terman writes: "This behavior (simulated sense antenna) causes a signal to be delivered to the receiver even though the loop ts in the position for zero response;"

I have a friend, N5CPA, who was a B-24 bomber pilot flying out of Italy to bomb Austria and Germany as WW-2 was ending. They had a direction finding station in North Africa to advise them of their positions when needed. Problem was, Germans often answered first with wrong location and direction in impeccable American English so Americans might exhaust their fuel.

Walter Maxwell worked for the FCC at war`s end in Hawaii and equipped himself with an Adcock antenna so he could advise lost American aviators of their positions in the Pacific. I think Walter has published his story in a radio magazine.

Best regards, Richard Harrison, KB5WZI

3939. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-29 23:55:55 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <K4adndoc0qSUZZXUnZ2dnUVZ_j6dnZ2d@bright.net>
Source record: 20663

Dear Owen:

Experience here in the Upper Midwest is that ground dwelling animals will
chew PVC. but not PE. Had to replace a vast amount of PVC covered cable,
but PE covered coax and cable was untouched.

What have others found? 73, Mac N8TT

--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
"Owen Duffy" <none@no.where> wrote in message
news:Xns9B4753073F0C2nonenowhere@61.9.191.5...

<snip>
>
> I made replacement parts from PVC plumbing fittings, not because Hustler
> couldn't supply parts, but there was little point repairing with same
> fodder for the birds.
>
> The repair is described at http://www.vk1od.net/H4BTV/hustler4btv.htm .
> It might give you some ideas.
>
> BTW, Hustler must have seen the article and sent me gratis a set of
> original trap covers, they are still in the shed after twenty years...
> the PVC works fine and the birds haven't attacked them (though they seem
> to enjoy anything else with exposed PE or vinyl).
>
> Owen

3940. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 00:06:15 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4770F561F7Anonenowhere@61.9.191.5>
Source record: 20664

jawod <jawod@fuse.net> wrote in news:4908DA97.6040107@fuse.net:

> I've attached the original article that describes the CW in question.

As you now know, that didn't work.

You need to put the article on a web site somewhere, or give the URL of an existing copy.

Owen

3941. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 00:10:57 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4771C164FBCnonenowhere@61.9.191.5>
Source record: 20665

"J. Mc Laughlin" <jcm@power-net.net> wrote in
news:K4adndoc0qSUZZXUnZ2dnUVZ_j6dnZ2d@bright.net:

> Dear Owen:
>
> Experience here in the Upper Midwest is that ground dwelling animals
> will chew PVC. but not PE. Had to replace a vast amount of PVC
> covered cable, but PE covered coax and cable was untouched.

Hi Mac,

I know that some animals (eg rats) will eat soft PVC. That motivates cable sheaths impregnated with arsenic... which is worse? We don't have some of the critters that you have, thankfully.

The other commonly used plastic I didn't mention was polypropylene, and I think the trap covers may be polyprop... .

All in all, vermin resistance components, and ready availability are important factors in the life of antennas etc... but we are tame buyers who generally don't consider that until we need to repair the things.

Owen

3942. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 02:18:35 UTC
From: jawod <jawod@fuse.net>
Message-ID: <4909197B.6070905@fuse.net>
Source record: 20666

Owen Duffy wrote:
> jawod <jawod@fuse.net> wrote in news:4908DA97.6040107@fuse.net:
>
>
>>I've attached the original article that describes the CW in question.
>
>
> As you now know, that didn't work.
>
> You need to put the article on a web site somewhere, or give the URL of an
> existing copy.
>
> Owen
Thank you SO much Owen

here ya go

www.w5fc.org/files/QRP%20Expressions.pdf

John
AB8O

3943. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 02:52:07 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <Pine.OSF.4.33.0810292140570.31161-100000@worf.netins.net>
Source record: 20667

On Wed, 29 Oct 2008, jawod wrote:

> here ya go
>
> www.w5fc.org/files/QRP%20Expressions.pdf
>
> John
> AB8O
>

This was the article that convinced me to build a NCW. (The 3rd option)
I scaled mine up to the 132 ft version so I could have 80m.

When I finally have a QTH to support its size, I will string it up
permanently. Till then, it is my field-day antenna of choice.

My 706IIg with AT180 autotuner have no trouble getting a clean match on 6m
thru 80m.

3944. Lawsuit countdown 34 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 03:52:15 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <7b23d7d9-8f65-4339-9482-d059b061b3f1@v30g2000hsa.googlegroups.com>
Source record: 20668
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Oct 29, 4:02 pm, mopeyzakw...@yahoo.com wrote:
> Batch Search Summary
spam

3945. Lawsuit countdown 33 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 03:59:48 UTC
From: kb9rqz@yahoo.com
Message-ID: <pvaig4l0ik4kuuh5o4q36pod78ire17vcs@4ax.com>
Source record: 20669
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Wed, 29 Oct 2008 13:02:28 -0700 (PDT), mopeyzakween@yahoo.com
wrote:

>Batch Search Summary

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

3946. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 04:03:09 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B47991FC3A94nonenowhere@61.9.191.5>
Source record: 20670

jawod <jawod@fuse.net> wrote in news:4909197B.6070905@fuse.net:

...
> Thank you SO much Owen
>
> here ya go
>
> www.w5fc.org/files/QRP%20Expressions.pdf

There are a host of issues with the content of the article. I don't intend to red pen the article, but the issues sound a warning about credibility.

There is no doubt it describes a Ruthroff 4:1 balun in its "new Carolina Windom" configuration. Such a balun will have a very low common mode impedance.

Factors of your implementation that are / may be different include:

The DXE balun you used appears to be described as a current balun on the DXE web site. If it is, it may work differently. (I have already commented on the lack of clarity of the product information, perhaps they might clarify it if you email them with a support question - "what did I buy?".)

DXE also warn us that 'tuner' style baluns such as the one you used are more likely to be reactive an higher frequencies... presumably a consequence of thicker wire insulation which increases the Zo of the TL sections which results in less ideal impedance transformation with increasing frequency.

Owen

3947. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 04:26:45 UTC
From: jawod <jawod@fuse.net>
Message-ID: <49093785.1060306@fuse.net>
Source record: 20671

> DXE also warn us that 'tuner' style baluns such as the one you used are
> more likely to be reactive an higher frequencies... presumably a
> consequence of thicker wire insulation which increases the Zo of the TL
> sections which results in less ideal impedance transformation with
> increasing frequency.

Thanks for the input. The strange thing is that the system failed at
ALL freq's. The original use of the balun was with a folded dipole and
a feedline of 300 ohm twinlead cut to an odd multiple of the lowest freq
desired...which I did and it worked reasonably well. I cannot
understand how this application (the CW OCF) is significantly different
from the original one, at least in terms of using a 4:1 balun.

Allow me to put this to rest. I can live with it as it is, theoretical
considerations notwithstanding. I don't want to go over to the dark
side, but, hey, it works. Maybe I have a new "Magic" Antenna.

John
AB8O

3948. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 04:40:28 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B479F736551Cnonenowhere@61.9.191.5>
Source record: 20672

jawod <jawod@fuse.net> wrote in news:49093785.1060306@fuse.net:
>... Maybe I have a new "Magic" Antenna.

Instead of the "perfect antenna" as claimed in the article!

Owen

3949. Re: WWII Direction Finder Fix

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 05:51:09 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <g1hig4pp6372euutsfj7hahioi1bshlauh@4ax.com>
Source record: 20673

On Wed, 29 Oct 2008 18:34:03 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Jeff wrote:
>"Somewhat later, the "homer" was introduced."
>
>The last topic in Terman`s 1955 opus is "Radio Direction Finding". On
>page 1048 Terman writes: "This behavior (simulated sense antenna) causes
>a signal to be delivered to the receiver even though the loop ts in the
>position for zero response;"

A homer is quite different. Dumb story follows.

Once upon a time, the government decided that small business needed to have some of the smaller military contracts directed in their direction. No altruism was involved as the military was just trying to cut costs.

Intech Inc was in the marine radio business and decided to bid on a USCG contract to design and build a homer. The chief engineer handled the negotiations and I only found out after we had underbid everyone else by about 50%. Oops. There was just one problem. Nobody knew what a homer was or how it worked.

After some very strange ideas and misconception, I removed a dusty copy of Radio Engineering Handbook, 3rd edition, by Henney. This is the 1941 edition, but much of the data is from the first edition in 1933 thanks to war time censorship. Pg 613 has a schematic of a homer antenna and receiver system. I drag this to management who initially declares that the USCG couldn't possibly want something that simple. It took a while, but I eventually based the design on the ancient design from the book. It eventually became the AN-SRD/21 homer.

>I have a friend, N5CPA, who was a B-24 bomber pilot flying out of Italy
>to bomb Austria and Germany as WW-2 was ending. They had a direction
>finding station in North Africa to advise them of their positions when
>needed. Problem was, Germans often answered first with wrong location
>and direction in impeccable American English so Americans might exhaust
>their fuel.

Fair enough. We were borrowing the German Consol navigation signals over the Bay of Biscane:
<http://jproc.ca/hyperbolic/consol.html>

Good reading: The Wizard War by R.V. Jones. Covers the battle of the navigation beams during WWII, V1, V2, and allied scientific intelligence.

>Walter Maxwell worked for the FCC at war`s end in Hawaii and equipped
>himself with an Adcock antenna so he could advise lost American aviators
>of their positions in the Pacific. I think Walter has published his
>story in a radio magazine.

Yep. Walter Maxwell (W2DU) emailed me a copy of his article from the
Jan 2002 issue of QST. Very interesting and well worth reading. I
don't consider it good form to resend what looks like copyrighted
material, so you'll have to either get your copy from the author or
from the ARRL archives:
<http://www.w2du.com>

>Best regards, Richard Harrison, KB5WZI

Marginally related drivel: Most of my experience is with doppler and
rotating antenna type direction finders. Some of my ancient 1994
comments on the technology:
<http://www.qsl.net/n9zia/doppler_notes1.txt>
<http://www.qsl.net/n9zia/doppler_notes2.txt>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3950. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 11:46:01 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <68hOk.6625$Ws1.1541@nlpi064.nbdc.sbc.com>
Source record: 20674

jawod wrote:
> Three versions of the Carolina Windom are presented:
> Original single wire feed,

Actually, not a Carolina Windom - simply a traditional Windom, the grandfather of all Windoms - named after Major General Loren G. Windom, W8GZ, (Windy) (QST, Sep 1929, pp 19-22, 84).

www.geocities.com/w8jyz/8GZ.pdf

> OCF with twinlead and balun,

Don't know if it was ever a commercially available antenna called a "Carolina Windom" but this is just a traditional "Off-Center-Fed Dipole" labeled as such in my 1957 ARRL Handbook.

http://www.w8ji.com/windom_off_center_fed.htm

> and OCF with 10' length of coax

This is what most people think about when someone says "Carolina Windom" and the reason that some people were confused.

http://www.hamuniverse.com/k4iwlnewwindom.html

> I guess I'll conclude that the balun has failed.

At least hang a 200 ohm non-inductive resistor on the output and measure the input impedance. I don't know how you can assume the balun has failed if you don't know what impedances the balun was having to deal with.
--
73, Cecil http://www.w5dxp.com

3951. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 14:45:48 UTC
From: Edwin Johnson <edwinljohnson@bellsouth.net>
Message-ID: <wMjOk.81784$XB4.44884@bignews9.bellsouth.net>
Source record: 20675

On 2008-10-29, jawod <jawod@fuse.net> wrote:
> I've attached the original article that describes the CW in question.
> Three versions of the Carolina Windom are presented: Original single
> wire feed, OCF with twinlead and balun, and OCF with 10' length of coax
> to a choke balun (1:1). Mine is the middle one. Please see Fig 3A. The
> balun is at the bottom of the twin lead (I think I mistakenly referred
> to it as ladder line). I added large ferrite beads just below the balun
> on the coax as discussed here in the group earlier.

If I'm reading this correctly, you put the balun at the bottom of the twin lead and the ferrite bead balun just under it.

Many 'Carolina Windoms' use the balun at the feed point, the ladder line or twin lead under that, and the ferrite bead balun at the bottom of the ladder line, to which is attached the coax.

Placing the balun (4:1 or whatever) under the twin lead would really do strange things to the impedance and probably cause the problems you mentioned.

73 ...Edwin, KD5ZLB
--

"Once you have flown, you will walk the earth with your eyes turned skyward, for there you have been, there you long to return."-da Vinci http://bellsouthpwp2.net/e/d/edwinljohnson

3952. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 17:04:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <UI6dnam_hpa0dJTUnZ2dnUVZ_hednZ2d@posted.easystreetonline>
Source record: 20676

When trying to understand off center fed antennas, it's important to realize a few key facts:

1. A properly working "voltage" or "Ruthroff" balun will force common mode current to exist on the feedline in its attempt to cause equal voltages on the unequal length sides relative to the feedline shield.
2. Even if an effective "current" or "Guanella" balun is used, feedline current will still be induced by the uneven coupling between the two antenna sides.
3. A transforming balun is very unlikely to effect the expected transformation ratio, and is likely to add a significant amount of series and/or shunt reactance except at those spot frequencies where the match is close to perfect.

This isn't to say that off center fed antennas can't sometimes be made to "work", i.e., provide a reasonable impedance match on some bands. But when they do, it's not for the reasons you think from an analysis assuming a perfect transformer and balun. It usually involves a complex relationship among the particular imperfections of the balun/transformer, feedline, and path to the Earth taken by the feedline shield.

Roy Lewallen, W7EL

3953. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 17:34:40 UTC
From: Lisa Smith <ldallain@gmail.com>
Message-ID: <gecr74eff1@aioe.org>
Source record: 20677

Edwin Johnson wrote:

> ...
> Placing the balun (4:1 or whatever) under the twin lead would really do
> strange things to the impedance and probably cause the problems you mentioned.
>
> 73 ...Edwin, KD5ZLB

Actually, I would expect placing a 4:1 balun under the 300 ohm balanced line and before the 50 ohm unbalanced to provide a step-up(or step-down, depending on the "direction" you view it from) of 50:200 or 4:1, as it properly should. However, as someone presented in a paper a little while back, some antennas "filled with errors" are able to function in some manner and end up gaining their supporters ...

If you were to place a 1:1 balun at this same point, I would expect little difference, but a difference (and, since you are mismatched at this point, simply maintaining this mismatch with a component introducing some loss and "redirecting" CM currents, not a good difference!)

It seems the "misunderstood/mystical/magical balun" lives on ...

Regards,
JS

3954. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-30 20:38:09 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B484DAD56742nonenowhere@61.9.191.5>
Source record: 20678

Roy Lewallen <w7el@eznec.com> wrote in
news:UI6dnam_hpa0dJTUnZ2dnUVZ_hednZ2d@posted.easystreetonline:

> When trying to understand off center fed antennas, it's important to
> realize a few key facts:
...

Yes, I thing you are quite correct Roy.

The advertising hype that goes along with many of these commercially popularised antennas gives the impression that deployment of multi-band wire antennas for the lower HF bands is a very standardised thing, a no-brainer. One buys the product, installs it in their own environment in their own way, and it just "works" out of the box... whatever "works" means.

The real world doesn't work that simply.

But to a buyer with faith in the promotional claims, they can buy a lot of satisfaction for only $69.99 or whatever, and not have any untidy left over materials to clutter up their home, or residual technical issues to clutter up their mind.

Today, the growth opportunity in the US is selling attic antennas for low HF bands to new hams. Not as popular here because restrictive covenants on residential properties aren't as common.

But, hey, a simple wire antenna with published performance figures from 160m to 2m is attractive to *our* new six hour hams. Which antenna is that? The W5GI Mystery Antenna, you know, the one "that performs exceptionally well even though it confounds antenna modeling software".

Owen

3955. Re: WWII Direction Finder Fix

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 00:08:36 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <e0sOk.912$cx5.413@newsfe01.iad>
Source record: 20679

I hate to be a nit-picker, but my article was in the Jan 2007 issue of QST, not 2002. In addition, there were nine Adcocks in Hawaii, and at least 50 on the Mainland DURING WW2, not just me. The article is not on my web page, as indicated below, but for those who don't have the above issue of QST, let me know and I'll send you a copy.

Walt, W2DU

> >Walter Maxwell worked for the FCC at war`s end in Hawaii and equipped
> >himself with an Adcock antenna so he could advise lost American aviators
> >of their positions in the Pacific. I think Walter has published his
> >story in a radio magazine.
>
> Yep. Walter Maxwell (W2DU) emailed me a copy of his article from the
> Jan 2002 issue of QST. Very interesting and well worth reading. I
> don't consider it good form to resend what looks like copyrighted
> material, so you'll have to either get your copy from the author or
> from the ARRL archives:
> <http://www.w2du.com>
>
> >Best regards, Richard Harrison, KB5WZI >
> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

3956. Lawsuit countdown 34 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 02:48:22 UTC
From: kb9rqz@yahoo.com
Message-ID: <qorkg41f0i4oj2vpjlieplhh95oss2k4mh@4ax.com>
Source record: 20680
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Wed, 29 Oct 2008 13:02:28 -0700 (PDT), mopeyzakween@yahoo.com
wrote:

>Batch Search Summary

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

3957. What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 09:17:43 UTC
From: Scott Stephens <obnoxium@sbcglobal.net>
Message-ID: <X1AOk.1775$%11.1176@flpi144.ffdc.sbc.com>
Source record: 20682

Since antennas have reactance and radiation resistance, are they always critically damped, or will they ring-down?

Is this implied by a swr plot? Can I take 3db points as antenna bandwidth and assume a radiation-resistance loaded-Q from that?

Does feed-point impedance change radiation resistance?

Thanks

3958. Can NEC2 plot radiation resistance vs. frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 09:18:35 UTC
From: Scott Stephens <obnoxium@sbcglobal.net>
Message-ID: <K2AOk.1776$%11.1178@flpi144.ffdc.sbc.com>
Source record: 20681

Can NEC2 plot radiation resistance vs. frequency?

Thanks

3959. Re: What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 12:33:27 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <pWCOk.7038$YU2.4515@nlpi066.nbdc.sbc.com>
Source record: 20683

Scott Stephens wrote:
> Since antennas have reactance and radiation resistance, ...

It might help to note that the antenna feedpoint
impedance is a virtual impedance - a ratio of total
voltage to total current. A dipole is a standing
wave antenna with a feedpoint impedance of:

Zfp = (Vfor+Vref)/(Ifor+Iref) [all phasors]

This type of impedance is covered by the (B) definition
of "impedance" in "The IEEE Dictionary". It is not the
same thing as an "impedor" which is covered by the
(C) definition of "impedance".
--
73, Cecil http://www.w5dxp.com

3960. Re: Can NEC2 plot radiation resistance vs. frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 13:03:48 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <590mg4dtajprfeskkag4sfpek6p75kfcft@4ax.com>
Source record: 20684

On Fri, 31 Oct 2008 04:18:35 -0500, Scott Stephens
<obnoxium@sbcglobal.net> wrote:

>Can NEC2 plot radiation resistance vs. frequency?

Yep. For example, 4NEC2
<http://home.ict.nl/~arivoors/>
can plot:
<http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/impedance.html>
for this ground plane antenna:
<http://802.11junk.com/jeffl/antennas/gnd-plane-02/>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3961. Re: What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 13:16:25 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <10538c7e-81da-4e9b-884e-51cdfa9ccb58@k36g2000pri.googlegroups.com>
Source record: 20685

On 31 okt, 10:17, Scott Stephens <obnox...@sbcglobal.net> wrote:
> Since antennas have reactance and radiation resistance, are they always
> critically damped, or will they ring-down?
>
> Is this implied by a swr plot? Can I take 3db points as antenna
> bandwidth and assume a radiation-resistance loaded-Q from that?
>
> Does feed-point impedance change radiation resistance?
>
> Thanks

Hello,

A small tuned loop behaves as a lumped RLC circuit around the center frequency. Small means small w.r.t. lambda. It has small relative BW (rel. BW = useful BW / Fcenter). It shows lots of ringing. Of course, the model is only valid for the frequency range where size << lambda.

For small loops (especially loops on PCB), most losses are ohmic, just a part of the losses is due to radiation. When you make a good air loop (with air or vacuum capacitor), the Q factor can be over 1000 (so your -3dB impedance bandwidth is very low at HF frequencies). Your VSWR=2 useful bandwidth is about 70% of the 3 dB impedance bandwidth of the antenna.

Thin half wave dipoles can also be modeled with a RLC circuit. The R is frequency dependent, but in a limited frequency range, a simple RLC circuit is useful. When more accuracy is required , or larger frequency range, a transmission line model with lumped losses is better. HW dipoles close to perfect conducting ground have narrow useful BW, hence high Q factor and the RLC model matches better.

Thicker dipoles have wider bandwidth (so lower Q factor). In that case even within the useful frequency range the radiation resistance varies (it increases with increasing frequency). When the Thickness of the dipole (think of a biconical dipole), is in the range of 0.15 lambda or more, Q factor will be that low, that you can hardly see the exponential decaying sinusoidal wave (so it behaves more like a heavily damped circuit).

If you have access to EM simulation SW you might simulate a construction and compare the impedance versus frequency for your LRC equivalent model.

Back to your question, most narrow band antennas are not critically damped and have an impulse response with exponential decaying sinusoidal wave shape. Are you in GPR or equivalent?

Best regards,

Wim
PA3DJS
www.tetech.nl
The mail is OK when you remove abc.

3962. Re: What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 14:20:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <wuEOk.3583$hc1.3350@flpi150.ffdc.sbc.com>
Source record: 20686

Cecil Moore wrote:
> It might help to note that the antenna feedpoint
> impedance is a virtual impedance - a ratio of total
> voltage to total current.

I forgot to say that the surge impedance of a standing
wave antenna, like a transmission line, is quite different
from the steady-state value of feedpoint impedance.
--
73, Cecil http://www.w5dxp.com

3963. Re: Can NEC2 plot radiation resistance vs. frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 16:31:46 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gefbtinhg2@news.jpl.nasa.gov>
Source record: 20688

Jeff Liebermann wrote:
> On Fri, 31 Oct 2008 04:18:35 -0500, Scott Stephens
> <obnoxium@sbcglobal.net> wrote:
>
>> Can NEC2 plot radiation resistance vs. frequency?
>
> Yep. For example, 4NEC2
> <http://home.ict.nl/~arivoors/>
> can plot:
> <http://802.11junk.com/jeffl/antennas/gnd-plane-02/slides/impedance.html>
> for this ground plane antenna:
> <http://802.11junk.com/jeffl/antennas/gnd-plane-02/>
>

NEC2 doesn't plot anything.. purely text.

And while it can calculate feedpoint impedance vs frequency, which any
number of programs can plot, that's not radiation resistance.

3964. Re: What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 16:37:46 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gefc8rrum1@news.jpl.nasa.gov>
Source record: 20687

Scott Stephens wrote:
> Since antennas have reactance and radiation resistance, are they always
> critically damped, or will they ring-down?
No, they are not critically damped, NOR are they a simple resonator.

>
> Is this implied by a swr plot? Can I take 3db points as antenna
> bandwidth and assume a radiation-resistance loaded-Q from that?

No (this is a common error when folks first hear about the Chu limit and read about Antenna Q. They mistakenly equate Antenna Q with "tuned circuit Q" and then leap to the idea that center frequency/bandwidth = Q.. nope.. Q, in both cases, is the stored energy divided by the energy lost per cycle. But the mechanism is different...)

>
> Does feed-point impedance change radiation resistance?
No. A folded dipole has a feedpoint impedance of about 300 ohms and a dipole has a feedpoint impedance of about 72 ohms, but they have the exact same radiation resistance.

Google for "radiation resistance" and "surrey" to find some pages by Dr. Jefferies at UofSurrey..

http://personal.ee.surrey.ac.uk/Personal/D.Jefferies/radimp.html
http://personal.ee.surrey.ac.uk/Personal/D.Jefferies/antennas.html

http://www.ece.rutgers.edu/~orfanidi/ewa/ is an online textbook which you may find useful

>
> Thanks

3965. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 17:37:15 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <geffob$18ue$1@f04n12.cac.psu.edu>
Source record: 20689

Owen Duffy wrote:
> Roy Lewallen <w7el@eznec.com> wrote in
> news:UI6dnam_hpa0dJTUnZ2dnUVZ_hednZ2d@posted.easystreetonline:
>
>> When trying to understand off center fed antennas, it's important to
>> realize a few key facts:
> ...
>
> Yes, I thing you are quite correct Roy.
>
> The advertising hype that goes along with many of these commercially
> popularised antennas gives the impression that deployment of multi-band
> wire antennas for the lower HF bands is a very standardised thing, a no-
> brainer. One buys the product, installs it in their own environment in
> their own way, and it just "works" out of the box... whatever "works"
> means.
>
> The real world doesn't work that simply.
>
> But to a buyer with faith in the promotional claims, they can buy a lot
> of satisfaction for only $69.99 or whatever, and not have any untidy left
> over materials to clutter up their home, or residual technical issues to
> clutter up their mind.
>
> Today, the growth opportunity in the US is selling attic antennas for low
> HF bands to new hams. Not as popular here because restrictive covenants
> on residential properties aren't as common.
>
> But, hey, a simple wire antenna with published performance figures from
> 160m to 2m is attractive to *our* new six hour hams. Which antenna is
> that? The W5GI Mystery Antenna, you know, the one "that performs
> exceptionally well even though it confounds antenna modeling software".

With all respect, Owen - a Ham can be just as ignorant if they tested
in the days when we had to mine and smelt our own copper for antennas.

There is plenty of ignorance to go around.

Before I go too much further, Hams should build their own wire
antennas. No excuses.

The interesting thing is that most of these novel antennas work to some
extent. I know a fellow in PA who was excited that he could work Maine
on 40 meters with a really bad antenna setup. He just didn't know what
to expect. (from where I'm at, 100 watts and a modest dipole should just

about ruin an S-meter between those two places)

That is how antenna BS starts. This guy would think that a poor antenna is great because it performs better than his awful antenna.. 8^)

I won't come out and condemn things like OCF dipoles though, because they are an interesting and cool novelty, and by gosh, I had fun building, testing, and using mine. I learned a lot. Used one during Field day, and ran and held frequencies at 100 watts on 80 meters. Totally subjective of course, but low power stations usually don't do that.

One of the things I learned was that it is a real compromise. Higher band performance wasn't so hot. But I'm a lot better off having built it, and finding out it's capabilities and shortcomings, than just believing that it is a bad antenna because I've been told it was so. I know exactly what the antenna is like, and it only took me a few hours of work, and a couple months of testing to find out.

I note this mainly because I am one of the unwashed new Hams - and we aren't all as you describe.

- 73 de Mike N3LI -

3966. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 18:39:45 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gefjdh$13ng$1@f04n12.cac.psu.edu>
Source record: 20691

Ralph Mowery wrote:
> "Michael Coslo" <mjc5@psu.edu> wrote in message
> news:geffob$18ue$1@f04n12.cac.psu.edu...
>> Before I go too much further, Hams should build their own wire antennas.
>> No excuses.
>>
>
> For some hams, it is cheeper to just buy the wire antennas. By the time you
> go to the store or order some wire, get the coax, get the insulators, get
> one or two coax connectors, and maybe a balun , it may be cheeper to just
> get all in one place for one price.

Side note: I was at a Ham supply store this past year, and I was looking
for some window line. They had a dipole antenna that included window
line for about half the price of the same amount of window line by
itself. That's probably the only good excuse IMO to buy a pre-made wire
antenna.

But I don't build my own antennas to save money. I'm trying to learn
something. Can I design and cut and install the antenna, and does it
perform as my design says it does?

> I do build all my wire antennas because
> I can get the wire for free and found some insulators for nothing. If
> building trap dioples or other special wire antenas, the parts issue is even
> greater.

Never built a trap dipole. I'm going to have to try it some day. I guess
the major advantage will be that it won't be so lobey as a longer wire
tuned for the higher frequency. But hey, the experimentation is the fun.

I'm not here to convince anyone that my antenna is bigger than theirs!
;^) he he.

> I have an OCF antenna at 45 feet that I use for 80 and 40 meters. It works
> much beter than an 80 meter dipole antenna at 25 feet usually. They are at
> right angles to each other. I do have a beam for other bands so do not care
> how it works on the higher bands. It does seem to have a larger bandwidth
> than the regular dipole on 80 meters.

Yeah, I did okay on 80 and 40 too. That was my thing with the OCF. It
just seemed to be at best a 2 band antenna,
IIRC, the bandwidth was a little bigger on my OCF.

All antennas are a compromise of some sort, and the OCF is within the
acceptable range.

3967. "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 18:40:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2d4e98b7-8d50-490e-a39f-e6dafaa140bc@k36g2000pri.googlegroups.com>
Source record: 20692

I can easily see myself as being viewed as an "unwashed ham" on this
newsgroup !
I am still of the belief that on a fractional wave antenna the current
travels on both the outside
and the inside of the radiator. This puts me in opposition to the
multitude of "washed" hams
who resist change even tho as yet I have not been proved as being in
error.
I suppose a "washed" ham is one who is of the opinion that "all is
known about antennas" and thus
"change" is to be avoided.
At the moment the consensus seems to be that current only flows on the
outside of a radiator as an open circuit where-as a few say the power
jumps from the end of the antennas to ground to complete a circuit.
One would tend to think that a newsgroup of "washed" hams would be
able to supply the definitive answer in line with "all is known".
Points to consider,
A fractional wavelength antenna is NOT in a state of equi;ibrium
(balanced forces if you prefer)
where a full wave radiator IS in a state of equilibrium (balanced
forces where the sum of which equals zero) and all laws are based on a
state of equilibrium per classical physics
Best regards
Art

3968. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 18:57:01 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <gMCdnXWSIdMO25bUnZ2dnUVZ_o_inZ2d@earthlink.com>
Source record: 20690

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:geffob$18ue$1@f04n12.cac.psu.edu...
> Before I go too much further, Hams should build their own wire antennas.
> No excuses.
>

For some hams, it is cheeper to just buy the wire antennas. By the time you go to the store or order some wire, get the coax, get the insulators, get one or two coax connectors, and maybe a balun , it may be cheeper to just get all in one place for one price. I do build all my wire antennas because I can get the wire for free and found some insulators for nothing. If building trap dioples or other special wire antenas, the parts issue is even greater.

I have an OCF antenna at 45 feet that I use for 80 and 40 meters. It works much beter than an 80 meter dipole antenna at 25 feet usually. They are at right angles to each other. I do have a beam for other bands so do not care how it works on the higher bands. It does seem to have a larger bandwidth than the regular dipole on 80 meters.

3969. Re: What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 19:12:43 UTC
From: Scott Stephens <obnoxium@sbcglobal.net>
Message-ID: <XJIOk.3719$Ei5.3470@flpi143.ffdc.sbc.com>
Source record: 20693

Wimpie wrote:

> On 31 okt, 10:17, Scott Stephens <obnox...@sbcglobal.net> wrote:
>> Since antennas have reactance and radiation resistance, are they always
>> critically damped, or will they ring-down?
>>
>> Is this implied by a swr plot? Can I take 3db points as antenna
>> bandwidth and assume a radiation-resistance loaded-Q from that?
>>
>> Does feed-point impedance change radiation resistance?
>>
>> Thanks
>
> Hello,

> Thin half wave dipoles can also be modeled with a RLC circuit. The R
> is frequency dependent, but in a limited frequency range, a simple
> RLC circuit is useful. When more accuracy is required , or larger
> frequency range, a transmission line model with lumped losses is
> better. HW dipoles close to perfect conducting ground have narrow
> useful BW, hence high Q factor and the RLC model matches better.

As I suspected/feared. If I try to design a pulse generator for a TDR in spice, I'll have to synthesize an appropriate frequency-dependent radiation-resistor.

> Thicker dipoles have wider bandwidth (so lower Q factor). In that
> case even within the useful frequency range the radiation resistance
> varies (it increases with increasing frequency). When the Thickness
> of the dipole (think of a biconical dipole), is in the range of 0.15
> lambda or more, Q factor will be that low, that you can hardly see
> the exponential decaying sinusoidal wave (so it behaves more like a
> heavily damped circuit).

Yes, I've noticed UWB antenna look like horns or loops of wide straps

> If you have access to EM simulation SW you might simulate a
> construction and compare the impedance versus frequency for your LRC
> equivalent model.

Perhaps an inverse-Fourier transform of that Z vs. freq plot can give me a time-domain impulse graph?

> Back to your question, most narrow band antennas are not critically
> damped and have an impulse response with exponential decaying
> sinusoidal wave shape. Are you in GPR or equivalent?

Yes, I'm interested in TDR and GPR.

Thanks,

Scott, KB9ETU

3970. Re: What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 19:43:58 UTC
From: Scott Stephens <obnoxium@sbcglobal.net>
Message-ID: <_cJOk.5695$yr3.1646@nlpi068.nbdc.sbc.com>
Source record: 20694

Jim Lux wrote:

> Scott Stephens wrote:

>> Is this implied by a swr plot? Can I take 3db points as antenna
>> bandwidth and assume a radiation-resistance loaded-Q from that?
>
> No (this is a common error when folks first hear about the Chu limit and
> read about Antenna Q. They mistakenly equate Antenna Q with "tuned
> circuit Q" and then leap to the idea that center frequency/bandwidth =
> Q.. nope.. Q, in both cases, is the stored energy divided by the energy
> lost per cycle. But the mechanism is different...)

Looking up the "Chu Limit, I found:
(http://ceta.mit.edu/PIER/pier43/11.0305131.Bellett.L.pdf)

I just skimmed, it seems the mechanism of RLC network is the R, but for
antenna, "Q is formed from the independent contribution of all the modes".

Which, for a UWB or impulse-radar antenna, will be an interesting; a
frequency-dependent resistance to model.

From the paper it seems using a ferrite broadens a loop antenna by
raising radiation resistance across frequencies. Whereas dielectrics
increase energy storage (Q) by confining flux, unlike magnetics.

I've even heard of laser-ionized plasma being used for UWB antenna,
since it will quench to stop it from ringing.

> Google for "radiation resistance" and "surrey" to find some pages by Dr.
> Jefferies at UofSurrey..

Ok, I'll take a long-look.

> http://personal.ee.surrey.ac.uk/Personal/D.Jefferies/radimp.html
> http://personal.ee.surrey.ac.uk/Personal/D.Jefferies/antennas.html
>
> http://www.ece.rutgers.edu/~orfanidi/ewa/ is an online textbook which
> you may find useful

Thanks

3971. Re: What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 19:45:26 UTC
From: Scott Stephens <obnoxium@sbcglobal.net>
Message-ID: <meJOk.5697$yr3.405@nlpi068.nbdc.sbc.com>
Source record: 20695

Cecil Moore wrote:

> I forgot to say that the surge impedance of a standing
> wave antenna, like a transmission line, is quite different
> from the steady-state value of feedpoint impedance.

Thanks

3972. Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 20:27:47 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <GRJOk.55538$rD2.45415@bignews4.bellsouth.net>
Source record: 20696

Perhaps someone can answer a question or two about synthetic aperture radar systems. I'm interested in whether or not the flat plate we see as the receiver antenna actually radiates power, or is a separate transmitter antenna used? TIA

Ed, NM2K

3973. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 20:38:42 UTC
From: Pierfrancesco Caci <ik5pvx@penny.tippete.net>
Message-ID: <87mygkv6st.fsf@penny.tippete.net>
Source record: 20697

>>>>> "Ed" == Ed Cregger <ecregger@bellsouff.net> writes:

Ed> Perhaps someone can answer a question or two about synthetic
Ed> aperture radar systems. I'm interested in whether or not the
Ed> flat plate we see as the receiver antenna actually radiates

yes it does. Some old design had slotted waveguides and a common
transmitter, more modern units have separate transmitters for each
dipole, or for a row of dipoles.

Ed> power, or is a separate transmitter antenna used? TIA

no, a separate antenna is not necessary, not at least for "normal" air
traffic control/air surveillance radars. Those huge OTH monsters are a
different beast of course... The separate thing you see on most radars
is the IFF antenna, recognizable because it is turned a few degrees
ahead of the main beam.

Pf, ik5pvx

--
Pierfrancesco Caci

3974. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 20:45:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <v27st5-n76.ln1@mail.specsol.com>
Source record: 20698

Ed Cregger <ecregger@bellsouff.net> wrote:
> Perhaps someone can answer a question or two about synthetic aperture radar
> systems. I'm interested in whether or not the flat plate we see as the
> receiver antenna actually radiates power, or is a separate transmitter
> antenna used? TIA
>
> Ed, NM2K
>

You mean on something like this?

http://www.raytheon.com/capabilities/rtnwcm/groups/ncs/documents/content/rtn_ncs_products_tpq37_pdf.pdf

It would depend on the design, but in general, yes, the flat plate does
both.

--
Jim Pennino

Remove .spam.sux to reply.

3975. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 21:09:59 UTC
From: Dave <noone@nowhere.com>
Message-ID: <HuKOk.1783$225.968@nwrddc02.gnilink.net>
Source record: 20699

welcome back art, glad you are still around or it could be a long cold winter! i definately look forward to your rediculous theories to give me a good laugh now and then. once the current flows back down inside the antenna element, where does it go?

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message news:2d4e98b7-8d50-490e-a39f-e6dafaa140bc@k36g2000pri.googlegroups.com...
>I can easily see myself as being viewed as an "unwashed ham" on this
> newsgroup !
> I am still of the belief that on a fractional wave antenna the current
> travels on both the outside
> and the inside of the radiator. This puts me in opposition to the
> multitude of "washed" hams
> who resist change even tho as yet I have not been proved as being in
> error.
> I suppose a "washed" ham is one who is of the opinion that "all is
> known about antennas" and thus
> "change" is to be avoided.
> At the moment the consensus seems to be that current only flows on the
> outside of a radiator as an open circuit where-as a few say the power
> jumps from the end of the antennas to ground to complete a circuit.
> One would tend to think that a newsgroup of "washed" hams would be
> able to supply the definitive answer in line with "all is known".
> Points to consider,
> A fractional wavelength antenna is NOT in a state of equi;ibrium
> (balanced forces if you prefer)
> where a full wave radiator IS in a state of equilibrium (balanced
> forces where the sum of which equals zero) and all laws are based on a
> state of equilibrium per classical physics
> Best regards
> Art

3976. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 22:02:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6c622f19-a6e6-4162-ad5f-b239bda3707e@v39g2000pro.googlegroups.com>
Source record: 20700

On Oct 31, 4:09 pm, "Dave" <no...@nowhere.com> wrote:
> welcome back art, glad you are still around or it could be a long cold
> winter! i definately look forward to your rediculous theories to give me a
> good laugh now and then. once the current flows back down inside the
> antenna element, where does it go?
>
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:2d4e98b7-8d50-490e-a39f-e6dafaa140bc@k36g2000pri.googlegroups.com...
>
> >I can easily see myself as being viewed as an "unwashed ham" on this
> > newsgroup !
> > I am still of the belief that on a fractional wave antenna the current
> > travels on both the outside
> > and the inside of the radiator. This puts me in opposition to the
> > multitude of "washed" hams
> > who resist change even tho as yet I have not been proved as being in
> > error.
> > I suppose a "washed" ham is one who is of the opinion that "all is
> > known about antennas" and thus
> > "change" is to be avoided.
> > At the moment the consensus seems to be that current only flows on the
> > outside of a radiator as an open circuit where-as a few say the power
> > jumps from the end of the antennas to ground to complete a circuit.
> > One would tend to think that a newsgroup of "washed" hams would be
> > able to supply the definitive answer in line with "all is known".
> > Points to consider,
> > A fractional wavelength antenna is NOT in a state of equi;ibrium
> > (balanced forces if you prefer)
> > where a full wave radiator IS in a state of equilibrium (balanced
> > forces where the sum of which equals zero) and all laws are based on a
> > state of equilibrium per classical physics
> > Best regards
> > Art

So you accept that current flows down the center ?
Knowing that you should be able to answer your own question !
Unless you to are an "unwashed" ham
Art

3977. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 22:11:20 UTC
From: nm5k@wt.net
Message-ID: <2af836a1-77e5-4085-b72f-03464544e9cf@q30g2000prq.googlegroups.com>
Source record: 20551

On Oct 31, 1:40 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> I can easily see myself as being viewed as an "unwashed ham" on this
> newsgroup !
I hope you use a good deodorant. :/

> I am still of the belief that on a fractional wave antenna the current
> travels on both the outside
> and the inside of the radiator.
It's a free country. But skin effect knows no boundaries I'm
afraid.

> This puts me in opposition to the
> multitude of "washed" hams
> who resist change even tho as yet I have not been proved as being in
> error.

Nor have you taken any effort to prove you are not in error.
So what we end up with is a room of non stinky hams, who
have to hold their noses when a certain unwashed ham enters
the building. :/

> I suppose a "washed" ham is one who is of the opinion that "all is
> known about antennas" and thus
> "change" is to be avoided.

No a washed ham would be one who showers or bathes on a fairly
regular basis, and most likely uses some type of deodorant.
I suppose a car wash could be a suitable substitution. Or a lake.
It's not really that critical as long as water is involved.

> At the moment the consensus seems to be that current only flows on the
> outside of a radiator as an open circuit where-as a few say the power
> jumps from the end of the antennas to ground to complete a circuit.

My cat has new mittens. The ones we used last year jumped to
ground, and vaporized into black carbon based matter.
Almost like a fig neutrino which was left in an 450 degree oven
for 14 hours.

> One would tend to think that a newsgroup of "washed" hams would be
> able to supply the definitive answer in line with "all is known".

Define "all is known".

> Points to consider,
> A fractional wavelength antenna is NOT in a state of equi;ibrium
> (balanced forces if you prefer)

Define equilibrium as it relates to an antenna.

> where a full wave radiator IS in a state of equilibrium (balanced
> forces where the sum of which equals zero) and all laws are based on a
> state of equilibrium per classical physics

If a full wave radiator IS in a state of equilibrium, whatever that
means,
why are you interested in fractional antennas?
If a full wave is so special, why is a half wave generally just as an
efficient a radiator as a full wave?
Something for you to ponder during your next visit to the
water closet.

> Best regards
> Art

And likewise I'm sure. I'm going to go play in the dirt for a while.

3978. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 22:33:07 UTC
From: Channel Cop <nedrog@yahoo.com>
Message-ID: <geg131$h0g$1@aioe.org>
Source record: 20552

<nm5k@wt.net> wrote in message
news:2af836a1-77e5-4085-b72f-03464544e9cf@q30g2000prq.googlegroups.com...
On Oct 31, 1:40 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> I can easily see myself as being viewed as an "unwashed ham" on this
> newsgroup !
I hope you use a good deodorant. :/

> I am still of the belief that on a fractional wave antenna the current
> travels on both the outside
> and the inside of the radiator.
It's a free country. But skin effect knows no boundaries I'm
afraid.

> This puts me in opposition to the
> multitude of "washed" hams
> who resist change even tho as yet I have not been proved as being in
> error.

Nor have you taken any effort to prove you are not in error.
So what we end up with is a room of non stinky hams, who
have to hold their noses when a certain unwashed ham enters
the building. :/

> I suppose a "washed" ham is one who is of the opinion that "all is
> known about antennas" and thus
> "change" is to be avoided.

No a washed ham would be one who showers or bathes on a fairly
regular basis, and most likely uses some type of deodorant.
I suppose a car wash could be a suitable substitution. Or a lake.
It's not really that critical as long as water is involved.

> At the moment the consensus seems to be that current only flows on the
> outside of a radiator as an open circuit where-as a few say the power
> jumps from the end of the antennas to ground to complete a circuit.

My cat has new mittens. The ones we used last year jumped to
ground, and vaporized into black carbon based matter.
Almost like a fig neutrino which was left in an 450 degree oven
for 14 hours.

> One would tend to think that a newsgroup of "washed" hams would be
> able to supply the definitive answer in line with "all is known".

Define "all is known".

> Points to consider,
> A fractional wavelength antenna is NOT in a state of equi;ibrium
> (balanced forces if you prefer)

Define equilibrium as it relates to an antenna.

> where a full wave radiator IS in a state of equilibrium (balanced
> forces where the sum of which equals zero) and all laws are based on a
> state of equilibrium per classical physics

If a full wave radiator IS in a state of equilibrium, whatever that
means,
why are you interested in fractional antennas?
If a full wave is so special, why is a half wave generally just as an
efficient a radiator as a full wave?
Something for you to ponder during your next visit to the
water closet.

> Best regards
> Art

And likewise I'm sure. I'm going to go play in the dirt for a while.

And just how would you be able to measure the SWR on the inside of the antenna element?? But I guess that you might assume that what ever the SWR on the line, and therefore you would take 1/2 for the outside of the element and the other half for the inside of the element... but wouldn't that cancel each other, and if it did then wouldn't the SWR drop to zero?? I am really confused!

3979. Randy Chapman, KB5URP, had a Halloween nightmare laid on his crack dealing as by the AKC

Newsgroup: rec.radio.amateur.antenna
Date: 2008-10-31 23:48:51 UTC
From: mopeyzakween@yahoo.com
Message-ID: <5318b6bc-5f62-4755-9d3e-8f4da7480263@g17g2000prg.googlegroups.com>
Source record: 20553
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)

PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

3980. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 00:13:17 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <geg6uv$8mb$1@aioe.org>
Source record: 20554

"Art Unwin" writes...
> I am still of the belief that on a fractional wave antenna
> the current travels on both the outside and the inside of
> the radiator. This puts me in opposition to the multitude
> of "washed" hams who resist change even tho as yet
> I have not been proved as being in error.

Believe as you personally wish, Art.

But note that your belief is not supported either by theo-
retical or practical physics, or decades of field experience.

Instead of challenging the readers of your posts to prove
that you are wrong, you might take the time to research and
show SCIENTIFICALLY that you are right (if you can do so).

RF

3981. Lawsuit countdown 32 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 00:37:16 UTC
From: kb9rqz@yahoo.com
Message-ID: <b59ng4lkkogl0f8cpcoagal8obuv2r3f8b@4ax.com>
Source record: 20555
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 31 Oct 2008 16:48:51 -0700 (PDT), mopeyzakween@yahoo.com
wrote:

>
can the spam

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

3982. Re: Carolina Windom without a balun: go figure

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 00:43:06 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B497734C1900nonenowhere@61.9.191.5>
Source record: 20556

Michael Coslo <mjc5@psu.edu> wrote in
news:geffob$18ue$1@f04n12.cac.psu.edu:

>
> With all respect, Owen - a Ham can be just as ignorant if they
> tested
> in the days when we had to mine and smelt our own copper for antennas.

Mike, it is not about ignorance or how we were tested. We all start from a base of no knowledge. The test doesn't make a ham, it is the enquiring interest that makes us hams.

We are promoting ham radio to a different population, one that is more excited by the box with lights and knobs, than an enquiring interest and understanding of how it works.

Then add the economic factors that it is cheaper to buy an antenna complete than to buy the ladder line it contains... and people have a economic rationale for passing up the opportunity to do, to discover, to learn.

The getting of knowledge often has monetary cost... the question individuals need to ask is are they worth the investment in themselves.

The point about *our* new (VK) hams is that with just six hours investment in the hobby, they aren't well equipped to see through outragous claims of some antenna manufacturers. My perception is that there are many more US sourced wire antennas of the magic kind appearing on the bands here in VK since the introduction of our Foundation Licence.

Owen

3983. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 01:13:32 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <52f1ce76-d4bd-498c-b921-7215679432a9@w39g2000prb.googlegroups.com>
Source record: 20557

On Oct 31, 7:13 pm, "Richard Fry" <r...@adams.net> wrote:
> "Art Unwin" writes...
> > I am still of the belief that on a fractional wave antenna
> > the current travels on both the outside and the inside of
> > the radiator. This puts me in opposition to the multitude
> > of "washed" hams who resist change even tho as yet
> > I have not been proved as being in error.
>
> ----------
>
> Believe as you personally wish, Art.
>
> But note that your belief is not supported either by theo-
> retical or practical physics, or decades of field experience.
>
> Instead of challenging the readers of your posts to prove
> that you are wrong, you might take the time to research and
> show SCIENTIFICALLY that you are right (if you can do so).
>
> RF

So what do you believe ?

3984. Re: What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 01:56:44 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <527a9bc8-96a3-4a41-87c5-837a870037b0@v16g2000prc.googlegroups.com>
Source record: 20558

On 31 okt, 20:12, Scott Stephens <obnox...@sbcglobal.net> wrote:
> Wimpie wrote:
> > On 31 okt, 10:17, Scott Stephens <obnox...@sbcglobal.net> wrote:
> >> Since antennas have reactance and radiation resistance, are they always
> >> critically damped, or will they ring-down?
>
> >> Is this implied by a swr plot? Can I take 3db points as antenna
> >> bandwidth and assume a radiation-resistance loaded-Q from that?
>
> >> Does feed-point impedance change radiation resistance?
>
> >> Thanks
>
> > Hello,
> > Thin half wave dipoles can also be modeled with a RLC circuit. The R
> > is frequency dependent, but in a limited frequency range, a simple
> > RLC circuit is useful. When more accuracy is required , or larger
> > frequency range, a transmission line model with lumped losses is
> > better. HW dipoles close to perfect conducting ground have narrow
> > useful BW, hence high Q factor and the RLC model matches better.
>
> As I suspected/feared. If I try to design a pulse generator for a TDR in
> spice, I'll have to synthesize an appropriate frequency-dependent
> radiation-resistor.
>
> > Thicker dipoles have wider bandwidth (so lower Q factor). In that
> > case even within the useful frequency range the radiation resistance
> > varies (it increases with increasing frequency). When the Thickness
> > of the dipole (think of a biconical dipole), is in the range of 0.15
> > lambda or more, Q factor will be that low, that you can hardly see
> > the exponential decaying sinusoidal wave (so it behaves more like a
> > heavily damped circuit).
>
> Yes, I've noticed UWB antenna look like horns or loops of wide straps
>
> > If you have access to EM simulation SW you might simulate a
> > construction and compare the impedance versus frequency for your LRC
> > equivalent model.
>
> Perhaps an inverse-Fourier transform of that Z vs. freq plot can give me
> a time-domain impulse graph?
>
> > Back to your question, most narrow band antennas are not critically
> > damped and have an impulse response with exponential decaying

> > sinusoidal wave shape. Are you in GPR or equivalent?
>
> Yes, I'm interested in TDR and GPR.
>
> Thanks,
>
> Scott, KB9ETU- Tekst uit oorspronkelijk bericht niet weergeven -
>
> - Tekst uit oorspronkelijk bericht weergeven -

Hello Scot,

Now it becomes a different story. You are talking about large relative BW. The concept of radiation resistance is nice for small structures, but in case of large structures (for example traveling wave antennas), you get (for example) impedance transformation.

A flaring and widening parallel strip transmission line has almost constant real input impedance for frequencies above the quarter wave length, without any resistive damping. However when the design is not OK, the radiation pattern can be frequency dependent and may show notches in the desired direction for certain frequency ranges. Also the radiation centre may vary with frequency.

Some wide band antennas create a nice impulse response by absorbing most of the power in resistance (resistive loaded dipole). Others are backed by wide band absorbing material, to avoid frequency selective reflection.

So one can make an antenna with close to 50 Ohms real impedance over wide frequency range (so no oscillatory behavior), but it does not mean that such an antenna is good for your application as you also have to consider radiation pattern (versus frequency).

Best regards,

Wim
PA3DJS
www.tetech.nl
The mail is OK when you remove abc.

3985. Re: Can NEC2 plot radiation resistance vs. frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 02:50:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <bbCdnZ9ZS--JWZbUnZ2dnUVZ_qLinZ2d@posted.easystreetonline>
Source record: 20559

Jim Lux wrote:
>
> . . .
>
> And while it can calculate feedpoint impedance vs frequency, which any
> number of programs can plot, that's not radiation resistance.

Unless you set all the losses in the model to zero.

Roy Lewallen, W7EL

3986. WWW.HOTACTRES4U.BLOGSPOT.COM

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 03:11:50 UTC
From: DHEESHA <dheeshapriya@gmail.com>
Message-ID: <b763fa48-591f-4452-ba16-653e837359ab@c22g2000prc.googlegroups.com>
Source record: 20560

WWW.HOTACTRES4U.BLOGSPOT.COM

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
hi frnds C THIS BLOG WWW.HOTACTRES4U.BLOGSPOT.COM
ITS HAVE SOME ADVERTISEMENT ITS VERY USEFUL TO U.....PLZ CLICK
THE ADS(ADS BY GOOGLE) BCOZ IF U CLICK THE ADS MEANS I WILL EARN some
MONEY
SO PLZ HELP ME FRND,,,,DONT FORGET TO DO THAT.....
TAKE CARE BYEEEEEEEEEEE
HAVE A NICE DAY>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

WWW.HOTACTRES4U.BLOGSPOT.COM

3987. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 03:50:41 UTC
From: jimlux@earthlink.net
Message-ID: <c7f667d8-842d-415e-a73b-a91bc41bcedd@u29g2000pro.googlegroups.com>
Source record: 20561

On Oct 31, 1:27 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
> Perhaps someone can answer a question or two about synthetic aperture radar
> systems. I'm interested in whether or not the flat plate we see as the
> receiver antenna actually radiates power, or is a separate transmitter
> antenna used? TIA
>
> Ed, NM2K

Synthetic Aperture Radar (SAR) isn't usually the rotating antenna thing. SAR would be on some sort of moving platform (a plane or satellite, for instance, although SARs have been done on cars and boats and balloons)

Perhaps what you're thinking about is a phased array antenna? The flat plate thing is the antenna, and might be either totally passive (and can work for both transmit and receive) or active, with lots of T/R modules.

3988. Re: Can NEC2 plot radiation resistance vs. frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 03:55:51 UTC
From: jimlux@earthlink.net
Message-ID: <263e7507-6506-4d14-9e15-aea2b1fe4773@f37g2000pri.googlegroups.com>
Source record: 20562

On Oct 31, 7:50 pm, Roy Lewallen <w...@eznec.com> wrote:
> Jim Lux wrote:
>
> > . . .
>
> > And while it can calculate feedpoint impedance vs frequency, which any
> > number of programs can plot, that's not radiation resistance.
>
> Unless you set all the losses in the model to zero.
>
> Roy Lewallen, W7EL

What about folded dipole vs non folded dipole? Rrad is the same, but
Zfeed is different, even in the lossless case. Or any antenna where
there's some built in impedance transformer (stubs, lumped components,
etc.)

3989. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 04:21:14 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <g8lng41h70o1sios58a8e6dlusa0qt09o1@4ax.com>
Source record: 20563

On Fri, 31 Oct 2008 16:27:47 -0400, "Ed Cregger"
<ecregger@bellsouff.net> wrote:

>Perhaps someone can answer a question or two about synthetic aperture radar
>systems. I'm interested in whether or not the flat plate we see as the
>receiver antenna actually radiates power, or is a separate transmitter
>antenna used? TIA
>
>Ed, NM2K

As others have mentioned, that's not synthetic aperture radar. See
the article at:
<http://en.wikipedia.org/wiki/Synthetic_aperture_radar>
for explanations and references. Note that either the target or the
radar has to be moving for SAR to work. A mess of small transmitters,
scattered over a wide area, will also work. A rotating radar antenna
(phased array, bedspring, or dish) will not work.

One example is the SRTM (Shuttle Radar Topography Mission), which used
interferometry and a synthetic aperture radar to map the planet. In
this case, the shuttle was moving and the ground was relatively
motionless.
<http://fas.org/irp/program/collect/ifsar.htm>
<http://www2.jpl.nasa.gov/srtm/>
Since there was only one space shuttle in orbit, the antenna must both
xmit and receive.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

3990. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 12:32:40 UTC
From: ltdoc@yahoo.com
Message-ID: <6f1b9fa5-b228-4594-aaf9-698cfe5c748f@s9g2000prg.googlegroups.com>
Source record: 20564

> So what do you believe ?

Art,
I believe we will never get a 'straight' answer from you. Does
that make me a 'washed' ham or an 'unwashed' one? Beats me, I don't
know.
- 'Doc

3991. Re: WWII Direction Finder Fix

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 13:10:41 UTC
From: Jay in the Mojave <Jay123a@qnet.com>
Message-ID: <KPednQzNb4PMyJHUnZ2dnUVZ_jWdnZ2d@posted.quantumnetworking>
Source record: 20565

Hello All:

Thank you very kindly for all the great info and e-mails. It is greatly appreciated.

Jay in the Mojave

3992. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 13:26:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <lOYOk.1870$Jv2.736@nwrddc01.gnilink.net>
Source record: 20566

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:6c622f19-a6e6-4162-ad5f-b239bda3707e@v39g2000pro.googlegroups.com...

>So you accept that current flows down the center ?
>Knowing that you should be able to answer your own question !
>Unless you to are an "unwashed" ham
>Art

no, i took a shower last night, so i am definately washed. that was a
question for you, where does the current go on the inside of the antenna
element?

3993. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 15:11:32 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <Ui_Ok.58362$vX2.16085@bignews6.bellsouth.net>
Source record: 20567

<jimlux@earthlink.net> wrote in message
news:c7f667d8-842d-415e-a73b-a91bc41bcedd@u29g2000pro.googlegroups.com...
> On Oct 31, 1:27 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
>> Perhaps someone can answer a question or two about synthetic aperture
>> radar
>> systems. I'm interested in whether or not the flat plate we see as the
>> receiver antenna actually radiates power, or is a separate transmitter
>> antenna used? TIA
>>
>> Ed, NM2K
>
> Synthetic Aperture Radar (SAR) isn't usually the rotating antenna
> thing. SAR would be on some sort of moving platform (a plane or
> satellite, for instance, although SARs have been done on cars and
> boats and balloons)
>
> Perhaps what you're thinking about is a phased array antenna? The flat
> plate thing is the antenna, and might be either totally passive (and
> can work for both transmit and receive) or active, with lots of T/R
> modules.
>

I was thinking of the Aegis class warships.

Ed Cregger

3994. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 15:12:50 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <6k_Ok.58363$vX2.51114@bignews6.bellsouth.net>
Source record: 20568

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:g8lng41h70o1sios58a8e6dlusa0qt09o1@4ax.com...
> On Fri, 31 Oct 2008 16:27:47 -0400, "Ed Cregger"
> <ecregger@bellsouff.net> wrote:
>
>>Perhaps someone can answer a question or two about synthetic aperture
>>radar
>>systems. I'm interested in whether or not the flat plate we see as the
>>receiver antenna actually radiates power, or is a separate transmitter
>>antenna used? TIA
>>
>>Ed, NM2K
>
> As others have mentioned, that's not synthetic aperture radar. See
> the article at:
> <http://en.wikipedia.org/wiki/Synthetic_aperture_radar>
> for explanations and references. Note that either the target or the
> radar has to be moving for SAR to work. A mess of small transmitters,
> scattered over a wide area, will also work. A rotating radar antenna
> (phased array, bedspring, or dish) will not work.
>
> One example is the SRTM (Shuttle Radar Topography Mission), which used
> interferometry and a synthetic aperture radar to map the planet. In
> this case, the shuttle was moving and the ground was relatively
> motionless.
> <http://fas.org/irp/program/collect/ifsar.htm>
> <http://www2.jpl.nasa.gov/srtm/>
> Since there was only one space shuttle in orbit, the antenna must both
> xmit and receive.

Thanks for the explanations, all. Much appreciated.

Ed, NM2K

3995. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 15:49:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3caaa595-183a-4c59-b5ab-bdacf0ad3498@o4g2000pra.googlegroups.com>
Source record: 20569

On Nov 1, 8:26 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:6c622f19-a6e6-4162-ad5f-b239bda3707e@v39g2000pro.googlegroups.com...
>
> >So you accept that current flows down the center ?
> >Knowing that you should be able to answer your own question !
> >Unless you to are an "unwashed" ham
> >Art
>
> no, i took a shower last night, so i am definately washed. that was a
> question for you, where does the current go on the inside of the antenna
> element?

David
When viewing the antenna from an equilibrium point of view which is a
staple requirement of all electrical laws
one must assume that all forces/vectors equal zero (Newton)
Following this dictum physics state that foe equilibrium the charge on
the surface of a radiator does not move
linearlly there fore, there cannot be a linear force or vector to
oppose it. From this it is stated that there is no movement
in linear form else where which includes the center of the conductor/
radiator when the radfiator is one wavelength or multiple there of.
Now we have the case of a fractional wavelength radiator. In this case
one is aware that charges do move in a linear
direction as evidenced by "end effect". Therefore by following the
standard laws of physics there must be a
balancing force/vector in the opposite direction and the only place
that vector could be is in the center of the conductor
One should also be aware that a electrical curcuit for a fractional
wavelength is a series circuit and a parallelel circuit for a
fulle wavelength both of which are closed cuircuits when determining
current flow of a radiator so one can itemise the electrical circuit
in detail with respect to the components on the actual radiator to
ensure compatability.
Now according to my theory of radiation the forward current on a
radiator is opposed by closed circuit eddy current
which in combination provide a angular rotational force on any
residing particle which allows for directional levitation or
projection.
When the current of the radiator reaches the end of the radiator it
closes the circuit by entering the center of the conductor
(assuming the arrangement is not in a state of vacuum)under circular

surface current cuircuit where it is still in existance.
The internal current flow is solely resistive in nature comprising of
theseries resistance of the material used and not radiative.
Now David, if you can point to a description that differs to the above
and follows the laws of physics I would be happy to look it up and
study it , but in the final analysis one must be able to determine
the state of the conductor at it's center at all times.
David, my explanation is based on the world of physics as I know it.
It is not based on opinions from those who never graduated from high
school or those who have not studied physics and rely solely on the
written world or heresay. Hopefully any responses will be likewise.
Have a happy winter discussing physics and its application to antennas
and radiation which is what this newsgroup initially was generated for

Elementary my dear Watson as one Englishman said
Best regards
Art

3996. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 16:14:24 UTC
From: dplatt@radagast.org
Message-ID: <0sbut5-9gp.ln1@radagast.org>
Source record: 20570

In article <Ui_Ok.58362$vX2.16085@bignews6.bellsouth.net>,
Ed Cregger <ecregger@bellsouff.net> wrote:

>I was thinking of the Aegis class warships.

I believe that the Aegis warship radar is a phased-array system, akin to the PAVE PAWS radars that have been in the ham press lately due to QRM issues on both the east and west coasts of the US (some ham 440 repeater systems have been required to mitigate interference to PAVE PAWS and some have gone off the air as a result).

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3997. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 17:33:23 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9u3pg4hi4jjpub5r31gs2cq1l3hc69afe7@4ax.com>
Source record: 20572

On Fri, 31 Oct 2008 11:40:07 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I can easily see myself as being viewed as an "unwashed ham" on this
>newsgroup !

Mabye. Most recently, the term comes from cold war era references to
the GUM (great unwashed masses). This was a derrogatory term for the
average intelligence of the general public. The origin of the term
dates back to merry olde England, where it was used to refer to the
lower classes:
<http://answers.google.com/answers/threadview?id=29346>
This may be appropriate for ham radio if you have an elitist view of
the Extra-Class license, accompanied by the usual snobbery. As your
FCC ULS page shows you have an Advanced class license:
<http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=410939>
this is entirely possible, but improbable. To avoid confusion, I
suggest you upgrade to Extra-Class so that your self image improves,
and so that you not consider yourself being viewd as a lower class
"unwashed" ham.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

3998. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 17:49:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ll4pg4h74dbusqfdv29sfkq6djnd0h9l27@4ax.com>
Source record: 20571

On Sat, 1 Nov 2008 11:11:32 -0400, "Ed Cregger"
<ecregger@bellsouff.net> wrote:

>>> systems. I'm interested in whether or not the flat plate we see as the
>>> receiver antenna actually radiates power, or is a separate transmitter
>>> antenna used? TIA

>I was thinking of the Aegis class warships.

Hi Ed,

The "flat plate" is acually a mosaic of 4100 phased elements driven by
a single RF source.

73's
Richard Clark, KB7QHC

3999. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 17:51:16 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <mt4pg4l71d5djj2f37a5apls2m1tjuf46h@4ax.com>
Source record: 20573

On Sat, 1 Nov 2008 11:11:32 -0400, "Ed Cregger"
<ecregger@bellsouff.net> wrote:

>I was thinking of the Aegis class warships.

See: AN/SPY-1. 4 panels with 4 megawatts in S-band.
<http://en.wikipedia.org/wiki/AN/SPY-1>
<http://www.globalsecurity.org/military/systems/ship/systems/an-spy-1.htm>
<https://wrc.navair-rdte.navy.mil/warfighter_enc/weapons/SensElec/RADAR/anspy1.htm>

Lots of fun when the beam hits an adjacent vessels antenna farm and
toasts everything connected to it.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4000. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 19:01:43 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c2454295-ee19-47e3-9e3e-72b6804ea49d@a17g2000prm.googlegroups.com>
Source record: 20574

On Nov 1, 12:33 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Fri, 31 Oct 2008 11:40:07 -0700 (PDT), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >I can easily see myself as being viewed as an "unwashed ham" on this
> >newsgroup !
>
> Mabye. Most recently, the term comes from cold war era references to
> the GUM (great unwashed masses). This was a derrogatory term for the
> average intelligence of the general public. The origin of the term
> dates back to merry olde England, where it was used to refer to the
> lower classes:
> <http://answers.google.com/answers/threadview?id=29346>
> This may be appropriate for ham radio if you have an elitist view of
> the Extra-Class license, accompanied by the usual snobbery. As your
> FCC ULS page shows you have an Advanced class license:
> <http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=410939>
> this is entirely possible, but improbable. To avoid confusion, I
> suggest you upgrade to Extra-Class so that your self image improves,
> and so that you not consider yourself being viewd as a lower class
> "unwashed" ham.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

I don't think Owen determined "unwashed: by the number of FCC
examinations passed.
I suspect he was refering to those who do not have a leaning towards
the science and physics of ham radio
but just want a license to be a talking head. How this type of person
views another is of no consequence
unless all reverts back to the middle ages where death can be a
consquence of any challenge to the status quo.
Art

4001. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 20:21:24 UTC
From: Dave <noone@nowhere.com>
Message-ID: <8T2Pk.2015$225.1910@nwrddc02.gnilink.net>
Source record: 20575

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:3caaa595-183a-4c59-b5ab-bdacf0ad3498@o4g2000pra.googlegroups.com...
On Nov 1, 8:26 am, "Dave" <no...@nowhere.com> wrote:
> David, my explanation is based on the world of physics as I know it.

the world according to art... I love it!

4002. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 20:51:41 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <phfpg4tglomrq66t93vqs3ss8htipau2jg@4ax.com>
Source record: 20576

On Sat, 1 Nov 2008 12:01:43 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Nov 1, 12:33ï¿½pm, Jeff Liebermann <je...@cruzio.com> wrote:
>> On Fri, 31 Oct 2008 11:40:07 -0700 (PDT), Art Unwin
>>
>> <ArthurUn...@gmail.com> wrote:
>> >I can easily see myself as being viewed as an "unwashed ham" on this
>> >newsgroup !
>>
>> Mabye. ï¿½Most recently, the term comes from cold war era references to
>> the GUM (great unwashed masses). ï¿½This was a derrogatory term for the
>> average intelligence of the general public. ï¿½The origin of the term
>> dates back to merry olde England, where it was used to refer to the
>> lower classes:
>> <http://answers.google.com/answers/threadview?id=29346>
>> This may be appropriate for ham radio if you have an elitist view of
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>> this is entirely possible, but improbable. ï¿½To avoid confusion, I
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>> and so that you not consider yourself being viewd as a lower class
>> "unwashed" ham.

>I don't think Owen determined "unwashed: by the number of FCC
>examinations passed.

Who be this Owen?

>I suspect he was refering to those who do not have a leaning towards
>the science and physics of ham radio
>but just want a license to be a talking head. How this type of person
>views another is of no consequence

We have a substantial number of hams locally that are only interested
in emergency services and have no interest in the technical aspects of
ham radio beyond operating their radios. I'm sure they will be
thrilled to know that their views are of no consequence.

>unless all reverts back to the middle ages where death can be a
>consquence of any challenge to the status quo.
>Art

Yea verily. Methinks trial by combat be the manner in which all
arguments should be settled. It worked well in the middle ages where

all the combative types conveniently exterminated each other, leaving only the peaceful and tolerant, thus laying the path for the Renaissance. Perhaps it be a worthy enterprise to return to trial by combat in ham radio. That should clear out the endless political debates, reduce pileups, and promote harmony on various bands.

--
Jeff Liebermann jeffl@cruzio.com
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4003. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 21:28:42 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <nS3Pk.11699$up3.7271@newsfe01.iad>
Source record: 20577

Art, once upon a time, a long time ago, I first heard the word, or concept, called "skin effect". It seems that somehow, current at RF tends to stay near the surface of the conductor, going less deep into the conductor as frequency rises. In fact, at frequencies we 'unwashed' hams use routinely, the current hardly penetrates the conductor at all. Consequently, if the conductor is the radiating element of an antenna, and it is a solid, there is no way the current can enter the center of the conductor and travel through the mass of the conductor.

I also heard a long time ago the word "reflection." Seems that many savants discovered that when the current reaches the end of the radiator (conductor) it sees an open circuit, which the savants say causes the current to reverse its direction and flow back along the "surface" of the conductor. I also seem to recall some of those savants say that the combination of the forward current and the reflected current esstablishes what they call a 'standing wave.' Art, are you at all familiar with what I'm saying here? These savants have been able to prove that a standing wave exists on the radiator by moving a fluorescent bulb along the radiator for all to see.

So what I'm asking you to explain, Art, is how could this proven standing wave exist on the radiator if the current reaching end of the radiator now goes into the center of the radiator to propagate only through the mass of the conductor, and seeing only the resistance of the conductor?

You've told us this happens, Art, but you haven't explained why. Now Art, please explain this concept to all of us unwashed hams.

Walt, W2DU

4004. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 22:01:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f7587b27-bfce-49a1-89e5-8310b95ee879@l33g2000pri.googlegroups.com>
Source record: 20578

On Nov 1, 3:51 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sat, 1 Nov 2008 12:01:43 -0700 (PDT), Art Unwin
>
>
>
> <ArthurUn...@gmail.com> wrote:
> >On Nov 1, 12:33 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> >> On Fri, 31 Oct 2008 11:40:07 -0700 (PDT), Art Unwin
>
> >> <ArthurUn...@gmail.com> wrote:
> >> >I can easily see myself as being viewed as an "unwashed ham" on this
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> >> Mabye. Most recently, the term comes from cold war era references to
> >> the GUM (great unwashed masses). This was a derrogatory term for the
> >> average intelligence of the general public. The origin of the term
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> >> lower classes:
> >> <http://answers.google.com/answers/threadview?id=29346>
> >> This may be appropriate for ham radio if you have an elitist view of
> >> the Extra-Class license, accompanied by the usual snobbery. As your
> >> FCC ULS page shows you have an Advanced class license:
> >> <http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=410939>
> >> this is entirely possible, but improbable. To avoid confusion, I
> >> suggest you upgrade to Extra-Class so that your self image improves,
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> >I don't think Owen determined "unwashed: by the number of FCC
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> Who be this Owen?
>
> >I suspect he was refering to those who do not have a leaning towards
> >the science and physics of ham radio
> >but just want a license to be a talking head. How this type of person
> >views another is of no consequence
>
> We have a substantial number of hams locally that are only interested
> in emergency services and have no interest in the technical aspects of
> ham radio beyond operating their radios. I'm sure they will be
> thrilled to know that their views are of no consequence.
>
> >unless all reverts back to the middle ages where death can be a
> >consquence of any challenge to the status quo.

> >Art
>
> Yea verily. Methinks trial by combat be the manner in which all
> arguments should be settled. It worked well in the middle ages where
> all the combative types conveniently exterminated each other, leaving
> only the peaceful and tolerant, thus laying the path for the
> Renaissance.   Perhaps it be a worthy enterprise to return to trial by
> combat in ham radio. That should clear out the endless political
> debates, reduce pileups, and promote harmony on various bands.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

No, I don't go along with those who choose ethnic cleansing
nor by those who accumulate the most wealth or those who determine
that God is on their side or the strong that are determined to
dominate
the weak. All nations that have followed this path in history lose out
in numbers
until their ways change, never to rise again as the future holds for
them " kill and be killed" by the many they have harmed.
I suspect that the next change in size of nations
will be the Middle East as all sides have moved towards permanent sin
that will never be forgiven and where some are willing to give
themselves
while taking all, leaving nothing but a desert while the tolerant have
presettled
else where they remove themselves from pre ethnic pasts.
Could we now possibly go back to radio and antennas which is what the
newsgroup
is set up for?
Art

4005. Re: Can NEC2 plot radiation resistance vs. frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 22:59:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <VPednbptvN7tQpHUnZ2dnUVZ_jGdnZ2d@posted.easystreetonline>
Source record: 20580

jimlux@earthlink.net wrote:
> On Oct 31, 7:50 pm, Roy Lewallen <w...@eznec.com> wrote:
>> Jim Lux wrote:
>>
>>> . . .
>>> And while it can calculate feedpoint impedance vs frequency, which any
>>> number of programs can plot, that's not radiation resistance.
>> Unless you set all the losses in the model to zero.
>>
>> Roy Lewallen, W7EL
>
> What about folded dipole vs non folded dipole? Rrad is the same, but
> Zfeed is different, even in the lossless case. Or any antenna where
> there's some built in impedance transformer (stubs, lumped components,
> etc.)

This question comes up from time to time. The answer is that radiation resistance is the resistive part of the antenna impedance when all losses are zero, and this resistance can be defined at (or "referred to") any point on the antenna, including the feed point. Some text authors use a more strict definition, for example, the resistance referred to a current maximum. But this isn't at all universal, and many such as Kraus adopt the more general definition.

This allows us to call the feedpoint resistance of a lossless folded dipole the "radiation resistance", a practice that's gotten quite a few people into trouble when using the well known formula for efficiency

Eff = Rr / (Rr + Rl)

where Rr and Rl are the radiation and loss resistances respectively. The fact is that this equation is just fine for folded dipoles (or monopoles, where it more often causes trouble), but you have to refer the loss resistance to the same point as the radiation resistance. (In the case of a folded antenna, this means transforming it by the same factor.) In a folded monopole where Rl is primarily ground system resistance, you have to multiply the ground system resistance by 4 to get Rl referred to the feedpoint. Then you can use the lossless feedpoint resistance for Rr. Or, if you choose, you can use the untransformed impedances, in which case you use ground system resistance directly for Rl but divide the lossless feedpoint resistance by four for Rr. Either method is equally valid and both give the same result, as they should. But you have to be careful to specify the point to which Rr is referred, so Rl can be referred to that same point.

A common mistake (made repeatedly by many people, some very well known) is to use the lossless feedpoint resistance for Rr but the untransformed ground resistance for Rl. This leads them to the incorrect conclusion that "folding" a monopole improves the efficiency.

Roy Lewallen, W7EL

4006. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 23:20:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hoopg418ou5qfrjt4fc8qc5nk3p1pq1oal@4ax.com>
Source record: 20579

On Sat, 1 Nov 2008 15:01:38 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>"Unwashed" hams
>"washed" hams
>ethnic cleansing
>accumulate the most wealth
>God is on their side
>the strong dominate the weak.
>history
>" kill and be killed"
>size of nations
> the Middle East
>permanent sin
>a desert
>pre ethnic pasts.

>Could we now possibly go back to radio and antennas which is what the
>newsgroup is set up for?

Among the 13 topics you chose to write about, you don't seem to be
interested, so why ask?

73's
Richard Clark, KB7QHC

4007. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 23:29:56 UTC
From: Dave <noone@nowhere.com>
Message-ID: <UD5Pk.1988$Jv2.962@nwrddc01.gnilink.net>
Source record: 20581

"Walter Maxwell" <walt@w2du.com> wrote in message
news:nS3Pk.11699$up3.7271@newsfe01.iad...

> You've told us this happens, Art, but you haven't explained why. Now Art,
> please
> explain this concept to all of us unwashed hams.

hey, i just took a shower, speak for yourself!

4008. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 23:53:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <61f809e4-0b3b-425b-9a99-5e4b44dcb4b0@b38g2000prf.googlegroups.com>
Source record: 20582

On Nov 1, 4:28 pm, "Walter Maxwell" <w...@w2du.com> wrote:
> Art, once upon a time, a long time ago, I first heard the word, or concept,
> called "skin effect".
I don't think you are alo0ne there.

It seems that somehow, current at RF tends to stay near
> the surface of the conductor, going less deep into the conductor as frequency
> rises.
I don't know why you say somehow. Only the surface of a radiator
radiates and the opposing force to the time varying current
known as eddy current changes its depth of penetration with frequency

In fact, at frequencies we 'unwashed' hams use routinely, the current
> hardly penetrates the conductor at all.
Again quit true

Consequently, if the conductor is the
> radiating element of an antenna, and it is a solid, there is no way the current
> can enter the center of the conductor and travel through the mass of the
> conductor.

The only thing stopping the fliow of current is the eddy current. The
eddy current
is not present when current flows thru the center of a conductor, nor
is there
radiation from the center of the conductor and the copper resistance
of the center
is certainly less than the provided current and skin resistance that
would occur
if the currfent behaved like salmon and fought it's way back
upstream.

>
> I also heard a long time ago the word "reflection." Seems that many savants
> discovered that when the current reaches the end of the radiator (conductor) it
> sees an open circuit,
You are moving away from the subject at hand by not declaring what the
radiator is !
For instance there is no evidence that the provided current reverses
itself on a full
wave quad preferring instead to close the current circuit by returning
to the sourcewhich is what standard
physics teaches. There are two radiation circuits, a series and a
parallel circuit
both of which are continuous and closed circuits.

which the savants say causes the current to reverse its
> direction and flow back along the "surface" of the conductor.
Ther may well be current disturbance on the outside of a radiator but
the
main current path is always the one of least resistance to complete a
closed circuit.

I also seem to
> recall some of those savants say that the combination of the forward current and
> the reflected current esstablishes what they call a 'standing wave.'
Well I recognise that there can be disturbances but none that are
powerfull enough to overpower the
main current applied to the radiator.

Art, are
> you at all familiar with what I'm saying here?
Yes. You are trying to apply a foundation for a book

These savants have been able to
> prove that a standing wave exists on the radiator by moving a fluorescent bulb
> along the radiator for all to see.
I have never stated that a standing wave does not exist

>
> So what I'm asking you to explain, Art, is how could this proven standing wave
> exist on the radiator if the current reaching end of the radiator now goes into
> the center of the radiator to propagate only through the mass of the conductor,
> and seeing only the resistance of the conductor?

First of all the standing wave is a disturbance along the path of
current flow
but not so strong as it can overpower it's provider., physics would
never support such a notion.
I previously stated that radiation can only occur from the surface of
the radiator
since it is the eddy or Foucault current that can provide levitation
to resting particles. When current flows thru
a material center it only encounters copper losses as there is no eddy
current generated.

>
> You've told us this happens, Art, but you haven't explained why. Now Art, please
> explain this concept to all of us unwashed hams.

I have stated many times what is happening. I reject all notions that
the applied time varying current can be overcome
from its pursuit of returning to its source as it will always follow
the path of least resistance and wil, never generate
a negative force that destroys equilibrium or suggests that energy can
be create.

Frankly, your concentration on reflections with respect to radiation
is just a way to promote a book while at the same time
ignoring what provides communication which is the main issue with

respect to antennas. When you get down to the real
issue of what creats radiation you will find it much easier to
explain reflections instead of just trying to substantiate
possible answers to the frequent abnormalities of your position. I
challenge you to show that when the arbritary field enclosing a static
field
accompanied by the addition of a time varying field applied to said
enclosed field in equilibrium does not equal Maxwells laws.
If it does then the action of particles is a given with respect to
radiation and thus destroys your notions with respect to reflection.
Provide a service to ham radio, Show that the said addition to
gaussian law does NOT equate to Maxwells findings and thus the
present teachings are correct and my theorem is not.

>
> Walt, W2DU
Best regards
Art Unwin

4009. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-01 23:57:31 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <5bqpg41t792butpng3pvl4n1ar4o7qm3pn@4ax.com>
Source record: 20583

On Sat, 1 Nov 2008 15:01:38 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>> >I don't think Owen determined "unwashed: by the number of FCC
>> >examinations passed.
>>
>> Who be this Owen? ï¿½

Who is Owen? Is he a radio god?

>No, I don't go along with those who choose ethnic cleansing
>nor by those who accumulate the most wealth or those who determine
>that God is on their side or the strong that are determined to
>dominate the weak.

Well, those are usually the winners. If you don't "go along" with
them, it's highly likely that you will be among the losers. That's an
acceptable proposition in a country that protects, supports, and
sometimes even subsidizes the losers (i.e. government bailout). You
might find it more comfortable to be among the winners.

>All nations that have followed this path in history lose out
>in numbers
>until their ways change, never to rise again as the future holds for
> them " kill and be killed" by the many they have harmed.

All nations? Well, Jews have maintained their cultural and
nationalistic integrity probably the longest. We also do quite well
in collecting wealth. We're not into ethnic cleansing, although there
are factions that wouldn't mind doing that to the neighboring Arab
states. Lots of other examples (Persia, China, American Indian
nations, Egypt, India) that have been around for a long time. They
all have their ups and downs, but all seem to survive.

>I suspect that the next change in size of nations
>will be the Middle East as all sides have moved towards permanent sin
>that will never be forgiven and where some are willing to give
>themselves
>while taking all, leaving nothing but a desert while the tolerant have
>presettled
>else where they remove themselves from pre ethnic pasts.

For a nominal charge, I'll supply the needed forgiveness. As for
leaving the middle east a deserts, it has always been a desert. Not
much changes above ground level.

>Could we now possibly go back to radio and antennas which is what the
>newsgroup
>is set up for?

Possibly yes. However, ending a sentence in a preposition is a
violation of proper grammar, up with which I will not put.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4010. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 00:07:51 UTC
From: PN2222A <pn2222a@sbcglobal.net>
Message-ID: <yb6Pk.3669$hc1.3030@flpi150.ffdc.sbc.com>
Source record: 20584

"Art Unwin" <ArthurUnwin@gmail.com> wrote

>When viewing the antenna from an equilibrium point of view which is a
>staple requirement of all electrical laws
>one must assume that all forces/vectors equal zero (Newton)
>Following this dictum physics state that foe equilibrium the charge on
>the surface of a radiator does not move
>linearlly there fore, there cannot be a linear force or vector to
>oppose it. From this it is stated that there is no movement
>in linear form else where which includes the center of the conductor/
>radiator when the radfiator is one wavelength or multiple there of.
>Now we have the case of a fractional wavelength radiator. In this case
>one is aware that charges do move in a linear
> direction as evidenced by "end effect". Therefore by following the
>standard laws of physics there must be a
> balancing force/vector in the opposite direction and the only place
>that vector could be is in the center of the conductor
>One should also be aware that a electrical curcuit for a fractional
>wavelength is a series circuit and a parallelel circuit for a
>fulle wavelength both of which are closed cuircuits when determining
>current flow of a radiator so one can itemise the electrical circuit
>in detail with respect to the components on the actual radiator to
>ensure compatability.
>Now according to my theory of radiation the forward current on a
>radiator is opposed by closed circuit eddy current
>which in combination provide a angular rotational force on any
>residing particle which allows for directional levitation or
>projection.
>When the current of the radiator reaches the end of the radiator it
>closes the circuit by entering the center of the conductor
> (assuming the arrangement is not in a state of vacuum)under circular
>surface current cuircuit where it is still in existance.
> The internal current flow is solely resistive in nature comprising of
>theseries resistance of the material used and not radiative.
>Now David, if you can point to a description that differs to the above
>and follows the laws of physics I would be happy to look it up and
>study it , but in the final analysis one must be able to determine
>the state of the conductor at it's center at all times.
>David, my explanation is based on the world of physics as I know it.

Hi Art
Trying to build a picture here.
Let's say I have a 1/2 wave dipole, and I drive it such that one ampere
is flowing at the feedpoint. Let's agree to use amps RMS and volts RMS
at 14 MHz

for this example, just for clarity.
If I measure the current a short distance from the feedpoint, it's a bit
less than one amp. Correct so far?

If I tease the antenna conductor apart and measure the current flowing
on the
outside with one RF Ammeter, and the current flowing in the
center with a second ammeter, what are the two currents?

Thanks!
73
PN2222A

4011. Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 00:12:29 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B49AF0D246F7Huckleberrybigvalley@198.186.192.196>
Source record: 20585

I'm trying to build a decent performing 2M coaxial skirted antenna and have a question about its design for maximum efficiency.

I based the "hub" on an SO-239 connector. I soldered my RG8X cable center conductor to the solder pin center conductor and brought the shield braid out in two places.

I cut a 19" piece of half inch copper pipe, cut 4 half inch slots on one end, fanned the slotted end out slightly to fit nicely against the SO-239, and slid this pipe over my coax and up to the SO-239. I brought the two braid lengths previously prepared out through two of the rather fat slots, soldered the pipe to the SO-239 and the braids were soldered to the pipe where they came protruded out the slots.

I soldered an 18 1/2" brass welding rod to a PL-259 center conductor and screwed that the the SO-239 for my radiator. The copper pipe assy and coax slide nicely down into a length of 3/4" PVC . This makes a very nice break-down package for transportation and portable work.

Back to my question: I am measuring about 125 watts forward and 4-5 watts reflected at my desired frequency (146.000). While this may be acceptable to some, I would like to get the match down to 1:1 SWR.

Are there any design deficiencies in my proto-type? Can anyone suggest something I might try to improve the match? Is there a "rule of thumb" regarding the construction of such antennas?... length of coaxial skirt vs. antenna element?

I appreciate any feedback on this. Thanks.

I suppose I could provide a picture if anyone requires it....

Ed K7AAT

4012. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 00:35:07 UTC
From: Dave <noone@nowhere.com>
Message-ID: <%A6Pk.1999$Jv2.505@nwrddc01.gnilink.net>
Source record: 20586

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9B49AF0D246F7Huckleberrybigvalley@198.186.192.196...
>
> I'm trying to build a decent performing 2M coaxial skirted antenna and
> have a question about its design for maximum efficiency.
>
> I based the "hub" on an SO-239 connector. I soldered my RG8X cable
> center conductor to the solder pin center conductor and brought the
> shield braid out in two places.
>
> I cut a 19" piece of half inch copper pipe, cut 4 half inch slots on
> one end, fanned the slotted end out slightly to fit nicely against the
> SO-239, and slid this pipe over my coax and up to the SO-239. I brought
> the two braid lengths previously prepared out through two of the rather
> fat slots, soldered the pipe to the SO-239 and the braids were soldered
> to the pipe where they came protruded out the slots.
>
> I soldered an 18 1/2" brass welding rod to a PL-259 center conductor
> and screwed that the the SO-239 for my radiator. The copper pipe assy
> and coax slide nicely down into a length of 3/4" PVC . This makes a very
> nice break-down package for transportation and portable work.
>
> Back to my question: I am measuring about 125 watts forward and 4-5
> watts reflected at my desired frequency (146.000). While this may be
> acceptable to some, I would like to get the match down to 1:1 SWR.
>
> Are there any design deficiencies in my proto-type? Can anyone
> suggest something I might try to improve the match? Is there a "rule of
> thumb" regarding the construction of such antennas?... length of coaxial
> skirt vs. antenna element?
>
> I appreciate any feedback on this. Thanks.
>
> I suppose I could provide a picture if anyone requires it....
>
> Ed K7AAT

remember, too low an swr can kill you!

To get exactly 50 ohms you may need a fatter copper pipe, or some other
change to the geometry. if ti works well as it is i would leave it alone.

4013. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 00:56:19 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <8vspg452ib9c917hj2jd5cp5b9ppesl5kt@4ax.com>
Source record: 20587

On 02 Nov 2008 00:12:29 GMT, Ed <Huckleberry_REMOVE_@bigvalley.net>
wrote:

> I'm trying to build a decent performing 2M coaxial skirted antenna and
>have a question about its design for maximum efficiency.
(...)
> Back to my question: I am measuring about 125 watts forward and 4-5
>watts reflected at my desired frequency (146.000). While this may be
>acceptable to some, I would like to get the match down to 1:1 SWR.

125 watts forward with 5 watts back is a VSWR = 1.5:1

The characteristic impedance of a coaxial antenna is about 75 ohms.
The best you can do with your present arrangement is therefore about
1.5:1 which is what you're getting.

To do any better, you'll need some way to match the 75 ohm antenna to
your 50 ohm system. That's usually an odd multiple of 1/4 wave coax
section, with an impedance of 61 ohms. Something like:
<http://www.repeater-builder.com/rbtip/matchingstubs.html>

> I suppose I could provide a picture if anyone requires it....

A JPG is worth 1000 guesses.

Also, you might want to do your testing with something less than 125
watts, as accidents and miscalculations might become expensive.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4014. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 01:48:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <5100d309-244a-47c9-a91f-db3020cc1651@t18g2000prt.googlegroups.com>
Source record: 20588

On Nov 1, 7:07 pm, "PN2222A" <pn22...@sbcglobal.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote
>
>
>
> >When viewing the antenna from an equilibrium point of view which is a
> >staple requirement of all electrical laws
> >one must assume that all forces/vectors equal zero (Newton)
> >Following this dictum physics state that foe equilibrium the charge on
> >the surface of a radiator does not move
> >linearlly there fore, there cannot be a linear force or vector to
> >oppose it. From this it is stated that there is no movement
> >in linear form else where which includes the center of the conductor/
> >radiator when the radfiator is one wavelength or multiple there of.
> >Now we have the case of a fractional wavelength radiator. In this case
> >one is aware that charges do move in a linear
> > direction as evidenced by "end effect". Therefore by following the
> >standard laws of physics there must be a
> > balancing force/vector in the opposite direction and the only place
> >that vector could be is in the center of the conductor
> >One should also be aware that a electrical curcuit for a fractional
> >wavelength is a series circuit and a parallelel circuit for a
> >fulle wavelength both of which are closed cuircuits when determining
> >current flow of a radiator so one can itemise the electrical circuit
> >in detail with respect to the components on the actual radiator to
> >ensure compatability.
> >Now according to my theory of radiation the forward current on a
> >radiator is opposed by closed circuit eddy current
> >which in combination provide a angular rotational force on any
> >residing particle which allows for directional levitation or
> >projection.
> >When the current of the radiator reaches the end of the radiator it
> >closes the circuit by entering the center of the conductor
> > (assuming the arrangement is not in a state of vacuum)under circular
> >surface current cuircuit where it is still in existance.
> > The internal current flow is solely resistive in nature comprising of
> >theseries resistance of the material used and not radiative.
> >Now David, if you can point to a description that differs to the above
> >and follows the laws of physics I would be happy to look it up and
> >study it , but in the final analysis one must be able to determine
> >the state of the conductor at it's center at all times.
> >David, my explanation is based on the world of physics as I know it.
>
> Hi Art

> Trying to build a picture here.
> Let's say I have a 1/2 wave dipole, and I drive it such that one ampere
> is flowing at the feedpoint. Let's agree to use amps RMS and volts RMS
> at 14 MHz
> for this example, just for clarity.
> If I measure the current a short distance from the feedpoint, it's a bit
> less than one amp.   Correct so far?
>
> If I tease the antenna conductor apart and measure the current flowing
> on the
> outside with one RF Ammeter, and the current flowing in the
> center with a second ammeter, what are the two currents?
>
> Thanks!
> 73
> PN2222A

Sorry. I have enough problems trying to explain my own theorem which
follows Newton,
Gauss and also Einsteins dream in identifying all four universal
forces which provide the key
to the explanation to radiation and discards the notion of traveling
waves in the atmosphere.
Until this group has the courage in disputing that the addition of
radiators and a time varying
current to a Gaussian arbitrary static field in equilibrium is
mathematically identical with Maxwell's laws
AND also accept the Grand Unification Theory which I have supplied the
proof of authenticity change will never be accepted regardless of
first
principles that they learned in their only period of learning where
they apparently were placed
in a position of understanding all the laws of the Universe and every
thing else. If any of those
that are educated enough to take up the challenge from first
principles then they are in danger of being mocked
by those who cannot accept change,Thus it is safer to abide by books
that are full of just conjecture with respect to radiation.
There is nobody in this newsgroup who is willing to take the challenge
and be subject to the ire of the many talking heads.
The comparison of my extended Gaussian law of statics to the laws of
Maxwell will never be attempted by a ham whether
on this newsgroup or else where. On top of thatm, the theorem will
never be attempted or accepted when applied to NEC or mininec programs
with optimizer regardles of the fact that computer programs are
founded on the laws of Maxwell which includes the four forces of the
Universe plus the foundation of equilibrium NONE of which are included
or accounted for in the design of Yagi's or other planar devices.
To be frank,, most of this group have asked for a definition of the
term equilibrium, this despite the fact that there is no law of

physics in this universe that does not expect the condition of
equilibrium as a a given for the validity of any law with respect to
our universe. This is in addition to all suppliers of technical
information to Maxwell to condense into a smaller number, all
specifically stated that the information given were valid ONLY under
the conditions of equilibrium
As far as your question goes, you cannot create energy so the energy
supplied is the same that returns to the source
neglecting losses in the closed system i.e Energy supplied to the
"system" cannot be overcome by the disturbances created by the initial
energy
Best regards
Art Unwin KB9MZ.....xg
which has never been extended

4015. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 01:53:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <YOCdnczI1KSzlZDUnZ2dnUVZ_s7inZ2d@posted.easystreetonline>
Source record: 20589

Jeff Liebermann wrote:
> . . .
> Possibly yes. However, ending a sentence in a preposition is a
> violation of proper grammar, up with which I will not put.

Johnny's dad wanted to read him a story from a book, but Johnny wasn't interested. So his mean father sent him to his room without supper. After supper, his father went to Johnny's room to try again. And Johnny said,

"Why did you bring the book that before dinner I didn't want to be read to out of up for after?"

That was the record of six prepositions at the end of a sentence submitted by readers to "Charlie Rice's Punchbowl" in Parade Magazine oh, I dunno, 45 years or so ago. I guess remembering stuff like that is why I don't have room to remember where I parked the car or left my glasses.

Roy Lewallen, W7EL

4016. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 02:02:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <YfudnRiQss2gl5DUnZ2dnUVZ_gednZ2d@posted.easystreetonline>
Source record: 20590

Ed wrote:
> . . .
> Back to my question: I am measuring about 125 watts forward and 4-5
> watts reflected at my desired frequency (146.000). While this may be
> acceptable to some, I would like to get the match down to 1:1 SWR.
> . . .

Actually, this is acceptable to just about everyone. And those for whom it's not don't usually have a rational reason for it.

Here are some ways to do it:

1. Lower the impedance at resonance by making the top of the antenna into an inverted cone shape, by using fanned out multiple conductors. You'll have to adjust the length of the conductors and possibly the sleeve to maintain the same resonant frequency.
2. Build and use a simple matching network, preferably placed as close to the antenna as possible. Then you can adjust it for a perfect match.
3. Use some other form of impedance transformation such as a stub matching network or transmission line transformer.

If you do things right, it'll work the same when you finish as it did when you start. But you'll feel better seeing zero "reflected" power on your meter, and the placebo effect is not to be sneezed at.

Roy Lewallen, W7EL

4017. KB5URP, Randy Chapman, is a punk ass convicted crack dealer!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 02:19:10 UTC
From: mopeyzakween@yahoo.com
Message-ID: <f88ee126-c373-4314-a5a9-063e12a6dc74@b31g2000prf.googlegroups.com>
Source record: 20591
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

Hypocryitical queen talks shit about others but sells crack cocaine to
kids. HAH! Here i is info:

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE

GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4018. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 03:22:09 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4A922B74F99nonenowhere@61.9.191.5>
Source record: 20592

Ed,

You might have expected the feedpoint impedance to be around 70 ohms. It will depend on the feedline configuration, because you haven't taken much is the way of measures to decouple the feedline.

Your measured fwd and ref indicates VSWR~=1.5 which is consistent with 70 ohms, but you haven't measured 70 ohms.

Assuming though that such an antenna should be close to 70+j0 at resonance...

If you did want to incorporate an impedance matching system that doesn't compromise the portability you have described, you could try a twelfth wave transformer with 29.3° of 50 ohm coax from the feedpoint, then 29.3° of 75 ohm coax then any length of 50 ohm coax to the transmitter.

For example, for 146MHz, that could be 137mm of Belden 9258 (RG8/X) then 139mm of Belden 1189A (RG6/U) then any length of 50 ohm coax to the tx.

Owen

4019. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 03:23:38 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B49CF740E52AHuckleberrybigvalley@74.209.136.92>
Source record: 20593

Dave, Jeff, Roy, ...

Thank you for the excellent responses to my questions. I am considering any and all of them.

One note: I erred on my previously stated power levels.... it was 1.25 Watts forward and about .05 watts reflected. Same ratio, but less energy.

Ed

4020. Re: What's the Impulse response of a loop and dipole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 03:59:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <cKmdnbedKJ8puJDUnZ2dnUVZ_rzinZ2d@posted.easystreetonline>
Source record: 20594

I sense a little confusion about the differences between time and frequency domain analysis. This is really common.

Impedance is a frequency domain concept, and works in the time domain only in a very limited way. Impedance consists of two parts, a magnitude and phase or a resistance and reactance. Reactance is a function of frequency, so it has no simple equivalent meaning in the time domain which encompasses a very wide range of frequencies all at once. Likewise for magnitude and phase. So only resistance is really useful in time domain analysis. Some impedances, like a low loss transmission line's Z0, are essentially purely resistive, so they're useful. But complex impedances, in general, are not.

With a TDR system you can readily see and interpret frequency-dependent resistances like skin effect, "capacitive" and "inductive" regions (where the Z0 of the transmission path is lower or higher than the reference respectively), and a lot of other features. But it's difficult to get an intuitive feel for the relationship between a TDR and frequency domain analysis of a lot of circuits which change characteristics rapidly with frequency (in other words, which have a reasonably high Q).

A TDR generally produces a fast rising step or its derivative, a narrow pulse. Viewed in the frequency domain, this step or pulse has energy over a very wide range of frequencies, but very little in any narrow range of frequencies. So if a circuit has high Q, there's usually not enough energy at or near the resonant frequency to get the circuit to ring at any appreciable amplitude, and you often won't even see the circuit with a TDR. (By this I mean that, for example, a high Q series resonant circuit looks like an open and a parallel resonant circuit like a short, which are essentially their impedances except near resonance.) A dipole is a pretty low Q circuit in the frequency domain, so you can see a periodic time domain response that corresponds to its basic resonance. It looks like a lossy, open circuited transmission line whose characteristic impedance increases from the feed point outward. The response, which I'm sure you can also find somewhere on the web, looks something like a distorted (due to the changing Z0) square wave whose amplitude diminishes with time (due to the radiative "loss").

Roy Lewallen, W7EL

4021. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 04:05:30 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <eG9Pk.2098$225.1295@nwrddc02.gnilink.net>
Source record: 20595

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9B49AF0D246F7Huckleberrybigvalley@198.186.192.196...
>
> I'm trying to build a decent performing 2M coaxial skirted antenna and
> have a question about its design for maximum efficiency.
>
> I based the "hub" on an SO-239 connector. I soldered my RG8X cable
> center conductor to the solder pin center conductor and brought the
> shield braid out in two places.
>
> I cut a 19" piece of half inch copper pipe, cut 4 half inch slots on
> one end, fanned the slotted end out slightly to fit nicely against the
> SO-239, and slid this pipe over my coax and up to the SO-239. I brought
> the two braid lengths previously prepared out through two of the rather
> fat slots, soldered the pipe to the SO-239 and the braids were soldered
> to the pipe where they came protruded out the slots.
>
> I soldered an 18 1/2" brass welding rod to a PL-259 center conductor
> and screwed that the the SO-239 for my radiator. The copper pipe assy
> and coax slide nicely down into a length of 3/4" PVC . This makes a very
> nice break-down package for transportation and portable work.
>
> Back to my question: I am measuring about 125 watts forward and 4-5
> watts reflected at my desired frequency (146.000). While this may be
> acceptable to some, I would like to get the match down to 1:1 SWR.
>
> Are there any design deficiencies in my proto-type? Can anyone
> suggest something I might try to improve the match? Is there a "rule of
> thumb" regarding the construction of such antennas?... length of coaxial
> skirt vs. antenna element?
>
> I appreciate any feedback on this. Thanks.
>
> I suppose I could provide a picture if anyone requires it....
>
> Ed K7AAT
Hi Ed

If you are in search of precission, I'd suggest that you consider using 70 ohm coax to feed the 70 ohm antenna. There are some very good 70 ohm coax available at low cost. Their loss will be a fraction of a dB less than your RG-8X. Their OD may be smaller (that helps a little to decouple the stub from the coax). TheVSWR on the 70 ohm line will be lower than on the 50 ohm line. You will then be able to construct a tuning network at the

junction from the transmitter to the 70 ohm line. There will be essentially no meaureable VSWR anywhere in the system.

Jerry KD6JDJ

4022. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 04:37:20 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B49DBF281D87Huckleberrybigvalley@74.209.136.82>
Source record: 20596

Owen Duffy <none@no.where> wrote in
news:Xns9B4A922B74F99nonenowhere@61.9.191.5:

>
> Ed,
>
> You might have expected the feedpoint impedance to be around 70 ohms.
> It will depend on the feedline configuration, because you haven't
> taken much is the way of measures to decouple the feedline.
>
> Your measured fwd and ref indicates VSWR~=1.5 which is consistent with
> 70 ohms, but you haven't measured 70 ohms.
>
> Assuming though that such an antenna should be close to 70+j0 at
> resonance...
>
> If you did want to incorporate an impedance matching system that
> doesn't compromise the portability you have described, you could try a
> twelfth wave transformer with 29.3° of 50 ohm coax from the feedpoint,
> then 29.3° of 75 ohm coax then any length of 50 ohm coax to the
> transmitter.
>
> For example, for 146MHz, that could be 137mm of Belden 9258 (RG8/X)
> then 139mm of Belden 1189A (RG6/U) then any length of 50 ohm coax to
> the tx.
>
> Owen
>

Very nice, Owen. Saved me a lot of difficult math.... since I have
those materials on hand I may see what I can throw together tomorrow.

Ed

4023. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 04:58:12 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <u5cqg4d3fqif69sbmek3f8im5e8rf2uouv@4ax.com>
Source record: 20597

On Sun, 02 Nov 2008 03:22:09 GMT, Owen Duffy <none@no.where> wrote:

>If you did want to incorporate an impedance matching system that doesn't
>compromise the portability you have described, you could try a twelfth wave
>transformer with 29.3ï¿½ of 50 ohm coax from the feedpoint, then 29.3ï¿½ of 75
>ohm coax then any length of 50 ohm coax to the transmitter.
>
>For example, for 146MHz, that could be 137mm of Belden 9258 (RG8/X) then
>139mm of Belden 1189A (RG6/U) then any length of 50 ohm coax to the tx.
>
>Owen

Very nice. Here's a bit more on how it works:
<http://ourworld.compuserve.com/homepages/demerson/twelfth.htm>
<http://ourworld.compuserve.com/homepages/demerson/12thfdbk.htm>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4024. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 05:54:41 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4AAC084EA4nonenowhere@61.9.191.5>
Source record: 20598

Ed <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns9B49DBF281D87Huckleberrybigvalley@74.209.136.82:

> Owen Duffy <none@no.where> wrote in
> news:Xns9B4A922B74F99nonenowhere@61.9.191.5:
>
>>
>> Ed,
>>
>> You might have expected the feedpoint impedance to be around 70 ohms.
>> It will depend on the feedline configuration, because you haven't
>> taken much is the way of measures to decouple the feedline.
>>
>> Your measured fwd and ref indicates VSWR~=1.5 which is consistent
>> with 70 ohms, but you haven't measured 70 ohms.
>>
>> Assuming though that such an antenna should be close to 70+j0 at
>> resonance...
>>
>> If you did want to incorporate an impedance matching system that
>> doesn't compromise the portability you have described, you could try
>> a twelfth wave transformer with 29.3° of 50 ohm coax from the
>> feedpoint, then 29.3° of 75 ohm coax then any length of 50 ohm coax
>> to the transmitter.
>>
>> For example, for 146MHz, that could be 137mm of Belden 9258 (RG8/X)
>> then 139mm of Belden 1189A (RG6/U) then any length of 50 ohm coax to
>> the tx.
>>
>> Owen
>>
>
> Very nice, Owen. Saved me a lot of difficult math.... since I
> have
> those materials on hand I may see what I can throw together tomorrow.

I didn't do the math, I punched the numbers into TLLC
(http://www.vk1od.net/tl/tllc.php).

Of course, the reason I was so specific is that translation from the
29.3° depends on the velocity factor... so use the velocity factor for
the cables you have at hand. (For example, if you use RG59, it has a
very different velocity factor to te 1189A, and you need to adjust
accordingly.)

There is a little on the twelfth wave transformer, including a graph of the lengths for different transformation ratios at http://www.vk1od.net/RG6/index.htm .

Have fun.

Owen

4025. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 06:35:59 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4AB3084C299nonenowhere@61.9.191.5>
Source record: 20599

Owen Duffy <none@no.where> wrote in news:Xns9B4AAC084EA4nonenowhere@
61.9.191.5:

...
> There is a little on the twelfth wave transformer, including a graph of
> the lengths for different transformation ratios at
> http://www.vk1od.net/RG6/index.htm .

If you read the article, you might try evaluating the systemusing TLLC with
say 10m of feedline configured with:
- the twelfth wave transformer near the antenna and 10m of RG8/X, and
- the twelfth wave transformer near the tx and 10m of RG6.

Intesting, the cheapest option (mostly RG6) is the one with the least loss!

Owen

4026. Re: WWII Direction Finder Fix

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 12:15:29 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <ERgPk.4477$U%6.4182@newsfe01.iad>
Source record: 20600

Walt,

I had not heard of these Adcock antennas and am interested on the time of their deployment to Europe. By chance, do you know when that happened?

My uncle was Robert LaMotte, radio operator of the ill-fated B-24 bomber "Lady Be Good" that was lost in a bombing run over Italy in 1943 and believed to have ditched in the Med. The ship and crew were found 16 years later in the Libyan desert, victims of a "read from the back of the loop" tragedy. They abandoned ship when running out of fuel, believing they were over water but had overflown their airstrip and in fact were over the desert. (Google "lady be good" for lots of links)

The family has always followed any news about these types of mishaps, and I am curious to know how soon after my uncle's loss any technology might have appeared to prevent the accident.

Thanks in advance for your response,

-larry
K8UT
"Walter Maxwell" <walt@w2du.com> wrote in message
news:e0sOk.912$cx5.413@newsfe01.iad...
>I hate to be a nit-picker, but my article was in the Jan 2007 issue of QST,
>not
> 2002. In addition, there were nine Adcocks in Hawaii, and at least 50 on
> the
> Mainland DURING WW2, not just me. The article is not on my web page, as
> indicated below, but for those who don't have the above issue of QST, let
> me
> know and I'll send you a copy.
>
> Walt, W2DU
>
>
>> >Walter Maxwell worked for the FCC at war`s end in Hawaii and equipped
>> >himself with an Adcock antenna so he could advise lost American aviators
>> >of their positions in the Pacific. I think Walter has published his
>> >story in a radio magazine.
>>
>> Yep. Walter Maxwell (W2DU) emailed me a copy of his article from the
>> Jan 2002 issue of QST. Very interesting and well worth reading. I
>> don't consider it good form to resend what looks like copyrighted
>> material, so you'll have to either get your copy from the author or
>> from the ARRL archives:
>> <http://www.w2du.com>

>>
>> >Best regards, Richard Harrison, KB5WZI >
>> --
>> Jeff Liebermann jeffl@cruzio.com
>> 150 Felker St #D http://www.LearnByDestroying.com
>> Santa Cruz CA 95060 http://802.11junk.com
>> Skype: JeffLiebermann AE6KS 831-336-2558
>
>

4027. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 13:04:12 UTC
From: Dave <noone@nowhere.com>
Message-ID: <gzhPk.2081$Jv2.700@nwrddc01.gnilink.net>
Source record: 20501

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:5100d309-244a-47c9-a91f-db3020cc1651@t18g2000prt.googlegroups.com...
>To be frank,, most of this group have asked for a definition of the
>term equilibrium,

and which you have never supplied, despite your claim that it has to be
satified for everything.

>this despite the fact that there is no law of
>physics in this universe that does not expect the condition of
>equilibrium as a a given for the validity of any law with respect to
>our universe.

which laws specifically require equilibrium? any law that talks about
energy transfer, which is most of them, require non-equilibrium. energy can
not flow where everything is in equilibrium, by definition! oh, but wait,
you have not supplied that definition yet, so you must have a different
definition in which energy can flow despite equilibrium... lets hear it art,
that is worthy of a Nobel prize for sure!

>This is in addition to all suppliers of technical
>information to Maxwell to condense into a smaller number, all
>specifically stated that the information given were valid ONLY under
>the conditions of equilibrium

Give quotes. i want to see in the original writings where Gauss, Ampere,
Coulomb, Ohm, Lorentz, etc all require some kind of equilibrium. Come on
art, you claim to be above all of us who have studied such things for years,
and yet you can not define even your most basic condition that you keep
ranting about.

So your homework assignment is to in one equation do this: Define
Equilibrium.

4028. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 13:27:55 UTC
From: "R. Fry" <rfry@adams.net>
Message-ID: <gek9svshr1@aioe.org>
Source record: 20502

"Roy Lewallen" wrote:
>
> But you'll feel better seeing zero "reflected" power on your meter, ...

The meter indication will be essentially zero only if the directivity of the device measuring reflected energy is extremely good (as in 60+ dB).

The leakage of forward energy into the reflected sample that is present in typical commercial products will lead to (mis)adjusting the load Z to whatever produces zero on the reflected meter. However some amount of reflected energy will be needed to cancel the leakage of the reflected coupler, in order to obtain that "zero" reading.

And then the reverse energy is not really zero, and the true load SWR is not really 1:1.

RF

4029. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 14:00:40 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <coiPk.2088$Jv2.360@nwrddc01.gnilink.net>
Source record: 20503

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B4AAC084EA4nonenowhere@61.9.191.5...
> Ed <Huckleberry_REMOVE_@bigvalley.net> wrote in
> news:Xns9B49DBF281D87Huckleberrybigvalley@74.209.136.82:
>
>> Owen Duffy <none@no.where> wrote in
>> news:Xns9B4A922B74F99nonenowhere@61.9.191.5:
>>
>>>
>>> Ed,
>>>
>>> You might have expected the feedpoint impedance to be around 70 ohms.
>>> It will depend on the feedline configuration, because you haven't
>>> taken much is the way of measures to decouple the feedline.
>>>
>>> Your measured fwd and ref indicates VSWR~=1.5 which is consistent
>>> with 70 ohms, but you haven't measured 70 ohms.
>>>
>>> Assuming though that such an antenna should be close to 70+j0 at
>>> resonance...
>>>
>>> If you did want to incorporate an impedance matching system that
>>> doesn't compromise the portability you have described, you could try
>>> a twelfth wave transformer with 29.3° of 50 ohm coax from the
>>> feedpoint, then 29.3° of 75 ohm coax then any length of 50 ohm coax
>>> to the transmitter.
>>>
>>> For example, for 146MHz, that could be 137mm of Belden 9258 (RG8/X)
>>> then 139mm of Belden 1189A (RG6/U) then any length of 50 ohm coax to
>>> the tx.
>>>
>>> Owen
>>>
>>
>> Very nice, Owen. Saved me a lot of difficult math.... since I
>> have
>> those materials on hand I may see what I can throw together tomorrow.
>
> I didn't do the math, I punched the numbers into TLLC
> (http://www.vk1od.net/tl/tllc.php).
>
> Of course, the reason I was so specific is that translation from the
> 29.3° depends on the velocity factor... so use the velocity factor for

> the cables you have at hand. (For example, if you use RG59, it has a
> very different velocity factor to te 1189A, and you need to adjust
> accordingly.)
>
> There is a little on the twelfth wave transformer, including a graph of
> the lengths for different transformation ratios at
> http://www.vk1od.net/RG6/index.htm .
>
> Have fun.
>
> Owen

Hi Owen

Another way of avoiding the math is to use both a Smith Chart and an
overlay of a Z Theta Chart. The problem of choosing line lengths and their
Zo them becomes intuitive. But any "perfect match" does depend heavily on
knowing impedance rather than VSWR, as you know.
The load impedance ploted on the Smith Chart can be assummed to translate
to any impedance on the circle of constant VSWR for any load impedance.
The impedance moves along the line of constant "Theta" on the Z Theta Chart
for a change of Chart Z.
With the overlay of the two charts, it is fairly easy to see what lengths
and Zo will produce the best match.

Jerry KD6JDJ

4030. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 17:29:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <29b2c2eb-5cc2-44a3-a6d1-74fc5f251a7d@b31g2000prb.googlegroups.com>
Source record: 20504

On Nov 2, 7:04 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:5100d309-244a-47c9-a91f-db3020cc1651@t18g2000prt.googlegroups.com...
>
> >To be frank,, most of this group have asked for a definition of the
> >term equilibrium,
>
> and which you have never supplied, despite your claim that it has to be
> satified for everything.
>
> >this despite the fact that there is no law of
> >physics in this universe that does not expect the condition of
> >equilibrium as a a given for the validity of any law with respect to
> >our universe.
>
> which laws specifically require equilibrium? any law that talks about
> energy transfer, which is most of them, require non-equilibrium. energy can
> not flow where everything is in equilibrium, by definition! oh, but wait,
> you have not supplied that definition yet, so you must have a different
> definition in which energy can flow despite equilibrium... lets hear it art,
> that is worthy of a Nobel prize for sure!
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> >This is in addition to all suppliers of technical
> >information to Maxwell to condense into a smaller number, all
> >specifically stated that the information given were valid ONLY under
> >the conditions of equilibrium
>
> Give quotes. i want to see in the original writings where Gauss, Ampere,
> Coulomb, Ohm, Lorentz, etc all require some kind of equilibrium. Come on
> art, you claim to be above all of us who have studied such things for years,
> and yet you can not define even your most basic condition that you keep
> ranting about.
>
> So your homework assignment is to in one equation do this: Define
> Equilibrium.

David,
I am so glad that you keep writing. No I can't spend a lot of time
responding
because of the postings content. What I do find important is that
everybody
exercise to right of free speech as it allows all to determine who
and what you really are

Most people would look at a dictionary for themselves to determine what the word
equilibrium actually means as well as the recordings of history where all the masters of the past
has made a stipulation about the conditi9on of equilibrium as a staple of the validity of the laws that they espoused.
You should also know that Einstein was convinced that radiation held the clues as to the nature of the four forces of the universe
He never stumbled on the answer but he never ditched the idea of equilibrium as a staple
for the laws of relativity. Nor have other discarded same in string theory or the burgeoning science of particles
in our universe. I am betting that there are some knoweledgable people out there that do read your postings and place you in a certain category.
I would also point out that those who try to distort the ideas of reflection are the owners of the largest threads on this newsgroup where there are many that exceed a thousand posting where many are unable to turn the espoused ideas of reflections into a closed circuit of understanding since it involves so many positions that are unsustainable to those familiar with the state of the art.
All one has to do to destroy my theory and the new clues that emanate is to add radiators and a time varying current to that enclosed within a arbitrary border is in a state of equilibrium as per Gauss to determine the difference in the math to that espoused by Maxwell to detroy my position. All one has to do is to use any computor program on antennas with an optimizer, insert any dimensions that do not guide the computer in the direction of a planar design ie. all dimensions being non repeatable and then determine why the programs based on the laws of Maxwell consistently provide antennas that are in a state of equilibrium. No ham on this group have proved false my assertions with respect to radiation since their learning stopped at the point of leaving university where they still hold on to the books of yesteryear. On top of all this there is no evidence that there is any advantage in having rafiators in a straight line, or that size is a factor for any antenna WHERE there is accountability for ALLl the four forces that aid in the production of radiation.
So David keep writing as I have given you lots of data to refute so that posters can understand who and what you are .
Great day for antennas so get off the net and enjoy your self
Best regards
Art Unwin KB9MZ.....xg

4031. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 18:12:43 UTC
From: Dave <noone@nowhere.com>
Message-ID: <v4mPk.2140$Jv2.2073@nwrddc01.gnilink.net>
Source record: 20506

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:29b2c2eb-5cc2-44a3-a6d1-74fc5f251a7d@b31g2000prb.googlegroups.com...
>So David keep writing as I have given you lots of data to refute so
>that posters can understand who and what you are .

you have given no 'data', you have done lots of hand waving and
pontificating, but you have presented no actual data or equations that could
be refuted. i am just in here keeping you talking because i enjoy the
occasional laugh when you put together a particularly good piece of
bafflegab.

>Great day for antennas so get off the net and enjoy your self

I am taking the day off from antenna work, i have a guest operator using my
station for ss cw and i am just working on an update of my latest book...
practical stuff for the practical ham, you will have no place in it nor need
for it.

4032. Lawsuit countdown 30 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 18:30:42 UTC
From: kb9rqz@yahoo.com
Message-ID: <vdsrg4t46418jglakiho1kpmdktrpo9gfj@4ax.com>
Source record: 20507
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Sat, 1 Nov 2008 19:19:10 -0700 (PDT), mopeyzakween@yahoo.com wrote:

>Hypocryitical queen talks shit about others but sells crack cocaine to
>kids. HAH! Here i is info:

you need treatment real bad

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4033. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 18:33:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <56480fbd-7eb0-44ad-9eeb-a4fd2ed80a7b@s9g2000prm.googlegroups.com>
Source record: 20508

On Nov 2, 12:12 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:29b2c2eb-5cc2-44a3-a6d1-74fc5f251a7d@b31g2000prb.googlegroups.com...
>
> >So David keep writing as I have given you lots of data to refute so
> >that posters can understand who and what you are .
>
> you have given no 'data', you have done lots of hand waving and
> pontificating, but you have presented no actual data or equations that could
> be refuted. i am just in here keeping you talking because i enjoy the
> occasional laugh when you put together a particularly good piece of
> bafflegab.
>
> >Great day for antennas so get off the net and enjoy your self
>
> I am taking the day off from antenna work, i have a guest operator using my
> station for ss cw and i am just working on an update of my latest book...
> practical stuff for the practical ham, you will have no place in it nor need
> for it.

The book idea sounds interesting. there seems to be a lot more
printing
outside theo academic world these days to counteract their iron hold
on science discussions.
The best independent book that I own is
The secret of gravity and other mysteries of the Universe by Weldon
Vlasak which I recommend to anybody
in the ham radio world. Let me know when your book gets on the Oprah
list of the book of the month
so I can see you on TV
At the moment I am putting a different rotatable antenna for top band
on my tower while the weather is still good
tho there are a lot of hitches that get in the way when at the top !.
Art

4034. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 18:47:38 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <eBmPk.2204$225.1181@nwrddc02.gnilink.net>
Source record: 20509

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:fgtrg4p825fqamk19um6r8kt0j6htd02jl@4ax.com...
> On Sun, 02 Nov 2008 14:00:40 GMT, "Jerry" <jerrymartes@verizon.net>
> wrote:
>
>> Hi Owen
>>
>> Another way of avoiding the math is to use both a Smith Chart and an
>>overlay of a Z Theta Chart. The problem of choosing line lengths and
>>their
>>Zo them becomes intuitive. But any "perfect match" does depend heavily
>>on
>>knowing impedance rather than VSWR, as you know.
>> The load impedance ploted on the Smith Chart can be assummed to
>> translate
>>to any impedance on the circle of constant VSWR for any load impedance.
>>The impedance moves along the line of constant "Theta" on the Z Theta
>>Chart
>>for a change of Chart Z.
>> With the overlay of the two charts, it is fairly easy to see what
>> lengths
>>and Zo will produce the best match.
>>
>> Jerry KD6JDJ
>
> Hi Jerry,
>
> Your solution is rather exotic for this group, but I have encountered
> it in my Metrology days as part of the HP legacy. The method you
> described is missing from this article, but it gives the group a
> picture of the chart, none-the-less:
> http://www.hpl.hp.com/hpjournal/pdfs/IssuePDFs/1950-04.pdf
>
> 73's
> Richard Clark, KB7QHC

Hi Richard

As you know, I have been far away from the antenna design community for
such a long time that I feel like a beginner today. So, I wouldnt have
considered anything i know to be "exotic".
For those who havent used the Z Theta Chart, it is identical to the Smith
Chart, but expressed in polar coordinates (Impedance magnitude with its
angle).
With both a Smith Chart and a Z Theta Chart of equal radius and overlayed,

a pin hole thru both will identify any impedance with real Resistance. The value identified on the Smith Chart is given as R+/- jX.. The value identified on the Z Theta Chart is given as Z Angle Theta.

The use of both charts together is a great tool for impedance matching with transmission line sections. It is quick and simple yet it is quite accurate. An impedance, plotted on the Z Theta Chart moves along the lines of constant angle when the chart Impedance is changed. That lets the designer plot any impedance on the Z Theta Chart with, for instance 50 ohms as its center, then immediately see where the impedance will move if the Chart impedance is changed to the value of the new transmission line impedance chosen for the transformer, for instance 70 ohms.

Jerry

4035. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 18:51:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fgtrg4p825fqamk19um6r8kt0j6htd02jl@4ax.com>
Source record: 20505

On Sun, 02 Nov 2008 14:00:40 GMT, "Jerry" <jerrymartes@verizon.net>
wrote:

> Hi Owen
>
> Another way of avoiding the math is to use both a Smith Chart and an
>overlay of a Z Theta Chart. The problem of choosing line lengths and their
>Zo them becomes intuitive. But any "perfect match" does depend heavily on
>knowing impedance rather than VSWR, as you know.
> The load impedance ploted on the Smith Chart can be assummed to translate
>to any impedance on the circle of constant VSWR for any load impedance.
>The impedance moves along the line of constant "Theta" on the Z Theta Chart
>for a change of Chart Z.
> With the overlay of the two charts, it is fairly easy to see what lengths
>and Zo will produce the best match.
>
> Jerry KD6JDJ

Hi Jerry,

Your solution is rather exotic for this group, but I have encountered
it in my Metrology days as part of the HP legacy. The method you
described is missing from this article, but it gives the group a
picture of the chart, none-the-less:
http://www.hpl.hp.com/hpjournal/pdfs/IssuePDFs/1950-04.pdf

73's
Richard Clark, KB7QHC

4036. RE:Coaxial antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 19:20:02 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gekuh6$pg1$1@news.netins.net>
Source record: 20510

You could try putting 4 ground plane elements off the SO-239 connector, I'm told they are to help with standing wave problems. I've never used ground plane antennas, but it wouldn't take much effort and could be worth a try. I use the MFJ 269 antenna analyzer when building antennas and find that the unit saves lots of time. Rollie

4037. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 19:20:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gekui6$sj6$1@news.albasani.net>
Source record: 20511

Art Unwin wrote:

>> ...
> Best regards
> Art

Of course, I am always open to "new proof" (heck, even old proof will do!)

However, in a capacitor, I do believe that power and/or current does travel the surface of the plate(s.) To make a jump from this acceptance, to one accepting the same occurs at rf, where a signal actually leaves the antenna and enters/"rides"/travels/propagates the ether, is easily made, at least by me.

Since, obviously, the signal MUST leave the surface, why not just travel it (shortest distance between two points--and all that) to begin with?

I do believe it does travel the surface, if at all possible; however, given a very thin radiator and/or a very large PA, it would not surprise me if you can't force the current/power/VA to another route ...

Regards,
JS

4038. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 19:30:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gekv4itbv1@news.albasani.net>
Source record: 20512

Ed wrote:

> ...
> Back to my question: I am measuring about 125 watts forward and 4-5
> watts reflected at my desired frequency (146.000). While this may be
> acceptable to some, I would like to get the match down to 1:1 SWR.
> ...
>
> Ed K7AAT

You could always construct one of the "fancy" and esoteric 50:75 ohm ununs to accomplish, however, you would probably not gain much if anything, as there will be some loss--even if you construct the unun from optimum material.

However, if ONLY the mismatch bothers you (and not the insignificant 4-5 watts) and not the actual loss of watts--it is an option. But any "gain" you would get from this option would be virtually "insignificant", or so in my humble opinion.

Regards,
JS

4039. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 20:16:02 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <eUnPk.38889$OT2.6001@newsfe01.iad>
Source record: 20513

Hi Jerry,

The Z-Theta Chart has actually been around a long time, well known as the 'Carter' Chart, developed by Philip Carter, an early RCA transmission-line and antenna inventor, around the same time as Philip Smith developed the Smith Chart. In one of HP's Application Notes it is incorrectly called the 'Charter Chart'. But you are correct, overlaying those two charts is often very helpful.

Walt, W2DU

4040. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 20:19:52 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a9c74aa9-d7ae-46ec-bcb9-70469c6faee6@k36g2000pri.googlegroups.com>
Source record: 20514

On Nov 2, 1:20 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> > Best regards
> > Art
>
> Of course, I am always open to "new proof" (heck, even old proof will do!)
>
> However, in a capacitor, I do believe that power and/or current does
> travel the surface of the plate(s.)
But of course John it will travel along the plate
that is natures way of seeking the point of least resistance
to cross. Remember that the plate of a capacitor represents an
inductor which in combination with a capacitor has the same
constituents as a
tank circuit except that it is not being subject to a time varying
field.
I would like to say that I was in error stating that the when
programers made the computor program
on antennas on the premise of a contunuous sine wave they are quite
correct when viwing it from yhe stand point of a
tank circuit.

To make a jump from this
> acceptance, to one accepting the same occurs at rf, where a signal
> actually leaves the antenna and enters/"rides"/travels/propagates the
> ether, is easily made, at least by me.
I think the case is slightly different, it needs a continued varied
current to
achieve a stable eddy current which gives the ability for levitated
charge movement
and in the capacitor case the point of least resistance is pre
established after the first varient in current
and it is the current movement inconjunction with the eddy current
that provides the essential spin needed
for inline projection

>
> Since, obviously, the signal MUST leave the surface, why not just travel
> it (shortest distance between two points--and all that) to begin with?

Exactly . After the first pulse of current flow the point of least
resistance

is attained so yes the charge will travel at that specific point.
When a capacitor breaks down you cannot see the path taken by the
current
on the initiating plate but you can see a point trace where the charge
impinges
on the reeiving plate as opposed to the whole area of the plate.
Remember convention if correct states that a capacitor does not
radiate
>
> I do believe it does travel the surface, if at all possible; however,
> given a very thin radiator and/or a very large PA, it would not surprise
> me if you can't force the current/power/VA to another route ...

I don't see how that could happen except when a charge is released it
produces a
lesser resistance route by ironizing of the medium travelled either in
the initial case
or of a resultant discharge travelling thu ozone.

>
> Regards,
> JS
Interesting
Regards
Art

4041. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 20:24:56 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <z0oPk.38892$OT2.22243@newsfe01.iad>
Source record: 20515

Art, will you please tell us who has distorted the idea of reflection?

Walt, W2DU

4042. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 21:09:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gel4ul$5fi$1@news.albasani.net>
Source record: 20516

Art Unwin wrote:

> ...
> I don't see how that could happen except when a charge is released it
> produces a
> lesser resistance route by ironizing of the medium travelled either in
> the initial case
> or of a resultant discharge travelling thu ozone.
>
>> Regards,
>> JS
> Interesting
> Regards
> Art
>

Well, I AM one which can picture, theoretically, the antenna as a "transformer"; and, the antenna taking the signal from the feedline and "properly interfacing"/matching/transforming-its'-characteristics to the ether (actually, the ether looks like a "spherical turn" of superconductor which envelopes the antenna, as someone, either intentionally or unintentionally, mentioned in an earlier post in another thread ...)

But, as some gurus have pointed out, REAL PROOF for this is lacking ...

However, very ancient material incorporated the ether into theories of those times. Then, Einstein, in error, dismissed the ether totally--then he reneged and changed "luminous ether" to "gravitational ether." It would seem the "luminous ether" would be fine, if you only dealt with photons and/or "waves of photons." "Gravitational ether" would allow for much, much more ... in that one point is a LOT to contemplate ...

It seems to me, that most, past, authors/experimenters/scholars having been "fooled once" and changing from the ethers existence to its' non-existence, would NOT take a chance on being "fooled again"--they began to "ignore" the ether ...

End-point being, there are loads of equations and formulas laying about which craftily ignore the ether ... indeed, in my younger years it was not uncommon to find physicists totally ignorant of Einsteins acceptance of the gravitational ether (indeed, my own education was along these lines, only later readings on Einstein brought forth this error.) "They" would state that Einstein denied the ether, and one would have to go to great lengths to convince them different, if at all! ... go figure.

It is still quite common to find hams will have "NO ETHER!"

And, the point of all that? We shall, often, need to agree to disagree ...

Regards,
JS

4043. Re: WWII Direction Finder Fix

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 21:49:21 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <490e2044$0$1088$4fafbaef@reader1.news.tin.it>
Source record: 20517

```
--
-----------------------------------------------------
Antonio Vernucci, I0JX US call: K0JX
Beacons: 50.004 MHz & 70.088 MHz
Home page: http://www.qsl.net/i0jx
e-mail: k0jx {at} amsat {dot} org
-----------------------------------------------------
"Jay in the Mojave" <Jay123a@qnet.com> ha scritto nel messaggio
news:6MqdnfpmDP3TsJrUnZ2dnUVZ_jadnZ2d@posted.quantumnetworking...
> Hello All:
>
> I believe there was a posting here or maybe even in QST that talked about
> problems with Radio Direction Finders in aircraft and ships before WWII time
> frame. And the fix to repair them so that the Radio Direction Finders (RDF)
> did not point 180 degree's the wrong direction.
>
> I am researching information on the WWII Aviation Rescue Boats, (AVR's) 83 and
> 104 Ft long, Boats used by the US Army during WWII.
>
> I spent 5 years on a 104 AVR Boat, converted into a Commercial Fishing Boat
> for Albacore Tuna from 1966 to 1970 as a teen ager.
>
> Any information would be greatly appreciated. Thanks.
>
> Here's a link that shows some of the AVR Boats and spec's.
> http://www.warboats.org/crashboat.htm
>
> Jay
```

4044. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 23:07:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <fb414634-f436-47a2-85c2-3eeed14e64eb@x16g2000prn.googlegroups.com>
Source record: 20518

On Nov 2, 3:09 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > I don't see how that could happen except when a charge is released it
> > produces a
> > lesser resistance route by ironizing of the medium travelled either in
> > the initial case
> > or of a resultant discharge travelling thu ozone.
>
> >> Regards,
> >> JS
> > Interesting
> > Regards
> > Art
>
> Well, I AM one which can picture, theoretically, the antenna as a
> "transformer"; and, the antenna taking the signal from the feedline and
> "properly interfacing"/matching/transforming-its'-characteristics to the
> ether (actually, the ether looks like a "spherical turn" of
> superconductor which envelopes the antenna, as someone, either
> intentionally or unintentionally, mentioned in an earlier post in
> another thread ...)
>
> But, as some gurus have pointed out, REAL PROOF for this is lacking ...
>
> However, very ancient material incorporated the ether into theories of
> those times. Then, Einstein, in error, dismissed the ether
> totally--then he reneged and changed "luminous ether" to "gravitational
> ether." It would seem the "luminous ether" would be fine, if you only
> dealt with photons and/or "waves of photons." "Gravitational ether"
> would allow for much, much more ... in that one point is a LOT to
> contemplate ...
>
> It seems to me, that most, past, authors/experimenters/scholars having
> been "fooled once" and changing from the ethers existence to its'
> non-existence, would NOT take a chance on being "fooled again"--they
> began to "ignore" the ether ...
>
> End-point being, there are loads of equations and formulas laying about
> which craftily ignore the ether ... indeed, in my younger years it was
> not uncommon to find physicists totally ignorant of Einsteins acceptance
> of the gravitational ether (indeed, my own education was along these
> lines, only later readings on Einstein brought forth this error.)
> "They" would state that Einstein denied the ether, and one would have to

> go to great lengths to convince them different, if at all! ... go figure.
>
> It is still quite common to find hams will have "NO ETHER!"
>
> And, the point of all that? We shall, often, need to agree to disagree ...
>
> Regards,
> JS

What blows my mind John there is nobody willing to do the math with
respect to my extension of GAUSS
It blows my mind when a ham with a doctorate comes along and supplies
the mathematical proof and the math is denied
by the guru's on this newsgroup.
It blows my mind when hams state a conductor must be straight when
they use helicals in so many places yet despite the denials
they will not do the math for themselves but continue to ask me
endless questions so they can continue arguements.
Then they deny I have such an antenna and an Aussie who obviously
likes to bet offered a wager of what was it $1000 US ?
and nobody took him up on the wager. Then there are computor programs
that push aside Yagi antennas in favor of those
in equilibrium which support what I have found and these programs are
designed around Maxwell who is now arpparently losing favor with hams
tho professionals cling to it dearly. I have no problem with Guru's
disagreeing with me but I did expect a morsel or a small challenge
in at least one area other than look up the dictionary for them to get
the definition of equilibrium. And now we have a man who has written a
book
and preferes to tout this piece of trash rather than do the math with
respect to the radiation all on the basis that what he believes is in
a book that he wrote so it must be authentic. David take note when
your book comes out it may spawn a new science to rival classical
physics. It blows my mind that we have threads that break the thousand
mark on reflections or swr and then get repeated again and again
because of disagreements on the substance Now he is toting a later
edition hoping to collect some money from hams. Give me a break since
he will not do the math that I speak of probably because he can't
handle the difference in units between Gauss and Maxwell. You know
when OBAMA
wins the election on Tuesday hams will unite and declare McCAIN the
winner
John have a great evening
Best regards
Art Unwin KB9MZ.....xg

4045. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-02 23:23:26 UTC
From: JB <nospam@goofball.net>
Message-ID: <ODqPk.2183$Jv2.1248@nwrddc01.gnilink.net>
Source record: 20519

Gee it's too bad he didn't have a bunch of CATV hardline and a Motrac. All of this would be real simple.

I recall that there was a commercial AS "fire engine" antenna that never bothered with the matching at all because adding all the extra hardware for matching, wouldn't have justified the potential losses that might be introduced. Of course the main advantage of the antenna was that it could be elevated without need for reflecting plane or radials and thus wouldn't poke eyes out or get tangled. Otherwise a regular mobile mount or base radial kit would be advantageous.

4046. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 00:03:38 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <25b43f6e-875a-4272-afa7-3910ba6f0ec0@r15g2000prh.googlegroups.com>
Source record: 20520

On Nov 1, 7:12 pm, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
> I'm trying to build a decent performing 2M coaxial skirted antenna and
> have a question about its design for maximum efficiency.
>
> I based the "hub" on an SO-239 connector. I soldered my RG8X cable
> center conductor to the solder pin center conductor and brought the
> shield braid out in two places.
>
> I cut a 19" piece of half inch copper pipe, cut 4 half inch slots on
> one end, fanned the slotted end out slightly to fit nicely against the
> SO-239, and slid this pipe over my coax and up to the SO-239. I brought
> the two braid lengths previously prepared out through two of the rather
> fat slots, soldered the pipe to the SO-239 and the braids were soldered
> to the pipe where they came protruded out the slots.
>
> I soldered an 18 1/2" brass welding rod to a PL-259 center conductor
> and screwed that the the SO-239 for my radiator. The copper pipe assy
> and coax slide nicely down into a length of 3/4" PVC . This makes a very
> nice break-down package for transportation and portable work.
>
> Back to my question: I am measuring about 125 watts forward and 4-5
> watts reflected at my desired frequency (146.000). While this may be
> acceptable to some, I would like to get the match down to 1:1 SWR.
>
> Are there any design deficiencies in my proto-type? Can anyone
> suggest something I might try to improve the match? Is there a "rule of
> thumb" regarding the construction of such antennas?... length of coaxial
> skirt vs. antenna element?
>
> I appreciate any feedback on this. Thanks.
>
> I suppose I could provide a picture if anyone requires it....
>
> Ed K7AAT

Hi Ed, I think your SWR is about as good as you are going to get it.
What you have created is a center feed dipole with a feedpoint
impedance of about 70 ohms or so. One way to get a better match to 50
ohms is to flair out your coaxial skirt. Skirt at 90 degrees to the
radiator the impedance will be 36 ohms, 70 with the skirt at 180
degree. You will find 50 ohms somewhere in between, about 45 degrees I
think. This may be done at the expense of your radiation pattern. I
built something like what you are building a few years ago using sheet
metal rolled in a trumpet shape for the skirt. I think my SWR was

about 1.3:1. My metal mast and skirt connected together at the feedpoint. Whether or not the mast was insulated from the skirt of not didnt make any difference. If itis not clear what I am talking about think AEA isopole. While theirs was a 5/8ths we are talking about a 1/2 wl antenna.

Jimmie

4047. RE:Coaxial antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 00:09:21 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4B717BA7E78nonenowhere@61.9.191.5>
Source record: 20521

"Rollie" <rollie@iowatelecom.net> wrote in
news:gekuh6$pg1$1@news.netins.net:

> You could try putting 4 ground plane elements off the SO-239
> connector, I'm told they are to help with standing wave problems.

Repeating someone else's advice in this way is a detached recommendation,
and if you don't understand it, a questionable recommendation.

Attaching radials as you suggest turns the antenna into a regular ground
plane antenna. One expects the feed point impedance at resonance to be
around 35 ohms, which would result in a VSWR of 1.5 when fed directly by
50 ohm coax. Much the same outcome as feeding the coaxial dipole with 50
ohm coax.

> I've never used ground plane antennas, but it wouldn't take much
> effort and could be worth a try. I use the MFJ 269 antenna analyzer
> when building antennas and find that the unit saves lots of time.

Sloping the radials can raise the feedpoint impedance, but I think Ed
wanted an antenna without radials for his particular application.

Owen

4048. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 00:30:48 UTC
From: "Jim, K7JEB" <k7jeb_2@yahoo.com>
Message-ID: <4DrPk.11575$U%6.8267@newsfe01.iad>
Source record: 20522

Kreco Antennas in Cresco, PA makes a line of
coaxial dipole basestation antennas that exhibit
a 50-ohm feedpoint impedance. Here's the
website for their high-band basic model:

http://www.krecoantennas.com/hbcaxial.htm

They pull off this trick by, *I THINK*, shortening
the top element slightly and lengthening the skirt in
just the right way to achieve a match at a spot
frequency.

An interesting variant on the basic antenna is their
"shunt-fed" coaxial dipole that places the entire
antenna at DC ground for lightning protection. Here's
the webpage for it:

http://www.krecoantennas.com/shuntfed.htm

I've used their antennas in the past with excellent
results, but they are a bit pricey.

Jim, K7JEB

4049. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 00:58:39 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <3b3c97e9-d4ca-4a3e-8933-4303af45fcd3@s1g2000prg.googlegroups.com>
Source record: 20523

On Nov 2, 7:30 pm, "Jim, K7JEB" <k7je...@yahoo.com> wrote:
> Kreco Antennas in Cresco, PA makes a line of
> coaxial dipole basestation antennas that exhibit
> a 50-ohm feedpoint impedance. Here's the
> website for their high-band basic model:
>
>   http://www.krecoantennas.com/hbcaxial.htm
>
> They pull off this trick by, *I THINK*, shortening
> the top element slightly and lengthening the skirt in
> *just the right way* to achieve a match at a spot
> frequency.
>
> An interesting variant on the basic antenna is their
> "shunt-fed" coaxial dipole that places the entire
> antenna at DC ground for lightning protection. Here's
> the webpage for it:
>
> http://www.krecoantennas.com/shuntfed.htm
>
> I've used their antennas in the past with excellent
> results, but they are a bit pricey.
>
> Jim, K7JEB

We have used these at work. The 50 ohm value is very "nominal".

http://www.krecoantennas.com/hbcaxial.htm

Jimmie

4050. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 02:09:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <djlsg45bv3toi2frp2887sf3a2k6ffhk6g@4ax.com>
Source record: 20524

On Sun, 02 Nov 2008 23:23:26 GMT, "JB" <nospam@goofball.net> wrote:

>Gee it's too bad he didn't have a bunch of CATV hardline and a Motrac. All
>of this would be real simple.
>
>I recall that there was a commercial AS "fire engine" antenna that never
>bothered with the matching at all because adding all the extra hardware for
>matching, wouldn't have justified the potential losses that might be
>introduced. Of course the main advantage of the antenna was that it could
>be elevated without need for reflecting plane or radials and thus wouldn't
>poke eyes out or get tangled. Otherwise a regular mobile mount or base
>radial kit would be advantageous.

Yep. However, they recommended using 75 ohm coax cable. The loss of
equal lengths of similar size 75 ohm coax is less than 50 ohm. For
example:
RG-58c/u 0.20dB/meter at 150 Mhz (cheap 50 ohms coax)
LMR-240 0.09dB/meter at 150 Mhz (much better 50 ohm coax)
RG-6/u 0.07dB/meter at 150 Mhz (75 ohm CATV coax)

However, if you wanna run 50 ohm coax, the mismatch loss at the 75 ohm
antenna is about:
reflection_coef = (75-50)/(50+75)= 0.20
voltage = 1 - (0.2^2) = 0.96
20 * log(0.96) = 0.35 dB mismatch loss.
No big deal.

Hmmmm...
0.35 dB / 0.02dB/meter = 17.5 meters
At 17.5 meters, the losses of the 50 and 75 coax systems are
identical. Beyond 17.5 meters of coax, the 75 ohm coax delivers more
power.

I've been using RG-6/u for 2.4GHz wireless for quite a while. The
main incentive is that I can get the 75 ohm coax quite cheaply. For a
while, Hyperlink (http://www.hyperlinktech.com) had a rooftop 2.4Ghz
amplifier that was fed with 75 ohm coax. Alvarion/Breezecom also used
75 ohm coax in some of their BreezeAccess LB radios.

Someone eventually asks why 50 or 75 ohms. See:
<http://www.microwaves101.com/encyclopedia/why50ohms.cfm>

Motrac? Those are 30-40 years ancient. I used them for boat anchors.
Back then, I preferred GE radios:
<http://802.11junk.com/jeffl/pics/Old%20Repeaters/index.html>

--
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Skype: JeffLiebermann AE6KS 831-336-2558

4051. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 03:08:55 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4B8FED36156nonenowhere@61.9.191.5>
Source record: 20525

Jeff Liebermann <jeffl@cruzio.com> wrote in
news:djlsg45bv3toi2frp2887sf3a2k6ffhk6g@4ax.com:

...
> However, if you wanna run 50 ohm coax, the mismatch loss at the 75 ohm
> antenna is about:
> reflection_coef = (75-50)/(50+75)= 0.20
> voltage = 1 - (0.2^2) = 0.96
> 20 * log(0.96) = 0.35 dB mismatch loss.

The analysis you give assumes that the notional 'reflected power' is lost
from the system as heat. The old 'reflected power is dissipated as
increased heat in the PA' line.

In the real world, the power that a transmitter delivers to a non ideal
load is not so simply predicted, and it is entirely possible that it
delivers more power to the mismatched load.

Owen

4052. RE:Coaxial antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 03:09:16 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B4AC2D8B7ED3Huckleberrybigvalley@198.186.192.196>
Source record: 20526

> You could try putting 4 ground plane elements off the SO-239
> connector, I'm told they are to help with standing wave problems.
> I've never used ground plane antennas, but it wouldn't take much
> effort and could be worth a try. I use the MFJ 269 antenna analyzer
> when building antennas and find that the unit saves lots of time.
> Rollie

Yes, I have done that, and they work very well. I found three radials sufficient, and if bent down about 45 degrees the match was perfect. However, for the application I am planning, the antenna must be very portable.... ground plane radials "stick out" but the coaxial skirted antenna has a very minimal foot print.... it can be packed in a very tight space.... just like any pipe.

Tnx.

Ed K7AAT

4053. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 03:30:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gelr87$u7e$1@news.albasani.net>
Source record: 20527

Owen Duffy wrote:

> ...
> In the real world, the power that a transmitter delivers to a non ideal
> load is not so simply predicted, and it is entirely possible that it
> delivers more power to the mismatched load.
>
> Owen

That may well be; I am no expert on this; and, the point has missed my detailed investigation.

But, if memory serves me correct, when I fed a 50 ohm antenna with an old 75 ohm PA, equipped with plate voltage and current meters, I would have expected a dip (although it might appear slight) in voltage and a rise in plate current--indicating, that indeed, I was feeding "more power" to the load ... although not desirable ... extrapolating from this, feeding a 75 ohm antenna with a 50 ohm rig, I would expect the opposite.

Regards,
JS

4054. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 04:07:57 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <vpssg4l0tdn68u106p8j0mhlrelgpe23lo@4ax.com>
Source record: 20528

On Mon, 03 Nov 2008 03:08:55 GMT, Owen Duffy <none@no.where> wrote:

>Jeff Liebermann <jeffl@cruzio.com> wrote in
>news:djlsg45bv3toi2frp2887sf3a2k6ffhk6g@4ax.com:
>
>...
>> However, if you wanna run 50 ohm coax, the mismatch loss at the 75 ohm
>> antenna is about:
>> reflection_coef = (75-50)/(50+75)= 0.20
>> voltage = 1 - (0.2^2) = 0.96
>> 20 * log(0.96) = 0.35 dB mismatch loss.
>
>The analysis you give assumes that the notional 'reflected power' is lost
>from the system as heat. The old 'reflected power is dissipated as
>increased heat in the PA' line.
>
>In the real world, the power that a transmitter delivers to a non ideal
>load is not so simply predicted, and it is entirely possible that it
>delivers more power to the mismatched load.
>
>Owen

I beg to differ somewhat. In order for the reflected power to
contribute to the incident power, the reflected power would first be
attenuated by the coax loss. It would then require a substantial
mismatch at the transmitter, which is unlikely. However, assuming
there is a mismatch at the source, some of the reflected power will be
sent back to the load (antenna), after getting attenuated by the coax
for a 2nd time. There may be some contribution, but it will very very
very very small.

Let's try some more or less real numbers. I kinda prefer doing
everything in dBm but hams have this thing about using watts...

Start with a 50 watt xmitter and 20 meters of LMR-240 coax at
0.09dB/meter for an attenuation of 1.8dB.

The power delivered to the antenna is:
50 watts / ((1.8/10)^10) = 50 / 1.5 = 33 watts
The 1.5:1 VSWR reflects 4% of 33 watts for 1.3 watts reflected.

The 1.3 watts is again attenuated by the 1.8dB coax loss resulting in:
1.3 watts / (1.8/10)^10) = 1.3 / 1.5 = 0.87 watts

Now, lets assume that the xmitter has a broadband output stage,
optimized for 50 ohms and lacks the ability to properly match 75 ohms.

Once again, 4% of the power if reflected, resulting in:
0.87 watts * 4% = 0.035 watts reflected

Once again, the power reflected from the source end (xmitter end) is
attenuated by the 1.8dB coax loss for:
0.035 watts / ((1.8/10^10) = 0.035 / 1.5 = 0.023 watts.

Therefore, you're correct. It's possible that some of the reflected
power adds to the incident power. However, it's a really small
amount. In this case, it's only 23 milliwatts added to 33 watts
delivered to the antenna.

--
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Skype: JeffLiebermann AE6KS 831-336-2558

4055. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 04:46:57 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4BA08C43543nonenowhere@61.9.191.5>
Source record: 20529

Jeff Liebermann <jeffl@cruzio.com> wrote in
news:vpssg4l0tdn68u106p8j0mhlrelgpe23lo@4ax.com:

...
>>In the real world, the power that a transmitter delivers to a non
>>ideal load is not so simply predicted, and it is entirely possible
>>that it delivers more power to the mismatched load.
>>
>>Owen
>
> I beg to differ somewhat. In order for the reflected power to
> contribute to the incident power, the reflected power would first be
> attenuated by the coax loss. It would then require a substantial

Are you proposing vector addition of power?

> mismatch at the transmitter, which is unlikely. However, assuming
> there is a mismatch at the source, some of the reflected power will be
> sent back to the load (antenna), after getting attenuated by the coax
> for a 2nd time. There may be some contribution, but it will very very
> very very small.
>
> Let's try some more or less real numbers. I kinda prefer doing
> everything in dBm but hams have this thing about using watts...

Of course it doesn't matter, which unit system you use, but if you start
adding 'forward' and 'reflected' power in dBm because it is real
convenient, you have peformed a vector addition of power. Is that valid?

>
> Start with a 50 watt xmitter and 20 meters of LMR-240 coax at
> 0.09dB/meter for an attenuation of 1.8dB.
>
> The power delivered to the antenna is:
> 50 watts / ((1.8/10)^10) = 50 / 1.5 = 33 watts
> The 1.5:1 VSWR reflects 4% of 33 watts for 1.3 watts reflected.
>
> The 1.3 watts is again attenuated by the 1.8dB coax loss resulting in:
> 1.3 watts / (1.8/10)^10) = 1.3 / 1.5 = 0.87 watts

You start with a limited view of the mismatch, VSWR conveys only one
dimension of a two dimensional mismatch.

Your treatment of the forward wave and reflected waves as independently
attenuated is an approximation that will lead to significant errors in
some cases.

For example, what percentage of the power at the source end of the line is lost as heat in 1m of LMR400 at 1MHz with a) a 5+j0 ohm load, and b) a 500+j0 ohm load. The VSWR is approximatly the same in both cases but the answers are very different, one is almost 100 times the other.

Doesn't it stand to reason that as the length of the transmission line approaches zero, that the power lost transmission in this type of line in the high voltage low current load scenario is lower than the low voltage high current load scenario.

Another issue is that the V/I characteristics of a transmitter output stage is not necessarily (or usually for most ham transmitters) a straight line, in other words it does not exibit a constant Thevenin equivalent source impedance with varying loads and the application of some linear circuit analysis techniques to the output stage are inappropriate.

Owen

4056. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 05:10:38 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4BA4902CD6Anonenowhere@61.9.191.5>
Source record: 20530

Owen Duffy <none@no.where> wrote in
news:Xns9B4BA08C43543nonenowhere@61.9.191.5:

...
> Of course it doesn't matter, which unit system you use, but if you
> start adding 'forward' and 'reflected' power in dBm because it is real
> convenient, you have peformed a vector addition of power. Is that
> valid?

I should have said "...you have peformed a flawed vector addition of
power..."

Owen

4057. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 05:27:42 UTC
From: richardharrison@webtv.net
Message-ID: <15433-490E8BCE-1486@storefull-3251.bay.webtv.net>
Source record: 20531

Art wrote:
"----and these programs are designed around Maxwell who is now
apparently losing favor with hams----"

Baloney! My 20th edition of the ARRL Antenna Book was copyrighted in
2005. On page 3-24 it says:
"By the late 1800s, the work of Lorf Raleigh, Sommerfeld, Fresnell,
Maxwell and many others led to the full mathematic characterization of
all electromagnetic phenomena, light included."

J.C. Maxwell had not nearly lost favor by 2005 among the editors of "The
ARRL Antenna Book", and had he recently been discredited most of us
would have heard of it.

Best regards, Richard Harrison, KB5WZI

4058. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 07:05:42 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <tf6tg41q6to9mnbplm7t6ujn32fig6qg77@4ax.com>
Source record: 20532

On Mon, 03 Nov 2008 04:46:57 GMT, Owen Duffy <none@no.where> wrote:

>Jeff Liebermann <jeffl@cruzio.com> wrote in
>news:vpssg4l0tdn68u106p8j0mhlrelgpe23lo@4ax.com:
>
>...
>>>In the real world, the power that a transmitter delivers to a non
>>>ideal load is not so simply predicted, and it is entirely possible
>>>that it delivers more power to the mismatched load.
>>>
>>>Owen
>>
>> I beg to differ somewhat. In order for the reflected power to
>> contribute to the incident power, the reflected power would first be
>> attenuated by the coax loss. It would then require a substantial
>
>Are you proposing vector addition of power?

Nope. No need to complexicate things. I can safely assume a real 75
ohm load. I can cheat a bit and assume some multiple of 1/2 wave coax
cables, thus eliminating any imaginary contributions from the coax.

Please note that my purpose was to demonstrate that 75 ohm antennas
and 75 ohm coax will work adequately in a 50 ohm system. I think I've
done most of that. Including complex impedances to the calculations
will yield a more accurate result, but the resultant reflected power
that will be added to the forward delivered power, will be LESS than
the results produced by my calculations using only the real part of
the impedances.

>> mismatch at the transmitter, which is unlikely. However, assuming
>> there is a mismatch at the source, some of the reflected power will be
>> sent back to the load (antenna), after getting attenuated by the coax
>> for a 2nd time. There may be some contribution, but it will very very
>> very very small.
>>
>> Let's try some more or less real numbers. I kinda prefer doing
>> everything in dBm but hams have this thing about using watts...
>
>Of course it doesn't matter, which unit system you use, but if you start
>adding 'forward' and 'reflected' power in dBm because it is real
>convenient, you have peformed a flawed vector addition of power.
>Is that valid?

It's only valid for the level of accuracy with which you are working.
For convenience, perhaps we can just assume that the re-reflected

contribution to the forward power is in phase, thus yielding the maximum delivered power. Any phase shifts between the two signals will result in LESS delivered power than the in phase simplistic calculation. I'm sure the accuracy might be useful for academic purposes, but my example demonstrated that only 35 mw was added to 33 watts, an error of 0.1%. Of course, that's ridiculous because the initial measurement of the originating 50 watts is probably only accurate to 2 significant figures.

>> Start with a 50 watt xmitter and 20 meters of LMR-240 coax at
>> 0.09dB/meter for an attenuation of 1.8dB.
>>
>> The power delivered to the antenna is:
>> 50 watts / ((1.8/10)^10) = 50 / 1.5 = 33 watts
>> The 1.5:1 VSWR reflects 4% of 33 watts for 1.3 watts reflected.
>>
>> The 1.3 watts is again attenuated by the 1.8dB coax loss resulting in:
>> 1.3 watts / (1.8/10)^10) = 1.3 / 1.5 = 0.87 watts
>
>You start with a limited view of the mismatch, VSWR conveys only one
>dimension of a two dimensional mismatch.

Sure. It's good enough for a back of the envelope estimate of how much power the re-reflected signal can possibly add to the forward power.

>Your treatment of the forward wave and reflected waves as independently
>attenuated is an approximation that will lead to significant errors in
>some cases.

True. However, as long as I assume a 1.8dB coax cable loss, the reflected and re-reflected powers will be sufficiently low to be considered negligible. Including the necessary vector arithmetic to include the possibility of random coax cable lengths will improve accuracy, but not affect the result very much.

>For example, what percentage of the power at the source end of the line
>is lost as heat in 1m of LMR400 at 1MHz with a) a 5+j0 ohm load, and b) a
>500+j0 ohm load. The VSWR is approximatly the same in both cases but the
>answers are very different, one is almost 100 times the other.

I'll work out the exact numbers tomorrow, but I see your point. However, please note that I made an effort to use a REALISTIC example of a typical 2m radio, coax, and coaxial antenna arrangement. Of course, you can conjure a set of numbers that will result in a substantially increased calculation error. I can do the same thing if I take my example and simply reduce the coax cable length to the point where coax attenuation is dramatically smaller. A 100:1 load impedance change is not the same as a 1.5:1 impedance change (from 50 to 75 ohms)

>Doesn't it stand to reason that as the length of the transmission line
>approaches zero, that the power lost transmission in this type of line in
>the high voltage low current load scenario is lower than the low voltage
>high current load scenario.

Ummmm... you lost me there. I've got a headache tonite. I'll see it
makes more sense tomorrow morning.

>Another issue is that the V/I characteristics of a transmitter output
>stage is not necessarily (or usually for most ham transmitters) a
>straight line, in other words it does not exibit a constant Thevenin
>equivalent source impedance with varying loads and the application of
>some linear circuit analysis techniques to the output stage are
>inappropriate.

I really don't know if that's true for a 2m FM transmitter. I'm not
sure it even matters. The V/I characteristic (slope) is just the
source impedance of the output stage. Whether it's 50 or 75 ohms is
close enough for my simplistic calculation to be accurate without
throwing in non-linearities. The source impedance may be different
for a 50 watt radio, running at 1 watt, but not enough to make a big
difference. If the source impedance were magically 10 times as high,
the 35 milliwatts of re-reflected RF would become 350 mw and still be
a fairly negligible contribution to the delivered 33 watts.

--
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Skype: JeffLiebermann AE6KS 831-336-2558

4059. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 08:05:17 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B4BC22C11997nonenowhere@61.9.191.5>
Source record: 20533

Jeff, your re-reflection concept is complicating things.

Just consider a typical ham FM voice transmitter after steady state has been substantially established.

If the load was for example 70+j0 and the transmitter was connected by 2 wavelengths of Belden 9258, accounting for line loss we would expect the transmitter to see a load of about 68+j0 (VSWR(50)=1.4), ie the ratio of v/i at the output terminals of the transmitter would be about 68+j0.

Consider also the case where the transmitter was connected by 2.25 wavelengths of Belden 9258, accounting for line loss we would expect the transmitter to see a load of about 37+j0 (VSWR(50)=1.4), ie the ratio of v/i at the output terminals of the transmitter would be about 37+j0.

If you were to measure the output power of a range of such transmitters, it is unlikely that they will produce substantially identical power output under both conditions though the VSWR is similar, that the power is changed from that with a 50+j0 load by the same amount in all cases, or that the change is reliably predicted by your analysis technique (based on VSWR).

Your treatment of the 'forward power' as a constant with different loads, and the approximation of transmisssion line behaviour contribute error.

Additionally, the formulae you use do not account for non linear behaviour of typical output stages, gain variation at different output level, whether they reach voltage or current saturation with a given load, the effects of PA protection schemes that might limit current, 'relected power', 'power output' etc.

I would agree that a 70 ohm antenna at the end of 4m or so of RG8/X will *probably* not result in a large loss of output power, but I wouldn't agree with your results or method because it is not sound. Nevertheless, I understand why Ed might want to transform the load to 50 ohms, and he shouldn't be discouraged by flawed estimates.

Owen

PS:
You might dismiss my example of the 5 and 500 ohm loads on a short line as unrealistic, but it exposes a common misunderstanding that the loss per unit length when VSWR>1 is uniform along the line. If you want to explore the idea further, I have written some notes at http://www.vk1od.net/VSWR/displacement.htm .

4060. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 12:16:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <fYBPk.5404$x%.1921@nlpi070.nbdc.sbc.com>
Source record: 20534

Jeff Liebermann wrote:
> I beg to differ somewhat. In order for the reflected power to
> contribute to the incident power, the reflected power would first be
> attenuated by the coax loss. It would then require a substantial
> mismatch at the transmitter, which is unlikely. However, assuming
> there is a mismatch at the source, some of the reflected power will be
> sent back to the load (antenna), after getting attenuated by the coax
> for a 2nd time. There may be some contribution, but it will very very
> very very small.

Reflection of a single reflected wave is not the only mechanism
that can redistribute energy back toward the load. Superposition
of two waves at the source impedance (or at an impedance
discontinuity in a feedline) accompanied by destructive
interference can accomplish a similar feat. Non-reflective glass
is a 1/4WL matching section of thin-film that accomplishes the
same thing as a Z0-match.

To the best of my knowledge, nobody is taking wave cancellation
at the source impedance into account although it may be the
major source of the redistribution of reflected energy back
toward the antenna. It's explained on the following web pages:

http://www.mellesgriot.com/products/optics/oc_2_1.htm

"Clearly, if the wavelength of the incident light and
the thickness of the film are such that a phase difference
exists between reflections of p, then *reflected wavefronts*
interfere destructively, and overall reflected intensity is
a minimum. If the two reflections are of equal amplitude,
then this amplitude (and hence intensity) minimum will be
zero." (Referring to 1/4 wavelength thin films.)

"In the absence of absorption or scatter, the principle of
conservation of energy indicates all 'lost' reflected intensity
will appear as *enhanced intensity in the transmitted beam*.
The sum of the reflected and transmitted beam intensities is
always equal to the incident intensity. This important fact
has been confirmed experimentally."

http://micro.magnet.fsu.edu/primer/java/scienceopticsu/interference/waveinteractions/index
.html

"... when two waves of equal amplitude and wavelength that are
180-degrees ... out of phase with each other meet, they are not
actually annihilated, ... All of the photon energy present in

these waves must somehow be recovered or *redistributed* in a new
direction, according to the law of energy conservation ... Instead,
upon meeting, the photons are *redistributed* to regions that permit
constructive interference, so the effect should be considered as
a *redistribution* of light waves and photon energy rather than
the spontaneous construction or destruction of light."

Why does almost everyone seem to consider reflection the only way
to redistribute reflected energy back toward the antenna?
--
73, Cecil http://www.w5dxp.com

4061. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 12:21:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <f%BPk.3893$Ei5.3071@flpi143.ffdc.sbc.com>
Source record: 20535

Owen Duffy wrote:
> I should have said "...you have peformed a flawed vector addition of
> power..."

The correct method of adding power comes to us from the
field of optics in the form of the irradiance equation.
If we multiply irradiance by the cross-sectional area of
coax, we get power.

Ptot = P1 + P2 + 2*SQRT(P1*P2)cos(A)

where 'A' is the angle between the electric fields
of the two phasors.
--
73, Cecil http://www.w5dxp.com

4062. corrosion

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 12:22:28 UTC
From: Gary Smith <vk3lcd@gmail.com>
Message-ID: <gemqegcpp1@news-01.bur.connect.com.au>
Source record: 20536

Hi, whats the best way to remove white corrosion from aluminium? I have some aluminium and it has bolt holes in it with white corrosion in the holes, is there a spray or liquid to soak it in then maybe use steel wool in the holes?

Thanks

Gary
VK3LCD

4063. Re: corrosion

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 15:54:24 UTC
From: JB <nospam@goofball.net>
Message-ID: <Q8FPk.2454$225.2336@nwrddc02.gnilink.net>
Source record: 20537

"Gary Smith" <vk3lcd@gmail.com> wrote in message
news:gemqegcpp1@news-01.bur.connect.com.au...
> Hi, whats the best way to remove white corrosion from aluminium? I have
some
> aluminium and it has bolt holes in it with white corrosion in the holes,
is
> there a spray or liquid to soak it in then maybe use steel wool in the
> holes?
>
> Thanks
>
> Gary
> VK3LCD
>
Drill the holes out larger. You can use a mild acid like in Aluminum jelly
but the corrosion gets into the metal and makes it extremely brittle. The
holes would crack out under stress.

In fresh aluminum, use NoAlox or some other type of antenna grease. I find
a little extra Vaseline in the mix helps. The idea is not to mess things
up, but just rub enough in to seal the pores of the metal.

4064. Re: RE:Coaxial antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 16:02:12 UTC
From: JB <nospam@goofball.net>
Message-ID: <8gFPk.2456$225.1610@nwrddc02.gnilink.net>
Source record: 20538

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns9B4AC2D8B7ED3Huckleberrybigvalley@198.186.192.196...
>
> > You could try putting 4 ground plane elements off the SO-239
> > connector, I'm told they are to help with standing wave problems.
> > I've never used ground plane antennas, but it wouldn't take much
> > effort and could be worth a try. I use the MFJ 269 antenna analyzer
> > when building antennas and find that the unit saves lots of time.
> > Rollie
>
>
> Yes, I have done that, and they work very well. I found three
> radials sufficient, and if bent down about 45 degrees the match was
> perfect. However, for the application I am planning, the antenna must
be
> very portable.... ground plane radials "stick out" but the coaxial
> skirted antenna has a very minimal foot print.... it can be packed in a
> very tight space.... just like any pipe.
>
> Tnx.
>
> Ed K7AAT

A twinlead J-pole in a PVC pipe works well for this. Our club had one
on a post stabbed into the ground when we needed talk-in at the BBQ's.

4065. Re: corrosion

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 16:31:13 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <Yxy1PcaRdyDJFwH$@g3ohx.demon.co.uk>
Source record: 20539

In message <Q8FPk.2454$225.2336@nwrddc02.gnilink.net>, JB
<nospam@goofball.net> writes
>
>"Gary Smith" <vk3lcd@gmail.com> wrote in message
>news:gemqegcpp1@news-01.bur.connect.com.au...
>> Hi, whats the best way to remove white corrosion from aluminium? I have
>some
>> aluminium and it has bolt holes in it with white corrosion in the holes,
>is
>> there a spray or liquid to soak it in then maybe use steel wool in the
>> holes?
>>
>> Thanks
>>
>> Gary
>> VK3LCD
>>
>Drill the holes out larger. You can use a mild acid like in Aluminum jelly
>but the corrosion gets into the metal and makes it extremely brittle. The
>holes would crack out under stress.
>
>In fresh aluminum, use NoAlox or some other type of antenna grease. I find
>a little extra Vaseline in the mix helps. The idea is not to mess things
>up, but just rub enough in to seal the pores of the metal.
>
I think I've read that you should avoid using steel wool. Tiny pieces of
the steel become embedded in the aluminium. The 'dissimilar metal'
effect soon causes worse corrosion. It is best to use a non-metallic
scoring pad.
--
Ian

4066. Re: Coaxial Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 16:39:09 UTC
From: JB <nospam@goofball.net>
Message-ID: <NOFPk.2311$Jv2.873@nwrddc01.gnilink.net>
Source record: 20540

> Motrac? Those are 30-40 years ancient. I used them for boat anchors.
> Back then, I preferred GE radios:

Back in the day we were radio techs and weight lifters!

I used both. I had Pre-Progs and Progs. Both were good for keeping warm and digging out of the snow, but the MHT motracs were extremely easy to duplex, bullet proof and had excellent audio. With 110 watts VHF and the optional preamp for .12uv for 20dbq, that radio talked like no other I have owned before or since, and I could do it parked at a jam packed radio site. I ran a UHF 35 watt radio, duplexed, to access a high level remote base system with an autopatch. We had wide area flat rate dialing and I had a switch on my WE TT pad to key the radio continuously. A resistor across the relay and a small cavity for the RX and it sounded better than the IMTS system. I never graduated to Micor for a mobile because it could cost you $500 just to fill up a 12 channel mobile. I was using a duplexed 73MHT up to 5 years ago because I always wanted to monitor that frequency and had little trouble as NCS.

IMNSHO the Micor and MastrII have yet to be improved upon for performance and practicality for a repeater.

OH - the point was the coupling in the PA tube would allow you to match directly to 75 ohm.

4067. Re: corrosion

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 23:18:09 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <YCLPk.59370$vX2.9487@bignews6.bellsouth.net>
Source record: 20541

>>
> Drill the holes out larger. You can use a mild acid like in Aluminum
> jelly
> but the corrosion gets into the metal and makes it extremely brittle. The
> holes would crack out under stress.
>
> In fresh aluminum, use NoAlox or some other type of antenna grease. I
> find
> a little extra Vaseline in the mix helps. The idea is not to mess things
> up, but just rub enough in to seal the pores of the metal.
>
I agree with the NoAlox but I reserve comment about drilling out the holes until you clean it first to see if it needs drilling out.
You can pick up NoAlox, or Penetrox in the electrical dept of Lowes or Home Depot, or at an Electrical Supply house like Graybar. It is used by electricians when making electrical connections with Aluminum wire. It contains an abrasive to cut through the oxide, and the grease to coat the aluminum and keep O2 from it.

4068. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-03 23:57:21 UTC
From: Dave <noone@nowhere.com>
Message-ID: <BdMPk.2642$Jv2.1332@nwrddc01.gnilink.net>
Source record: 20542

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:fb414634-f436-47a2-85c2-3eeed14e64eb@x16g2000prn.googlegroups.com...

>What blows my mind John there is nobody willing to do the math with
>respect to my extension of GAUSS

ok, give us your equations. what EXACTLY have you done to Gauss? NO HAND
WAVING, write the equations!

>It blows my mind when a ham with a doctorate comes along and supplies
>the mathematical proof and the math is denied

if i remember right, he added (t) in a place where it wasn't necessary.
then dissappeared. maybe he decided it was better to not be associated with
your theory? or is he off writing it up for a Nobel prize for himself???

> David take note when your book comes out it may spawn a new science to
> rival classical
>physics.

not my book, nothing theoretical in it, just practical proven stuff.

4069. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 01:01:09 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <79574a89-0034-497e-9134-d72db944648e@i24g2000prf.googlegroups.com>
Source record: 20543

On Nov 3, 5:57 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:fb414634-f436-47a2-85c2-3eeed14e64eb@x16g2000prn.googlegroups.com...
>
> >What blows my mind John there is nobody willing to do the math with
> >respect to my extension of GAUSS
>
> ok, give us your equations. what EXACTLY have you done to Gauss? NO HAND
> WAVING, write the equations!
No David there is no point going down that path again. Me giving you
an equation
would only add more problems. You surely must be aware of an
arbritary border
format where the contents are in equilibrium, why not play with the
Gaussian law of statics
and learn how such a field becomes handy. Then you change it to a
dynamic field with the addition
of radiators while maintaining equilibrium and then subject everything
to a time varying field.
When you do this for your self it becomes more meaningfull to the user
but you have a real problem that you have to sort out
before you play with any of the electrical laws. You have to review
history to convince yourself that all the masters involved in physics
made the proviso that equilibrium MUST exist for the laws to be valid.
They made this proviso based on the reasoning that our Universe is in
a state of equilibrium and later that every action has an equal and
opposite reaction (Newton) If you do not agree with these principles
then the use of a arbitrary border for a mathematical solution is not
valid.
As far as Dr Davis of MIT who is working for the space agency, he did
everything that was required of him and then left. Several times he
came back to help out members of the group with respect to the
mathematics but it was plain that the group did not welcome his
presence. The private e mail I received from him gave me a lot of
confidence in my findings. What I find exciting is that galactic
particles are finding their way from the Sun to Earth which gives
mechanical content to the subject of radiation as opposed to the
prevailing theory of waves. To me this is more far reaching than just
radiation as it also gives other cycles to these same particles with
an affinity to water and other diamagnetic substances which gives it a
firm connection to storms and tornadoes as well as rotating sea areas
along with tides, all of which involved the four forces of the
Universe which Einstein correctly fore saw radiation as the key for

forward movement in understanding of Classical Physics. I consider
myself very fortunate when going back to the Gaussian fields and
applying a broader mathematic front to his work which he may have well
did for himself if he stayed in the field. Doing this provided so many
clues with respect to radiation and how it is produced which produced
connections to other known phenomina which was well known but now how
a dotted line connection to other things that are well established
such that more extensive research was not required which can be very
difficult to those not involved in the academic field;. For me the
jigsaw is now completed and as history shows change takes a long while
to be accepted certainly by those in academia
but for me it doesn't matter as I feel very smug and fortunate with my
findings which contempt by others cannot eradicate.
Enuff said
Best regards
Art unwin KB9MZ.....XG

>
> >It blows my mind when a ham with a doctorate comes along and supplies
> >the mathematical proof and the math is denied
>
> if i remember right, he added (t) in a place where it wasn't necessary.
> then dissappeared. maybe he decided it was better to not be associated with
> your theory? or is he off writing it up for a Nobel prize for himself???
>
> > David take note when your book comes out it may spawn a new science to
> > rival classical
> >physics.
>
> not my book, nothing theoretical in it, just practical proven stuff.

4070. Re: corrosion

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 02:35:33 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <_xOPk.7543$cx5.5258@newsfe01.iad>
Source record: 20544

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:YCLPk.59370$vX2.9487@bignews6.bellsouth.net...
>
> I agree with the NoAlox but I reserve comment about drilling out the holes
> until you clean it first to see if it needs drilling out.
> You can pick up NoAlox, or Penetrox in the electrical dept of Lowes or
> Home Depot, or at an Electrical Supply house like Graybar. It is used by
> electricians when making electrical connections with Aluminum wire. It
> contains an abrasive to cut through the oxide, and the grease to coat the
> aluminum and keep O2 from it.

These compounds actually contain irregular particles of zinc which is a superior metal for contact with aluminum. Hal is otherwise correct.

Ian is also correct about avoiding the use of steel wool with aluminum. Invariably, you will get fine steel particles imbedded in the aluminum which will promote the corrosion of the aluminum.

If screws go through the holes in the aluminum, use heavily galvanized hardware to minimize future corrosion. For steel screws, heavy cadmium plating is ideal, but due to its toxicity, is getting more difficult to find.

73, Dr. Barry L. Ornitz WA4VZQ

4071. eBay: Drake MN75 Ant Tuner and original box

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 02:46:04 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <LHOPk.5524$x%.4641@nlpi070.nbdc.sbc.com>
Source record: 20545

http://search.ebay.com/_W0QQsassZwd5jfrQQfrppZ50QQfsopZ32QQfsooZ2QQrdZ0

4072. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 05:08:06 UTC
From: nm5k@wt.net
Message-ID: <40464def-93e8-43db-87b9-b8afc6b411e2@v16g2000prc.googlegroups.com>
Source record: 20546

On Nov 2, 5:07 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> What blows my mind John there is nobody willing to do the math with
> respect to my extension of GAUSS

Time is up. I'm back from the dirt pile. Let the games continue.
What blows my mind is why a certain whiny Englishman who
moved to the land of Obama, refuses to do his own homework to
show the world.
Why would I want to do work on your dinky dummy load on a stick?
Why would I even *need* to do your work? After all, all is known
regarding antennas according to you. So you should already know
all the details of this mathematical endeavor, and should be prepared
to release them to the unwashed stinky masses.

> It blows my mind when a ham with a doctorate comes along and supplies
> the mathematical proof and the math is denied
> by the guru's on this newsgroup.

Why do you keep lying about the doktor. We all know he didn't provide
any math. If your advanced age has made this hard for you to recall,
I can provide the links to the original thread, which I have already
done
before. Maybe even two or three times. :/

> It blows my mind when hams state a conductor must be straight when
> they use helicals in so many places yet despite the denials
> they will not do the math for themselves but continue to ask me
> endless questions so they can continue arguements.

What math might I need to answer whatever question you might
have about coils? You already know everything about antennas,
so why bug us about it?

> Then they deny I have such an antenna and an Aussie who obviously
> likes to bet offered a wager of what was it $1000 US ?
> and nobody took him up on the wager.

I have no idea what you are blabbering about. I know you supposedly
sent one of your designs to another ham on this group for a test
run. We have never heard a single peep as to the results of this
test drive. What say, Mr. Stinky?

> Then there are computor programs
> that push aside Yagi antennas in favor of those
> in equilibrium which support what I have found and these programs are

> designed around Maxwell who is now arpparently losing favor with hams
> tho professionals cling to it dearly.

Must be a strong program to be able to push around yagi antennas.
Well, I suppose if the yagi was built for 1.2 ghz, it would be
fairly
easy to push aside. But I suspect it would strain mightily to
push around a HF tri-bander..

>I have no problem with Guru's
> disagreeing with me but I did expect a morsel or a small challenge
> in at least one area other than look up the dictionary for them to get
> the definition of equilibrium.

I *know* how the rest of the world describes equilibrium. What
I want to know is how *you* apply this term to antenna theory.
Of course, I'm not going to hold my breath waiting for you to
provide this simple answer.
All you want to do is whine, piss, and moan about the sorry
state of the antenna world as you know it.

>And now we have a man who has written a
> book
> and preferes to tout this piece of trash rather than do the math with
> respect to the radiation all on the basis that what he believes is in
> a book that he wrote so it must be authentic.

What are you whining about now? I know nothing of your man, and
his book. I've been busy playing in the dirt. I guess I missed the
memo...

> David take note when
> your book comes out it may spawn a new science to rival classical
> physics.

I wouldn't be holding your breath.

>It blows my mind that we have threads that break the thousand
> mark on reflections or swr and then get repeated again and again
> because of disagreements on the substance

Your mind is going to explode if you keep this up. !!!BOOM!!!
Blood and brain matter flying all about.. Another one bites the
dust..

> Now he is toting a later
> edition hoping to collect some money from hams.

Money is good. And I can do the math when it comes to $$$.

> Give me a break since
> he will not do the math that I speak of probably because he can't
> handle the difference in units between Gauss and Maxwell.

When are *you* going to do the math?

>You know
> when OBAMA
> wins the election on Tuesday hams will unite and declare McCAIN the
> winner

I hope so. Obama sucks so hard, he's likely to implode before he gets
in office. Of course, you'll probably vote for the sorry socialist sum-
bitch,
if you haven't already.. :(
I bet he won't do the math for you either. Sure, he'll tell you
whatever
you want to hear at the moment, but at the end of the day, all you
will have is a dummy load on stick legs. Maybe we should have your
antenna do some squats. :/

4073. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 07:09:04 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <pySPk.60815$OT2.58372@newsfe01.iad>
Source record: 20547

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:mt4pg4l71d5djj2f37a5apls2m1tjuf46h@4ax.com...
> On Sat, 1 Nov 2008 11:11:32 -0400, "Ed Cregger"
> <ecregger@bellsouff.net> wrote:
>
> >I was thinking of the Aegis class warships.
>
> See: AN/SPY-1. 4 panels with 4 megawatts in S-band.
> <http://en.wikipedia.org/wiki/AN/SPY-1>
> <http://www.globalsecurity.org/military/systems/ship/systems/an-spy-1.htm>
>
<https://wrc.navair-rdte.navy.mil/warfighter_enc/weapons/SensElec/RADAR/anspy1.htm>
>
> Lots of fun when the beam hits an adjacent vessels antenna farm and
> toasts everything connected to it.

It happens but it's not supposed to. A standard rule is that an Aegis ship needs to "sector out" other vessels in company when they are within a specified distance -- I forget the number. Among the more vulnerable equipments are the EW receivers.

The AN/SPY-1 sends a pseudo-random pulse train. When you hear one on a suitable receiver, it sounds like corn popping. No joke.

"Sal"

4074. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 15:48:14 UTC
From: richardharrison@webtv.net
Message-ID: <15434-49106EBE-393@storefull-3251.bay.webtv.net>
Source record: 20548

Mark Keith wrote:
"Why would I even "need" to do your work?"

Good question.

Art`s full wavelength of wire is rolled up so its individual elements aren`t strung up to fully reinforce each other`s fields. Resistance loss of the elements adds even when rolled up.

Art wrote:
"What blows my mind John there is nobody willing to do the math with respect to my extension of GAUSS."

Who needs it?

Terman`s 1955 opus says on page 864:
"Radio waves represent electrical energy that has escaped into free space: they are described in detail in Sec. 1-1. Radio waves are produced to some extent whenever a wire in open space carries a high-frequency current. The laws governing such radiation are obtained by using Maxwell`s equations to express the fields associated with the wire: when this is done there is found to be a component, termed the radiated field, having a strength that varies inversely with distance."

Best regards, Richard Harrison, KB5WZI

4075. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 16:51:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1b9da709-1f8b-4e25-9868-5be8f17949f7@e38g2000prn.googlegroups.com>
Source record: 20549

On Nov 4, 9:48 am, richardharri...@webtv.net (Richard Harrison) wrote:
> Mark Keith wrote:
>
> "Why would I even "need" to do your work?"
>
> Good question.
>
> Art`s full wavelength of wire is rolled up so its individual elements
> aren`t strung up to fully reinforce each other`s fields. Resistance loss
> of the elements adds even when rolled up.
>
> Art wrote:
>
> "What blows my mind John there is nobody willing to do the math with
> respect to my extension of GAUSS."
>
> Who needs it?
>
> Terman`s 1955 opus says on page 864:
> "Radio waves represent electrical energy that has escaped into free
> space: they are described in detail in Sec. 1-1. Radio waves are
> produced to some extent whenever a wire in open space carries a
> high-frequency current. The laws governing such radiation are obtained
> by using Maxwell`s equations to express the fields associated with the
> wire: when this is done there is found to be a component, termed the
> radiated field, having a strength that varies inversely with distance."
>
> Best regards, Richard Harrison, KB5WZI

Well Richard I don't go along with that unless the definition of a
wave is made clear.
Some see a wave likened to a part of a cobwebb m oving in the
atmosphere. Other see a wave as a group of particles
unconnected but moving in unison with other particles thru the
atmosphere. I go with the particle aproach in a counter gravity
flight.
Until. a good definition of a wave comes along and how such is
constituted;
As far as doing all the work for me the work has all been done and
each assertion is backed up by existing modern practices such that no
more proof is required. If people want to ignore science let them
believe that the World is flat but I can't expect the like of Mark to
follow such a trail as he readily admits
to not completing high school or for that matter people who consider

that all education has been completed and thus all is known,.
Fortunately many hams are continueing to experiment in search of the holy grail where others wish to continue as just talking heads.
Termnans definition quoted above is not definitive with respect to radiation in any way and it is well recognised that radiation is not known in all its aspects.
What is known is that there are four fources involved all of which are accounted for in Maxwell's mathematics but not fully explained in a scientific account
and that includes the so called definition that Terman put forward in the absense of fuul knoweledge of radiation.
Regards
Art

4076. Re: Radio Works CW80 Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 17:49:55 UTC
From: Brian <hml59@yahoo.com>
Message-ID: <qMqdnTG909-lFo3UnZ2dnUVZ_jydnZ2d@speakeasy.net>
Source record: 20550

I have used Radio Works Carolina Windom, CW80 couple of years. After transmitting RTTY couple of minutes around 7-800 watts, antenna went dead.. Infinite SWR on all bands.. I think Balun was dead.. I want to replace more bigger balun for high power, which manufacture's balun is good for CW80?? Is it a 4:1 or 6:1?? I would like to homebrew if there is a step by step guideline..
Thanks for your help..

4077. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 18:19:31 UTC
From: nm5k@wt.net
Message-ID: <e9e21724-b4c8-401f-8b6d-3bd8e8afb1ae@p31g2000prf.googlegroups.com>
Source record: 20451

On Nov 4, 10:51 am, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> Well Richard I don't go along with that unless the definition of a
> wave is made clear.
> Some see a wave likened to a part of a cobwebb m oving in the
> atmosphere. Other see a wave as a group of particles
> unconnected but moving in unison with other particles thru the
> atmosphere. I go with the particle aproach in a counter gravity
> flight.

I hope it is a good flight. Of course, with the recent economic
downturn, I imagine in-flight meals are out.
I heard they now offer a cup of water and a fig neutrino.

> As far as doing all the work for me the work has all been done and
> each assertion is backed up by existing modern practices such that no
> more proof is required.

Well, then WTF are you doing here whining about it?
Art, you are just plain full of crap. If the work had been done,
you would be offering it as evidence.
But all you do is hand wave various levels of bafflegab.

>If people want to ignore science let them
> believe that the World is flat but I can't expect the like of Mark to
> follow such a trail as he readily admits
> to not completing high school or for that matter people who consider
> that all education has been completed and thus all is known,.

Well, it's obvious that your education has led you astray.
You can't spell worth a crap, your ideas about science
border on lunacy. And to top it off, you probably voted for
Obama. :(
And you want to whine about my level of education?
I'm sure this is news to you, but they don't offer antenna
theory in high school. So it wouldn't make a rats ass
if I finished high school or not. I would still have to study
antenna theory either at a later school, or on my own.
I choose to do such study on my own time.

My home schooling appears to be superior to your
version, being I spell slightly better than you do, and
when I talk about antenna theory, people don't constantly
jump down my back telling me I'm insane.
I'm not even corrected very often, and I'm sure they would

if I was off in outer space as far as theory or even
details of whatever antenna talk I enter into.
A fairly nit picky bunch you have around here.
They don't suffer fools very well.

On the other hand, you can't make one post without
causing extreme controversy.
Your idea of science is to conjure up various degrees
of bafflegab, and then blame everyone else for not doing
your "work" when the controversy starts up.

> Fortunately many hams are continueing to experiment in search of the
> holy grail where others wish to continue as just talking heads.

What is a holy grail antenna? I know what a talking head is.
I see them on the tube every day.
On the other hand, all I see you do is talk out your ass.
A talking ass. Kind of reminds me of Mr. Ed, with a
twist.

> Termnans definition quoted above is not definitive with respect to
> radiation in any way and it is well recognised that radiation is not
> known in all its aspects.

Oh, and you are the one to set us all straight I presume...
Chortle...

> What is known is that there are four fources involved all of which are
> accounted for in Maxwell's mathematics but not fully explained in a
> scientific account
> and that includes the so called definition that Terman put forward in
> the absense of fuul knoweledge of radiation.

Art, I've got news for you. Terman probably forgot more about
radiation than you know in totality. I think Richards book was
printed in about 1955, and it's still fairly relevant.
You on the other hand... :/

> Regards
> Art

Regards, the ignorant dumbass.

4078. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 18:36:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s751h49e7nasdvbalgt3f2jpmibd77tm1v@4ax.com>
Source record: 20452

On Fri, 31 Oct 2008 11:40:07 -0700 (PDT), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>A fractional wavelength antenna is NOT in a state of equi;ibrium
>(balanced forces if you prefer)
>where a full wave radiator IS in a state of equilibrium

Neither of those antennas (and no antennas) are in a state of
equilibrium.

73's
Richard Clark, KB7QHC

4079. Celebrate our Freedom to expose convicted crack dealers like Randy Chapman, KB5URP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 23:21:57 UTC
From: mopeyzakween@yahoo.com
Message-ID: <62334d81-46fe-4bf9-ae35-7f7c345f62ab@d42g2000prb.googlegroups.com>
Source record: 20453
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)

PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4080. Anyone out there using a HAZER on their Rohn 25 Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 23:25:55 UTC
From: Jim <nospam@nospam.com>
Message-ID: <c6m1h4lbflh5fhfvc7jm4niqp4t00gmmcp@4ax.com>
Source record: 20454

I have been thinking of purchasing a HAZER tram system, but after
reading all the reviews all over the web I'm kind of leery.

Anyone out there using one? If so, I would like to start a dialog or
swap E-Mail or call you on phone to find which model you are using,
and what problems you have had with the system. The reviews seem
to go 10 to 1 against the Hazer, recommending a crank up tower....

I would appreciate any comments and recommendations and
in general should I waste my money on the thing or does it work
as advertised?

73,

Jim, WA5DXP
wdxp at cox dot net

4081. Randy Chapman, KB5URP, is in charge of Texas Convicted Crack Dealers For Obama!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 23:31:00 UTC
From: mopeyzakween@yahoo.com
Message-ID: <1a3f20cf-b342-411e-8249-210bc48de311@x1g2000prh.googlegroups.com>
Source record: 20455
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

He likes Obama's lenient stance on crack dealer

4082. Lawsuit countdown 28 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 23:45:03 UTC
From: an old freind <kb9rqz@hotmail.com>
Message-ID: <bdcb5ae8-fdf9-4379-8798-5bf5229cfbea@s1g2000prg.googlegroups.com>
Source record: 20456
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Nov 4, 6:21 pm, mopeyzakw...@yahoo.com wrote:
> SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS

can the spam

4083. Lawsuit countdown 28 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 23:45:18 UTC
From: an old freind <kb9rqz@hotmail.com>
Message-ID: <556e8e61-8e22-4a19-8cf1-801b8bf3e285@d36g2000prf.googlegroups.com>
Source record: 20457
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Nov 4, 6:31 pm, mopeyzakw...@yahoo.com wrote:
>
can the spam

4084. Lawsuit countdown 28 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-04 23:54:00 UTC
From: kb9rqz@yahoo.com
Message-ID: <74o1h4dk822qkaqoj1pjdt1lcu76v66a9k@4ax.com>
Source record: 20458
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Tue, 4 Nov 2008 15:31:00 -0800 (PST), mopeyzakween@yahoo.com wrote:

>He lik
can the spam

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4085. Get ready to build antennas for the new wifi band ...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 01:40:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <geqthiegn1@news.albasani.net>
Source record: 20459

This one single action, and this article on it,
http://news.cnet.com/8301-1035_3-10082505-94.html, pretty much, puts the
final nail in amateur radios coffin.

The main reason?; it makes amateur radio seem like a childs toy/play in
comparison to the communications which are shortly to lay at each and
every citizens finger tips, and secure communications at that.

Only the proper funeral for amateur radio lays in the future, and that
will, most likely, even be skipped--except for the odd article lamenting
its' death ... I think the importance of all this will be missed by a
good 99.9999999% of amateurs ...

Technology is a double edged sword, but one which forever prods us on a
forward path.

So, let's get a freq list together and start planning those antennas for
our cell phones, hand-helds and laptops!

Regards,
JS

4086. Re: Lawsuit countdown 28 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 03:08:39 UTC
From: mopeyzakween@yahoo.com
Message-ID: <9d1df0a3-659c-413f-9614-e9edf53df6fe@t18g2000prt.googlegroups.com>
Source record: 20460
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Nov 4, 6:45 pm, an old freind <kb9...@hotmail.com> wrote:
> On Nov 4, 6:31 pm, mopeyzakw...@yahoo.com wrote:
>
> can the spam

fuck you

4087. Re: Lawsuit countdown 28 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 03:55:38 UTC
From: kb9rqz@yahoo.com
Message-ID: <f962h49bo6prbh9ntrg6pqi79eslrqpjof@4ax.com>
Source record: 20461
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Tue, 4 Nov 2008 19:08:39 -0800 (PST), mopeyzakween@yahoo.com wrote:

>On Nov 4, 6:45ï¿½pm, an old freind <kb9...@hotmail.com> wrote:
>> On Nov 4, 6:31ï¿½pm, mopeyzakw...@yahoo.com wrote:
>>
>> can the spam
>
>fuck you
no thank spamer

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4088. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 04:26:27 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <Tf9Qk.398$A73.153@edtnps82>
Source record: 20462

>What blows my mind John there is nobody willing to do the math with
>respect to my extension of GAUSS
>It blows my mind when a ham with a doctorate comes along and supplies
>the mathematical proof and the math is denied
>by the guru's on this newsgroup.

Art, the following should address your concerns with respect
to Gauss's law.

I maintain the web site for the "Night Train Express" net on
75 m, and have added a page to this web site
concerning Gauss etc. There are two pages copied from
a text book. Note that the third of Maxwell's equation is
Gauss's Law.

Link at: http://www3.telus.net/nighttrainexpress/maxwell_1.htm
Click on "Next" for the 2nd page of math showing the development
of the wave equation.

73,

Frank

4089. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 07:24:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <08i2h41qcb9bq90idj3mdcmqpfc1h7t3l3@4ax.com>
Source record: 20463

On Wed, 05 Nov 2008 04:26:27 GMT, "Frank" <ve6cb@telus.net> wrote:

>Link at: http://www3.telus.net/nighttrainexpress/maxwell_1.htm
>Click on "Next" for the 2nd page of math showing the development
>of the wave equation.

Are you suppressing a 3rd page of math showing equal librium? It must
be there according to Art's revisionist discovery of Newton's laws for
the Unified Theory of RF Fields. ... maybe the 7th or 8th page then.
42nd page?

73's
Richard Clark, KB7QHC

4090. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 14:17:37 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <qUhQk.62372$vX2.6115@bignews6.bellsouth.net>
Source record: 20464

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:1b9da709-1f8b-4e25-9868-5be8f17949f7@e38g2000prn.googlegroups.com...
On Nov 4, 9:48 am, richardharri...@webtv.net (Richard Harrison) wrote:
> Mark Keith wrote:
>
> "Why would I even "need" to do your work?"
>
> Good question.
>
> Art`s full wavelength of wire is rolled up so its individual elements
> aren`t strung up to fully reinforce each other`s fields. Resistance loss
> of the elements adds even when rolled up.
>
> Art wrote:
>
> "What blows my mind John there is nobody willing to do the math with
> respect to my extension of GAUSS."
>
> Who needs it?
>
> Terman`s 1955 opus says on page 864:
> "Radio waves represent electrical energy that has escaped into free
> space: they are described in detail in Sec. 1-1. Radio waves are
> produced to some extent whenever a wire in open space carries a
> high-frequency current. The laws governing such radiation are obtained
> by using Maxwell`s equations to express the fields associated with the
> wire: when this is done there is found to be a component, termed the
> radiated field, having a strength that varies inversely with distance."
>
> Best regards, Richard Harrison, KB5WZI

Well Richard I don't go along with that unless the definition of a
wave is made clear.
Some see a wave likened to a part of a cobwebb m oving in the
atmosphere. Other see a wave as a group of particles
unconnected but moving in unison with other particles thru the
atmosphere. I go with the particle aproach in a counter gravity
flight.
Until. a good definition of a wave comes along and how such is
constituted;
As far as doing all the work for me the work has all been done and
each assertion is backed up by existing modern practices such that no
more proof is required. If people want to ignore science let them
believe that the World is flat but I can't expect the like of Mark to

follow such a trail as he readily admits
to not completing high school or for that matter people who consider
that all education has been completed and thus all is known,.
Fortunately many hams are continueing to experiment in search of the
holy grail where others wish to continue as just talking heads.
Termnans definition quoted above is not definitive with respect to
radiation in any way and it is well recognised that radiation is not
known in all its aspects.
What is known is that there are four fources involved all of which are
accounted for in Maxwell's mathematics but not fully explained in a
scientific account
and that includes the so called definition that Terman put forward in
the absense of fuul knoweledge of radiation.
Regards
Art

I appreciate higher education, Art. But not all higher education needs to be obtained at college or university.

After all, if one reads the same books outside of an organized curriculum and if one truly loves the pursuit of knowledge, is it not possible for one to further ones knowledge without completing organized/formal schemes of formal education? IIRC, some of our most important scientific discoveries were made by "uneducated" individuals. I feel that too much emphasis is placed upon having credentials in this world, not that I would not like to have a degree or two of my own to proudly display on the wall.

Ed, NM2K (for just a short while longer)

4091. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 14:44:20 UTC
From: Dave <dave@dave.dave>
Message-ID: <4911b144$0$31741$bd467cd0@news.dslextreme.com>
Source record: 20465

Ed Cregger wrote:

> Well Richard I don't go along with that unless the definition of a
> wave is made clear.
> Some see a wave likened to a part of a cobwebb m oving in the
> atmosphere. Other see a wave as a group of particles
> unconnected but moving in unison with other particles thru the
> atmosphere. I go with the particle aproach in a counter gravity
> flight.

I don't believe in waves moving through ether. I believe there is a
field around a radiator, exactly like the glow around a light bulb.

4092. FS: AT-271 Fishing Pole Antenna. ..Miltary Collapsible Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 15:08:13 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <BFiQk.1255$N9.374@read2.cgocable.net>
Source record: 20466
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Have available the AT-271 Military Collabsible Antenna.... $30 USD Plus Shipping

This portable antenna can be used for the top section of a Vertical Antenna OR Horizontal elements for an Antenna System such as the Buddipole tm ..... A Great QRP / Portable Antenna weighs only 400 Grams [14 Oz] and measures 104" extended yet only 14" long when folded.
The construction is the same as is used for sectional fishing poles. Each of the 8 hollow tubular metal sections has a plug one one end and a socket on the other end. All the sections are connected by a string made of either a cloth or metal cord. At the bottom of the base element there's a spring inside the tube to tension the cord. Some units may use an elastic shock-cord material. This way all the elements are kept in order when they are disconnected from each other and are held together when assembled into a 104" [8.6 Ft] long antenna. When the elements are folded or disassembled the package is only 14 inches long.
The base has a male 3/8-24 thread which is the same as is used on most Ham Radio and CB antennas. Some sort of spring base could be used when this antenna is used because the hollow antenna elements will "fold" if too much force is applied to them.
These units are in Like New Condition.. Sold AS-IS but will not be DOA.
Have access to more...ASK!

Pictures on www.rodemi.com

Thanks for looking....Norm VE3CZI

4093. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 15:19:16 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <yOiQk.61887$rD2.27264@bignews4.bellsouth.net>
Source record: 20467

"Dave" <dave@dave.dave> wrote in message
news:4911b144$0$31741$bd467cd0@news.dslextreme.com...
> Ed Cregger wrote:
>
>> Well Richard I don't go along with that unless the definition of a
>> wave is made clear.
>> Some see a wave likened to a part of a cobwebb m oving in the
>> atmosphere. Other see a wave as a group of particles
>> unconnected but moving in unison with other particles thru the
>> atmosphere. I go with the particle aproach in a counter gravity
>> flight.
>
> I don't believe in waves moving through ether. I believe there is a field
> around a radiator, exactly like the glow around a light bulb.

Sorry, Dave. I did not write that text.

Allegedly, scientists have determined that the very foundation of our
universe is made of something that they call "quantum foam". Tiny sub
particles that pop into and then out of existence. To me, this is just
another way of saying "the aether".

Ed, NM2K

4094. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 16:00:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <bda8cfdd-bfc2-4b2b-b38e-20ab2c11c270@s9g2000prm.googlegroups.com>
Source record: 20468

On Nov 5, 8:17 am, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:1b9da709-1f8b-4e25-9868-5be8f17949f7@e38g2000prn.googlegroups.com...
> On Nov 4, 9:48 am, richardharri...@webtv.net (Richard Harrison) wrote:
>
>
>
> > Mark Keith wrote:
>
> > "Why would I even "need" to do your work?"
>
> > Good question.
>
> > Art`s full wavelength of wire is rolled up so its individual elements
> > aren`t strung up to fully reinforce each other`s fields. Resistance loss
> > of the elements adds even when rolled up.
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> > produced to some extent whenever a wire in open space carries a
> > high-frequency current. The laws governing such radiation are obtained
> > by using Maxwell`s equations to express the fields associated with the
> > wire: when this is done there is found to be a component, termed the
> > radiated field, having a strength that varies inversely with distance."
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> Well Richard I don't go along with that unless the definition of a
> wave is made clear.
> Some see a wave likened to a part of a cobwebb m oving in the
> atmosphere. Other see a wave as a group of particles
> unconnected but moving in unison with other particles thru the
> atmosphere. I go with the particle aproach in a counter gravity
> flight.
> Until. a good definition of a wave comes along and how such is

> constituted;
> As far as doing all the work for me the work has all been done and
> each assertion is backed up by existing modern practices such that no
> more proof is required. If people want to ignore science let them
> believe that the World is flat but I can't expect the like of Mark to
> follow such a trail as he readily admits
> to not completing high school or for that matter people who consider
> that all education has been completed and thus all is known,.
> Fortunately many hams are continueing to experiment in search of the
> holy grail where others wish to continue as just talking heads.
> Termnans definition quoted above is not definitive with respect to
> radiation in any way and it is well recognised that radiation is not
> known in all its aspects.
> What is known is that there are four fources involved all of which are
> accounted for in Maxwell's mathematics but not fully explained in a
> scientific account
> and that includes the so called definition that Terman put forward in
> the absense of fuul knoweledge of radiation.
> Regards
> Art
>
> -------------
>
> I appreciate higher education, Art. But not all higher education needs to be
> obtained at college or university.
>
> After all, if one reads the same books outside of an organized curriculum
> and if one truly loves the pursuit of knowledge, is it not possible for one
> to further ones knowledge without completing organized/formal schemes of
> formal education? IIRC, some of our most important scientific discoveries
> were made by "uneducated" individuals. I feel that too much emphasis is
> placed upon having credentials in this world, not that I would not like to
> have a degree or two of my own to proudly display on the wall.
>
> Ed, NM2K (for just a short while longer)

Ed, I agree with you 100% but if you are going to debate a subject
then one stands on his knoweledge base
without resorting to slirs. In a debate both positions are put on the
table for debate.
We are long gone from the days that those who challenge old ideas are
pushed aside purely on the volume of jeers
without any evidence what ever. Mark cannot debate the subject on its
technical merits however he can mount an assault
on any messenger based on emotions, he certainly is not equiped to go
thru the higher math of Maxwell and Gauss.
This does not exclude him from any discussion but to mount a personal
assault in the place of knoweledge just gives exposure
to what a person he really is.. On the subject of antennas I have put
thru a theory where a particular antenna is produced.

Antennas produced in the past have been torn apart on its merits thro
out ham radio history but only after study and it is this study that I
am looking for.
As yet nothing that I have put forward has been scientifically
refutted not that I wish for that but I do relish a challenge
Regards
Art

4095. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 16:06:37 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <hwjQk.677$xJ3.560@edtnps83>
Source record: 20469

>>Link at: http://www3.telus.net/nighttrainexpress/maxwell_1.htm
>>Click on "Next" for the 2nd page of math showing the development
>>of the wave equation.
>
> Are you suppressing a 3rd page of math showing equal librium? It must
> be there according to Art's revisionist discovery of Newton's laws for
> the Unified Theory of RF Fields. ... maybe the 7th or 8th page then.
> 42nd page?

No, Sorry Richard. Nothing about "Equal librium" in 1200 pages.

73,
Frank, VE6CB

4096. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 16:13:13 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3e561d1a-eb96-46fb-9c1e-c081a741b5d9@p31g2000prf.googlegroups.com>
Source record: 20470

On Nov 5, 8:44 am, Dave <d...@dave.dave> wrote:
> Ed Cregger wrote:
> > Well Richard I don't go along with that unless the definition of a
> > wave is made clear.
> > Some see a wave likened to a part of a cobwebb m oving in the
> > atmosphere. Other see a wave as a group of particles
> > unconnected but moving in unison with other particles thru the
> > atmosphere. I go with the particle aproach in a counter gravity
> > flight.
>
> I don't believe in waves moving through ether. I believe there is a
> field around a radiator, exactly like the glow around a light bulb.

David
Nothing wrong with that as we are looking at the exchange of energy
as with a tank circuit, I don't think there is any disagreement with
at, it is where the subject
of communication fits in.
Observation shows that communication density varies with the state of
the Sun and scientists
have recognised particles on Earth that comes from the Sun. We also
know that communication exists in a straight line
so one must determine how such a thing can be created. We all know
there are four forces at work in our Universe
so it is essential that they are fully understood when we study
radiation such that existing facts are corroborated.
So David now you have established that there is a sort of glow in your
mind around a antenna you have only established a possible starting
point
of your study. I have put forward a replication of radiation based on
scrap sorting procedures that match the tank circuit phenomina and
applied it to the subject of radiation where I account for all the
four forces where straight line projection is maintained so why is
this such a problem to hams?
Regards
Art

4097. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 17:00:20 UTC
From: richardharrison@webtv.net
Message-ID: <22914-4911D124-2363@storefull-3252.bay.webtv.net>
Source record: 20472

Art wrote:
"Well Richard I don`t go along with that unless the definition of a wave is made clear."

We deal with sinusoidal waves because all other shapes can be nade from combinations of these.

Particle aspects of radiation come to the fore only when radiation interaxts with matter.

Physics tells us a particle that moves with constant momentum in a straight line according to Newton`s first law (inertia statement) has wave motion, according to the "de Broglie hypothesis". Lambda = Planck`s constant / momentum.

The wave aspect of EM radiation is used as a model to make the phenomenon intelligible in terms of familiar laws and events of our everyday, large-scale world.

The 3rd edition of Kraus` "Antennas" says on page 904:
"They (computer program designers) could develop software to simulate the performance of antennas. In general, these techniques either numerically solve Maxwell`s equations by descretizing the problem using integral techniques, such as Moment Methods (MoM) as discussed in Sec.14-11, or differential technuques, such as finite elements or finite difference-time domain."

Maxwell gave us everything we need.

Best regards, Richard Harrison, KB5WZI

4098. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 17:07:16 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <QlkQk.3043$8_3.2614@flpi147.ffdc.sbc.com>
Source record: 20471

Ed Cregger wrote:
> Allegedly, scientists have determined that the very foundation of our
> universe is made of something that they call "quantum foam". Tiny sub
> particles that pop into and then out of existence. To me, this is just
> another way of saying "the aether".

Apparently Einstein agreed with you.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

4099. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 17:35:11 UTC
From: nm5k@wt.net
Message-ID: <3843ced7-3f7c-437e-b41e-70919eec79ce@v22g2000pro.googlegroups.com>
Source record: 20473

On Nov 5, 10:00 am, Art Unwin <ArthurUn...@gmail.com> wrote:

>
>Mark cannot debate the subject on its
> technical merits however he can mount an assault
> on any messenger based on emotions, he certainly is not equiped to go
> thru the higher math of Maxwell and Gauss.

How can one debate an issue when the one offering
the new theory refuses to answer any questions posed to him?
And if I run across some math I can't handle, I can surely find
someone who can. No one is going to be able to know
everything, and that includes you.
It seems to me you are not equipped to handle the math
yourself. You sure haven't offered any at all. Zero.Nada. Zilch.
So how would you know if I can handle the math or not?
You haven't offered any to inspect.
And neither did the Doktor you constantly bring up. Not a bit.

> This does not exclude him from any discussion but to mount a personal
> assault in the place of knoweledge just gives exposure
> to what a person he really is..

You are the one that started the personal assaults a long time
ago. You've had your knickers in a twist ever since I proved
your "loophole" antenna did not work as you claimed and
it's all gone downhill since then.
And that was a long time ago.
You are the only one that seems to be worried about my
level of education. No one else seems to care a whit.
If I'm such an ignorant dumbass as you claim, why did
it only take me about 30 minutes to disprove your "loophole"
antenna theory. You know, the dipole fed with a version of
a T match, with a variable cap that you claimed would
allow you to steer the pattern of the antenna.
A quick modeling of that antenna proved your claims to
be false as far as steering the pattern.
On your behalf, I did prove that the antenna was viable as
far as tuning for each band, but I disproved your claims of
steering the pattern. And I didn't need a spec of math to
do it. What was your response to this modeling?
Nothing at all... :/

Being as I shot that antenna out of the water, you quickly
dropped it, and decided to try other designs.
Very inefficient designs I might add. Of course you

disagree, but you refuse to actually do the real world
tests to prove or disprove these claims.
Instead, you attack the messenger. You whine about
other hams. You whine about England vs the USA.
You just whine. Period. I find it disgusting. Sorry if
that chaps your ass. I really could care less.

What kind of person am I? I'm a person who can't stand a
whiner, that's who I am. And all you do is whine, piss, and
moan about *other* hams that won't do *your* work for you.
On a personal level, you make me sick to my stomach.
If you were any kind of real scientist, you would have done
all this work on your own, and proved or disproved your
theory to *yourself* before braying like a jackass on this
group.

You supposedly gave an antenna to a ham on this group
to inspect and test. Did we ever hear about any results of
this test. Nope. Not a peep. Zero, zilch, nada..
Did he ever report back to you? He sure didn't report back
to us. Of course, you won't reveal if he did or not.

Leads me to believe that my quick analysis of your
antenna was pretty much right on, if you all are afraid
to post the results.
I don't need too much math to smell a turd.
I have enough real world antenna experience to know
what is bunk, and what is the real deal.
I have offered you a sure way out of this mess many
times, but you refuse to listen.
I said, build it and test it! If it actually works, and you
can prove it, your dilemma is over.

But you refuse. You would rather whine, piss, and moan
about all the other hams on the planet.
You claim that most hams think all is known about
antennas. But the only one I hear say that over and over
is *you*.
And to me, it's quite obvious that *you* have a long
ways to go before you could even be close to claiming
you know everything about antennas.
Myself, I know I don't know everything about antennas,
and I don't make claims hinting that I do.
You will notice I don't enter threads which are out of
my expertise. A man has to know his limitations.

> On the subject of antennas I have put
> thru a theory where a particular antenna is produced.

Where is the "produced" antenna? Have you tested it
against a radiator of known performance? Like a dipole?

> Antennas produced in the past have been torn apart on its merits thro
> out ham radio history but only after study and it is this study that I
> am looking for.

Well, I hope you find that study wherever it is hiding and
put it out of it's misery.

> As yet nothing that I have put forward has been scientifically
> refutted not that I wish for that but I do relish a challenge

You wouldn't know how to respond to a challenge if it bit you
in the ass.
You refuse to answer logical questions posed to you. You refuse
to reveal any test results. You refuse to provide any math to
back up your claims. Of course, a horses ass like you will
claim I'm too freakin stupid to make heads or tails of said
math, which may or may not be true.
But like I say, I *do* know plenty of people that can handle
any math that might pose a problem to me, so that claim
is fairly mute.

Anything else you wish to whine or complain about
before you start another thread of useless bafflegab?

4100. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 18:01:24 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ead331e1-d4b7-4a2b-a7ec-2c1d54c88a0d@b2g2000prf.googlegroups.com>
Source record: 20474

On Nov 5, 11:00 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "Well Richard I don`t go along with that unless the definition of a wave
> is made clear."
>
> We deal with sinusoidal waves because all other shapes can be nade from
> combinations of these.
>
>
>
> The 3rd edition of Kraus` "Antennas" says on page 904:
> "They (computer program designers) could develop software to simulate
> the performance of antennas. In general, these techniques either
> numerically solve Maxwell`s equations by descretizing the problem using
> integral techniques, such as Moment Methods (MoM) as discussed in
> Sec.14-11, or differential technuques, such as finite elements or finite
> difference-time domain."
>
> Maxwell gave us everything we need.
>
> Best regards, Richard Harrison, KB5WZI

Richard you have not come up with anything that contradicts what I
have apothosized, nothing !
\When I mention antannas of a new desighn you say who needs them. When
I say that antennas should be tilted
with respect to the Earth you say BS. When I point to the
coirrelatioin between Gaus statics and Maxwell you remain silent.
Now you bring up Kraus by quoting what he said with respect to
computor programs. I was not happy with computor programs because of
the assumption
that they has about sino soidal current. My studies prove that I was
wrong in that determination. This allows me to review Kraus antennas
to see where he deviated from Maxwell. You point to a computor program
on antennas. Most if not all hams foicus on planar designs where
current is induced
progressively from one element to another in simple electromagnetic
coupling form, that relationship does not supply anything with respect
to radiation.
Programmers put that design as an addition to the program that
revolved around Maxwell you did not work around approximations.
Now I feel it is legitamate to apply the computor programs to my

deductions and Maxwell produces the antenna that I forcast and not the lesser efficient yagi antenna.Same goes for Krauss's work on the helix which like the plana designs are also a approximation. These fact are indisputable if you believe the MOM methods used for computor programs. Now we have the situation where a yagi or the helix is pushed aside by the computor programs in favor of what I have postulated. Now it is YOU who have a problem. I kn ow you do not use computors but it was you that brought the subject up.Computor programs duplicate what I am postilating with more efficient antennas and yet you put computors forward to repudiate what I say.
So what are you going to do now? study computor programming to see how a program based around Maxwellk could provide such incorrect answers, deny the teachings of Maxwell or deny the viability of antenna computor programs which puts ham radio back a generation?
Regards
Art

4101. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 18:31:59 UTC
From: nm5k@wt.net
Message-ID: <27506d22-18ce-4187-ae4d-c7a72c456152@x16g2000prn.googlegroups.com>
Source record: 20475

On Nov 5, 12:01 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> Richard you have not come up with anything that contradicts what I
> have apothosized, nothing !

The word you've entered isn't in the dictionary. Click on a spelling
suggestion below or try again using the search bar above.
Suggestions for apothosized:

1. apotheosis 2. hypothesize

Spelling Help Powered by Franklin Electronic Publishers

>Now it is YOU who have a problem.

Yep, just like I said.. Always blame it on the other guy.
It's always his fault. Art is never wrong. What a horses ass.. :/

4102. Outbacker 1899

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 18:40:06 UTC
From: Karsten Heddenhausen <dc7os@htp-tel.de>
Message-ID: <4911e886$0$11098$af665b99@news.htp-tel.de>
Source record: 20476

Hi,

last weekend i bought an Outbacker 1899. I would use a magnet mount
fpor my car. Is it ok? Do i need a tuner?

73 de Karsten DC7OS

--
Wenn man in dem Wort Mama 4 Buchstaben austauscht erhï¿½lt man das Wort
Bier!

4103. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 18:45:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4bc7465e-de28-4f68-8cd2-3912ae33bdb9@v39g2000pro.googlegroups.com>
Source record: 20477

On Nov 5, 12:31 pm, n...@wt.net wrote:
> On Nov 5, 12:01 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > Richard you have not come up with anything that contradicts what I
> > have apothosized, nothing !
>
> The word you've entered isn't in the dictionary. Click on a spelling
> suggestion below or try again using the search bar above.
> Suggestions for apothosized:
>
>   1. apotheosis   2. hypothesize
>
> Spelling Help Powered by Franklin Electronic Publishers
>
> >Now it is YOU who have a problem.
>
> Yep, just like I said.. Always blame it on the other guy.
> It's always his fault. Art is never wrong. What a horses ass.. :/

Look. Ham radio has a problem, a real problem that they refuse to come
to terms with.
Antenna computor programs that have entered ham radio with the full
acceptance
of it's members which takes up a considerable portion of antenna news
does NOT
provide planar antennas as the most efficient antennas based on the
compliance with Maxwell.
This is no small matter for ham radio. We can bury our heads in the
sand or we can
re examine the facts as accepted by science. If adherence to Maxwells
laws provides radiuators
that are more efficient and smaller than the status quo we can ignore
it as Richards states
" we already have a design " or "who needs it"
Now I have shared my findings based on the laws of Maxwell as to why
this is, you need not agree with it
but surely for those who are inquisitive about antennas should be
curious about the parodox that I have exposed.
There are smarter people on this newsgroup whome I have brought this
to their attention so why the silence and the abuse with respect to
these findings
that Einstein pursued in a fruitless effort?

Art

4104. Re: Outbacker 1899

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 19:19:56 UTC
From: dplatt@radagast.org
Message-ID: <s789u5-18k.ln1@radagast.org>
Source record: 20478

>Hi,
>
>last weekend i bought an Outbacker 1899. I would use a magnet mount
>fpor my car. Is it ok? Do i need a tuner?

There are several issues here.

A really big, hefty mag-mount antenna (one designed specifically for HF mobile antennas) may hold the Outbacker securely enough. These big mag-mounts usually have three separate magnet pads.

I would not depend on a mag-mount of any type to provide adequate electrical grounding for an HF antenna... they don't have enough surface area in the magnet assembly. HF antennas of this type really need to be grounded to the chassis, via a heavy and direct ground lead, in order to achieve acceptable performance. If the ground lead is too long, or has too much inductance or resistance, you may find the antenna very difficult to tune/match and its performance will suffer.

Frankly, I think you may be happier in the long run using a ball mount or a heavy-duty lip mount (the top-of-the-line Comet and Diamond trunk-lip mounts may be strong enough).

I don't generally think that using a tuner with mobile antennas of this type is a good idea... they should be tuned by adjusting the whip length as necessary for the frequency you are using. A tuner mounted right at the base may allow automatic matching on other frequencies in the same band, but the losses (already high) will be even higher than if you tuned the antenna itself.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4105. Re: Outbacker 1899

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 20:13:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <N7nQk.5824$c45.5082@nlpi065.nbdc.sbc.com>
Source record: 20479

Karsten Heddenhausen wrote:
> last weekend i bought an Outbacker 1899. I would use a magnet mount
> fpor my car. Is it ok? Do i need a tuner?

If you don't go any lower than 14 MHz, it will work
reasonably well - lots of problems below 14 MHz.
--
73, Cecil http://www.w5dxp.com

4106. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 20:23:55 UTC
From: nm5k@wt.net
Message-ID: <c9621299-ca1f-485e-bffa-03e16a72d254@c22g2000prc.googlegroups.com>
Source record: 20480

On Nov 5, 12:45 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 5, 12:31 pm, n...@wt.net wrote:
>
>
>
> > On Nov 5, 12:01 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > > Richard you have not come up with anything that contradicts what I
> > > have apothosized, nothing !
>
> > The word you've entered isn't in the dictionary. Click on a spelling
> > suggestion below or try again using the search bar above.
> > Suggestions for apothosized:
>
> >   1. apotheosis   2. hypothesize
>
> > Spelling Help Powered by Franklin Electronic Publishers
>
> > >Now it is YOU who have a problem.
>
> > Yep, just like I said.. Always blame it on the other guy.
> > It's always his fault. Art is never wrong. What a horses ass.. :/
>
> Look. Ham radio has a problem, a real problem that they refuse to come
> to terms with.

No. *You* have the problem, not ham radio as a group.

> Antenna computor programs that have entered ham radio with the full
> acceptance
> of it's members which takes up a considerable portion of antenna news
> does NOT
> provide planar antennas as the most efficient antennas based on the
> compliance with Maxwell.

I don't fully accept *all* results obtained through the use of
antenna
programs. There are a few cases where the programs have problems.
Fortunately, most of these are known, and if you really understand
what you are trying to model, it's usually fairly obvious if something
is in error.

> This is no small matter for ham radio. We can bury our heads in the
> sand or we can
> re examine the facts as accepted by science.

Be my guest. It's a free world. But don't feed me a turd
and call it a steak. I can tell the difference in most cases.

>If adherence to Maxwells
> laws provides radiuators
> that are more efficient and smaller than the status quo we can ignore
> it as Richards states
> " we already have a design " or "who needs it"

But so far you have been unable to do this.
You seem to think that a free lunch is hiding somewhere.
I'm here to tell you that you will likely starve to death
before you find it. Why? Because there is no free lunch.

> Now I have shared my findings based on the laws of Maxwell as to why
> this is, you need not agree with it
> but surely for those who are inquisitive about antennas should be
> curious about the parodox that I have exposed.

You haven't exposed anything except a bunch of baffle gab.

> There are smarter people on this newsgroup whome I have brought this
> to their attention so why the silence and the abuse with respect to
> these findings
> that Einstein pursued in a fruitless effort?

Well, obviously they don't seem to agree with your theories.
And who could blame them when the only "proof" offered is
conjured up baffle gab.
The ball is totally in your court. Either do the testing and
prove your theory, or accept the failure.
I know I'm not going to do any work on it. I don't like
compromised inefficient antennas. So there is no incentive
whatsoever for me to waste my energy on it when it's sure
to be less effective than what I use at present.

4107. American Tower parts - Be prepared for GRIEF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 20:35:22 UTC
From: Jim <nospam@nospam.com>
Message-ID: <lsv3h45qpnqbiljnt3mthv1a5ab6pbeiu8@4ax.com>
Source record: 20481

FYI:

I bought some new parts for my Rohn 25 from OldTowerGuy on Ebay, and one was a hinged base. Well, it took me almost a day to get the 3 pins on the base into the legs in the tower. When I wrote them they told me that Rohn had changed plants recently and they were not keeping their dimensions up to spec. Only thing wrong with this excuse is that this was a brand new section that had been in storage for many years, unused (I had 3 of them). I tried to get the thing on several new and used sections, same exact problem.

Then after using a car scissors jack and axe and baseball bat to finally get the 3 pins into the base, he holes on one leg would not line up, no matter what. I got bolts into holes on two legs, but the other two were off in two dimensions. They were too far into the leg for holes to line up, and then on the axis they were off too. It took two of us some time with car scissors jack wedged between crossarm and base plate to force the two holes to line up vertically, but they were still not lined up axially. We tried all kinds of drifts, screwdrivers, and so forth, and was about to redrill the hole, when we were finally able to force one of the bolts through the leg, then the last one lined up after beating it in with a baseball bat.

Luckily I decided to try to see how the hinge worked. I did notice that even though the holes for the hinged
portsions are for 1/2 inch bolts, they shipped the thing with all 3/8" bolts. I went to Fastners store and bought stainless 7/16" bolts to allow for a bit of slack, and guess what? The thing is so far out of alignment that it would not go down to flat position so you could put the
two captive bolts in to hold the tower upright. The fartherst you can get the tower down is at about a 5 or 10 degree angle.

I'm hoping they take it back but with EBAY you never know what will happen or what you will lose.

Caveat Emptor - I'm sticking with Rohn from now on.

Jim WA5DXP

4108. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 20:51:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3514h4p8kfcsu0i1kov5gm9gr7e8djjg5i@4ax.com>
Source record: 20482

On Wed, 5 Nov 2008 10:01:24 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Richard you have not come up with anything that contradicts what I
>have apothosized,

"Potential Energy is not in equilibrium."
so says Newton.

"Kinetic Energy is not in equilibrium."
so says Newton.

"Radiation that uses neither, is not radiation."
so says Gauss.

"Radiation is not in equilibrium."
so says Maxwell.

"An antenna receives or transmits radiation."
so says Einstein.

"An antenna is not in equilibrium."
so says Marx (of Hart, Schaffner & Marx).

The math has been proven, and the dead white scientists (and
haberdashers) have spoken from the grave. You have come up with a
contradiction only, and demonstrated nothing that will raise the dead.
No Lazarus Prize will be awarded this year.

In spite of your reference to having apotheosized anything, no, you
don't rise to the pantheon of deity either (not until you can get
those nails out of your hands).

To early for Easter.

73's
Richard Clark, KB7QHC

4109. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 21:24:10 UTC
From: richardharrison@webtv.net
Message-ID: <22722-49120EFA-1960@storefull-3253.bay.webtv.net>
Source record: 20483

Art wrote:
"We can bury our heads in the sand or we can re examune the facts as accepted by science. If adherence to Maxwell`s laws provides radiators that are more efficient and smaller than the status quo we can ignore it as Richard states "We already have a design" or Who needs it."

Richard says: Hooray! Richard does not discourage novelty or the computer which is a most useful tool. Show us the novelty and the data.

Art`s rant reminds me of an offhand remark by Jerry Chinski, Chief Engineer of KXYZ when I worked there in 1949. It was not directed at me when Jerry said: "You can have the best equipment in the world but if knuckleheads are operating it, the product is likely useless."

Antenna modeling is well tested and accepted. If the computer operator is a knucklehead, its output is likely useless (GIGO). The operator likely needs help to get useful output. But, some operators blame the system not their own ineptitude.

Many participants in this newsgroup use EZNEC to get good results when evaluating prospective antennas. I`m sure some blame the system when it doesn`t produce the desired results. I`d call them Chinski-ites.

My 20th edition of "The ARRL Antenna Book" includes a CD-ROM of the entire book. Chapter 8 is "Phased Array Techniques" , written by the EZNEC man, Roy W. Lewallen, W7EL. It is full of practical information in print for all to see and criticize. Last line in the book is: We would appreciate any feedback or bug reports you might have.

If Art would subject his data to such scrutiny, he might get more cheers and fewer jeers.

Best regards, Richard Harrison, KB5WZI

4110. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 23:08:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <600d7d17-5078-416f-bc53-608cdfebf1cb@d36g2000prf.googlegroups.com>
Source record: 20484

On Nov 5, 3:24 pm, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "We can bury our heads in the sand or we can re examune the facts as
> accepted by science. If adherence to Maxwell`s laws provides radiators
> that are more efficient and smaller than the status quo we can ignore it
> as Richard states "We already have a design" or Who needs it."
>
> Richard says: Hooray! Richard does not discourage novelty or the
> computer which is a most useful tool. Show us the novelty and the data.
>
> Art`s rant reminds me of an offhand remark by Jerry Chinski, Chief
> Engineer of KXYZ when I worked there in 1949. It was not directed at me
> when Jerry said: "You can have the best equipment in the world but if
> knuckleheads are operating it, the product is likely useless."
>
> Antenna modeling is well tested and accepted. If the computer operator
> is a knucklehead, its output is likely useless (GIGO). The operator
> likely needs help to get useful output. But, some operators blame the
> system not their own ineptitude.
>
> Many participants in this newsgroup use EZNEC to get good results when
> evaluating prospective antennas. I`m sure some blame the system when it
> doesn`t produce the desired results. I`d call them Chinski-ites.
>
> My 20th edition of "The ARRL Antenna Book" includes a CD-ROM of the
> entire book. Chapter 8 is "Phased Array Techniques" , written by the
> EZNEC man, Roy W. Lewallen, W7EL. It is full of practical information in
> print for all to see and criticize. Last line in the book is: We would
> appreciate any feedback or bug reports you might have.
>
> If Art would subject his data to such scrutiny, he might get more cheers
> and fewer jeers.
>
> Best regards, Richard Harrison, KB5WZI

Ok Richard so I am inept, let us leave it at that. There are many
experts and guru's on this newsgroup
who pretty much agree with you and not one has come forward to refute
some of the things that have been stated against what I proffer
So I will assume that the program is accepted for Yagi' but not for
radiators in equilibrium.
All this is not unusual a lot of things that were found out were
delayed from the public because of people just couldn';t take change.

Those who do not understand the rules of science with respect to
radiators say it is bafflegab because they don't understand the
sciences.
So I will let it go at that and assume that I am the one out of step.
You and others have made your point and there is no such thing than a
better antenna than the Yagi and that all is known is about antennas
and nothing that is not printed in a book is acceptable to radio hams.
I get the message and that should make every one happy
Art
Art

4111. Convicted crack dealer, KB5URP, Randy Chapman, is an Obama supporter because of his lenient attitude toward crack dealers!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 23:40:59 UTC
From: mopeyzakween@yahoo.com
Message-ID: <df28a978-3aa5-4911-9b0b-3287b9e3d6f4@i24g2000prf.googlegroups.com>
Source record: 20485
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

Chapwoman is a queenie boi convicted crack dealer!

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE

GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4112. Lawsuit countdown 27 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-05 23:46:31 UTC
From: kb9rqz@yahoo.com
Message-ID: <q1c4h4l9t0hu8d0kjarrjmjf1sh4q8m42m@4ax.com>
Source record: 20486
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Wed, 5 Nov 2008 15:40:59 -0800 (PST), mopeyzakween@yahoo.com wrote:

>Chapwoman
can the stalking spam

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4113. Re: American Tower parts - Be prepared for GRIEF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 00:05:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <ijo9u5-ser.ln1@mail.specsol.com>
Source record: 20487

Jim <nospam@nospam.com> wrote:
> FYI:
>
>
> I bought some new parts for my Rohn 25 from OldTowerGuy on Ebay,

Rohn changed their name to Frankfort Tower Industries, went bankrupt,
and sold the assets to Radian Communication Services in 2003.

Don't be surprised if new "Rohn" stuff is a different than old "Rohn"
stuff.

--
Jim Pennino

Remove .spam.sux to reply.

4114. WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 01:36:26 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <0815f4c7-4dd0-404f-88d6-41b0bc3870a3@b2g2000prf.googlegroups.com>
Source record: 20488
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?
With the financial mess, I have started to listen to AM radio in the car on the way to and from work for the past few weeks and I've noticed some random static at certain locations. At first I attributed this to some power line noise. Bit it didn't really sound like 60 Hz buzz hash, it was more random popcorn like but I know power lines can blow around in the wind and have strange discharges so I didn't think too much of it for a while. But after a few days I noticed that the static is there only when the car is moving. OK, so its wheel static. Static electricity from the wheels or brakes or something. OK that's not unusual either. But it is the combination that has me curious. This static only occurs when the car is moving and it only occurs at certain repeatable locations on my drive. Everyday when I turn the corner from X to Y, I get the static as the car is moving, but not when stopped at the same corner. And I never get the static when turning the corner from A to B. If it was power line, stopping the car wouldn't stop the static. If it is wheel static, why does it not happen all the time and happen only at certain locations. It seems as if these certain locations have something special about the pavement or the water content of the soil or something. None of that seems likely to me though, I see nothing changing in the pavement as I drive from an area of static to an area of non-static. It is not related to stepping on the brake or gas or shifting gears or going over bumps or any other aspect of the car that I can tell other than it's speed down the road.
As an experiment, I attached a drag wire under the car. The wire drags on the ground to discharge any static build up the car. This made no difference. Another clue, we've had no rain here in a while. The static all stops during wet weather. Also I am in the Philadelphia area and the AM station is in the New York area so it is on the weak side.
I've been a ham for over 30 years and I have a lot of experience with EMI, but this one has me scratching my head. The wheel static changes repeatably in different locations for no apparent reason. It's got to be something to do with the pavement. Anybody have any experience with this?

Mark

4115. Re: Lawsuit countdown 27 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 01:54:53 UTC
From: kgl.1928@gmail.com
Message-ID: <e8f724e0-b32e-4c52-b73f-ed8679d7eee1@g17g2000prg.googlegroups.com>
Source record: 20489
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,alt.usenet.kooks,rec.radio.amateur.policy

On Nov 5, 5:46 pm, kb9...@yahoo.com wrote:
> On Wed, 5 Nov 2008 15:40:59 -0800 (PST), mopeyzakw...@yahoo.com wrote:
> >Chapwoman
>
> can the stalking spam
>
> "one useless man is disgrace 2 become a law firm 3 or more become a congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
> altopia is never used by KB9RQZ
> nor is Konst...@hotmail.com ever
> btw i can be found at
> 17366 N River Rd
> Chassel Mi
>
> but the cowards asking lack the gut to act
mark,kindly stop posting your non radio related spam.

4116. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 03:08:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <getn4e$e06$1@news.albasani.net>
Source record: 20490

Cecil Moore wrote:
> Ed Cregger wrote:
>> Allegedly, scientists have determined that the very foundation of our
>> universe is made of something that they call "quantum foam". Tiny sub
>> particles that pop into and then out of existence. To me, this is just
>> another way of saying "the aether".
>
> Apparently Einstein agreed with you.

Yes, I suspect both of you are correct ... it peeves me, and NOT
SLIGHTLY, I can't even get my mind "wrapped about that."

But then, neither can you! :-P

Regards,
JS

4117. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 03:09:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fpn4h4t83e94h1k72ar4p10pi1dic1qkqs@4ax.com>
Source record: 20491

On Wed, 5 Nov 2008 15:08:33 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

> nothing that is not printed in a book is acceptable to radio hams.

You got your ideas by reading headstones?

>I get the message

Somehow I doubt that. You sound like today's concession speach as a
warm up for the next campaign cycle.

Art, if you were running for political office, your idea shelf life
would equal Lyndon Larouche's.

73's
Richard Clark, KB7QHC

4118. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 03:21:51 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <Pine.OSF.4.33.0811052119110.5390-100000@worf.netins.net>
Source record: 20492
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

On Wed, 5 Nov 2008, Mark wrote:

> I've been a ham for over 30 years and I have a lot of experience with
> EMI, but this one has me scratching my head. The wheel static
> changes repeatably in different locations for no apparent reason.
> It's got to be something to do with the pavement. Anybody have any
> experience with this?
>
> Mark
>

My guess is different lengths/types/orientation of rebar in the roadbed.

--
My mailbox is NOT an advertisement medium. Tehrasha Darkon
My address is NOT for sale, lease or rent. darkon@netins.net
Send me spam, lose your account. Get it? TINLC-1372
http://tehrasha.mamehost.com/bastard B.A.S.T.A.R.D

4119. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 03:22:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <getnu2$er3$1@news.albasani.net>
Source record: 20493

Richard Clark wrote:
> On Wed, 5 Nov 2008 10:01:24 -0800 (PST), Art Unwin
> <ArthurUnwin@gmail.com> wrote:
>
>> Richard you have not come up with anything that contradicts what I
>> have apothosized,
>
> "Potential Energy is not in equilibrium."
> so says Newton.
>
> "Kinetic Energy is not in equilibrium."
> so says Newton.
>
> "Radiation that uses neither, is not radiation."
> so says Gauss.
>
> "Radiation is not in equilibrium."
> so says Maxwell.
>
> "An antenna receives or transmits radiation."
> so says Einstein.
>
> "An antenna is not in equilibrium."
> so says Marx (of Hart, Schaffner & Marx).
>
> The math has been proven, and the dead white scientists (and
> haberdashers) have spoken from the grave. You have come up with a
> contradiction only, and demonstrated nothing that will raise the dead.
> No Lazarus Prize will be awarded this year.
>
> In spite of your reference to having apotheosized anything, no, you
> don't rise to the pantheon of deity either (not until you can get
> those nails out of your hands).
>
> To early for Easter.
>
> 73's
> Richard Clark, KB7QHC

... Almond Joy gots nuts, Mounds don't! :-)

Regards,
JS

4120. Re: Lawsuit countdown 27 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 05:25:42 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <a0f842cd-0bd1-44a7-99fc-a783df323e8b@l33g2000pri.googlegroups.com>
Source record: 20494
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,alt.usenet.kooks,rec.radio.amateur.policy

On Nov 5, 8:54 pm, kgl.1...@gmail.com wrote:
>
> mark,kindly stop posting your non radio related spam.-
you are the one spaming fanboi

4121. Lawsuit countdown 26 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 05:28:15 UTC
From: kb9rqz@yahoo.com
Message-ID: <q205h4tfkd4a90eecb5s9eg35q0t7aausg@4ax.com>
Source record: 20495
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Wed, 5 Nov 2008 15:40:59 -0800 (PST), mopeyzakween@yahoo.com wrote:

>Chapwoman is a queenie boi convicted crack dealer!
>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4122. Re: Lawsuit countdown 26 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 05:48:41 UTC
From: kb9rqz@yahoo.com
Message-ID: <m015h4d9s8k60rdk7ppabit26h0l0129l2@4ax.com>
Source record: 20496
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Thu, 06 Nov 2008 00:28:15 -0500, kb9rqz@yahoo.com wrote:

>On Wed, 5 Nov 2008 15:40:59 -0800 (PST), mopeyzakween@yahoo.com wrote:
>
>>Chapwoman is a queenie boi convicted crack dealer!
>>
>
>
>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
>adams
>
>woger you are a Congress all in your own head
>
>http://kb9rqz.bravejournal.com/
>altopia is never used by KB9RQZ
>nor is Konstans@hotmail.com ever
>btw i can be found at
>17366 N River Rd
>Chassel Mi
>
>but the cowards asking lack the gut to act

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4123. Re: hey marqueer, how long 'till the amateur radio community gets to shit on your paw's grave???

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 05:52:26 UTC
From: stop.itmork@gmail.com
Message-ID: <0867c661-a6a2-41d7-8df9-de2206b0799b@b2g2000prf.googlegroups.com>
Source record: 20497
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,alt.usenet.kooks,rec.radio.amateur.policy

On Nov 5, 11:25 pm, an old friend <kb9...@hotmail.com> wrote:
> On Nov 5, 8:54 pm, kgl.1...@gmail.com wrote:
>
> > mark,kindly stop posting your non radio related spam.-
>
> you are the one spaming fanboi

```
oh look, the kooks taught the hurdy-gurdy monkey a new word!
"fanboi"

BWHAHAHAHAHAHAHAHAHA!!!!!!!!!!!!!!!!!!!!!!
```

4124. Lawsuit countdown 26 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 05:59:48 UTC
From: kb9rqz@yahoo.com
Message-ID: <6t15h419eh74cqo43bmpd59d6t3u1pg5co@4ax.com>
Source record: 20498
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,alt.usenet.kooks,rec.radio.amateur.policy

On Wed, 5 Nov 2008 21:52:26 -0800 (PST), stop.itmork@gmail.com wrote:

>
another of your stupid sock fanboi?

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4125. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 07:24:48 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <fWwQk.57154$kh2.24311@bignews3.bellsouth.net>
Source record: 20499
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

"Tehrasha Darkon" <darkon@netins.net> wrote in message
news:Pine.OSF.4.33.0811052119110.5390-100000@worf.netins.net...
> On Wed, 5 Nov 2008, Mark wrote:
>
>> I've been a ham for over 30 years and I have a lot of experience with
>> EMI, but this one has me scratching my head. The wheel static
>> changes repeatably in different locations for no apparent reason.
>> It's got to be something to do with the pavement. Anybody have any
>> experience with this?
>>
>> Mark
>>
>
> My guess is different lengths/types/orientation of rebar in the roadbed.
>
> --
> My mailbox is NOT an advertisement medium. Tehrasha Darkon
> My address is NOT for sale, lease or rent. darkon@netins.net
> Send me spam, lose your account. Get it? TINLC-1372
> http://tehrasha.mamehost.com/bastard B.A.S.T.A.R.D
>

Or electronic/magnetic sensors embedded in the road.

Ed, NM2K

4126. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 11:55:56 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <dj2bu5-p5u.ln1@p400bob.personal.cox.net>
Source record: 20351
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

Hi Mark

I'll admit I have never actually noticed it but your experience sounds plausible.

So me thinking in fundamental terms.

- The ground strap not working implies a charge and discharge cycle in the wheel/axle.
- When you corner the tyre/road, tyre/wheel, wheel/axle conductivity (or insulation properties) changes.
- When the road surface changes physical or conductive properties also change.
- Wet weather mixes wth the road dirt and produces are better conductive path and thus less of a voltage to discharge.

Does applying the brakes (better conductivity hub/disc to axle/car) change or reduce the noise? (It will also distort the tyre shape in a like mannner to cornering so this test may be invalidated. Try just making the pads bind slightly with the drum/disc so it doesnt affect tyre shape)

Does driving on a noisy stretch with a wheel on the lane marking paint yield slightly less noise? (Wow, a new way to measure road speed!) If this gets to be a positive test you can try one side or the other to see if it is wheel dependent. (The kerb side tyres will of course have slightly more surface on the road due to road camber,)

Hard to test but does the noise stop straight away on wet pavement or does the water have to take some time to get well ingrained onto the tread and side surfaces of the tyre?

The more tyre surface that is on the road (eg smooth pavement, cornering G or wet pavement) the more likely the static charge will discharge at a lower voltage (ie less noisy) Can you make the problem worse by adding some more air to your tyres?

Road material conductivity to the underlying "ground" I dont think would be that significant but I'll admit I have never measured it. I would have thought that it is low enough resistance (including any rebar!) to not be factored in. I am prepared to be shot down over this though!

Interesting/Intriguing situation! You can of course just try some of that conductive powder that goes inside the tyre. Something like that green roadside puncture repair stuff may also help and additionally give you some protection for its priamry use!

Please get back to us with what you find.

Cheers Bob VK2YQA/W5 East Texas

(It is too dangerous for me to use AR in the car nowadays. I am so use to veering the "wrong way" from driving for so long on the other side I cant afford the risk! Sigh! - Yeah I also spell "tyre" the other way!)

Mark wrote:
> WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

4127. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 12:04:11 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Z2BQk.5868$c45.5114@nlpi065.nbdc.sbc.com>
Source record: 20500

John Smith wrote:
> But then, neither can you! :-P

The quantum foam is still seething following the Big
Bang. It is akin to an explosion that has not yet
run its course.
--
73, Cecil http://www.w5dxp.com
"According to the general theory of relativity,
space without ether is unthinkable." Albert Einstein

4128. HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 12:59:30 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <SSBQk.4258$W06.1779@flpi148.ffdc.sbc.com>
Source record: 20352

I know that Hallicrafters made a dual diversity set up and RCA used three AR-88s in a trioka, selecting the best signal with a tone decoder that switched in the best and let the other/s idle or squelched. I've heard that Collins used the R 390 (51J or 51S?) , and Hammarlund the Super Pros (only 600s or others?). It seems like three antennas spaced about 1000 feet apart on an equilateral triangle was a 100% solution. Did the Brits use it a Bletchley? But I don't see anything these days and have to wonder if diversity reception was made obsolete by SSB or the news & financial services using wire for TTY. I also know that Telstar was the final nail. Was the primary use for RTTY or was it used to voice well as CW? Anyone have some real personal experience to offer?
Thanks
Hank WD5JFR

4129. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 13:37:29 UTC
From: necromancer <55_sux@worldofnecromancer_no_spam_no_way.org>
Message-ID: <1tq5h41j8q3j1ohvc6abkgs5i2v664qi5v@4ax.com>
Source record: 20353
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

On Wed, 5 Nov 2008 17:36:26 -0800 (PST), Mark <makolber@yahoo.com>
wrote:

>WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?
>With the financial mess, I have started to listen to AM radio in the
>car on the way to and from work for the past few weeks and I've
>noticed some random static at certain locations. At first I
>attributed this to some power line noise. Bit it didn't really sound
>like 60 Hz buzz hash, it was more random popcorn like but I know power
>lines can blow around in the wind and have strange discharges so I
>didn't think too much of it for a while. But after a few days I
>noticed that the static is there only when the car is moving. OK, so
>its wheel static. Static electricity from the wheels or brakes or
>something. OK that's not unusual either. But it is the combination
>that has me curious. This static only occurs when the car is moving
>and it only occurs at certain repeatable locations on my drive.
>Everyday when I turn the corner from X to Y, I get the static as the
>car is moving, but not when stopped at the same corner. And I never
>get the static when turning the corner from A to B. If it was power
>line, stopping the car wouldn't stop the static. If it is wheel
>static, why does it not happen all the time and happen only at certain
>locations.

Question: you say the static only occurs when the car is moving and
gave two scenarios where the car is moving: turning the corner from X
to Y (with static) and A to B (no static). My first question is are
these right turns, left turns or one of each? Is there a traffic light
at one and not at the other? Do you hear the static when driving
straight or performing the turns in other locations? Two theories
here: 1)is that maybe when you turn, something is coming into contact
with something else completing a circuit (or alternately seperating
and breaking a circuit) that would result in your static and 2) if
turn X to Y and A to B are at different intersections, there might be
something in the environment at the X to Y intersection that may not
be present at the A to B intersection - such as a traffic light and
its sensors and controllers, a business's sign etc...

My second question is have you tried the static producing maneuver
with the radio turned off? Just curious as to if the source of the
noise is from the sound system or maybe from another source that you
may not have noticed before you started listening to the AM radio -
car bodies and panels can flex some when under g loads like turns and
that could be the source of your noise.
--

"I... Can't drive... FIFTY-FIVE!!"
--Sammy Hagar

4130. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 13:47:47 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <7ACQk.3518$225.1000@nwrddc02.gnilink.net>
Source record: 20354

"Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in message
news:SSBQk.4258$W06.1779@flpi148.ffdc.sbc.com...
>I know that Hallicrafters made a dual diversity set up and RCA used three
>AR-88s in a trioka, selecting the best signal with a tone decoder that
>switched in the best and let the other/s idle or squelched. I've heard that
>Collins used the R 390 (51J or 51S?) , and Hammarlund the Super Pros (only
>600s or others?). It seems like three antennas spaced about 1000 feet apart
>on an equilateral triangle was a 100% solution. Did the Brits use it a
>Bletchley? But I don't see anything these days and have to wonder if
>diversity reception was made obsolete by SSB or the news & financial
>services using wire for TTY. I also know that Telstar was the final nail.
>Was the primary use for RTTY or was it used to voice well as CW? Anyone
>have some real personal experience to offer?
> Thanks
> Hank WD5JFR
I don't own one- but believe the Elecraft K3 can do diversity but woud
require the 2nd RX option.
There's space diversity (which you allude to) but also polarity diversity.
Dale W4OP

4131. Convicted crack dealer Randy Chapman, KB5URP, is a punk suckboy

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 13:52:13 UTC
From: mopeyzakween@yahoo.com
Message-ID: <764a85dd-977a-4be6-82a4-bea2475911f5@c36g2000prc.googlegroups.com>
Source record: 20355
Cross-posted to: rec.radio.cb,rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.amateur.policy

Sit there and suck on it Chapman, you drug addled, lying piece of rat
turd.

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE

GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4132. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 14:38:56 UTC
From: Dave <dave@dave.dave>
Message-ID: <49130180$0$31808$bd467cd0@news.dslextreme.com>
Source record: 20356

Dale Parfitt wrote:

>> Hank WD5JFR
> I don't own one- but believe the Elecraft K3 can do diversity but woud
> require the 2nd RX option.
> There's space diversity (which you allude to) but also polarity diversity.
> Dale W4OP
>
>
And frequency diversity and time diversity.

4133. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 14:45:37 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <lqDQk.4259$W06.3779@flpi148.ffdc.sbc.com>
Source record: 20357

Space diversity is what they call it for microwave systems and they also
use frequency diversity. I've not heard of polarity diversity used on
commercial HF systems but I have used it quite a bit myself with a
horizontal dipole and a 18AVT. The military and FEMA use a computer
control systems to automagically establish links on various bands for a
round tables, and switching to the best link whenever required. I can't
recall the acronym but I hams have a PC based system. I've seen it in
use at a swapmeet using Sunair transceivers.
Does the Elecraft have a built in tone decoder?

Hank wd5jfr
"Dale Parfitt" <parinc1@verizon.net> wrote in message
news:7ACQk.3518$225.1000@nwrddc02.gnilink.net...
>
> "Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in message
> news:SSBQk.4258$W06.1779@flpi148.ffdc.sbc.com...
>>I know that Hallicrafters made a dual diversity set up and RCA used
>>three AR-88s in a trioka, selecting the best signal with a tone
>>decoder that switched in the best and let the other/s idle or
>>squelched. I've heard that Collins used the R 390 (51J or 51S?) , and
>>Hammarlund the Super Pros (only 600s or others?). It seems like three
>>antennas spaced about 1000 feet apart on an equilateral triangle was a
>>100% solution. Did the Brits use it a Bletchley? But I don't see
>>anything these days and have to wonder if diversity reception was made
>>obsolete by SSB or the news & financial services using wire for TTY. I
>>also know that Telstar was the final nail. Was the primary use for
>>RTTY or was it used to voice well as CW? Anyone have some real
>>personal experience to offer?
>> Thanks
>> Hank WD5JFR
> I don't own one- but believe the Elecraft K3 can do diversity but woud
> require the 2nd RX option.
> There's space diversity (which you allude to) but also polarity
> diversity.
> Dale W4OP
>

4134. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 15:26:29 UTC
From: Dave <dave@dave.dave>
Message-ID: <49130ca5$0$31778$bd467cd0@news.dslextreme.com>
Source record: 20358

Henry Kolesnik wrote:
> Space diversity is what they call it for microwave systems and they also
> use frequency diversity. I've not heard of polarity diversity used on
> commercial HF systems but I have used it quite a bit myself with a
> horizontal dipole and a 18AVT. The military and FEMA use a computer
> control systems to automagically establish links on various bands for a
> round tables, and switching to the best link whenever required. I can't
> recall the acronym but I hams have a PC based system. I've seen it in
> use at a swapmeet using Sunair transceivers.
> Does the Elecraft have a built in tone decoder?
>
> Hank wd5jfr
> "Dale Parfitt" <parinc1@verizon.net> wrote in message
> news:7ACQk.3518$225.1000@nwrddc02.gnilink.net...
>>
>> "Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in message
>> news:SSBQk.4258$W06.1779@flpi148.ffdc.sbc.com...
>>> I know that Hallicrafters made a dual diversity set up and RCA used
>>> three AR-88s in a trioka, selecting the best signal with a tone
>>> decoder that switched in the best and let the other/s idle or
>>> squelched. I've heard that Collins used the R 390 (51J or 51S?) , and
>>> Hammarlund the Super Pros (only 600s or others?). It seems like
>>> three antennas spaced about 1000 feet apart on an equilateral
>>> triangle was a 100% solution. Did the Brits use it a Bletchley? But I
>>> don't see anything these days and have to wonder if diversity
>>> reception was made obsolete by SSB or the news & financial services
>>> using wire for TTY. I also know that Telstar was the final nail. Was
>>> the primary use for RTTY or was it used to voice well as CW? Anyone
>>> have some real personal experience to offer?
>>> Thanks
>>> Hank WD5JFR
>> I don't own one- but believe the Elecraft K3 can do diversity but woud
>> require the 2nd RX option.
>> There's space diversity (which you allude to) but also polarity
>> diversity.
>> Dale W4OP
>>
>
http://www.elecraft.com/

4135. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 16:32:39 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <H_EQk.3576$225.40@nwrddc02.gnilink.net>
Source record: 20359

"Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in message
news:SSBQk.4258$W06.1779@flpi148.ffdc.sbc.com...
>I know that Hallicrafters made a dual diversity set up and RCA used three
>AR-88s in a trioka, selecting the best signal with a tone decoder that
>switched in the best and let the other/s idle or squelched. I've heard that
>Collins used the R 390 (51J or 51S?) , and Hammarlund the Super Pros (only
>600s or others?). It seems like three antennas spaced about 1000 feet apart
>on an equilateral triangle was a 100% solution. Did the Brits use it a
>Bletchley? But I don't see anything these days and have to wonder if
>diversity reception was made obsolete by SSB or the news & financial
>services using wire for TTY. I also know that Telstar was the final nail.
>Was the primary use for RTTY or was it used to voice well as CW? Anyone
>have some real personal experience to offer?
> Thanks
> Hank WD5JFR
Years ago at Collins we used a frequency diversity system that sent the same signal on upper and lower sideband. Additional improvement was achieved by delaying one sideband a few milliseconds, then doing the inverse delay at the receiving end. The time delay approach worked well, but never caught on commercially.

Additionally, separate antennas were deployed for space diversity. I have forgotten the siting guidelines.

The frequency diversity system was used for RTTY, and antenna space diversity for voice/data.

4136. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 17:30:59 UTC
From: richard <member@newsguy.com>
Message-ID: <am96h4hu6imcffi9hltjjfnoibmdnfjft7@4ax.com>
Source record: 20360
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

On Wed, 5 Nov 2008 17:36:26 -0800 (PST), Mark <makolber@yahoo.com>
wrote:

>WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?
>With the financial mess, I have started to listen to AM radio in the
>car on the way to and from work for the past few weeks and I've
>noticed some random static at certain locations. At first I
>attributed this to some power line noise. Bit it didn't really sound
>like 60 Hz buzz hash, it was more random popcorn like but I know power
>lines can blow around in the wind and have strange discharges so I
>didn't think too much of it for a while. But after a few days I
>noticed that the static is there only when the car is moving. OK, so
>its wheel static. Static electricity from the wheels or brakes or
>something. OK that's not unusual either. But it is the combination
>that has me curious. This static only occurs when the car is moving
>and it only occurs at certain repeatable locations on my drive.
>Everyday when I turn the corner from X to Y, I get the static as the
>car is moving, but not when stopped at the same corner. And I never
>get the static when turning the corner from A to B. If it was power
>line, stopping the car wouldn't stop the static. If it is wheel
>static, why does it not happen all the time and happen only at certain
>locations. It seems as if these certain locations have something
>special about the pavement or the water content of the soil or
>something. None of that seems likely to me though, I see nothing
>changing in the pavement as I drive from an area of static to an area
>of non-static. It is not related to stepping on the brake or gas or
>shifting gears or going over bumps or any other aspect of the car that
>I can tell other than it's speed down the road.
>As an experiment, I attached a drag wire under the car. The wire
>drags on the ground to discharge any static build up the car. This
>made no difference. Another clue, we've had no rain here in a
>while. The static all stops during wet weather. Also I am in the
>Philadelphia area and the AM station is in the New York area so it is
>on the weak side.
>I've been a ham for over 30 years and I have a lot of experience with
>EMI, but this one has me scratching my head. The wheel static
>changes repeatably in different locations for no apparent reason.
>It's got to be something to do with the pavement. Anybody have any
>experience with this?
>
>Mark

So get yourself a decent portable AM radio. Use it instead and if you
still hear the same static at the same locations, then you'll know

it's not the car.

My assumption is that it is the wiring in the car. Like a broken ground wire near the wheel well or even corroded wires.

You can also buy filters which are generally capacitors that can be installed before the radio.

I remember reading some time ago where some gal had this constant noise not in her car radio, but her teeth! She tracked the source down and found it to be a local radio station she was always passing.

Now me personally, I can never figure this one out.
Most of the time, when ever I go to bed, I'll hear a radio station. It's just enough to be annoying. I can rarely tell what's being said or played. I only hear it when I'm laying down on the bed, not sitting up. So I figure it has to do with the springs.

4137. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 18:17:26 UTC
From: richardharrison@webtv.net
Message-ID: <15433-491334B6-2497@storefull-3251.bay.webtv.net>
Source record: 20361

Henry Kolesnik. WD5JFR wrote:
"It seems that three antennas spaced about 1000 feet apart on an
equilateral triangle was a 100% solution."

Radio Free Europe relayed broadcasts from Munich to Lisbon by HF.
Satellites now make HF obsolete.

The point to point relay used one or more rhombics in Munich and three
in Lisbon for triple diversity reception. The three rhombics in Lisbon
may not have had optimum spacing. We had to clear cork and olive trees
to make room, but the recieved signals in them faded separately, in
spite of their side by side placements. We had apace diversity. All
rhombics were horizontal.

Frequency diversity was also used by transmitting on more than one
frequency in Munich. More than one horizontal rhombic was sometimes used
in Munich. Due to ionospheric polarization scrambling, no attempt was
made at polarization diversity.

Each receiving rhombic fed three or more receivers. The outputs of three
receivers were fed to an election box which selected the strongest and
least noisy signal while squelching all others in its group.

Henry mentioned, among others, the 51-J and SP-600 receivers. The 51-j
was incompatible with this mission. It had too many spurious responses.
We once tried to use one as a bridge detector at a transmitter site and
it was useless. The SP-600 has the front end selectivity required.

We used double sideband (AM) transmissions, but the SP-600`s had
selectable sideband responses which allowed us to supress interference
on one side of the carrier frequency.

These TDR systems worked like gangbusters.

Best regards, Richard Harrison, KB5WZI

4138. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 18:28:45 UTC
From: richardharrison@webtv.net
Message-ID: <15434-4913375D-496@storefull-3251.bay.webtv.net>
Source record: 20362

Wayne wrote:
"The time deay approach werked well, but never caught on commercially."

Our receiver selection boxes were made by Crosby or Pioneer if I
remember, but it`s been a half century.

Best regards, Richard Harrison, KB5WZI

4139. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 18:47:54 UTC
From: richardharrison@webtv.net
Message-ID: <15433-49133BDA-2499@storefull-3251.bay.webtv.net>
Source record: 20363

Mark wrote:
"Wheel static only on some patches of pavement?"

Why any wheel static ever? Springs used to be installed in hubs to make a sliding contact between the axle and the wheel. They must still be available.

Graphite can be added to axle grease as is usual with speedometer cable lubrication. Graphite is powdered carbon and conductive.

Best regards, Richard Harrison, KB5WZI

4140. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 18:55:46 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <S4HQk.3597$225.2887@nwrddc02.gnilink.net>
Source record: 20364

"Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in message
news:SSBQk.4258$W06.1779@flpi148.ffdc.sbc.com...
>I know that Hallicrafters made a dual diversity set up and RCA used three
>AR-88s in a trioka, selecting the best signal with a tone decoder that
>switched in the best and let the other/s idle or squelched. I've heard that
>Collins used the R 390 (51J or 51S?) , and Hammarlund the Super Pros (only
>600s or others?). It seems like three antennas spaced about 1000 feet apart
>on an equilateral triangle was a 100% solution. Did the Brits use it a
>Bletchley? But I don't see anything these days and have to wonder if
>diversity reception was made obsolete by SSB or the news & financial
>services using wire for TTY. I also know that Telstar was the final nail.
>Was the primary use for RTTY or was it used to voice well as CW? Anyone
>have some real personal experience to offer?
> Thanks
> Hank WD5JFR

The Flex 5000 will also do diverstity RX with the 2nd RX option installed.
W4OP

4141. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 19:08:16 UTC
From: richardharrison@webtv.net
Message-ID: <15433-491340A0-2500@storefull-3251.bay.webtv.net>
Source record: 20365

Richard wrote:
"She tracked the source down and found it to be a local fadio station
she was always passing."

We contracted a crew boat in S. Louisiana from Nolan Duet (Doo A`).

Nolan bought his wife a new car but she complained it made a clicking
sound as she turned corners. Nolan told her she would just have to take
the car back to the dealer.

Nolan said: "I wasn`t going to tell that woman that it was the buttons
on her dress that caused the noise!"

Best regards, Richard Harrison, KB5WZI

4142. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 19:15:16 UTC
From: nm5k@wt.net
Message-ID: <b8d48207-dad6-4b3c-b3ac-24e267f1b652@g17g2000prg.googlegroups.com>
Source record: 20366

On Nov 5, 5:08 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> Ok Richard so I am inept, let us leave it at that. There are many
> experts and guru's on this newsgroup
> who pretty much agree with you and not one has come forward to refute
> some of the things that have been stated against what I proffer

I refute things you say quite often, but you ignore them.
As an example, you constantly state that an antenna should
be a full wave length in order to live a productive and useful life.
You claim such an antenna is in equilibrium. Whatever that is
supposed to mean to you. We don't know how equilibrium applies
in your case, as you refuse to tell anyone when questioned.
When I state that a full wave has no real efficiency advantage vs
a half wave, a statement which almost everyone knows is true,
you ignore it.
Of course, using a small antenna the size of two shoe boxes is
not really a full wave antenna. It's still a very small antenna fed
with a loading coil made up of a full wave length of wire, if I
understand what you are doing. And with your winding technique,
it's quite easy to see how this could be a very lossy method to
feed such a small radiator. You basically have a dummy load on
a stick.
A good 160m mobile antenna setup would tear it a new one.. :/

> So I will assume that the program is accepted for Yagi' but not for
> radiators in equilibrium.

How can a radiator be in equilibrium? You are talking about a
piece of metal.

> All this is not unusual a lot of things that were found out were
> delayed from the public because of people just couldn';t take change.

Change... Hummm.. A common Obama mantra..
Change can be good, or change can be bad.
Throwing a lot of the Wall Street CEO's in prison would be a
fairly good change.
A new president who thinks he can bend the constitution to suit
his personal agenda would not be a good change.
Ignoring proven data and replacing it with faulty unproven data would
not be a good change.
Using proven data and building on it to prove a new design or theory
would not be a bad change, if the new design or theory can pass
the scrutiny of rigorous testing over a period of time.

Using conjured up baffle gab to try to prove a new theory is
not going to cut it in the change dept.
BTW, I mention Obama quite a bit, and it's probably no secret I'm
no fan of his.
But I want to mention it is not on a personal level, or due to his
skin color, etc. I'm sure he can be a fairly decent guy at times,
but I still think he's a blatant socialist, and I have little use for
him.
He's a constitutional attorney who has no respect for the
constitution. IE: he'd like to take a big crap on the 2nd
amendment if he ever gets the chance for just one example.
This is not to say I really like McCain either..
I'm more of the independent Libertarian ilk.. If a politician can't
follow the constitution, I have zero use for them.

But back to the matter at hand..

> Those who do not understand the rules of science with respect to
> radiators say it is bafflegab because they don't understand the
> sciences.

I understand enough to tell a turd from a diamond any day.
An Einstein level of reasoning is not required for this simple
task.

> So I will let it go at that and assume that I am the one out of step.

You have taken the first step towards recovery.

> You and others have made your point and there is no such thing than a
> better antenna than the Yagi and that all is known is about antennas
> and nothing that is not printed in a book is acceptable to radio hams.
> I get the message and that should make every one happy

Just more whining from a disenchanted pseudo inventer..
I don't even know how the poor Yagi got involved. The yagi
has zero to do with anything I have argued about.
A contra wound dummy load on a stick, and a yagi and
about as different animals as chipmunks and baboons.

Or are you know abandoning the dummy load on a stick,
and returning to the perverted array with skewed elements
you harped on quite a few months ago?
You know, the one that provided less performance than
the properly designed yagi with an equal number of elements..
You know, the one I called the cluster%#&* antenna..
Chortle.. :/

4143. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 19:20:03 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <DrHQk.3297$Jv2.3072@nwrddc01.gnilink.net>
Source record: 20367

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:15434-4913375D-496@storefull-3251.bay.webtv.net...
> Wayne wrote:
> "The time deay approach werked well, but never caught on commercially."
>
> Our receiver selection boxes were made by Crosby or Pioneer if I
> remember, but it`s been a half century.
>
> Best regards, Richard Harrison, KB5WZI
>
Heh heh. Yeah, long time.
We made our own time delay box under Navy funding. In a prototype, we provided the time delay by recording the RTTY signal on tape and playing it back soon afterwards on a different tape head. The original and delayed were then sent on different sidebands. Noise was simulated with recorded static, and the noise audio was injected at the receiving end before deconstructing the delay with another tape deck.

IIRC, we found combinations that gave about a 3-5 db improvement. Fun project that would be even more fun with modern circuitry.

4144. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 19:39:20 UTC
From: richardharrison@webtv.net
Message-ID: <22914-491347E8-2657@storefull-3252.bay.webtv.net>
Source record: 20368

Wayne wrote:
"In a prototype, we provided the time delay by recording the RTTY signal on a tape and playing it back soon afterwards on a different tape head."

That is a technique used to add echo to a recording without a long audio chamber or worse yet springs stretched between transducers.

Best regards, Richard Harrison, KB5WZI

4145. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 20:32:48 UTC
From: ml <m@di.net>
Message-ID: <m-091B29.15324806112008@news.optonline.net>
Source record: 20369

In article <SSBQk.4258$W06.1779@flpi148.ffdc.sbc.com>,
"Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote:

> I know that Hallicrafters made a dual diversity set up and RCA used
> three AR-88s in a trioka, selecting the best signal with a tone decoder
> that switched in the best and let the other/s idle or squelched. I've
> heard that Collins used the R 390 (51J or 51S?) , and Hammarlund the
> Super Pros (only 600s or others?). It seems like three antennas spaced
> about 1000 feet apart on an equilateral triangle was a 100% solution.
> Did the Brits use it a Bletchley? But I don't see anything these days
> and have to wonder if diversity reception was made obsolete by SSB or
> the news & financial services using wire for TTY. I also know that
> Telstar was the final nail. Was the primary use for RTTY or was it used
> to voice well as CW? Anyone have some real personal experience to
> offer?
> Thanks
> Hank WD5JFR

<<<>>

my icom 2820h does diversity, thou i really understand that in
a 'fm' uhf/vhf rig

I was sorta surprized that the flex radio has diversity, i mean
why not , but what i really wonder is if you had two nicely
spaced antennas aside from obvious a/b switching of the
antennas which you could do w/a coax switch i wonder how it would
or if it would be able to reduce noise both a) local and b) not
local

very interesting

as far as commercial, I work at a phone company we have a
cellular division and most all of our sites have very
complicated diversity systems built in , as most of the problems
we have are typically caused by multipath

on the same front data modems such as for example the (sierra)
airlink raven X evdo modem has a 2nd antenna port for rx
diversity ant the GSM models typically don't have it least not
that i ever saw

so diversity isn't dead but it's a best kept secreate sorta

4146. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 20:39:29 UTC
From: ml <m@di.net>
Message-ID: <m-EDF289.15392906112008@news.optonline.net>
Source record: 20370
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

In article <Pine.OSF.4.33.0811052119110.5390-100000@worf.netins.net>,
Tehrasha Darkon <darkon@netins.net> wrote:

> On Wed, 5 Nov 2008, Mark wrote:
>
> > I've been a ham for over 30 years and I have a lot of experience with
> > EMI, but this one has me scratching my head. The wheel static
> > changes repeatably in different locations for no apparent reason.
> > It's got to be something to do with the pavement. Anybody have any
> > experience with this?
> >
> > Mark
> >
>
> My guess is different lengths/types/orientation of rebar in the roadbed.

<<for a while glassfault i spelled it wrong it was asfault
pavement that was made with recycled glass we did a test here in
nyc i belive the first to do such testing and it was very
conductive, caused a lot of problems with the testing gear so
they put metal scraps in the mix didn't help we paved
a 1/2 block test road initially and if you had the radio on
and drove over it you heard a clearly different background noise
ie higher

ultimately the fixed it forgot how i think they tumbled the
glass and added some chemical

dunno if this has anything to do w/your specific case but
anything from hitting a certain frequency vibration that causes
a lose wire to rattle to perhaps some crappy wires burred
under the st see any manhole covers around?? telco or
sewers? typically they all have some juice and often make a
bit of noise

4147. Re: Lawsuit countdown 26 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 20:54:18 UTC
From: kb9rqz@yahoo.com
Message-ID: <jbm6h417p1r39jd6fm3hkuh769i699on85@4ax.com>
Source record: 20371
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Thu, 06 Nov 2008 00:28:15 -0500, kb9rqz@yahoo.com wrote:

>On Wed, 5 Nov 2008 15:40:59 -0800 (PST), mopeyzakween@yahoo.com wrote:
>
>>Chapwoman is a queenie boi convicted crack dealer!
>>
>
>
>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
>adams
>
>woger you are a Congress all in your own head
>
>http://kb9rqz.bravejournal.com/
>altopia is never used by KB9RQZ
>nor is Konstans@hotmail.com ever
>btw i can be found at
>17366 N River Rd
>Chassel Mi
>
>but the cowards asking lack the gut to act

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4148. Lawsuit countdown 26 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 20:58:13 UTC
From: kb9rqz@yahoo.com
Message-ID: <mim6h4lp0tq83fsqil1qjqje8fionso61i@4ax.com>
Source record: 20372
Cross-posted to: rec.radio.cb,rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Thu, 6 Nov 2008 05:52:13 -0800 (PST), mopeyzakween@yahoo.com wrote:

>Sit there and suck on it Chapman, you drug addled, lying piece of rat
>turd.
>
>
can the spam

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4149. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 21:19:15 UTC
From: richardharrison@webtv.net
Message-ID: <15433-49135F53-2520@storefull-3251.bay.webtv.net>
Source record: 20373

NM5K wrote:
"Of course, using a small antenna the size of two shoe boxes is not
really a full wave antenna. It`s still a very small antenna fed with a
loading coil made up of a full wave length of wire, if I umderstand what
you are doing."

Yes. It appears he has a dipole two shoe boxes long. The ARRL Antenna
Book has an interesting section on "Short Antennas" that starts on on
page 6-21 in my 20th edition. On page 6-30 it says:
"Loading is always a compromise; the best method is determined by the
amount of space available and the band(s) to be worked.
The simplest way to shorten a dipole is shown in Fig 53. If you do not
have sufficient length between supports, simply hang as much of the
center of the antenna as possible between the supports and let the ends
hang down.

Best regards, Richard Harrison, KB5WZI

4150. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-06 21:38:53 UTC
From: richardharrison@webtv.net
Message-ID: <15433-491363ED-2524@storefull-3251.bay.webtv.net>
Source record: 20374

ML wrote:
"So diversity isn`t dead----."

Either diversity or alternate routing is essential for high reliability
when using terrestrial microwave.

Best regards, Richard Harrison, KB5WZI

4151. Re: American Tower parts - Be prepared for GRIEF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 00:15:21 UTC
From: JB <nospam@goofball.net>
Message-ID: <tMLQk.3357$Jv2.3228@nwrddc01.gnilink.net>
Source record: 20375

You really need to make sure things are all aligned and fit before pouring the footing. Even then a 3# sledge can come in handy. It's good you at least had parts that "could" fit.

4152. Re: Lawsuit countdown 28 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 00:25:11 UTC
From: JB <nospam@goofball.net>
Message-ID: <HVLQk.3643$225.3508@nwrddc02.gnilink.net>
Source record: 20376
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

So drop a line to FCC. Some OOOT loop was a convicted baby raper living in a mental institution and the FCC granted him a Ham license. Someone dopped them a line and FCC revoked it in a heartbeat.

http://www.arrl.org/news/stories/2007/11/21/101/?nc=1

4153. Re: Lawsuit countdown 28 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 00:32:36 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <cba1d01b-b1e4-42ec-9358-9c06135dc681@r15g2000prh.googlegroups.com>
Source record: 20377
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Nov 6, 7:25 pm, "JB" <nos...@goofball.net> wrote:
> So drop a line to FCC. Some OOOT loop was a convicted baby raper living in
> a mental institution and the FCC granted him a Ham license. Someone dopped
> them a line and FCC revoked it in a heartbeat.
>
> http://www.arrl.org/news/stories/2007/11/21/101/?nc=1

the reason the poster likely desn't is he most likely making it all up

4154. Re: Lawsuit countdown 28 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 00:50:01 UTC
From: mopeyzakween@yahoo.com
Message-ID: <bf318b1c-3a6a-43f0-8839-08698c0fab09@h23g2000prf.googlegroups.com>
Source record: 20378
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Nov 6, 7:32 pm, an old friend <kb9...@hotmail.com> wrote:
> On Nov 6, 7:25 pm, "JB" <nos...@goofball.net> wrote:
>
> > So drop a line to FCC. Some OOOT loop was a convicted baby raper living in
> > a mental institution and the FCC granted him a Ham license. Someone dopped
> > them a line and FCC revoked it in a heartbeat.
>
> >http://www.arrl.org/news/stories/2007/11/21/101/?nc=1
>
> the reason the poster likely desn't is he most likely making it all up

go to texas DPS website and pay for the info, like I did, asshole.

4155. Re: Lawsuit countdown 28 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 01:03:52 UTC
From: kb9rqz@yahoo.com
Message-ID: <2v47h4p89tmip9rtlj7sd0u28ssvef43i6@4ax.com>
Source record: 20379
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Thu, 6 Nov 2008 16:50:01 -0800 (PST), mopeyzakween@yahoo.com wrote:

>On Nov 6, 7:32ï¿½pm, an old friend <kb9...@hotmail.com> wrote:
>> On Nov 6, 7:25ï¿½pm, "JB" <nos...@goofball.net> wrote:
>>
>> > So drop a line to FCC. ï¿½Some OOOT loop was a convicted baby raper living in
>> > a mental institution and the FCC granted him a Ham license. ï¿½Someone dopped
>> > them a line and FCC revoked it in a heartbeat.
>>
>> >http://www.arrl.org/news/stories/2007/11/21/101/?nc=1
>>
>> the reason the poster likely desn't is he most likely making it all up
>
>go to texas DPS website and pay for the info, like I did, asshole.
why only an OCD freakwould care

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4156. Re: American Tower parts - Be prepared for GRIEF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 01:21:38 UTC
From: Jim <nospam@nospam.com>
Message-ID: <t157h4luqav2mtofttf8b77r2o68j0c7mm@4ax.com>
Source record: 20380

Thanks for that information. Perhaps the American Tower parts is
made for the "New" Rohn, as the tower sections I am using are
brand new old stock I bought about 30 years ago and put in storage
for when I wanted to upgrade the towers. Ike took care of my
Rohn 25, so anyway, the problem is quality control at the American
Tower factory not the Rohn changes. Either their manufacturing jigs
are a joke, or the welder was hungover the day they fabricated this
hinged base, but I know they deliberately knew it was bad, as the
hinge bolts and securing bolts are 1/2" to take the load. They
shipped the thing with 3/8" bolts to allow slack in several
directions, and even that would not work. In order to get the hinge
to work, get this, you have to remove ALL 4 BOLTS. Try that with
a 60 foot tower bolted to the hinge.

Also, the hinge plate was warped, and the pins that go into the legs
of the Rohn ware off in two directions, the holes were axially
rotated so the bolts would not line up, and they would go too far into
the leg so the holes would not line up vertically. It's hard to
describe, but you would have to see this to believe it. I had to use
a automotive scissors jack and gobs of heavy silicone grease, and a
baseball bat and large heavy axe to just get the pins on the hinge to
go into the legs of the Rohn. Two of the legs holes could be made to
line up, the third one was impossible, off in two directions.

Then, the tower people tried to say it was ROHN's fault.... he he. I
sent them digital pictures and have not heard back from them, but
looks like I will have problems getting my money back.

The galvanize was very thick and thorough, heavy plates, it's just
they the parts don't fit together, no after assembly testing, no
quality control, although there was a big red sticker on the thing.
This one really slipped through the cracks. We will see if they stand
behind their products or not. My son just graduated from law school,
would be a good first case for him... he he...

The "Old" Rohn products were excellent, I assembled many a tower over
the years and never had any matching problems. Now I'm going to use
a HAZER with this, my last tower...

Jim

On Thu, 06 Nov 2008 00:05:01 GMT, jimp@specsol.spam.sux.com wrote:

>Jim <nospam@nospam.com> wrote:
>> FYI:
>>

>>
>> I bought some new parts for my Rohn 25 from OldTowerGuy on Ebay,
>
>Rohn changed their name to Frankfort Tower Industries, went bankrupt,
>and sold the assets to Radian Communication Services in 2003.
>
>Don't be surprised if new "Rohn" stuff is a different than old "Rohn"
>stuff.

4157. Re: American Tower parts - Be prepared for GRIEF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 01:26:36 UTC
From: Jim <nospam@nospam.com>
Message-ID: <5267h4dj32a228rrdet03gcb61ktn1s33m@4ax.com>
Source record: 20381

Dear JB;

Don't know if you are familiar with a hinged tower base, but the only way this one would "hinge" is to remove all 4 bolts. Try that with a 60 foot tower on the hinge. Yes, I tried everything with two sections and it was a total nightmare, impossible to work as advertised. I sent digital pictures to the factory, have not heard back a peep. I had to use a scissors jack, baseball bat and large axe just to get the hinge pins inside the tower legs, along with lots of heavy silicone grease, thent he holes would not line up...

On Fri, 07 Nov 2008 00:15:21 GMT, "JB" <nospam@goofball.net> wrote:

>You really need to make sure things are all aligned and fit before pouring
>the footing. Even then a 3# sledge can come in handy. It's good you at
>least had parts that "could" fit.

4158. Re: Anyone out there using a HAZER on their Rohn 25 Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 01:29:27 UTC
From: Jim <nospam@nospam.com>
Message-ID: <0b67h49mecrf6rfhk99759n5prjr3f13ao@4ax.com>
Source record: 20382

I got lots of personal responses on this question at a ham site, and
have decided to order the Hazer tram system. One fellow told me how
he adapted an inexpensive electric winch to his system as he is
handicapped.

On Tue, 04 Nov 2008 17:25:55 -0600, Jim <nospam@nospam.com> wrote:

>I have been thinking of purchasing a HAZER tram system, but after
>reading all the reviews all over the web I'm kind of leery.
>
>Anyone out there using one? If so, I would like to start a dialog or
>swap E-Mail or call you on phone to find which model you are using,
>and what problems you have had with the system. The reviews seem
>to go 10 to 1 against the Hazer, recommending a crank up tower....
>
>I would appreciate any comments and recommendations and
>in general should I waste my money on the thing or does it work
>as advertised?
>
>73,
>
>Jim, WA5DXP
>wdxp at cox dot net
>
>

4159. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 02:48:18 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <S%NQk.11694$sc2.4859@news-server.bigpond.net.au>
Source record: 20384
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

Hello Mark,
I used to drive a semi trailer years back, and had the same problem. It occurred only in fine hot weather, and the static build up used to wipe out 80m mobiling, plus the Am receiver on the broadcast band. It was what I call "Tyre Static"

I noticed that in wet or damp weather it didn't occur, so I cured the problem by simply introducing some graphite powder into the grease of the outer wheel bearing on the front axle.

Later on I found that a molybdenum based greases did the same job, without the mess of handling the graphite powder.

I also found that steel belted radials were the culprit, but the early rayon biased tyres didn't suffer from the static build up problem at all. Main problem was that the rayon biased tyres didn't have the speed or load ratings the steel belted tyres have.

A big problem is that nowadays with the introduction of sealed wheel bearings and front wheel drive vehicles makes it nigh impossible to introduce graphite powder or to re-grease the wheel bearings.

By experimentation I found another cure, that was to put some graphite powder inside of the tyre before mounting the tyre on the rim (wheel), that reduces it as well. One can let the air out of the tyre and introduce graphite powder through the valve stem and then re-inflate the tyre.

I found that the graphite powder inside of the tyre did not affect the at all, we used to recap our truck tyres up to 3 times, only thing was the tyre fitters hated dealing with the graphite inside of the tyre.

On another problem not really related to highway use is that when farm tractors were fitted with UHF CB, ploughing in a paddock, static noise used to build up to a point where communication were impossible even over a short distance. The cure was to wipe the antenna down with a dry cloth.

Hope this helps
HarryH

"Mark" <makolber@yahoo.com> wrote in message
news:0815f4c7-4dd0-404f-88d6-41b0bc3870a3@b2g2000prf.googlegroups.com...
> WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?
> With the financial mess, I have started to listen to AM radio in the
> car on the way to and from work for the past few weeks and I've
> noticed some random static at certain locations. At first I
> attributed this to some power line noise. Bit it didn't really sound

> like 60 Hz buzz hash, it was more random popcorn like but I know power
> lines can blow around in the wind and have strange discharges so I
> didn't think too much of it for a while. But after a few days I
> noticed that the static is there only when the car is moving. OK, so
> its wheel static. Static electricity from the wheels or brakes or
> something. OK that's not unusual either. But it is the combination
> that has me curious. This static only occurs when the car is moving
> and it only occurs at certain repeatable locations on my drive.
> Everyday when I turn the corner from X to Y, I get the static as the
> car is moving, but not when stopped at the same corner. And I never
> get the static when turning the corner from A to B. If it was power
> line, stopping the car wouldn't stop the static. If it is wheel
> static, why does it not happen all the time and happen only at certain
> locations. It seems as if these certain locations have something
> special about the pavement or the water content of the soil or
> something. None of that seems likely to me though, I see nothing
> changing in the pavement as I drive from an area of static to an area
> of non-static. It is not related to stepping on the brake or gas or
> shifting gears or going over bumps or any other aspect of the car that
> I can tell other than it's speed down the road.
> As an experiment, I attached a drag wire under the car. The wire
> drags on the ground to discharge any static build up the car. This
> made no difference. Another clue, we've had no rain here in a
> while. The static all stops during wet weather. Also I am in the
> Philadelphia area and the AM station is in the New York area so it is
> on the weak side.
> I've been a ham for over 30 years and I have a lot of experience with
> EMI, but this one has me scratching my head. The wheel static
> changes repeatably in different locations for no apparent reason.
> It's got to be something to do with the pavement. Anybody have any
> experience with this?
>
> Mark
>

4160. Re: American Tower parts - Be prepared for GRIEF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 03:01:30 UTC
From: George Csahanin <george@dyb.com>
Message-ID: <uaOQk.4251$Ei5.1325@flpi143.ffdc.sbc.com>
Source record: 20383

And now Radian has been sold...

<jimp@specsol.spam.sux.com> wrote in message
news:ijo9u5-ser.ln1@mail.specsol.com...
> Jim <nospam@nospam.com> wrote:
>> FYI:
>>
>>
>> I bought some new parts for my Rohn 25 from OldTowerGuy on Ebay,
>
> Rohn changed their name to Frankfort Tower Industries, went bankrupt,
> and sold the assets to Radian Communication Services in 2003.
>
> Don't be surprised if new "Rohn" stuff is a different than old "Rohn"
> stuff.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

4161. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 07:05:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1226041500@panix.com>
Source record: 20385
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

4162. BASE Station CB radios and Linear AMP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 12:18:52 UTC
From: Mike Kulyk <mkulyk@optonline.net>
Message-ID: <49143234$0$14278$607ed4bc@cv.net>
Source record: 20386

I have 2 older CB BASE station radios. ONE IS SSB.. and the other is AM only

And I have a 100 + watt Knight T 175 AMP. 10 mtr and 6 mtr AMP. ALL THIS EQUIPMENT IS IN NEED OF REPAIR. THE AM unit comes on and I got sound out of it. Squelch Noise. COMES WITH NICE TURNER DESK MIC

THE SSB radio has NO power cord.. SO I could not power it. COMES with MIC.,.

THE AMP powered up.. Made some noise. SO I pulled the plug.

Pictures of all above by e-mail.

I will trade for a NON working HF transceiver.

73

Mike WB2GLW

4163. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 13:34:56 UTC
From: Bob Baldwin <bob-baldwin@tamu.edu>
Message-ID: <49144400$0$5496$bbae4d71@news.suddenlink.net>
Source record: 20387
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

Mark wrote:
> WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?
> With the financial mess, I have started to listen to AM radio in the
> car on the way to and from work for the past few weeks and I've
> noticed some random static at certain locations. At first I
> attributed this to some power line noise. Bit it didn't really sound
> like 60 Hz buzz hash, it was more random popcorn like but I know power
> lines can blow around in the wind and have strange discharges so I
> didn't think too much of it for a while. But after a few days I
> noticed that the static is there only when the car is moving. OK, so
> its wheel static. Static electricity from the wheels or brakes or
> something. OK that's not unusual either. But it is the combination
> that has me curious. This static only occurs when the car is moving
> and it only occurs at certain repeatable locations on my drive.
> Everyday when I turn the corner from X to Y, I get the static as the
> car is moving, but not when stopped at the same corner. And I never
> get the static when turning the corner from A to B. If it was power
> line, stopping the car wouldn't stop the static. If it is wheel
> static, why does it not happen all the time and happen only at certain
> locations. It seems as if these certain locations have something
> special about the pavement or the water content of the soil or
> something. None of that seems likely to me though, I see nothing
> changing in the pavement as I drive from an area of static to an area
> of non-static. It is not related to stepping on the brake or gas or
> shifting gears or going over bumps or any other aspect of the car that
> I can tell other than it's speed down the road.
> As an experiment, I attached a drag wire under the car. The wire
> drags on the ground to discharge any static build up the car. This
> made no difference. Another clue, we've had no rain here in a
> while. The static all stops during wet weather. Also I am in the
> Philadelphia area and the AM station is in the New York area so it is
> on the weak side.
> I've been a ham for over 30 years and I have a lot of experience with
> EMI, but this one has me scratching my head. The wheel static
> changes repeatably in different locations for no apparent reason.
> It's got to be something to do with the pavement. Anybody have any
> experience with this?
>
> Mark
I used to run HF mobile, and had this same problem all the time. I had
so many bonding straps under my truck that mechanics and oil change
personnel would ask what they were for. I operated mainly on 40 and 80,
and the engine/computer/fuel pump noise was very low. But, the tire

noise was a big problem. For some reason, bias ply tires produced the most noise, and radials the least. There was always a difference being on the road, and the shoulder. On dirt roads, no problem at all. I tried graphite in the tires, but never thought to try it in the axle grease.

bob baldwin WA5JOT
bryan, texas

4164. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 15:01:29 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <79c30e0b-a26e-4a8f-a933-638056453446@u18g2000pro.googlegroups.com>
Source record: 20388
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

On Nov 7, 8:34 am, Bob Baldwin <bob-bald...@tamu.edu> wrote:
> Mark wrote:
> > WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?
> > With the financial mess, I have started to listen to AM radio in the
> > car on the way to and from work for the past few weeks and I've
> > noticed some random static at certain locations. At first I
> > attributed this to some power line noise. Bit it didn't really sound
> > like 60 Hz buzz hash, it was more random popcorn like but I know power
> > lines can blow around in the wind and have strange discharges so I
> > didn't think too much of it for a while. But after a few days I
> > noticed that the static is there only when the car is moving.   OK, so
> > its wheel static. Static electricity from the wheels or brakes or
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> > and it only occurs at certain repeatable locations on my drive.
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> > line, stopping the car wouldn't stop the static. If it is wheel
> > static, why does it not happen all the time and happen only at certain
> > locations. It seems as if these certain locations have something
> > special about the pavement or the water content of the soil or
> > something. None of that seems likely to me though, I see nothing
> > changing in the pavement as I drive from an area of static to an area
> > of non-static.   It is not related to stepping on the brake or gas or
> > shifting gears or going over bumps or any other aspect of the car that
> > I can tell other than it's speed down the road.
> > As an experiment, I attached a drag wire under the car. The wire
> > drags on the ground to discharge any static build up the car. This
> > made no difference.   Another clue, we've had no rain here in a
> > while. The static all stops during wet weather. Also I am in the
> > Philadelphia area and the AM station is in the New York area so it is
> > on the weak side.
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> > EMI, but this one has me scratching my head. The wheel static
> > changes repeatably in different locations for no apparent reason.
> > It's got to be something to do with the pavement. Anybody have any
> > experience with this?
>
> > Mark
>
>   I used to run HF mobile, and had this same problem all the time. I had
> so many bonding straps under my truck that mechanics and oil change

> personnel would ask what they were for. I operated mainly on 40 and 80,
> and the engine/computer/fuel pump noise was very low. But, the tire
> noise was a big problem. For some reason, bias ply tires produced the
> most noise, and radials the least. There was always a difference being
> on the road, and the shoulder. On dirt roads, no problem at all. I tried
> graphite in the tires, but never thought to try it in the axle grease.
>
> bob baldwin WA5JOT
> bryan, texas- Hide quoted text -
>
> - Show quoted text -

A lot of time when you cross the state line the asphalt changes and
you can hear the difference. I noticed a big difference as soon as I
crossed into Ga from Fl the other day. Fl had the new asphalt that is
suppose to give you more traction in the rain and Ga hadnt upgraded
their's yet. I didnt realize the stactic was coming from the road/
tires until it turned off like someone threw a switch as soon as I
crossed the line.

Jimmie

4165. FA: LDG Z-11 Auto-Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 15:49:41 UTC
From: DC <nobody@pseudo.borked.net>
Message-ID: <da1589dd4e561334eadaf5572d3bc525@pseudo.borked.net>
Source record: 20389

http://snipr.com/LDG_Z11

4166. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 16:04:00 UTC
From: richardharrison@webtv.net
Message-ID: <22722-491466F0-2368@storefull-3253.bay.webtv.net>
Source record: 20390

Richard Clark wrote:
"An antenna is not in "equilibrium" so says Marx (of Hart, Shaffner & Marx)."

How about Chico, Harpo, and Groucho?

Art Unwin hopes to stump us by not defining what he means if anything by "equilibrium". A synonym, "balance" is often used in radio. Terman defines "balance" on page 901 of his 1955 opus:
"It is sometimes desirable to deliver power to a grounded antenna through a two-wire transmission line or, conversely, to use a coaxial cable line to deliver power to an ungrounded antenna system that is symmetrical with respect to ground. In either case, it is necessary to convert between a balanced system that is symmetrical with respect to ground, and an unbalanced system in which one side is grounded."

That seems to capture a problem we had here. Art is unbalanced and we are well grounded. None of us is in equilibrium.

Best regards, Richard Harrison, KB5WZI

4167. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 17:18:43 UTC
From: richardharrison@webtv.net
Message-ID: <22914-49147873-2898@storefull-3252.bay.webtv.net>
Source record: 20391

Mark Keith wrote:
"You`ve had your knickers in a twist ever since I proved your "loophole" antenna did not work as you (Art) claimed and its all gone downhill since then."

Yes. As I recall, Art claimed to have discovered something like the "gamma match" shown on page 26-9 of my 20th edition of the ARRL Antenna Book. Of course it`s been around nearly forever.

Art claimed radiation from the small gamma-loop strongly reinforced the dipole`s desired radiation. Art rejected the contention that radiation from the small loop is only directed in the plane of the loop so therefore only helps in the directions of the zenith and the earth and gives no help in the horizontal plane perpendicular to the dipole.and broadside to the small loop.

If Art patented the idea that the matching system radiated to significantly enhance the dipole`s desired radiation, he should not expect riches in royalties.

Best regards, Richard Harrison, KB5WZI

4168. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 18:18:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1cd24055-a9ab-4148-a6bb-68e8fab6fafb@w1g2000prk.googlegroups.com>
Source record: 20392

On Nov 7, 11:18 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Mark Keith wrote:
>
> "You`ve had your knickers in a twist ever since I proved your "loophole"
> antenna did not work as you (Art) claimed and its all gone downhill
> since then."
>
> Yes. As I recall, Art claimed to have discovered something like the
> "gamma match" shown on page 26-9 of my 20th edition of the ARRL Antenna
> Book. Of course it`s been around nearly forever.
>
> Art claimed radiation from the small gamma-loop strongly reinforced the
> dipole`s desired radiation. Art rejected the contention that radiation
> from the small loop is only directed in the plane of the loop so
> therefore only helps in the directions of the zenith and the earth and
> gives no help in the horizontal plane perpendicular to the dipole.and
> broadside to the small loop.
>
> If Art patented the idea that the matching system radiated to
> significantly enhance the dipole`s desired radiation, he should not
> expect riches in royalties.
>
> Best regards, Richard Harrison, KB5WZI

Yes I was granted a patent under " a constant impedance antenna
system"
and it is a matter of record despite what you have stated. And that is
all I wanted,.
a record of my work.

4169. Re: American Tower parts - Be prepared for GRIEF

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 18:41:39 UTC
From: JB <nospam@goofball.net>
Message-ID: <DZ%Qk.61$mi4.20@nwrddc02.gnilink.net>
Source record: 20393

"Jim" <nospam@nospam.com> wrote in message
news:5267h4dj32a228rrdet03gcb61ktn1s33m@4ax.com...
> Dear JB;
>
> Don't know if you are familiar with a hinged tower base, but the only
> way this one would "hinge" is to remove all 4 bolts. Try that with
> a 60 foot tower on the hinge. Yes, I tried everything with two
> sections and it was a total nightmare, impossible to work as
> advertised. I sent digital pictures to the factory, have not heard
> back a peep. I had to use a scissors jack, baseball bat and large axe
> just to get the hinge pins inside the tower legs, along with lots of
> heavy silicone grease, thent he holes would not line up...

Proves my point about checking things out before trying to put it up.

You bought it on Ebay from OldTowerGuy? The name says "let the
buyer beware" In that case, at least you got a "tower". Did you check
how bad the rust was before putting it up?

We have all been burned at some time in our lives. I took a 327 Chevy
block to be rebuilt, and they put me off for over a year. After much
cajoling and even hitting them with a lawsuit just to get (some) of the
parts back, I dropped the suit and they (local mob I guess) sicked
the cops on me and I was followed around and pulled over constantly
and threatened all over town until I joined the service just to get away.
I figured that if I was going to be shot at, I might as well go to war and
get paid for it.

I guess the shop was a front for political contributions or something.

4170. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 19:48:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qi49h49br9h0vgb9lpog73l8ftk5s37944@4ax.com>
Source record: 20394

On Fri, 7 Nov 2008 10:04:00 -0600, richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>"An antenna is not in "equilibrium" so says Marx (of Hart, Shaffner &
>Marx)."
>
>How about Chico, Harpo, and Groucho?

Ah! There we have chaotic harmony, not equilibrium. Perhaps more "attuned" to Gussian arrays. For haberdashery (what I presume Art describes here in this group), Hart, Shaffner & Marx is the zenith of equilibrium in dress (but not antennas).

>Art Unwin hopes to stump us by not defining what he means if anything by
>"equilibrium".

More the problem is that Art may have redefined the word "shoebox" which must be his metric standard for something the size of a WalMart store. If he had an antenna the size of two WalMart stores side-by-side, then yes, his claims would make sense.

So, in the vocabulary of Authur-speak:
Shoebox: One WalMart building.
Equilibrium: Matching fashions for men's levitation wear.
Paramagnetic: Skydiving at the North Pole.
Diamagnetic: Calorie cutting by eating only magenta colored food.
Array: Any jumble of rusted barbed wire sections.
Director: A reflector of an array.
Reflector: A director of an array.
Radiation: Bugs that hit your windshield (aka particels)
Resonance: Wiper action of flicking radiation off your windshield.
Antenna: A patent for a method of dividing by zero in checkbooks.

73's
Richard Clark, KB7QHC

4171. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 19:56:32 UTC
From: JIMMIE <JIMMIEDEE123@yahoo.com>
Message-ID: <a008b25f-bda9-4928-b059-940615847817@n33g2000pri.googlegroups.com>
Source record: 20395

On Nov 7, 1:18 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 7, 11:18 am, richardharri...@webtv.net (Richard Harrison)
> wrote:
>
>
>
>
>
> > Mark Keith wrote:
>
> > "You`ve had your knickers in a twist ever since I proved your "loophole"
> > antenna did not work as you (Art) claimed and its all gone downhill
> > since then."
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> > therefore only helps in the directions of the zenith and the earth and
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> > broadside to the small loop.
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> > If Art patented the idea that the matching system radiated to
> > significantly enhance the dipole`s desired radiation, he should not
> > expect riches in royalties.
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> > Best regards, Richard Harrison, KB5WZI
>
> Yes I was granted a patent under " a constant impedance antenna
> system"
> and it is a matter of record despite what you have stated. And that is
> all I wanted,.
> a record of my work.- Hide quoted text -
>
> - Show quoted text -

Art you are still under the delusion that if you get a patent it
means your idea is valid.
No, it just means it was your idea. At one time you had to give some
proof of the validity of the concept but this is no longer true. If
you want to get a patent on a Star Trek type "transporter" or "warp

drive" go ahead, you can probably get one. You can even patent something that already has a patent. The patent office will not keep you from screwing up.

Jimmie.

4172. Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 20:36:58 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <HF1Rk.5561$as4.4180@nlpi069.nbdc.sbc.com>
Source record: 20396

I'm no metallurgist so forgive my ignorance. Most of
us have had the problem of interfacing copper to
aluminum. Is there some sort of alloy terminal block
that will accomplish that feat? Seems simple enough
to create an alloy that gradually transitions from
copper to aluminum but what do I know?
--
73, Cecil http://www.w5dxp.com

4173. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 20:41:13 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0b842cfa-44d8-438d-be8f-20451a353517@b2g2000prf.googlegroups.com>
Source record: 20397

On Nov 7, 1:56 pm, JIMMIE <JIMMIEDEE...@yahoo.com> wrote:
> On Nov 7, 1:18 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > On Nov 7, 11:18 am, richardharri...@webtv.net (Richard Harrison)
> > wrote:
>
> > > Mark Keith wrote:
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> > > "You`ve had your knickers in a twist ever since I proved your "loophole"
> > > antenna did not work as you (Art) claimed and its all gone downhill
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> > > Yes. As I recall, Art claimed to have discovered something like the
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> > > Best regards, Richard Harrison, KB5WZI
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> > Yes I was granted a patent under " a constant impedance antenna
> > system"
> > and it is a matter of record despite what you have stated. And that is
> > all I wanted,.
> > a record of my work.- Hide quoted text -
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> Art you are still under the delusion that if you get a patent it
> means your idea is valid.
> No, it just means it was your idea. At one time you had to give some
> proof of the validity of the concept but this is no longer true. If
> you want to get a patent on a Star Trek type "transporter" or "warp

> drive" go ahead, you can probably get one. You can even patent
> something that already has a patent. The patent office will not keep
> you from screwing up.
>
> Jimmie.

No Jimmie
I had to go to Washington to provide the proof in the 90"s and it was accepted
and that is all I cared about. I did not write articles for the radio magazines or anything like that
I do it purely to provide a record of my work
I just moved on to other things but at least it is available to hams to use or reject.
This is no different from what I am doing now with this new antenna, I applied for
a patent and then shared it with the ham community, is that so bad?
You can put the constant impedance antenna on EZNEC for yourself or ignore it
Many others on this group Richard included don't know how to operate computors let alone
work on antenna programs themselves so they are not talking from experience but from teachings reeived
over half a century ago after which they have stopped learning. If any of these had any savvy they would have put some of the things I have stated
and proved things one way or another but they don't want to as it means change. Now if you are "wired" like Richard then you are happy to join him
in the war of words as the othe Richard has and a few others. As for me I have shared all and you can take it or leave it, your choice. At the moment it is a queer road on this group where people want to attack those who have new ideas or challenges the status quo but as yet have only relied on insults
in the absence of individual thought or possibly suspend or get rid of patents and the like as they only promote change.
The group can get angry with me if they wish because of my work but there is no way they are going to stop me doing it for what ever reason they have in mind. Sooner or later somebody with some smarts and some get go will look at things for themselves and test thgem out on a computor which now apears to be accepted by all and then decide whether they want to build on them or not, they will not rely on the opinions of this group as there is nothing provided to study just venom. So Jimmie I congratulate you on all your patents obtained as it shows you are capable of original thought where others are lacking
Art

4174. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 20:56:55 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e09b1dc8-f005-43e6-b8f2-86cbc5af9325@c22g2000prc.googlegroups.com>
Source record: 20398

On Nov 7, 2:36 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> I'm no metallurgist so forgive my ignorance. Most of
> us have had the problem of interfacing copper to
> aluminum. Is there some sort of alloy terminal block
> that will accomplish that feat? Seems simple enough
> to create an alloy that gradually transitions from
> copper to aluminum but what do I know?
> --
> 73, Cecil http://www.w5dxp.com

Cecil, there are plenty of connectors (Bronze?) on the market that
accept copper/alluminum
combinations. On the other hand I understand that if the joint is free
from the atmosphere
i.e. a tight interface the problem is not all that bad, G.E proved in
court during the 50's that if the connection
is tight or embedded an increase in resistance does not occur, I
believe that analysis still stands.
Co defendants that could not provide a similar defence got hammered
because their joints did
not provide a virgin interface thus existing corrosion was trapped
thus it could grow.to a sizable resistance
Art

4175. Re: Anyone out there using a HAZER on their Rohn 25 Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 21:10:11 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b726b226-8893-461f-8c40-b3aead58a69e@x16g2000prn.googlegroups.com>
Source record: 20399

On Nov 6, 7:29 pm, Jim <nos...@nospam.com> wrote:
> I got lots of personal responses on this question at a ham site, and
> have decided to order the Hazer tram system. One fellow told me how
> he adapted an inexpensive electric winch to his system as he is
> handicapped.
>
> On Tue, 04 Nov 2008 17:25:55 -0600, Jim <nos...@nospam.com> wrote:
> >I have been thinking of purchasing a HAZER tram system, but after
> >reading all the reviews all over the web I'm kind of leery.
>
> >Anyone out there using one? If so, I would like to start a dialog or
> >swap E-Mail or call you on phone to find which model you are using,
> >and what problems you have had with the system. The reviews seem
> >to go 10 to 1 against the Hazer, recommending a crank up tower....
>
> >I would appreciate any comments and recommendations and
> >in general should I waste my money on the thing or does it work
> >as advertised?
>
> >73,
>
> >Jim, WA5DXP
> >wdxp at cox dot net

Jim
The hinge on my fold over is corroded so I am about to build my own
"hazer"
I am using the square extruded aluminum that is available in the
stores and I have oibtained
some ball bearing pads that are used for inter conveyor use. Each of
the tubular tower sections
will be in contact only with these bearing pads so they are either
side of the tower tubular section which allows them
to by-pass connecting bolts with out hinderence. The addition of
combination ladder hooks provide a measure of safety.
The cost of such is way below anything that you can get commercialy
and the electric
winch is available on E bay for about $100. The structure of the above
is of a nut aand bolt type so welding availability is not a factor.
Have fun
Art

4176. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 21:17:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <30a762e7-918a-4ca1-aca7-43ec02cadd94@r15g2000prh.googlegroups.com>
Source record: 20400
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

On Nov 7, 9:01 am, JIMMIE <JIMMIEDEE...@yahoo.com> wrote:
> On Nov 7, 8:34 am, Bob Baldwin <bob-bald...@tamu.edu> wrote:
>
>
>
> > Mark wrote:
> > > WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?
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> > > changing in the pavement as I drive from an area of static to an area
> > > of non-static.   It is not related to stepping on the brake or gas or
> > > shifting gears or going over bumps or any other aspect of the car that
> > > I can tell other than it's speed down the road.
> > > As an experiment, I attached a drag wire under the car. The wire
> > > drags on the ground to discharge any static build up the car. This
> > > made no difference.   Another clue, we've had no rain here in a
> > > while. The static all stops during wet weather. Also I am in the
> > > Philadelphia area and the AM station is in the New York area so it is
> > > on the weak side.
> > > I've been a ham for over 30 years and I have a lot of experience with
> > > EMI, but this one has me scratching my head. The wheel static
> > > changes repeatably in different locations for no apparent reason.
> > > It's got to be something to do with the pavement. Anybody have any
> > > experience with this?
>

> > > Mark
>
> > I used to run HF mobile, and had this same problem all the time. I had
> > so many bonding straps under my truck that mechanics and oil change
> > personnel would ask what they were for. I operated mainly on 40 and 80,
> > and the engine/computer/fuel pump noise was very low. But, the tire
> > noise was a big problem. For some reason, bias ply tires produced the
> > most noise, and radials the least. There was always a difference being
> > on the road, and the shoulder. On dirt roads, no problem at all. I tried
> > graphite in the tires, but never thought to try it in the axle grease.
>
> > bob baldwin WA5JOT
> > bryan, texas- Hide quoted text -
>
> > - Show quoted text -
>
> A lot of time when you cross the state line the asphalt changes and
> you can hear the difference. I noticed a big difference as soon as I
> crossed into Ga from Fl the other day. Fl had the new asphalt that is
> suppose to give you more traction in the rain and Ga hadnt upgraded
> their's yet. I didnt realize the stactic was coming from the road/
> tires until it turned off like someone threw a switch as soon as I
> crossed the line.
>
> Jimmie

If the road surface interface is not "keyed" to the moving part then
statitic will always
occur. If there is a contradiction in velocity of the two interfaced
parts static will occur,
if the two surfaces maintain the same velocity static will not occur.
Thus static production
depend purely on relative velocity which is governed by friction in
your case.
Art

4177. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 21:51:34 UTC
From: nm5k@wt.net
Message-ID: <ff4cf825-d47e-448c-9134-5d3bfb3c4fc6@v22g2000pro.googlegroups.com>
Source record: 20251

On Nov 7, 2:41 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

> Many others on this group Richard included don't know how to operate
> computors let alone
> work on antenna programs themselves so they are not talking from
> experience but from teachings reeived

How could you be on this group without knowing how to operate
a computer?

> Sooner or later somebody with some smarts
> and some get go will look at things for themselves and test thgem out
> on a computor which now apears to be accepted by all and then decide
> whether they want to build on them or not,

This should read "sooner or later Art will grow some smarts and will
look at things for himself, and test them out on a computer if he
feels
so compelled, and then decide if he wants to build one or not. "

At this late stage in the game, I would have thought you would
have made a decision by now. You know, like build the freakin
thing and test it out against radiators of known properties.
In some parts of civilization, this is called "falling asleep at the
wheel".
:/

4178. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 21:59:00 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <ES2Rk.1064$A73.968@edtnps82>
Source record: 20252

"Frank" <ve6cb@telus.net> wrote in message
news:hwjQk.677$xJ3.560@edtnps83...
>>>Link at: http://www3.telus.net/nighttrainexpress/maxwell_1.htm
>>>Click on "Next" for the 2nd page of math showing the development
>>>of the wave equation.
>>
>> Are you suppressing a 3rd page of math showing equal librium? It must
>> be there according to Art's revisionist discovery of Newton's laws for
>> the Unified Theory of RF Fields. ... maybe the 7th or 8th page then.
>> 42nd page?
>
> No, Sorry Richard. Nothing about "Equal librium" in 1200 pages.
>
> 73,
> Frank, VE6CB

To clarify the math, I have added some relevant pages to:
http://www3.telus.net/nighttrainexpress/maxwell_1.htm

Frank

4179. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 22:33:44 UTC
From: dplatt@radagast.org
Message-ID: <8bseu5-bkc.ln1@radagast.org>
Source record: 20255

>I'm no metallurgist so forgive my ignorance. Most of
>us have had the problem of interfacing copper to
>aluminum. Is there some sort of alloy terminal block
>that will accomplish that feat? Seems simple enough
>to create an alloy that gradually transitions from
>copper to aluminum but what do I know?

As I understand it, the problem with these connections results from at least two factors:

- Different galvanic potential. When these metals are in contact, and there's also an electrolyte present (e.g. moisture plus almost any sort of salt), one of the metals will take on the role of an anode, and will start corroding away.

- Different thermal coefficients of expansion... repeated heating and cooling puts mechanical stress on the junction of the two wires and can cause the joint to loosen, which increases the resistance, which increases heating when current flows through the joint, which increases thermal stress...

In order to use an alloy intermediary to reduce the problem, you'd need one which is midway between aluminum and copper in both galvanic potential, and thermal coefficient of expansion. I tend to doubt whether using a single, monolithic piece of alloy would eliminate the fundamental problem... it'd just spread it out into two separate junctions with lesser but still-nonzero mechanical and galvanic incompatibilities.

A tapered alloy as you suggest may well be possible but I suspect that it'd be expensive to make, and might have other problems. Aluminum can be alloyed with copper, but the resulting alloy might be just what you don't want for electrical junctions... the 2000 (or 2xx.x) aluminum/copper alloys are said to be extremely hard but prone to stress corrosion cracking.

The approved methods for joining copper and aluminum seem to involve either using high-pressure crimps which create a cold weld, or special pressure connectors plus an antioxidant paste or cream which blocks out moisture and thus prevents galvanic corrosion.

I gather it's possible to solder or braze the two metals together, but I don't know what sort of strength the resulting bond will have.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior

I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4180. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 22:45:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <iqseu5-4g6.ln1@mail.specsol.com>
Source record: 20253

Cecil Moore <nospam@w5dxp.com> wrote:
> I'm no metallurgist so forgive my ignorance. Most of
> us have had the problem of interfacing copper to
> aluminum. Is there some sort of alloy terminal block
> that will accomplish that feat? Seems simple enough
> to create an alloy that gradually transitions from
> copper to aluminum but what do I know?

The problems are mostly the different thermal coefficients of expansion
and surface oxidation of Al. Galvanic corrosion can also be an issue.

For more than you probably want to know:

http://www.inspect-ny.com/aluminum/aluminum.htm

If you are talking about your house wiring, the above link will get
you to stuff that addresses the problem.

If you are talking about home brew stuff, the general solution is to
clean, apply anti-oxide grease, and connect under compression, i.e.
something with a tightening screw.

--
Jim Pennino

Remove .spam.sux to reply.

4181. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 22:47:46 UTC
From: Philo <philo@nospampse.be>
Message-ID: <rA3Rk.412$QH3.176@newsfe16.ams2>
Source record: 20254

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:HF1Rk.5561$as4.4180@nlpi069.nbdc.sbc.com...
> I'm no metallurgist so forgive my ignorance. Most of
> us have had the problem of interfacing copper to
> aluminum. Is there some sort of alloy terminal block
> that will accomplish that feat? Seems simple enough
> to create an alloy that gradually transitions from
> copper to aluminum but what do I know?
> --
> 73, Cecil http://www.w5dxp.com

Hello Cecil,

This is the kind of stuff you need.

http://www.niled.fr/Gamme_Niled/PDF/B/PageB06.pdf

You can also connect directly copper and aluminum if you apply (and
maintain) a fair amount of Penetrox P8A (Burndy) all over the joint.

Kind regards,

Philo

4182. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-07 23:35:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <56j9h4pbfn8i7k5lgog6d4otknr5g52ob6@4ax.com>
Source record: 20256
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

On Fri, 7 Nov 2008 13:17:06 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

Some readers may be confused with the terminology of the original:

>If the road surface interface is not "keyed" to the moving part then

Keyed: Scraping action alongside of a car for retribution.

>statitic will always
>occur. If there is a contradiction in velocity of the two interfaced
>parts static will occur,

Contradiction: A failed interdiction.

>if the two surfaces maintain the same velocity static will not occur.
>Thus static production
>depend purely on relative velocity which is governed by friction in
>your case.

Velocity: In southern Asia, larger than a town, smaller than a
metropolis.

>Art

Thus our original authur posits: if while driving around, the decaying hegemony of the counter-terrorists up and whisk you off to Ceylon for an interview - and you manage to scrape out of it (Keyed Contradiction), you will have escaped incarceration in the city of Velo (originally Veloceylon, that westerners have regrettably corrupted, as in the original here with Velocity) where static cling, the bane of haberdashers, is notable outside of the monsoon season.

Haberdashers? Static cling? Yes, it is an exceptional reach in vocabulary to answer for noise from the pavement. Join us at rec.radio.amateur.antenna for further examples in this fascinating tour of creative expression.

73's
Richard Clark, KB7QHC

4183. Re: hey henry schmidt teh homo

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 00:16:45 UTC
From: mopeyzakween@yahoo.com
Message-ID: <c78aa93a-dd86-494a-92fb-df1c5a798e1a@v39g2000pro.googlegroups.com>
Source record: 20257
Cross-posted to: rec.radio.amateur.policy,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave

On Nov 7, 1:18 pm, soviet.ma...@gmail.com wrote:
> On Nov 7, 10:53 am, "kb9rqz" <kb9...@puncemail.com> wrote:
>
> > "KD8CTL" <barney.morgan...@gmail.com> wrote in message
>
> >news:b737b2c2-6306-41e8-974c-a412ae06bec0@j40g2000prh.googlegroups.com...> looky here at marqueer gett'in ready to get his meat and cheese from
> > > ya!
>
> > >http://img227.imageshack.us/img227/8161/burgerkingul7.jpg
>
> > > I can't seem to get that catchy tune out of my head, you know the one,
> > > "STAINS ON YOUR PILLOW"
>
> > indeed taht is indeed one of gav farviotes indeed
>
> Author: Teh- Songster
> Subject: Tears On My Pillow--a nice 50's ballard changed just for
> Marky!
>
> ********STAINS ON YOUR PILLOW**************
>
> You don't remember me, but I remember you.
> I'm that seventeen year old, who tore your ass in two
>
> *Stains on your pillow, jizz in your ass, because of you.*
>
> My cock is not a gadget, your ass is not a toy, your dam asshole is
> so
> streached out because my name is LeRoy!
>
> If I could start anew, I'd only masturbate. You made me fuck your
> ass,
> Mark you're a reprobate!
>
> *Stains on your pillow, jizz in your ass, because of you.*

That is moparholic at twatmale dot cum posting that crap...he got chased into the buhes because we are posting about his faggot crack dealing boyfriend, Randy Chapman, KB5URP. He is a convicted crack dealer who did not think he would be found out, but here's his info...
Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS

3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)

COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4184. Randy Chapman, KB5URP, Convicted crack dealer, is in love with moparholic!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 00:24:45 UTC
From: mopeyzakween@yahoo.com
Message-ID: <bf1b0b15-1352-44c7-902b-21c5eaad43c3@u18g2000pro.googlegroups.com>
Source record: 20258
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)

PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4185. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 01:44:16 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <987116c6-a8d1-448a-8364-7215c7a05b6a@h23g2000prf.googlegroups.com>
Source record: 20259

On Nov 7, 4:33 pm, dpl...@radagast.org (Dave Platt) wrote:
> >I'm no metallurgist so forgive my ignorance. Most of
> >us have had the problem of interfacing copper to
> >aluminum. Is there some sort of alloy terminal block
> >that will accomplish that feat? Seems simple enough
> >to create an alloy that gradually transitions from
> >copper to aluminum but what do I know?
>
> As I understand it, the problem with these connections results from
> at least two factors:
>
> - Different galvanic potential. When these metals are in contact,
> and there's also an electrolyte present (e.g. moisture plus almost
> any sort of salt), one of the metals will take on the role of an
> anode, and will start corroding away.
>
> - Different thermal coefficients of expansion... repeated heating and
> cooling puts mechanical stress on the junction of the two wires and
> can cause the joint to loosen, which increases the resistance,
> which increases heating when current flows through the joint, which
> increases thermal stress...
>
> In order to use an alloy intermediary to reduce the problem, you'd
> need one which is midway between aluminum and copper in both galvanic
> potential, and thermal coefficient of expansion. I tend to doubt
> whether using a single, monolithic piece of alloy would eliminate the
> fundamental problem... it'd just spread it out into two separate
> junctions with lesser but still-nonzero mechanical and galvanic
> incompatibilities.
>
> A tapered alloy as you suggest may well be possible but I suspect that
> it'd be expensive to make, and might have other problems. Aluminum
> can be alloyed with copper, but the resulting alloy might be just what
> you don't want for electrical junctions... the 2000 (or 2xx.x)
> aluminum/copper alloys are said to be extremely hard but prone to
> stress corrosion cracking.
>
> The approved methods for joining copper and aluminum seem to involve
> either using high-pressure crimps which create a cold weld, or special
> pressure connectors plus an antioxidant paste or cream which blocks
> out moisture and thus prevents galvanic corrosion.
>
> I gather it's possible to solder or braze the two metals together, but
> I don't know what sort of strength the resulting bond will have.

>
> --
> Dave Platt <dpl...@radagast.org>   AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
>   I do _not_ wish to receive unsolicited commercial email, and I will
>   boycott any company which has the gall to send me such ads!

Sound like David that the rules have been changed and aluminum wiring
has now been banned
because of the things you say are inevitable for failure! I was
unaware that things had got to that point.
Has aluminum been baned for all electrical parts in Industry now,? I
have been out of touch since retiring
but I would have thought that a common connection was a common heat
sink which would alleviate some of the things you point to.
In the court case I refered to it was accepted that if one material
was imbedded into the other such that there was a virgin interface
ther was no problem.
With respect to house wiring I would not have faith in the workman
ship
Art

4186. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 01:55:11 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <31bba8f7-8135-460d-a6ab-fd64bb9fe93c@v16g2000prc.googlegroups.com>
Source record: 20260

On Nov 7, 3:59 pm, "Frank" <ve...@telus.net> wrote:
> "Frank" <ve...@telus.net> wrote in message
>
> news:hwjQk.677$xJ3.560@edtnps83...
>
> >>>Link at:http://www3.telus.net/nighttrainexpress/maxwell_1.htm
> >>>Click on "Next" for the 2nd page of math showing the development
> >>>of the wave equation.
>
> >> Are you suppressing a 3rd page of math showing equal librium? It must
> >> be there according to Art's revisionist discovery of Newton's laws for
> >> the Unified Theory of RF Fields. ... maybe the 7th or 8th page then.
> >> 42nd page?
>
> > No, Sorry Richard. Nothing about "Equal librium" in 1200 pages.
>
> > 73,
> > Frank, VE6CB
>
> To clarify the math, I have added some relevant pages
to:http://www3.telus.net/nighttrainexpress/maxwell_1.htm
>
> Frank

What is the name of the actual book you are quoting from? Time and
time again we get a quote from books
by some members of this group where it is then used totally out of
context. As an aside I am not quite sure what your intent is to supply
these formula. If it is to substantiate a point then I have totally
missed it.
Many thanks for the postings and efforts
Regards
Art

4187. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 02:12:27 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f8330b6c-b181-4e2e-8bd8-4c8ab2dd7e86@o4g2000pra.googlegroups.com>
Source record: 20261

On Nov 7, 7:55 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 7, 3:59 pm, "Frank" <ve...@telus.net> wrote:
>
>
>
> > "Frank" <ve...@telus.net> wrote in message
>
> >news:hwjQk.677$xJ3.560@edtnps83...
>
> > > >>>Link at:http://www3.telus.net/nighttrainexpress/maxwell_1.htm
> > > >>>Click on "Next" for the 2nd page of math showing the development
> > > >>>of the wave equation.
>
> > > >> Are you suppressing a 3rd page of math showing equal librium? It must
> > > >> be there according to Art's revisionist discovery of Newton's laws for
> > > >> the Unified Theory of RF Fields. ... maybe the 7th or 8th page then.
> > > >> 42nd page?
>
> > > > No, Sorry Richard. Nothing about "Equal librium" in 1200 pages.
>
> > > > 73,
> > > > Frank, VE6CB
>
> > To clarify the math, I have added some relevant pages
to:http://www3.telus.net/nighttrainexpress/maxwell_1.htm
>
> > Frank
>
> What is the name of the actual book you are quoting from? Time and
> time again we get a quote from books
> by some members of this group where it is then used totally out of
> context. As an aside I am not quite sure what your intent is to supply
> these formula. If it is to substantiate a point then I have totally
> missed it.
> Many thanks for the postings and efforts
> Regards
> Art

Oooops I have just noticed the book reference. As far as what is
printed I would like to hear somebody say that it confirms my thinking
which is why you brought it forward but you did not say that. Maybe
somebody with mathematical knoweledge will come forward to show how it
disproves what I say
but I doubt that, most will revert to the talking head stance.

Any way Frank I like how things are printed so I will try the library to see if they have a copy. I was particularly interested in the slow wave comment as that was also derided on this newsgroup.
Best regards
Art

4188. Re: Anyone out there using a HAZER on their Rohn 25 Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 02:26:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <12d230a2-66d7-4a09-bc1f-c25068826fc9@s9g2000prm.googlegroups.com>
Source record: 20262

On Nov 7, 3:10 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 6, 7:29 pm, Jim <nos...@nospam.com> wrote:
>
>
>
> > I got lots of personal responses on this question at a ham site, and
> > have decided to order the Hazer tram system. One fellow told me how
> > he adapted an inexpensive electric winch to his system as he is
> > handicapped.
>
> > On Tue, 04 Nov 2008 17:25:55 -0600, Jim <nos...@nospam.com> wrote:
> > >I have been thinking of purchasing a HAZER tram system, but after
> > >reading all the reviews all over the web I'm kind of leery.
>
> > >Anyone out there using one? If so, I would like to start a dialog or
> > >swap E-Mail or call you on phone to find which model you are using,
> > >and what problems you have had with the system. The reviews seem
> > >to go 10 to 1 against the Hazer, recommending a crank up tower....
>
> > >I would appreciate any comments and recommendations and
> > >in general should I waste my money on the thing or does it work
> > >as advertised?
>
> > >73,
>
> > >Jim, WA5DXP
> > >wdxp at cox dot net
>
> Jim
> The hinge on my fold over is corroded so I am about to build my own
> "hazer"
> I am using the square extruded aluminum that is available in the
> stores and I have oibtained
> some ball bearing pads that are used for inter conveyor use. Each of
> the tubular tower sections
> will be in contact only with these bearing pads so they are either
> side of the tower tubular section which allows them
> to by-pass connecting bolts with out hinderence. The addition of
> combination ladder hooks provide a measure of safety.
> The cost of such is way below anything that you can get commercialy
> and the electric
> winch is available on E bay for about $100. The structure of the above
> is of a nut aand bolt type so welding availability is not a factor.
> Have fun

> Art

Forgot to mention an important point, tho the ball bearing does not come into contact with the tower section bolts it does still has to travel
the conecting tower section points. It is for this reason I settled on the single bearing format. The bearing is usually bolted to a flat surface where the ball is free to move. On the underside of this unit is a seating for a 3/4 dia compression spring which applies a spring loading that is depressed to provide clearance for the tube within a tube joint of the sections such that movement of the "hazer" in terms of rattling is removed. These bearings can be purchased on E bay for about $2.50 a piece
Sorry about the omission in the original description.
Regards
Art

4189. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 03:41:53 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <6U7Rk.14$6s5.1@newsfe01.iad>
Source record: 20263

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:HF1Rk.5561$as4.4180@nlpi069.nbdc.sbc.com...
> I'm no metallurgist so forgive my ignorance. Most of
> us have had the problem of interfacing copper to
> aluminum. Is there some sort of alloy terminal block
> that will accomplish that feat? Seems simple enough
> to create an alloy that gradually transitions from
> copper to aluminum but what do I know?
> --
> 73, Cecil http://www.w5dxp.com

As others have mentioned, there are two issues involved: differing coefficients of thermal expansion and galvanic corrosion. Placing the joint under strong compression is the method of choice for eliminating the thermal expansion problem. Galvanic corrosion is not so simple to solve, however.

Galvanic corrosion, often misnamed "electrolysis", occurs when two (or more) dissimilar metals are brought into electrical contact in the presence of water. When the junction, known as a galvanic couple, forms, one of the metals in the couple becomes the anode (which corrodes faster than it would if the other metal was not present), while the other becomes the cathode (which corrodes slower than it would without the other metal being present). When contact between the dissimilar metals is made, the anode will corrode faster while the corrosion of the cathode will decelerate or even stop. If the terms anode and cathode sound familiar to terms used to describe the electrodes in batteries, they are one and the same. A battery is nothing more than two dissimilar electrodes immersed in a chemically conductive solution. If an external circuit is connected to the anode and cathode of a battery, when the circuit draws current, the anode corrodes. The battery is depleted when the anode is fully corroded away.
We can use a galvanic series of metals to predict which metal will preferentially corrode with respect to the other. Usually presented in a table, the metals are listed in order of most corroded to least corroded. I am including one such table with this post, courtesy of the McNally Institute, 1637 Sand Key Estates Ct., Clearwater, Fl 33767. Note that aluminum is located near the top of the table while copper is near the center. This shows that the aluminum is anodic and will preferentially corrode with respect to copper. There are two major factors that increase the degree of corrosion in any dissimilar metal couple: (1) how far apart the two metals are in the galvanic series. and (2) the ratio of the exposed areas of the cathode metal to the exposed area of the anode metal. The further apart the metals are, and the larger the exposed cathode metal area to the exposed anode area, the faster the anode will corrode. An aluminum rivet in a copper sheet will quickly corrode away, while a copper rivet in an aluminum sheet will show far less corrosion (the corroded aluminum is

spread out over a larger area).

One method of corrosion protection is to use metals close to each other in the galvanic series. The other method is to protect the junction between the metals from moisture. One reader suggested the use of a grease such as Penetrox or Noalox. These compounds, which are carried by most electrical supply houses, are merely fine, irregular-shaped zinc particles in a water resistant grease. When used between aluminum and copper joints, the zinc particles pierce the oxide coatings of both the copper and the aluminum when the joint is placed in compression. The grease keeps moisture out and zinc is very compatible with aluminum; however, the grease and zinc particles do not provide galvanic corrosion protection. These greases are best used in aluminum to aluminum joints. Coating the copper with lead, tin, or lead/tin solder before the joint is made will also provide some degree of protection as these metals or alloy are located between copper and aluminum in the galvanic series. An alloy terminal block that transitions gradually from one alloy to another sounds like a great idea, but it is virtually impossible to make such an alloy. As an example copper aluminum alloys cannot contain more than a few percent copper before the copper precipitates out. Welding, machining, or placing a high copper aluminum alloy under strain can cause microscopic particles of copper to form in the alloy. Localized corrosion will occur around these particles.

As amateur radio operators who encounter aluminum antennas connected to copper feedlines, about the best we can do is use good mechanical contact combined with a protective paint to keep moisture out of a joint. I usually use an acrylic paint as it has superior ultraviolet resistance which is needed if the joint is outdoors. My personal favorite is clear Krylon spray for this use. It lets you seen the joint and any corrosion that is formed. Some joints have held up for more than 15 years in my experience.

73, Barry WA4VZQ

~~~~~~

GALVANIC SERIES OF METALS AND ALLOYS

CORRODED END (ANODIC OR LEAST NOBLE)

MAGNESIUM
MAGNESIUM ALLOYS
ZINC
ALUMINUM 5052, 3004, 3003, 1100, 6053
CADMIUM
ALUMINUM 2117, 2017, 2024
MILD STEEL (1018), WROUGHT IRON
CAST IRON, LOW ALLOY HIGH STRENGTH STEEL
CHROME IRON (ACTIVE)
STAINLESS STEEL, 430 SERIES (ACTIVE)
302, 303, 321, 347, 410,416, STAINLESS STEEL (ACTIVE)
NI - RESIST
~~~~~~

316, 317, STAINLESS STEEL (ACTIVE)
CARPENTER 20CB-3 STAINLESS (ACTIVE)
ALUMINUM BRONZE (CA 687)
HASTELLOY C (ACTIVE) INCONEL 625 (ACTIVE) TITANIUM (ACTIVE)
LEAD - TIN SOLDERS
LEAD
TIN
INCONEL 600 (ACTIVE)
NICKEL (ACTIVE)
60 NI-15 CR (ACTIVE)
80 NI-20 CR (ACTIVE)
HASTELLOY B (ACTIVE)
BRASSES
COPPER (CA102)
MANGANESE BRONZE (CA 675), TIN BRONZE (CA903, 905)
SILICONE BRONZE
NICKEL SILVER
COPPER - NICKEL ALLOY 90-10
COPPER - NICKEL ALLOY 80-20
430 STAINLESS STEEL
NICKEL, ALUMINUM, BRONZE (CA 630, 632)
MONEL 400, K500
SILVER SOLDER
NICKEL (PASSIVE)
60 NI- 15 CR (PASSIVE)
INCONEL 600 (PASSIVE)
80 NI- 20 CR (PASSIVE)
CHROME IRON (PASSIVE)
302, 303, 304, 321, 347, STAINLESS STEEL (PASSIVE)
316, 317, STAINLESS STEEL (PASSIVE)
CARPENTER 20 CB-3 STAINLESS (PASSIVE), INCOLOY 825NICKEL - MOLYBDEUM -
CHROMIUM - IRON ALLOY (PASSIVE)
SILVER
TITANIUM (PASS.) HASTELLOY C & C276 (PASSIVE), INCONEL 625(PASS.)
GRAPHITE
ZIRCONIUM
GOLD
PLATINUM

PROTECTED END (CATHODIC OR MOST NOBLE)

4190. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 04:20:51 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <ls8Rk.171$ih7.100@newsfe01.iad>
Source record: 20264

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:HF1Rk.5561$as4.4180@nlpi069.nbdc.sbc.com...
> I'm no metallurgist so forgive my ignorance. Most of
> us have had the problem of interfacing copper to
> aluminum. Is there some sort of alloy terminal block
> that will accomplish that feat? Seems simple enough
> to create an alloy that gradually transitions from
> copper to aluminum but what do I know?

1. I encountered dissimilar metal parts which had been joined by what was termed "explosive welding" and/or "explosive bonding" both of which terms show up nicely in Google.

In my case, the parts were cylindrical sleeves, the top of each being stainless steel and the bottom being aluminum. I only saw one (out of thousands) with the bond fractured and I don't know what hit it to break it. They seem quite strong.

Perhaps a vendor of such products has something you can use.

2. I see a lot of brass and darn little corrosion. Would a transition piece of brass be acceptable?

"Sal"

4191. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 04:42:14 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <et5ah4hq878pmk6kht9086stm69cniftdq@4ax.com>
Source record: 20265

On Fri, 07 Nov 2008 14:36:58 -0600, Cecil Moore <nospam@w5dxp.com>
wrote:

>I'm no metallurgist so forgive my ignorance. Most of
>us have had the problem of interfacing copper to
>aluminum. Is there some sort of alloy terminal block
>that will accomplish that feat? Seems simple enough
>to create an alloy that gradually transitions from
>copper to aluminum but what do I know?

Methinks this might be worth reading:
<http://yarchive.net/electr/galvanic_corrosion.html>
It's a collection of postings about glavanic corrosion with lots of
good info.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

4192. Lawsuit countdown 24 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 05:21:43 UTC
From: kb9rqz@yahoo.com
Message-ID: <ke8ah4ht3inrabic4lvkph73mh9sc0pnfu@4ax.com>
Source record: 20266
Cross-posted to: rec.radio.amateur.policy,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave

On Fri, 7 Nov 2008 16:16:45 -0800 (PST), mopeyzakween@yahoo.com wrote:

>On Nov 7, 1:18ï¿½pm, soviet.ma...@gmail.com wrote:
>> On Nov 7, 10:53 am, "kb9rqz" <kb9...@puncemail.com> wrote:
>>
>> > "KD8CTL" <barney.morgan...@gmail.com> wrote in message
>>
>> >news:b737b2c2-6306-41e8-974c-a412ae06bec0@j40g2000prh.googlegroups.com...> looky here
at marqueer gett'in ready to get his meat and cheese from
>> > > ya!
>>
>> > >http://img227.imageshack.us/img227/8161/burgerkingul7.jpg
>>
>> > > I can't seem to get that catchy tune out of my head, you know the one,
>> > > "STAINS ON YOUR PILLOW"
>>
>> > indeed taht is indeed one of gav farviotes indeed
>>
>> Author: ï¿½Teh- Songster
>> Subject: ï¿½Tears On My Pillow--a nice 50's ballard changed just for
>> Marky!
>>
>> ********STAINS ON YOUR PILLOW**************
>>
>> You don't remember me, but I remember you.
>> I'm that seventeen year old, who tore your ass in two
>>
>> *Stains on your pillow, jizz in your ass, because of you.*
>>
>> My cock is not a gadget, your ass is not a toy, your dam asshole is
>> so
>> streached out because my name is LeRoy!
>>
>> If I could start anew, I'd only masturbate. You made me fuck your
>> ass,
>> Mark you're a reprobate!
>>
>> *Stains on your pillow, jizz in your ass, because of you.*
>
>That is moparholic at twatmale dot cum posting that crap...he got
>chased into the buhes because we are posting about his faggot crack
>dealing boyfriend, Randy Chapman, KB5URP. He is a convicted crack

>dealer who did not think he would be found out, but here's his info...
>Batch Search Summary
>SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
>3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS
>
>
>RESULTS FOR 'CHAPMAN,RANDALL '
> Search ID 3930206 Back to Top
>NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
>CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW
>
>
>CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
>SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
>MALE WHITE 508 195 BROWN Brown 10/26/1995
>NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
>CHAPMAN,RANDY
>
>BIRTHDATES 03/22/1961 (Primary)
>
>
> Arrest Summary (TRN)
>DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
>01/16/1995 A 0007369727 TEXAS CITY PD View
>
>
>Arrest Date: 01/16/1995 Arrest Summary
>
>
>DATE OF ARREST 01/16/1995
>SEQUENCE CODE A
>TRACKING NUMBER 0007369727
>AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
>CHARGE
>TRACKING SUFFIX A001
>OFFENSE DETAIL
>INTERNAL AGENCY PERSON NUMBER 020130
>INTERNAL AGENCY CASE NUMBER 95633
>ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
>ARREST OFFENSE CITATION 481.115(b)
>LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
>DATE OF OFFENSE 01/16/1995
>ARREST DISPOSITION 205 (HELD)
>ARREST DISPOSITION DATE 01/16/1995
>PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
>GALVESTON)
>PROSECUTION DETAIL
>AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
>GALVESTON)
>PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)

>PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
>PROSECUTOR OFFENSE CITATION 481.115(b)
>LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
>COURT STATUS
>COURT SEQUENCE a
>AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
>COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
>CITATION 481.115(b)
>LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
>COURT DISPOSITION 312 (DEFERRED)
>COURT DISPOSITION DATE 09/21/1995
>DATE OF SENTENCE/STATUS 09/21/1995
>CAUSE NUMBER 95CR0800
>FINAL PLEADING G (GUILTY)
>COURT PROBATION 4Y
>COURT FINE 200
>COURT COSTS 157
>AGENCY RECEIVING CUSTODY GCCSCD
>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4193. Lawsuit countdown 24 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 05:22:21 UTC
From: kb9rqz@yahoo.com
Message-ID: <kf8ah4l7gb2jn7valpu3i9ahgmdeihi92j@4ax.com>
Source record: 20267
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 7 Nov 2008 16:24:45 -0800 (PST), mopeyzakween@yahoo.com wrote:

>Batch Search Summary

sapming stalker

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4194. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 05:51:23 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <wN9Rk.9$9Z6.0@newsfe01.iad>
Source record: 20268

----- Original Message -----
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Newsgroups: rec.radio.amateur.antenna
Sent: Friday, November 07, 2008 11:20 PM
Subject: Re: Aluminum to Copper interface

>
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:HF1Rk.5561$as4.4180@nlpi069.nbdc.sbc.com...
>> I'm no metallurgist so forgive my ignorance. Most of
>> us have had the problem of interfacing copper to
>> aluminum. Is there some sort of alloy terminal block
>> that will accomplish that feat? Seems simple enough
>> to create an alloy that gradually transitions from
>> copper to aluminum but what do I know?
>
> 1. I encountered dissimilar metal parts which had been joined by what was
> termed "explosive welding" and/or "explosive bonding" both of which terms
> show up nicely in Google.
>
> In my case, the parts were cylindrical sleeves, the top of each being
> stainless steel and the bottom being aluminum. I only saw one (out of
> thousands) with the bond fractured and I don't know what hit it to break
> it.
> They seem quite strong.
>
> Perhaps a vendor of such products has something you can use.
>
> 2. I see a lot of brass and darn little corrosion. Would a transition
> piece of brass be acceptable?
>
> "Sal"

Red, yellow, and naval brass as well as aluminum bronze alloys are
marginally anodic with respect to copper so these alloys would provide
minimal corrosion protection. I know it might not be obvious, but steel
would make a better intermediate metal.

This will make sense if the actual voltages are included in the galvanic
series. These voltages are in sea water and with respect to a standard
calomel electrode.

Zinc -0.98 to -1.03
volts
Aluminum -0.70 to -0.90 "

Cast Iron -0.60 to -0.72
"
Steel -0.60 to -0.70
"
Red Brass, Yellow Brass, Naval Bross,
Aluminum Bronze -0.30 to -0.40 "
Copper -0.28 to -0.36
"

73, Barry WA4VZQ

4195. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 07:25:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p9fah4d9i5sutmioqv5nljmie89cpn6bvl@4ax.com>
Source record: 20269

On Fri, 7 Nov 2008 18:12:27 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

> As far as what is
>printed I would like to hear somebody say that it confirms my thinking

That you invented a time component to Gauss' equations and Maxwell
didn't? Fishing for validation or for Moby Dick? At least Ahab
nailed a gold dollar to the mast for the first one to spot the great
white whale.

73's
Richard Clark, KB7QHC

4196. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 13:52:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <gQgRk.4406$W06.2828@flpi148.ffdc.sbc.com>
Source record: 20270

jimp@specsol.spam.sux.com wrote:
> If you are talking about home brew stuff, the general solution is to
> clean, apply anti-oxide grease, and connect under compression, i.e.
> something with a tightening screw.

I'm putting my rotatable 20m dipole back up and am,
once again, needing to connect ladder-line to
aluminum tubing out in the weather. I guess I'll try
brass hardware this time.
--
73, Cecil http://www.w5dxp.com

4197. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 15:05:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <178f8cc5-46ab-4d16-bed3-28fef062d923@u29g2000pro.googlegroups.com>
Source record: 20271

On Nov 8, 1:25 am, Richard Clark <kb7...@comcast.net> wrote:
> On Fri, 7 Nov 2008 18:12:27 -0800 (PST), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> > As far as what is
> >printed I would like to hear somebody say that it confirms my thinking
>
> That you invented a time component to Gauss' equations and Maxwell
> didn't? Fishing for validation or for Moby Dick? At least Ahab
> nailed a gold dollar to the mast for the first one to spot the great
> white whale.
>
> 73's
> Richard Clark, KB7QHC

As a non engineer and somebody who is wired diferntly from the norm
it is undestandable that you have problems with Maxwell equations.
Gaus did contriubute to the Maxwellian laws which is accepted. The
static law wsas not
the particular gaussian contribution. Many have taken this that tho
Gauss contributed to
Maxwells laws it was not by way of his law of statics thus some have
taken this as pointing
to statics as something different and separate from electromechanics,
Science has excepted that
equilibrium is as universal as the GUT theorem which is why Einstein
searched so long to identify
the "weak" force. I remember a decade ago where I pointed to water
cavitation having the same
effect in electrical matters pointing to the comnbines loop dipole
arrangement where cavitation
occurs so that voltage can be a maximum at the dipole ends and where
llewellen quickly pointed
out that electricity does not work that way likening it to pushing to
a new science. am totally unaware
and nobody has pointed otherwise that the law of statics had a
deinitive connection to Maxwells laws
which points to radiators of a smaller volume and the identification
of the weak force. You can gabble forever
in knee jerk reaction to my postings but until you provide scientific
technology to the subject to repudiate what I state
you will remain a person that is wired diffgerently from other males
that communicats in a strange
way such gthat all meaning is totally obscurred in your search for

like minded people thatg you can have a close relationship with
in a like minded way. I for one are not one of that life style so get
off my back.

4198. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 15:32:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <fab119e0-3282-4db0-89a8-ce4bdd088c2e@d36g2000prf.googlegroups.com>
Source record: 20272

On Nov 7, 8:12 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 7, 7:55 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > On Nov 7, 3:59 pm, "Frank" <ve...@telus.net> wrote:
>
> > > "Frank" <ve...@telus.net> wrote in message
>
> > >news:hwjQk.677$xJ3.560@edtnps83...
>
> > > >>>Link at:http://www3.telus.net/nighttrainexpress/maxwell_1.htm
> > > >>>Click on "Next" for the 2nd page of math showing the development
> > > >>>of the wave equation.
>
> > > >> Are you suppressing a 3rd page of math showing equal librium? It must
> > > >> be there according to Art's revisionist discovery of Newton's laws for
> > > >> the Unified Theory of RF Fields. ... maybe the 7th or 8th page then.
> > > >> 42nd page?
>
> > > > No, Sorry Richard. Nothing about "Equal librium" in 1200 pages.
>
> > > > 73,
> > > > Frank, VE6CB
>
> > > To clarify the math, I have added some relevant pages
> to:http://www3.telus.net/nighttrainexpress/maxwell_1.htm
>
> > > Frank
>
> > What is the name of the actual book you are quoting from? Time and
> > time again we get a quote from books
> > by some members of this group where it is then used totally out of
> > context. As an aside I am not quite sure what your intent is to supply
> > these formula. If it is to substantiate a point then I have totally
> > missed it.
> > Many thanks for the postings and efforts
> > Regards
> > Art
>
> Oooops I have just noticed the book reference. As far as what is
> printed I would like to hear somebody say that it confirms my thinking
> which is why you brought it forward but you did not say that. Maybe
> somebody with mathematical knoweledge will come forward to show how it

> disproves what I say
> but I doubt that, most will revert to the talking head stance.
> Any way Frank I like how things are printed so I will try the library
> to see if they have a copy. I was particularly interested in the slow
> wave comment as that was also derided on this newsgroup.
> Best regards
> Art

Frank
What you have done is to bring to the fore front modern thinking in
science that has emerged since
the thinking of Jackson and Termin and become nmore in line with
Einstein and particle theory.
It without doubt confirms the thinking of the Grand universal theory
by the inclusion of Staic law
tho without the conclusive proof that Gauss;s static law provides but
even so arrives at a common conclusion.
It plkeases me very much that it is now used in college education so
that the present generation will not bemind bound
by the past. I was especially pleased with the reference to "slow
wave" which is a very importabt component to Maxwells laws
that has been ommited in the past. Regardles that the author did not
reference specifically the statics law he is very implicite
with respect to the commonality of statics with with respect with
electro magnetics which I thank you very much for bringing it to the
attention of others.
This follows your effots in showing that NEC computor programs do
indeed support the idea of arrays in equilibrium when you provided a
computor analysis showing radiators that were resonant and at
different angles to each other because of the addfition of the angle
requirement of the weak force.
You are to be commended for studying the statements for yourself to
confirm their veracity instead of the attitude of the talking heads.,
I look forward to your future posts
Very best regards
Art Unwin KB9MZ.......XG

4199. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 16:14:37 UTC
From: richardharrison@webtv.net
Message-ID: <15433-4915BAED-2898@storefull-3251.bay.webtv.net>
Source record: 20284

Art wrote:
"Frank, What is the name of the actual book you are quoting from?"

Read the posting!

"Engineering Eleactromagnetics, 2nd edition", Nathan Ida, ISBN
0-387-20156-4."

My unsolicited comment: Lyndon Johnson once described someneone like you approximately as: "He couldn`t pour beer out of a boot if instructions were stamped on the heel."

Best regards, Richard Harrison, KB5WZI

4200. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 16:18:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o4dbh41nq48pskh25r3ojd55d4tftjoo4p@4ax.com>
Source record: 20273

On Sat, 8 Nov 2008 07:05:08 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>As a non engineer and somebody who is wired diferntly from the norm
>it is undestandable that you have problems with Maxwell equations.

Well, Authru, it is obvious to the readers of this thread that of the
two of us, this non engineer is the one who better comprehends
Maxwell's work!

This non engineer easily observes that Maxwell contributed the
variable t (for time) to Gauss' equations. It is directly observable
on page:
http://www3.telus.net/nighttrainexpress/maxwell_1.htm
at the paragraph heading (guess what?):
"The Time-Dependant Wave Equation"
This is a part of the curriculum of every EE who has attempted to
educate you to this matter. Even this non engineer has formal
training to this specific point.

You now have been offered clear, specific, and demonstrable proof that
your claims are spurious. However, I am full aware that we will
revisit those invalid claims again as if you were never aware of this
simple demonstration.

73's
Richard Clark, KB7QHC

4201. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 16:31:31 UTC
From: Buck <usenet01@lumpuckeroo.com>
Message-ID: <hmfbh4tbl9h9ml5mnbo34uj5qdb1iipa0a@4ax.com>
Source record: 20274

Brass?

Buck
www.N4PGW.org

On Fri, 07 Nov 2008 14:36:58 -0600, Cecil Moore <nospam@w5dxp.com>
wrote:

>I'm no metallurgist so forgive my ignorance. Most of
>us have had the problem of interfacing copper to
>aluminum. Is there some sort of alloy terminal block
>that will accomplish that feat? Seems simple enough
>to create an alloy that gradually transitions from
>copper to aluminum but what do I know?

--
73 for now
Buck, N4PGW

www.lumpuckeroo.com

"Small - broadband - efficient: pick any two."

4202. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 16:47:46 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <MjjRk.59509$bx1.10240@bignews1.bellsouth.net>
Source record: 20275

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:fab119e0-3282-4db0-89a8-ce4bdd088c2e@d36g2000prf.googlegroups.com...
On Nov 7, 8:12 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 7, 7:55 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > On Nov 7, 3:59 pm, "Frank" <ve...@telus.net> wrote:
>
> > > "Frank" <ve...@telus.net> wrote in message
>
> > >news:hwjQk.677$xJ3.560@edtnps83...
>
> > > >>>Link at:http://www3.telus.net/nighttrainexpress/maxwell_1.htm
> > > >>>Click on "Next" for the 2nd page of math showing the development
> > > >>>of the wave equation.
>
> > > >> Are you suppressing a 3rd page of math showing equal librium? It
> > > >> must
> > > >> be there according to Art's revisionist discovery of Newton's laws
> > > >> for
> > > >> the Unified Theory of RF Fields. ... maybe the 7th or 8th page
> > > >> then.
> > > >> 42nd page?
>
> > > > > No, Sorry Richard. Nothing about "Equal librium" in 1200 pages.
>
> > > > > 73,
> > > > > Frank, VE6CB
>
> > > > To clarify the math, I have added some relevant pages
> > > > to:http://www3.telus.net/nighttrainexpress/maxwell_1.htm
>
> > > > Frank
>
> > What is the name of the actual book you are quoting from? Time and
> > time again we get a quote from books
> > by some members of this group where it is then used totally out of
> > context. As an aside I am not quite sure what your intent is to supply
> > these formula. If it is to substantiate a point then I have totally
> > missed it.
> > Many thanks for the postings and efforts
> > Regards
> > Art

>
> Oooops I have just noticed the book reference. As far as what is
> printed I would like to hear somebody say that it confirms my thinking
> which is why you brought it forward but you did not say that. Maybe
> somebody with mathematical knoweledge will come forward to show how it
> disproves what I say
> but I doubt that, most will revert to the talking head stance.
> Any way Frank I like how things are printed so I will try the library
> to see if they have a copy. I was particularly interested in the slow
> wave comment as that was also derided on this newsgroup.
> Best regards
> Art

Frank
What you have done is to bring to the fore front modern thinking in
science that has emerged since
the thinking of Jackson and Termin and become nmore in line with
Einstein and particle theory.
It without doubt confirms the thinking of the Grand universal theory
by the inclusion of Staic law
tho without the conclusive proof that Gauss;s static law provides but
even so arrives at a common conclusion.
It plkeases me very much that it is now used in college education so
that the present generation will not bemind bound
by the past. I was especially pleased with the reference to "slow
wave" which is a very importabt component to Maxwells laws
that has been ommited in the past. Regardles that the author did not
reference specifically the statics law he is very implicite
with respect to the commonality of statics with with respect with
electro magnetics which I thank you very much for bringing it to the
attention of others.
This follows your effots in showing that NEC computor programs do
indeed support the idea of arrays in equilibrium when you provided a
computor analysis showing radiators that were resonant and at
different angles to each other because of the addfition of the angle
requirement of the weak force.
You are to be commended for studying the statements for yourself to
confirm their veracity instead of the attitude of the talking heads.,
I look forward to your future posts
Very best regards
Art Unwin KB9MZ.......XG

To bring all of this down to Earth, I refer all to the old axiom, "Never mud
wrestle with a pig, yada yada yada..."

Ed, NM2K

4203. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 17:06:52 UTC
From: Dave <noone@nowhere.com>
Message-ID: <MGjRk.165$U5.78@nwrddc01.gnilink.net>
Source record: 20276

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:178f8cc5-46ab-4d16-bed3-28fef062d923@u29g2000pro.googlegroups.com...
> As a non engineer and somebody who is wired diferntly from the norm

QED.

4204. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 17:19:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ebibh41p8qf5su1pclr50s4gtkrom7hro1@4ax.com>
Source record: 20277

On Sat, 8 Nov 2008 11:47:46 -0500, "Ed Cregger"
<ecregger@bellsouff.net> wrote:

>To bring all of this down to Earth, I refer all to the old axiom, "Never mud
>wrestle with a pig, yada yada yada..."

Hi Ed,

Are you implying it would be easier to put lipstick on Art, than to
get his antenna through the eye of a needle?

73's
Richard Clark, KB7QHC

4205. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 18:18:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <34e738e4-f2d3-42d1-9bf3-2c0486823dcb@t18g2000prt.googlegroups.com>
Source record: 20278

On Nov 8, 11:06 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:178f8cc5-46ab-4d16-bed3-28fef062d923@u29g2000pro.googlegroups.com...
>
> > As a non engineer and somebody who is wired diferntly from the norm
>
> QED.

David, I am so happy that Dr Davis of MIT has finaly been vindicated
in the eyes of this group.
It has taken years for the group to accept the static relationship
with electromagnetics.,
I am also pleased that the present generation are using up to date
material and not the books of 50 years ago
where those taught at that time all was thought to be known and all
change was resisted. Of course if this newsgroup wish to challenge the
book excerpts that have been placed on this thread it would be very
interesting including the deduction that a radiator can be any size,
shape or elevation as long as it is in equilibrium.which is no small
matter in designing small volume antennas using all four fourses that
Maxwell and others clearly intended. Antennas belong to the present
generation where the old timers are satified going to their graves
convident that all is known while the present generation forgve ahead
by the recognition of the trole of all four fouces which must be
accounted for in any full analysis of the subject of radiation.. Now
that Dr Davis has been vindicated old timers who are still mentally
capable have the opportunity to be present in these very exciting
times
Nice weather here Davis so put aside that book you are writing and get
outside where you can practice the praticle instead of being a talking
head.
Best regards
Art.
PS I look forward to your destruction of the text suplied on this
thread since it opposes everything you have argued for during the last
half dozen years.
Hate to tell you but I did tell you so, many, many times. Eat some
humble pie!

4206. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 18:25:03 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <iv1hu5-6eo.ln1@mail.specsol.com>
Source record: 20279

Cecil Moore <nospam@w5dxp.com> wrote:
> jimp@specsol.spam.sux.com wrote:
>> If you are talking about home brew stuff, the general solution is to
>> clean, apply anti-oxide grease, and connect under compression, i.e.
>> something with a tightening screw.
>
> I'm putting my rotatable 20m dipole back up and am,
> once again, needing to connect ladder-line to
> aluminum tubing out in the weather. I guess I'll try
> brass hardware this time.

If there isn't already, stuff a short hunk of something solid like a fiberglass rod or wood dowel in the end where you make the connection, put terminals on the wires, use stainless screws with star lock washers under the screw head and between the terminal and tubing and the terminal and nut, anti-oxide grease, overwrap with sealing tape then with regular tape.

That's how I connected to the vertical in the middle of my lawn where the sprinklers hit it about a decade ago and there have been no problems.

FWIW, I tried brass (because someone gave me a bunch) for this sort of thing and switched to stainless.

--
Jim Pennino

Remove .spam.sux to reply.

4207. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 18:45:22 UTC
From: JB <nospam@goofball.net>
Message-ID: <67IRk.265$mi4.71@nwrddc02.gnilink.net>
Source record: 20280

>
> Red, yellow, and naval brass as well as aluminum bronze alloys are
> marginally anodic with respect to copper so these alloys would provide
> minimal corrosion protection. I know it might not be obvious, but steel
> would make a better intermediate metal.
>
> This will make sense if the actual voltages are included in the galvanic
> series. These voltages are in sea water and with respect to a standard
> calomel electrode.
>
> Zinc -0.98
to -1.03
> volts
> Aluminum -0.70 to -0.90 "
> Cast Iron -0.60 to -0.72
> "
> Steel -0.60
to -0.70
> "
> Red Brass, Yellow Brass, Naval Bross,
> Aluminum Bronze -0.30 to -0.40 "
> Copper -0.28 to -0.36
> "
>
>
> 73, Barry WA4VZQ
>
Always use Antenna Grease or equivalent on Aluminum contact points to keep the oxidation and moisture out. Steel is subject to rusting, so Stainless Steel or Galvanized Steel is best for antenna hardware to clamp to the Aluminum, and use tinned Brass or Copper loop-eye terminals soldered to the Copper wire and bolted with Stainless Steel or Galvanized hardware. Stainless should have a little Petroleum Jelly, NoAlox or Antenna Grease to keep threads from seizing. I have used Stainless Steel hose clamps and they work fine for quite a while.

Aluminum house wiring has been banned a lot of places and is a bad idea all around.
The problem is that the Aluminum is weaker. As it is flexed and heated at the connections, it will migrate out and the connection will get loose and you will have a cascade of oxidation and increased resistance. The recommended answer for that failure (If your house didn't burn) was to use a copper wire pigtail out to a wire-nut connection to the existing Aluminum wire with no-alox in the mix. Obviously, there is a loss of integrity and

"how to jam the wire nuts into the box" issues. If you have Aluminum house wiring, you should keep an eye on line drops all through the house and run new wiring for any big draw appliance addition.

4208. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 19:15:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <xzlRk.210$U5.55@nwrddc01.gnilink.net>
Source record: 20281

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:34e738e4-f2d3-42d1-9bf3-2c0486823dcb@t18g2000prt.googlegroups.com...
>Hate to tell you but I did tell you so, many, many times. Eat some
>humble pie!

not me. my antennas are big and high in the sky where they belong, not
packed in a shoebox. just scanning 25 years worth of contest certificates
that prove my big straight planar antennas do work.

4209. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 20:41:35 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <63f99f68-7749-448a-9b66-a5d011ce84cc@u29g2000pro.googlegroups.com>
Source record: 20282

On Nov 8, 1:15 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:34e738e4-f2d3-42d1-9bf3-2c0486823dcb@t18g2000prt.googlegroups.com...
>
> >Hate to tell you but I did tell you so, many, many times. Eat some
> >humble pie!
>
> not me. my antennas are big and high in the sky where they belong, not
> packed in a shoebox. just scanning 25 years worth of contest certificates
> that prove my big straight planar antennas do work.

Nothing wrong with that David the maximum boom length I got to was 80
feet and 13 elements
but then had to back off to 60feet but they surely worked good but
now
I have got to old to handle the work required to maintain them.
I was very surprized to hear you say that you were wired like Richard
so don't ventue in Illinois!
By the way did you get your four square antenna sorted out and is it
working to your expectations?
With respect to antenna height I have a feeling that height is not a
question of wavelengths but a question of
capacitive coupling to ground. I put the top band antenna up
temporarily at a height of thirty feet and the
the impedance settled on 50 ohms. I am now winterizing it so it gets
thru the winter. It consists of just one element
and a dish reflector but it will have to wait until next year before I
feed it at the dish end, in the mean time it will just be fed at the
centre
I still hope for directionality even tho the rotor is at 30 feet but
either way it will be interesting unless I move on to another project.
I had to move away from the shoebox size of antenna, what I found out
was it worked quite well for receiving but for transmit the eddy
currents opposed each other thus preventing particle elevation so the
volume is now double what it was but still small enough for the rotor
to turn the top band form and light enough to easily put it on the
tower
Regards
Art

4210. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-08 22:50:28 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <QIoRk.6753$ZP4.6558@nlpi067.nbdc.sbc.com>
Source record: 20283

Bart Bailey wrote:
> What about stainless hose clamps for more surface contact,
> and of course a liberal application of anti-oxide paste,
> maybe even some of that self vulcanizing tape on top of it all to try
> and obviate WX effects?

Been there, done that. Nothing seems to completely
solve the problem forever.
--
73, Cecil http://www.w5dxp.com

4211. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 00:35:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f66826c6-cf84-42c1-a909-020eb75dfacb@o40g2000prn.googlegroups.com>
Source record: 20285

On Nov 8, 10:14 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "Frank, What is the name of the actual book you are quoting from?"
>
> Read the posting!
>
> "Engineering Eleactromagnetics, 2nd edition", Nathan Ida, ISBN
> 0-387-20156-4."
>
> My unsolicited comment: Lyndon Johnson once described someneone like you
> approximately as: "He couldn`t pour beer out of a boot if instructions
> were stamped on the heel."
>
> Best regards, Richard Harrison, KB5WZI

Hopefully you now feel better after throwing that stone

4212. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 02:04:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7a50d60c-72ff-4ecf-b263-324d6e0e05d1@d36g2000prf.googlegroups.com>
Source record: 20286

On Nov 8, 11:06 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:178f8cc5-46ab-4d16-bed3-28fef062d923@u29g2000pro.googlegroups.com...
>
> > > As a non engineer and somebody who is wired diferntly from the norm
>
> > QED.

David,
I think I have misinterpreted your response above and I truly
apologize
I mistook the line above as a statement from you which I see now was
not
Now I am totally unaware of the point you are trying to make
Regards
Art

4213. Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 03:01:14 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9cd928df-389e-4147-85c7-7d2c732b2f40@r37g2000prr.googlegroups.com>
Source record: 20287

Thiking about the above subject I revert to the Gaussian field
aproach.
Everything in this Universe has it's own arbitrary border which must
include the Aether
otherwise if this was not so the arbitrary borders of the Earth,Sun
and other items
would have arbitrary borders that would abut each other. Since the
aether has an arbitrary border of its own it must be connected to
galactic particles and charges in equiulibrium. With the Suns
eruptions and other changes in particle distribution the passage of
particles into the arbitrary border would be never ending as would be
the escape of same which sugests a swirl of particles in orbit is what
constitutes the Aether. I understand the space program has confirmed
the presence ofmany different particles in the aether such as the
neutrinos from the Sun but I have not heard of the number or
identification of other particles that exist.Since within the aether
there is considerable number of particles with a high density I would
have thought the space program would have brought back some data with
respect to the Aether constituents and the orbit modes. Anybody have
any info on that? I am assuming the neutrinos are not part of the
orbiting particle mass but I may be wrong in that assumption, tho
these particles would only have 1/2 spin if any! Most certainly the
other type particles would not be diamagnetic otherwise neutrinos
would be part of the orbiting mass and probably contains all four
forces of the Universe including a gravitational pull e.t.c.
Regards
Art

4214. doug adair n8wwm Convicted crack dealer

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 03:43:08 UTC
From: lance adair <adair@limpwrist.com>
Message-ID: <l%sRk.2108$sl.1584@newsfe23.iad>
Source record: 20288
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

Was he convicted for that too now?

Lord knows he has been a trial and a tribulation on the family.

4215. Re:N8WWM the crack dealer

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 04:10:14 UTC
From: lance adair <adair@limpwrist.com>
Message-ID: <JotRk.2264$M_1.1248@newsfe01.iad>
Source record: 20289
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

<snipper cross post>

That has yet to be proven.

4216. Lawsuit countdown 24 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 04:25:13 UTC
From: kb9rqz@yahoo.com
Message-ID: <igpch4t3hgg0hn8lsieo5nhced6hsh5uj2@4ax.com>
Source record: 20290
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Sat, 8 Nov 2008 22:43:08 -0500, "lance adair" <adair@limpwrist.com>
wrote:

>
can the spaming stalking

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4217. Re: shownatova but the still after 121 day the lawsuit is still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 04:49:58 UTC
From: an old friend <kb9rqz@hotmail.com>
Message-ID: <894d571c-7661-4642-b022-4e1373951878@35g2000pry.googlegroups.com>
Source record: 20291
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

On Oct 5, 4:09 pm, "kb9rq...@hotmail.com" <kb9rq...@hotmail.com>
wrote:
> On Oct 4, 3:53 pm, "Ron" <apositivepl...@netscape.net> wrote:
>
>
>
> > plonk- Hide quoted text -
>
> - Show quoted text -

4218. Lawsuit countdown 24 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 04:55:52 UTC
From: kb9rqz@yahoo.com
Message-ID: <darch4lv23tb81saght63ejhv807pnlq5v@4ax.com>
Source record: 20292
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.cb

On Sat, 8 Nov 2008 20:49:58 -0800 (PST), an old friend
<kb9rqz@hotmail.com> wrote:

>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4219. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 06:02:40 UTC
From: nm5k@wt.net
Message-ID: <baefd3cc-b976-4bc8-8849-9050e489102d@i20g2000prf.googlegroups.com>
Source record: 20293

On Nov 8, 2:41 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

> I still hope for directionality even tho the rotor is at 30 feet but
> either way it will be interesting unless I move on to another project.

I'm sure it will be directive to some degree. But except for receive,
what good will that do you if you are 20db-30db down from a dipole
due to the excessive inductive losses?
I liken your setup to using a MW receiving loopstick as a transmit
antenna.. :/ Not a whole heck of a lot of difference except yours
is now a massive four shoe boxes in size. Mercy..
It's still puny considering the frequency.
My MW receiving loop in this room is bigger than that.
"A diamond 44 inches by 44 inches.
And my MW loop would almost certainly outdo your design
being as it is bigger and uses less turns of coil. "5"
It's still a dummy load on a rotating stick... :/

> I had to move away from the shoebox size of antenna, what I found out
> was it worked quite well for receiving but for transmit the eddy
> currents opposed each other thus preventing particle elevation so the
> volume is now double what it was but still small enough for the rotor
> to turn the top band form and light enough to easily put it on the
> tower

So we have validation that your first antenna was a dud when used
for transmitting! I'll alert the SPCA!
But I'm afraid doubling the size of your dummy load on a stick is
not going to pan out in the manner you would like.
Even four shoe boxes worth of wound wire maketh not a good 160m
antenna.
Reboot and try again.

4220. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 07:18:58 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <H9wRk.6911$Qb1.2255@newsfe19.iad>
Source record: 20294

"NoSPAM" <unknown@nospam.org> wrote in message
news:wN9Rk.9$9Z6.0@newsfe01.iad...
> ----- Original Message -----
> From: "Sal M. Onella" <salmonella@food.poisoning.org>
> Newsgroups: rec.radio.amateur.antenna
> Sent: Friday, November 07, 2008 11:20 PM
> Subject: Re: Aluminum to Copper interface

< snip >

> > 2. I see a lot of brass and darn little corrosion. Would a transition
> > piece of brass be acceptable?
> >
> > "Sal"
>
> Red, yellow, and naval brass as well as aluminum bronze alloys are
> marginally anodic with respect to copper so these alloys would provide
> minimal corrosion protection. I know it might not be obvious, but steel
> would make a better intermediate metal.
>
> This will make sense if the actual voltages are included in the galvanic
> series. These voltages are in sea water and with respect to a standard
> calomel electrode.
>
> Zinc -0.98
to -1.03
> volts
> Aluminum -0.70 to -0.90 "
> Cast Iron -0.60 to -0.72
> "
> Steel -0.60
to -0.70
> "
> Red Brass, Yellow Brass, Naval Bross,
> Aluminum Bronze -0.30 to -0.40 "
> Copper -0.28 to -0.36
> "

I saw those numbers decades ago -- in chem class, I guess. I cited brass
only because it seems to resist corrosion well, not because I actually know
what I'm talking about. <g>

73,
"Sal"
(actually KD6VKW)

4221. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 10:51:54 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ehzRk.353$U5.152@nwrddc01.gnilink.net>
Source record: 20295

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:9cd928df-389e-4147-85c7-7d2c732b2f40@r37g2000prr.googlegroups.com...

<snip pure uneducated bafflegab>

art, go to a good technical library and do some reading. or at least google a bit. the constituents of the solar wind have been sampled and measured for many years now. They are still learning some about it like the recent contributions of the nasa satellites in detecting the periodic coupling of the earth and solar wind magnetic fields that explains one of the methods that lets charged particles into the earths magnetopause. the solar neutrino flux is also fairly well understood and has been well measured.

4222. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 10:54:23 UTC
From: Dave <noone@nowhere.com>
Message-ID: <zjzRk.354$U5.351@nwrddc01.gnilink.net>
Source record: 20296

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:7a50d60c-72ff-4ecf-b263-324d6e0e05d1@d36g2000prf.googlegroups.com...
On Nov 8, 11:06 am, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:178f8cc5-46ab-4d16-bed3-28fef062d923@u29g2000pro.googlegroups.com...
>>
>> > As a non engineer and somebody who is wired diferntly from the norm
>>
>> QED.
>
>Now I am totally unaware of the point you are trying to make

and that is the point.

4223. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 15:32:44 UTC
From: ltdoc@yahoo.com
Message-ID: <287d0255-71c5-41f4-9287-a86cc79ed807@40g2000prx.googlegroups.com>
Source record: 20297

Art,
It's all relative.
- 'Doc

4224. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 16:07:30 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <aa2a889e-d0dd-4b44-bdb4-c7138eb2dc10@a29g2000pra.googlegroups.com>
Source record: 20298

On Nov 9, 4:51 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:9cd928df-389e-4147-85c7-7d2c732b2f40@r37g2000prr.googlegroups.com...
>
> <snip pure uneducated bafflegab>
>
> art, go to a good technical library and do some reading. or at least google
> a bit. the constituents of the solar wind have been sampled and measured
> for many years now. They are still learning some about it like the recent
> contributions of the nasa satellites in detecting the periodic coupling of
> the earth and solar wind magnetic fields that explains one of the methods
> that lets charged particles into the earths magnetopause. the solar
> neutrino flux is also fairly well understood and has been well measured.

Oh, I read a lot including scientific american but I don't soak up
things as fact.
Now that I have stumbled upon static particles and Neutrinos I look at
things in a different light and from my own perspective
For instance I easily can see the updraft of moisture also including
neutrinos
which becomes a lightning discharge as the moisture changes in
temperature and forming ice
where the neutrinos clump and return to earth in a strike containing a
magnetic field which can be seen asd totally disabling any compass
needle
as well as the
circular currents created to form tornadoes and whirlpools just as
eddy currfents are created.
I see all nature as being a similar phenomina from the four forces
whether mechanical, electrical or chemical
all of which eminates from particles with charge and their own
magnetic field. These thinkings may not all be correct
but with my confidence of how radiation is created to me it is only
natural to see if these same effects exist
in other Universl phenomina which to me are clones of basic phenomin a
of nature. Yes I read a lot but I never accept things as gospel as
history shows that it takes more than one shot to solve a jigsaw
puzzle where the individual parts do not have picture until all is put
in place.where on the road to understanding we have lots of differents
knoweledge areas that interconnect in many places but is only held
together by a theory that also has a paradox Spme would call this an
out of the box thinker which industry seeks in terms of diversity that
oft times provide a different aspect to solve a problem.

Maybe that is why I was invited with my family to the USA. This sort of thinking has now produced a antenna that is factual and not a approximation as all antennas are today. Yes it was found by accident by me when retracing the routes of the masters rather thasn acceptance at face value but by the understanding from first principles with the advances of the day which the masters did not have which often means that I assign different names to the norm
Best Regards
Art

4225. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 19:03:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <huGRk.421$U5.373@nwrddc01.gnilink.net>
Source record: 20299

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:aa2a889e-d0dd-4b44-bdb4-c7138eb2dc10@a29g2000pra.googlegroups.com...
On Nov 9, 4:51 am, "Dave" <no...@nowhere.com> wrote:

>For instance I easily can see the updraft of moisture also including
>neutrinos
>which becomes a lightning discharge as the moisture changes in
>temperature and forming ice
>where the neutrinos clump and return to earth in a strike containing a
>magnetic field which can be seen asd totally disabling any compass
>needle
>as well as the
>circular currents created to form tornadoes and whirlpools just as
>eddy currfents are created.

now that will put some researchers out on their buns after a lifes worth of
work studying lighting as electrons. its only neutrinos, they have been
barking up the wrong tree all along, the first 'masters' studied lightning
and static electricity they understood it to be movement of electrons, but
they were all wrong. even gauss must be wrong now since his fields are
based on the same static charges caused by electrons and protrons.
neutrinos have no charge, their motion can not cause a magnetic field, nor
do they cause tornadoes. thanks for a good laugh on an otherwise dull day.

4226. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 20:18:02 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d903988b-7ebc-45f6-aedf-2a24cae29b53@z6g2000pre.googlegroups.com>
Source record: 20300

On Nov 9, 1:03 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:aa2a889e-d0dd-4b44-bdb4-c7138eb2dc10@a29g2000pra.googlegroups.com...
> On Nov 9, 4:51 am, "Dave" <no...@nowhere.com> wrote:
>
> >For instance I easily can see the updraft of moisture also including
> >neutrinos
> >which becomes a lightning discharge as the moisture changes in
> >temperature and forming ice
> >where the neutrinos clump and return to earth in a strike containing a
> >magnetic field which can be seen asd totally disabling any compass
> >needle
> >as well as the
> >circular currents created to form tornadoes and whirlpools just as
> >eddy currfents are created.
>
> now that will put some researchers out on their buns after a lifes worth of
> work studying lighting as electrons. its only neutrinos, they have been
> barking up the wrong tree all along, the first 'masters' studied lightning
> and static electricity they understood it to be movement of electrons, but
> they were all wrong. even gauss must be wrong now since his fields are
> based on the same static charges caused by electrons and protrons.
> neutrinos have no charge, their motion can not cause a magnetic field, nor
> do they cause tornadoes. thanks for a good laugh on an otherwise dull day.

Interesting but the neutrinos can obtain a charge when entering the
Aether
which in itself I see as a magnetic field of particles enclosed by an
arbtrary border.
When one complets the math of comparing Gauss's law of static compared
with
his law of magnetics contained in Maxwell's laws it is not enough to
leave it at that,
a single mathematical excercize you must go on and compare with other
phenomina and physics matrhematics so your fi8ndings do not clash with
known and accepted phenomina
where substitution of ones findings can be inserted into other
accepted physics formula in terms of interconnecting
truth. Tbhus my findings have to supported by the mathematics in form
of substitutions in accepted and existing formula
as well as in the experimental trail. Thus my work has to be extended
not only by experimental results but also
via substitution in other formular excercised in other areas, this

took time but eventually I succeeded.
As far as the weather is concerned what creats lightning or tornadoes
and many other things have not been previously explained
such that they would be verified from another direction that includes
my findings.
So my thinking are not just idle thought but an effort to match my
physics findings with those of others an d this ofcourse includes the
identification of all four forces of the universe so advances can be
made on a solid foundation.
Weather is a bit chilly but not cold enough to prevent tower and
antenna work
Best regards
Art KB9MZ....,..XG

4227. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 20:47:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rhheh41t6i7tdtuopj9os67pug5jsonu4t@4ax.com>
Source record: 20301

On Sun, 09 Nov 2008 19:03:41 GMT, "Dave" <noone@nowhere.com> wrote:

>
>"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
>news:aa2a889e-d0dd-4b44-bdb4-c7138eb2dc10@a29g2000pra.googlegroups.com...
>On Nov 9, 4:51 am, "Dave" <no...@nowhere.com> wrote:
>
>>For instance I easily can see the updraft of moisture also including
>>neutrinos
>>which becomes a lightning discharge as the moisture changes in
>>temperature and forming ice
>>where the neutrinos clump and return to earth in a strike containing a
>>magnetic field which can be seen asd totally disabling any compass
>>needle
>>as well as the
>>circular currents created to form tornadoes and whirlpools just as
>>eddy currfents are created.
>
>now that will put some researchers out on their buns after a lifes worth of
>work studying lighting as electrons. its only neutrinos, they have been
>barking up the wrong tree all along, the first 'masters' studied lightning
>and static electricity they understood it to be movement of electrons, but
>they were all wrong. even gauss must be wrong now since his fields are
>based on the same static charges caused by electrons and protrons.
>neutrinos have no charge, their motion can not cause a magnetic field, nor
>do they cause tornadoes. thanks for a good laugh on an otherwise dull day.
>

Dave,

You interpret his quote too broadly (understandable given the murk
that has to be penetrated). If you re-read the quote you offer, it
offers absolutely nothing that distinguishes the participation of
neutrinos in the process.

Neutrinos don't
1. constitute a current (they are neutral!);
2. become a lightning discharge (they go for the ride!);
3. have a magnetic field (they don't have a charge!);
4. upset a compass (they are inert!);
5. create currents (they don't have any mass!);
6. form tornadoes and whirlpools (not enough magik!).

Basically, neutrinos are freeloading bums whose only accomplishment is
to queue up for a dole. If they move with a current (which is
doubtful given their aversion to work), it is like a hobo riding the

rails. To say a hobo runs the nation's railroads is equally absurd. Neutrinos cannot even summon up a charge where the panhandler on the street is far more productive.

Neutrinos only rub shoulders with the doers and shakers (electrons and ions) so that they can seem important by association. This is why they are the pathetic cousin in physics who have to be flung at high speeds into targets to get them to perform any form of useful work.

Neutrinos remind me of the time when Hare Krishnas, to look mystical and spiritual, danced and clanged their cymbals in airports for spare change.

Trying to offer neutrinos as important is the intellectual equivalent of portraying skid-row as the Valhalla of learning.

73's
Richard Clark, KB7QHC

4228. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 22:41:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d2bd9e47-20f8-4947-8536-6d411545b813@e1g2000pra.googlegroups.com>
Source record: 20302

On Nov 9, 1:03 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:aa2a889e-d0dd-4b44-bdb4-c7138eb2dc10@a29g2000pra.googlegroups.com...
> On Nov 9, 4:51 am, "Dave" <no...@nowhere.com> wrote:
>
> >For instance I easily can see the updraft of moisture also including
> >neutrinos
> >which becomes a lightning discharge as the moisture changes in
> >temperature and forming ice
> >where the neutrinos clump and return to earth in a strike containing a
> >magnetic field which can be seen asd totally disabling any compass
> >needle
> >as well as the
> >circular currents created to form tornadoes and whirlpools just as
> >eddy currfents are created.
>
> now that will put some researchers out on their buns after a lifes worth of
> work studying lighting as electrons. its only neutrinos, they have been
> barking up the wrong tree all along, the first 'masters' studied lightning
> and static electricity they understood it to be movement of electrons, but
> they were all wrong. even gauss must be wrong now since his fields are
> based on the same static charges caused by electrons and protrons.
> neutrinos have no charge, their motion can not cause a magnetic field, nor
> do they cause tornadoes. thanks for a good laugh on an otherwise dull day.

David
You must read and understant the "electromagnetic properties of
Neutrinos"
which is up to date. You should be able to google it. In the last
decade many new facts have come to light with respect to Neutrinos
which is in fact driving the huge expeditures at CERN.
There are a lot of people usually older people who rely on the books
they used in college
50 years ago such they feel all is known and therefore do not keep up
with studies since money becomes
the replacement. If you google the title I gave you it will bring you
up to date within a year or so which will
allow you to weed out old assertions uttered by those who have retired
from study.
If it is dismal and cold in Michigan then make use of the evening by
reading up on the subject to get up to date
Regards
Art

4229. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-09 23:11:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h5reh4t3p6ak1k9rks626uctbu4tpj8b4s@4ax.com>
Source record: 20303

On Sun, 9 Nov 2008 14:41:07 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>You must read and understant the "electromagnetic properties of
>Neutrinos"
>which is up to date.

"Because neutrinos are very weakly interacting, neutrino detectors
must be very large in order to detect a significant number of
neutrinos."

It would seem that the detector (and the corresponding transmitter) of
neutrinos would have to be larger than a shoe box, or two. In fact,
the size of CERN (that is, afterall, why they built it) which is
"with a diameter of 2 kilometres built in a tunnel"
would scarce lift the S-Meter off its peg.

Reading about these lazy welfare queens of physics may be entertaining
on a cold winter's night, but throwing a few bajillion in the
fireplace won't add one calorie of warmth.

73's
Richard Clark, KB7QHC

4230. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 00:25:20 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <PbLRk.4448$wn7.1087@newsfe25.iad>
Source record: 20304

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:H9wRk.6911$Qb1.2255@newsfe19.iad...
> I saw those numbers decades ago -- in chem class, I guess. I cited brass
> only because it seems to resist corrosion well, not because I actually
> know
> what I'm talking about. <g>

Hi Sal,

As an instrumentation designer who worked mainly in the chemical industry, corrosion abatement and material selection were daily facts of life. On more than one occasion, the company metallurgists saved my rear end. For example, stainless steel can be both cathodic and anodic with respect to itself. While most folks consider stainless a panacea for corrosion problems, it is not. In fact stainless alloys have little resistance to salt water. There are many poor owners of stainless auto exhaust systems that learn this the hard way when streets are salted in the winter to melt ice. Copper, brass, and bronze alloys are used in marine environments because of their anti-biofouling properties (barnacles, coral, mussels, etc.).

I try to make my posts educational when I can. Thanks for telling me that you had seen these numbers before. I hope they made a little sense this time. I think if we all were back in school, we might pay more attention this time. I know I would!

73, Barry WA4VZQ

4231. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 00:45:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <026c4161-bb84-4de8-b42f-9b78600fcff5@q30g2000prq.googlegroups.com>
Source record: 20305

On Nov 9, 1:03 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:aa2a889e-d0dd-4b44-bdb4-c7138eb2dc10@a29g2000pra.googlegroups.com...
> On Nov 9, 4:51 am, "Dave" <no...@nowhere.com> wrote:
>
> >For instance I easily can see the updraft of moisture also including
> >neutrinos
> >which becomes a lightning discharge as the moisture changes in
> >temperature and forming ice
> >where the neutrinos clump and return to earth in a strike containing a
> >magnetic field which can be seen asd totally disabling any compass
> >needle
> >as well as the
> >circular currents created to form tornadoes and whirlpools just as
> >eddy currfents are created.
>
> now that will put some researchers out on their buns after a lifes worth of
> work studying lighting as electrons. its only neutrinos, they have been
> barking up the wrong tree all along, the first 'masters' studied lightning
> and static electricity they understood it to be movement of electrons, but
> they were all wrong. even gauss must be wrong now since his fields are
> based on the same static charges caused by electrons and protrons.
> neutrinos have no charge, their motion can not cause a magnetic field, nor
> do they cause tornadoes. thanks for a good laugh on an otherwise dull day.

David
Pull yourself together.
Neutrons ARE a form of electrons. (leptons)
Neutrons are not within the arbitrary boundary provided by Gauss
Neutrons DO contain charge
It is assumed there are anti neutrons because they are suspected of
being rotating dipoles
this because they have a magnetic field
Yes they do have a magnetic field
They are attracted to diamagnetic materials as free electrons where
they do not become absorbed.
Detectors were placed underground on the ASSUMPTION that they passed
thru earth without stopping
Updrafts in storms suck up diamagnetic materials which include
neutrinos, frogs and the like
Take away the moisture that they rest upon until the resting density
is high whence they return to the Earth
mainly a diamagnetic material.

And it goes on and on.
Please read up on the properties of Neutrons as there has been a lot found out in Japan, U.S. and other places
in the last few years that have turned the info on Neutrons on its head.
Old books are just not up to date
Regards
Art
Lightning strikes or the descent of charged particles will send nearby magnets haywire.
Detectors of heavy water are large in area because the size/mass of neutrinos is so small.
Cern is applying high speed to neutrinos purely to obtain an impact of such power that it will
provide details

4232. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 01:15:00 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <32eku5-6q1.ln1@mail.specsol.com>
Source record: 20306

Art Unwin <ArthurUnwin@gmail.com> wrote:

> Pull yourself together.

Apparently easier said then done.

> Neutrons ARE a form of electrons. (leptons)

<snip crap>

neutron: classification baryon, electric charge 0

neutrino: elementary particle, electric charge 0

electron: elementary particle, electric charge 1.6 X 10-19 C

proton: classification baryon, electric charge 1.6 X 10-19 C

--
Jim Pennino

Remove .spam.sux to reply.

4233. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 02:29:00 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <23e4f03e-bad1-4b68-995a-b65003183644@a29g2000pra.googlegroups.com>
Source record: 20307

On Nov 9, 7:15 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > Pull yourself together.
>
> Apparently easier said then done.
>
> > Neutrons ARE a form of electrons. (leptons)
>
> <snip crap>
>
> neutron: classification baryon, electric charge 0
>
> neutrino: elementary particle, electric charge 0
>
> electron: elementary particle, electric charge 1.6 X 10-19 C
>
> proton: classification baryon, electric charge 1.6 X 10-19 C
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Jim, where does this information come from?. To my unqualified mind it
appears to be some what dated
possibly back to the the time that neutrnos was considered to be
without mass!
Art

4234. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 02:38:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dr6fh4dpcp6qpmc6gubobvjqveccibf75n@4ax.com>
Source record: 20308

On Mon, 10 Nov 2008 01:15:00 GMT, jimp@specsol.spam.sux.com wrote:

>Art Unwin <ArthurUnwin@gmail.com> wrote:
>
>> Pull yourself together.
>
>Apparently easier said then done.

For a neutrino, certainly. No charge to repel, no mass to get in the
way, no interference because it is unattractive (like a sidewalk wino
on a Saturday night... the "Lost Weekend" of particle physics).
Neutrino: an electron without cojones;
a proton without that wild thang.

Who would sit up nights waiting for a phone call (-um- radio program)
from a Neutrino?

***** Google approved and validated, trust no imitators *****

73's
Richard Clark, KB7QHC

4235. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 03:02:18 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <EoNRk.63367$De7.20072@bignews7.bellsouth.net>
Source record: 20309

The answer is a tinned crimp-sleeve or a tinned mechanical sleeve
Here's one http://www.rshughes.com/products/054007_13319.html
Hope this helps

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:HF1Rk.5561$as4.4180@nlpi069.nbdc.sbc.com...
> I'm no metallurgist so forgive my ignorance. Most of
> us have had the problem of interfacing copper to
> aluminum. Is there some sort of alloy terminal block
> that will accomplish that feat? Seems simple enough
> to create an alloy that gradually transitions from
> copper to aluminum but what do I know?
> --
> 73, Cecil http://www.w5dxp.com

4236. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 04:11:37 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <wtORk.1087$Lv6.286@bignews8.bellsouth.net>
Source record: 20310

Who woulda thunk it - Look at this alum-to-copper twister wire connector
http://www.idealindustries.com/products/wire_termination/twist-on/twister_al-cu.jsp
Google helped to find it
Hope this helps
Hal - W4PMJ

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:HF1Rk.5561$as4.4180@nlpi069.nbdc.sbc.com...
> I'm no metallurgist so forgive my ignorance. Most of
> us have had the problem of interfacing copper to
> aluminum. Is there some sort of alloy terminal block
> that will accomplish that feat? Seems simple enough
> to create an alloy that gradually transitions from
> copper to aluminum but what do I know?
> --
> 73, Cecil http://www.w5dxp.com

4237. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 08:54:53 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <DFSRk.448$Yu5.96@newsfe24.iad>
Source record: 20311

"NoSPAM" <unknown@nospam.org> wrote in message
news:PbLRk.4448$wn7.1087@newsfe25.iad...

< snip >

> I think if we all were back in school, we might pay more attention
> this time. I know I would!

Yup. A smarter man than I said, "We'll only need about five percent of what we learned in college; too bad nobody knows which five precent."

4238. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 12:43:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <3YVRk.3399$8_3.2878@flpi147.ffdc.sbc.com>
Source record: 20312

Art Unwin wrote:
> Neutrons ARE a form of electrons. (leptons)

Art, you seem to be confusing neutrons and
neutrinos. It is unfortunate that their names
are so similar. Electrons and neutrinos are
leptons. Protons and neutrons are baryons.
--
73, Cecil http://www.w5dxp.com

4239. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 12:52:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <z8WRk.7850$YU2.2920@nlpi066.nbdc.sbc.com>
Source record: 20313

Hal Rosser wrote:
> The answer is a tinned crimp-sleeve or a tinned mechanical sleeve
> Here's one http://www.rshughes.com/products/054007_13319.html

Thanks, Hal. I figured they had to exist.
--
73, Cecil http://www.w5dxp.com

4240. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 13:28:46 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <110cca43-245b-4734-a990-dc29c4a87d20@o4g2000pra.googlegroups.com>
Source record: 20314

On Nov 10, 6:43 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Art Unwin wrote:
> > Neutrons ARE a form of electrons. (leptons)
>
> Art, you seem to be confusing neutrons and
> neutrinos. It is unfortunate that their names
> are so similar. Electrons and neutrinos are
> leptons. Protons and neutrons are baryons.
> --
> 73, Cecil http://www.w5dxp.com

Thanks,
I will watch out for that in future
Same goes for Lorentz and Coulumb they bvoth have
patriots with very similar lnames.Maybe that is why
some of the odd statements are being made.about
Neutrinos and their respective charges.
I think I should let this thread fade away
Regards
Art

4241. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 16:25:50 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <fe9cfd26-0a40-4f63-b4c4-d8ae0c524ab6@n33g2000pri.googlegroups.com>
Source record: 20315

On Nov 10, 7:28 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 10, 6:43 am, Cecil Moore <nos...@w5dxp.com> wrote:
>
> > Art Unwin wrote:
> > > Neutrons ARE a form of electrons. (leptons)
>
> > Art, you seem to be confusing neutrons and
> > neutrinos. It is unfortunate that their names
> > are so similar. Electrons and neutrinos are
> > leptons. Protons and neutrons are baryons.
> > --
> > 73, Cecil http://www.w5dxp.com
>
> Thanks,
> I will watch out for that in future
> Same goes for Lorentz and Coulumb they bvoth have
> patriots with very similar lnames.Maybe that is why
> some of the odd statements are being made.about
> Neutrinos and their respective charges.
> I think I should let this thread fade away
> Regards
> Art

While I am at it the particle that I refer to may well not be a
neutrinos
but it does seem to fit. Neutrons and all the other chemical particles
that I have negligently brought into the subject
do not have a place in my theory with respect to radiation
just a particle which I feel inclined to call a Neutrinos
I say this for archive purposes so the error that I have been making
in my typing
is cleared for the record
Thanks Cecil
Art
Art

4242. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 16:55:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <nh5mu5-7m9.ln1@mail.specsol.com>
Source record: 20316

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Nov 9, 7:15 pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > Pull yourself together.
>>
>> Apparently easier said then done.
>>
>> > Neutrons ARE a form of electrons. (leptons)
>>
>> <snip crap>
>>
>> neutron: classification baryon, electric charge 0
>>
>> neutrino: elementary particle, electric charge 0
>>
>> electron: elementary particle, electric charge 1.6 X 10-19 C
>>
>> proton: classification baryon, electric charge 1.6 X 10-19 C
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> Jim, where does this information come from?. To my unqualified mind it
> appears to be some what dated
> possibly back to the the time that neutrnos was considered to be
> without mass!
> Art

Just about anywhere one would care to look.

None of the above information has changed in the slightest since many
decades before the 1998 Super-Kamiokande neutrino detector results.

--
Jim Pennino

Remove .spam.sux to reply.

4243. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 17:05:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <is5mu5-7m9.ln1@mail.specsol.com>
Source record: 20317

Richard Clark <kb7qhc@comcast.net> wrote:
> On Mon, 10 Nov 2008 01:15:00 GMT, jimp@specsol.spam.sux.com wrote:
>
>>Art Unwin <ArthurUnwin@gmail.com> wrote:
>>
>>> Pull yourself together.
>>
>>Apparently easier said then done.
>
> For a neutrino, certainly. No charge to repel, no mass to get in the
> way, no interference because it is unattractive (like a sidewalk wino
> on a Saturday night... the "Lost Weekend" of particle physics).
> Neutrino: an electron without cojones;
> a proton without that wild thang.
>
> Who would sit up nights waiting for a phone call (-um- radio program)
> from a Neutrino?
>
> ***** Google approved and validated, trust no imitators *****
>
> 73's
> Richard Clark, KB7QHC

Current thinking is that neutrinos have a mass on the order of 0.1 eV.

The mass of an electron for comparison is about 0.5 MeV.

--
Jim Pennino

Remove .spam.sux to reply.

4244. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 18:08:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f8fabd52-79fc-4a7a-a4ae-ca1773822968@z28g2000prd.googlegroups.com>
Source record: 20318

On Nov 10, 11:05 am, j...@specsol.spam.sux.com wrote:
> Richard Clark <kb7...@comcast.net> wrote:
> > On Mon, 10 Nov 2008 01:15:00 GMT, j...@specsol.spam.sux.com wrote:
>
> >>Art Unwin <ArthurUn...@gmail.com> wrote:
>
> >>> Pull yourself together.
>
> >>Apparently easier said then done.
>
> > For a neutrino, certainly. No charge to repel, no mass to get in the
> > way, no interference because it is unattractive (like a sidewalk wino
> > on a Saturday night... the "Lost Weekend" of particle physics).
> >   Neutrino: an electron without cojones;
> >   a proton without that wild thang.
>
> > Who would sit up nights waiting for a phone call (-um- radio program)
> > from a Neutrino?
>
> > ***** Google approved and validated, trust no imitators *****
>
> > 73's
> > Richard Clark, KB7QHC
>
> Current thinking is that neutrinos have a mass on the order of 0.1 eV.
>
> The mass of an electron for comparison is about 0.5 MeV.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Thank you for that. Hopefully that is put to bed
Art

4245. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 18:24:01 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <5%_Rk.1520$xJ3.65@edtnps83>
Source record: 20319

>I am also pleased that the present generation are using up to date
>material and not the books of 50 years ago
>where those taught at that time all was thought to be known and all
>change was resisted.

Art, I am not sure what you mean. This material has not changed
in over 100 years. To quote from Ida's text, pp 731, 732: "Based
on the inroduction of the displacement currents in Ampere's law,
Maxwell predicted the existence of propagating waves, a prediction
that was verified experimetally in 1888 by Heinrich Hertz. This prediction
was based on the nature of the equations one obtains by using Maxwell's
equations. We will show here that Maxwell's equations result, in general,
in wave equations". This proof is shown in "Example 12.3", which is
posted on my previously referenced web link:
http://www3.telus.net/nighttrainexpress/maxwell_1.htm
Unless you can show, by manipulation of Maxwell's equations, that it
is possible to obtain a 2nd order partial differential equation where the
independant variable is time; what is the point? I should also note
that a course I took in electromagetics (About 1983) has an almost
identical development of a wave equation. For reference the text is:
"Introduction to Electromagnetic Fields", Clayton R Paul, and
Syed A Nasar, published in 1982, ISBN 0-07-045884-7, pp 241 - 243

73,

Frank.

4246. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 19:15:57 UTC
From: dplatt@radagast.org
Message-ID: <dsdmu5-mf6.ln1@radagast.org>
Source record: 20320

In article <nh5mu5-7m9.ln1@mail.specsol.com>,
<jimp@specsol.spam.sux.com> wrote:
>Art Unwin <ArthurUnwin@gmail.com> wrote:

>>> > Pull yourself together.
>>>
>>> Apparently easier said then done.
>>>
>>> > Neutrons ARE a form of electrons. (leptons)

>>> <snip crap>
>>>
>>> neutron: classification baryon, electric charge 0
>>>
>>> neutrino: elementary particle, electric charge 0
>>>
>>> electron: elementary particle, electric charge 1.6 X 10-19 C
>>>
>>> proton: classification baryon, electric charge 1.6 X 10-19 C

I wonder if Art meant to say "Neutrinos ARE a form of electrons.
(leptons)".

That would be closer to the truth than what was actually quoted above,
in that electrons and neutrinos are both leptons.

It's still incorrect, though, according to the definitions I've read.
Although neutrinos and electrons are both leptons, that doesn't mean
that "neutrinos are a form of electrons".

By analogy: dogs and cats are both mammals. That doesn't mean that
dogs are a type of cat, or that cats are a type of dog.

For what it's worth - I have seen no evidence at all to indicate that
flows of neutrinos have anything whatsoever to do with the behavior of
antennas or with the transfer of electromagnetic energy from/to
antennas and/or free space.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4247. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 20:10:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2p4hh457cni89jnhvgngsi2es48kfrpodu@4ax.com>
Source record: 20321

On Mon, 10 Nov 2008 08:25:50 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>While I am at it the particle that I refer to may well not be a
>neutrinos

It is not like a neutrino ...but:
>but it does seem to fit.

A massless, chargeless particle works for enhancing RF radiation?

>Neutrons and all the other chemical particles
>that I have negligently brought into the subject
> do not have a place in my theory with respect to radiation

That pretty much tosses out the baby with the bathwater.

>just a particle which I feel inclined to call a Neutrinos

So, you now claim to have invented/discovered an unknown particle that
you are going to name a Neutrinos? (Convention would probably bristle
at adding just an s makes it respectable science.) Is this a
creationist particle?

Why not call it an Artrino or Unwintron? How did you discover it?
What did you use as a detector? Were you listening to 160M when it
came on with a signature tune like Big Ben and the BBC?

73's
Richard Clark, KB7QHC

4248. Re: Stinky man smelling hams and perfumy scented sissy hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 20:46:51 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <IZ0Sk.86772$XB4.74089@bignews9.bellsouth.net>
Source record: 20322

Every generation that I have encountered (three) during my life time is absolutely convinced that they know everything and that there is nothing left to discover. I usually find this trait to be most displayed with electrical engineers, though software engineers run a very close second place.

Ed, NM2K

4249. Re: Aether constituents and certainly none of them would be.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 20:48:21 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <6%0Sk.86775$XB4.73712@bignews9.bellsouth.net>
Source record: 20323

Quantum foam = Aether. End of discussion.

Ed, NM2K (for a bit longer)

4250. Re: BASE Station CB radios and Linear AMP

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 20:51:12 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <O11Sk.86777$XB4.60648@bignews9.bellsouth.net>
Source record: 20324

"Mike Kulyk" <mkulyk@optonline.net> wrote in message
news:49143234$0$14278$607ed4bc@cv.net...
>I have 2 older CB BASE station radios. ONE IS SSB.. and the other is AM
>only
>
> And I have a 100 + watt Knight T 175 AMP. 10 mtr and 6 mtr AMP. ALL THIS
> EQUIPMENT IS IN NEED OF REPAIR. THE AM unit comes on and I got sound out
> of
> it. Squelch Noise. COMES WITH NICE TURNER DESK MIC
>
> THE SSB radio has NO power cord.. SO I could not power it. COMES with
> MIC.,.
>
> THE AMP powered up.. Made some noise. SO I pulled the plug.
>
> Pictures of all above by e-mail.
>
> I will trade for a NON working HF transceiver.
>
> 73
>
> Mike WB2GLW

I'll bet you would. <G>

Seriously, just kidding and no offense intended.

I have some old CB stuff that I used in the Seventies. It appalls me just how little this gear brings on the used market.

If I had a non working HF rig, I'd give it to you. It wouldn't be the first time that I've given a rig away just to get someone up and running on the ham bands. After all, lots of people helped me out and I still appreciate it.

Ed, NM2K

4251. SM0VPO Homepages - update

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 21:32:30 UTC
From: Harry Lippitz <johnsmith@micro$oft.com>
Message-ID: <OL1Sk.3974$U5.25888@newsb.telia.net>
Source record: 20325

Hi all,

A few things have happened since my last update. The homepages are to be found at http://web.telia.com/~u85920178/ where there are some 250+ projects, many with PCB foil patterns in BMP format, 250 dpi. This means you do not need any special software to view it.

The last antenna was a 145MHz colinear stuffed up plastic drainpipe. Hell of a gain, but it needs support. The only problem with it is that under stron sunlight the plastic pipe bends away from the sun!

The lastest project was DIY transformers. the link is http://web.telia.com/~u85920178/power/diy_transformers.htm and it uses those cheap transformers from http://www.kjell.com

I also did an article on diode switching basics, but this I also translated into Swedish and sent to the SSA for publication. The URL for the original article is http://web.telia.com/~u85920178/data/diode_switching_01.htm

The old messageboard is now defunkt - kaput - deceased. Instyead I have a nice new forum at http://sm0vpo.wahlberg.cc but you should bookmark the address http://web.telia.com/~u85920178/board.htm so that I can again change in the future. The new board is hosted by Magnus Wahlberg in Eskilstuna, and a fine thing it is too. Message at the bottom do not just drop off into space. Old messages stay there until I or a moderator deletes them.

Perhaps you never thought about it, but the old formula for frequency = 1 / 2 x Pi x Root(LC), and the only variables are F, L and C. So for any value of F you can build a table of Root(LC) values. For example an index of 1MHz = 25000. If you divide 25000 by 250pf you need 25000/250 = 100uH for resonance.The value for 2MHz is 6250, so if you subtract one index from the other, you can work out the variable capacitor you need to track tuning between the two frequencies. The article is at http://web.telia.com/~u85920178/data/tune_01.htm

Future articles are many and I have several that are all nearing completion. Progress is interrupted by a speeding ticket with one of those stooopid speed cameras. Now I know how they function I will shortly be publishing a speed-camera blocker. I will also offer a few in kit form, until I get my 2400:- back.

I have also finished a "Generating 230V AC Power in 5 Minutes" video film. The link is at http://www.youtube.com/watch?v=t3yvdXIjGSo

Best regards to all from Harry - SM0VPO
SKYPE: "harry.sm0vpo"

E-mail: oeieio@hotmail.com

4252. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 21:36:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <37afbd0c-d9c9-4266-9fe9-91576d1cb9f5@v39g2000pro.googlegroups.com>
Source record: 20326

On Nov 10, 12:24 pm, "Frank" <ve...@nospam.telus.net> wrote:
> >I am also pleased that the present generation are using up to date
> >material and not the books of 50 years ago
> >where those taught at that time all was thought to be known and all
> >change was resisted.
>
> Art, I am not sure what you mean. This material has not changed
> in over 100 years. To quote from Ida's text, pp 731, 732: "Based
> on the inroduction of the displacement currents in Ampere's law,
> Maxwell predicted the existence of propagating waves, a prediction
> that was verified experimetally in 1888 by Heinrich Hertz. This prediction
> was based on the nature of the equations one obtains by using Maxwell's
> equations. We will show here that Maxwell's equations result, in general,
> in wave equations". This proof is shown in "Example 12.3", which is
> posted on my previously referenced web
link:http://www3.telus.net/nighttrainexpress/maxwell_1.htm
> Unless you can show, by manipulation of Maxwell's equations, that it
> is possible to obtain a 2nd order partial differential equation where the
> independant variable is time; what is the point? I should also note
> that a course I took in electromagetics (About 1983) has an almost
> identical development of a wave equation. For reference the text is:
> "Introduction to Electromagnetic Fields", Clayton R Paul, and
> Syed A Nasar, published in 1982, ISBN 0-07-045884-7, pp 241 - 243
>
> 73,
>
> Frank.

Frank, a couple of years ago I explained the inter weaving of Gauss
law of statics
with that of Maxwell. I twas this that met the most resistance of the
this group.
They seemed to see staics as something divorced from electromagnetics
and thus
one could not use equations of one with respect to the other. Thus
when it was shown
that the statics mathematics equated with Maxwells laws every body
said that was not valid.
The text you supplied made specific reference to this mathematical
interplay whilst talking about quasi
statics tho they never did the interface that I did. It was this
rejection at the beginning that set the stage
for years long rebuttle to the ideas that I put forward. To this day
pretty much all are of the position that interfacing

statics with dynamic fields or time varying currents was totally invalid which I put down to the education they received some 50 years ago.
It was for that reason I was delighted to see a modern book that treated the subject with startling clarity.
About 2 years ago a white paper was put out by two scientists that covers the Aether and its driving relationship
to the Universe as well as revisiting the thinkings of the past with which they outlined questions that the present aproach
seem to gloss over, as well as the revolving constituents(not foam) of the fast moving and revolving Aether and comparing present day notions
of the Univers as opposed to their own findings. This paper is excellent and shows that many present day notions could be way of the mark
Thus it pleases me that many are still questioning or reviewing the logic of electromagnetics including the more modern works of Planck in light of present day advances which certainly does not reflect the attitude of many in this group. In science and physics it is not a crime to challenge the thinkings of the past regardless if it may result in change as age of a theory does not present the idea of validity goes along with seniority
As an aside modern books still refer to waves in electromagnetics but I feel this is a result of not understanding how radiation occurs and thus concluding it similar to magnetic lines of force where as I theorise it is the multi quantity of elevation and projection of charged particles with spin such that straight line trajectory is maintained , a must for transmission of radio communications by virtue of the "weak force"
Regards
Art

4253. Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 21:48:29 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <998b7488-3722-483b-a325-b0bbb75389c6@w24g2000prd.googlegroups.com>
Source record: 20327

I've had my all-band-doublet up at 90 feet for over a year now with ladder-line spacers cut from polycarbonate sheet. Works great, is kinda pretty in the right light. The polycarbonate is supposed to be relatively UV-resistant and it seems to be doing pretty good.

But I have a hankering to use wooden insulators next time I put an antenna up.

The old ARRL handbooks always recommended boiling wooden feedline spacers in paraffin wax for weatherproofing. I suppose the idea is that it's water-repellent. Don't know how long this can be expected to survive weather extremes (ice, heat). In my experiments in my garage, the wax coating seems to pretty much rub right off with my fingernail, so I'm not sure how much good it does where the feed wires or tie wires abrades against it.

Shellac is another option I suppose, but shellac seems to me to be something like the enamel coating on magnet wire, and having used this in rooftop antennas in the past I was quite surprised that in the summer it gets hot enough up there to burn off the enamel.

Spar varnish seems to be the ultimate in wood coatings for weather resistance.

Any words of wisdom? Or is polycarbonate really the cat's meow?

Having fabricated antenna stuff out of both plexiglass and polycarbonate over the years, I am very very impressed with polycarbonate's workability. It does not craze or crack the way that plexiglass does.

Tim N3QE

4254. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 23:38:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r1hhh4p0tcrlfpfvok48iq4ddaf33rmnog@4ax.com>
Source record: 20328

On Mon, 10 Nov 2008 13:36:56 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>statics mathematics equated with Maxwells laws

Well, it didn't take long for amnesia to emerge from remission.

Just to set the time-line:
>On Sat, 08 Nov 2008 08:18:20 -0800, Richard Clark <kb7qhc@comcast.net> wrote:
>
>>on page:
>>http://www3.telus.net/nighttrainexpress/maxwell_1.htm
>>at the paragraph heading (guess what?):
>> "The Time-Dependant Wave Equation"
>>This is a part of the curriculum of every EE who has attempted to
>>educate you to this matter. Even this non engineer has formal
>>training to this specific point.
>>
>>You now have been offered clear, specific, and demonstrable proof that
>>your claims are spurious. However, I am full aware that we will
>>revisit those invalid claims again as if you were never aware of this
>>simple demonstration.

Two days, five hours, 18 minutes, and 36 seconds for the fog to roll
back in.

73's
Richard Clark, KB7QHC

4255. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-10 23:40:53 UTC
From: kb9rqz@yahoo.com
Message-ID: <vjhhh41m8vvorprafi7f4gjooe3o7bqhbl@4ax.com>
Source record: 20329
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4256. Re: Aluminum to Copper interface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 00:32:27 UTC
From: Grumpy The Mule <s_foonly@foo.bar>
Message-ID: <Xns9B52BC9F4CE2MDWN@194.177.96.78>
Source record: 20330

Howdy,

I've been using electric fence crimp terminals from Dare.
They're sold in numerous farm and hardware stores. There's
a crimper marketed by Dare for them as well at a very reasonable
price.

They're actually Nicopress terminals. Look like lead plated
copper to me. I've joined wire of various materials with
these including, aluminum to galvanized steel, aluminum to copper
and copper to galvanized steel. They do a fantastic job.

http://www.nicopress.com/F1.htm

73,
Grumpy

Cecil Moore <nospam@w5dxp.com> wrote in
news:z8WRk.7850$YU2.2920@nlpi066.nbdc.sbc.com:

> Hal Rosser wrote:
>> The answer is a tinned crimp-sleeve or a tinned mechanical sleeve
>> Here's one http://www.rshughes.com/products/054007_13319.html
>
> Thanks, Hal. I figured they had to exist.

4257. Re: I found a two headed n8wwm dougfly in my trap

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 00:40:45 UTC
From: mopeyzakween@yahoo.com
Message-ID: <9b78c024-51dd-4f97-b789-19426ca34024@q30g2000prq.googlegroups.com>
Source record: 20331
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Nov 9, 12:13 am, "lance adair" <ad...@limpwrist.com> wrote:
> "an old freind" <kb9...@hotmail.com> wrote in
messagenews:e6874056-6d8f-4b1b-9aad-5bd2c3d300ab@a26g2000prf.googlegroups.com...
> On Nov 8, 11:29 pm, "lance adair" <ad...@limpwrist.com> wrote:
>
> > can the gay bashing spam
>
> Are you a gay fly, mark? Cuz if you are I have a CCRAA swatter with YOUR
> name on it.

STFU faggot moparhoLICK.
Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)

LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4258. Randy Chapman, KB5URP, convicted crack dealer, has his buttocks slurped by nymboi moaprhoLICK!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 00:47:08 UTC
From: mopeyzakween@yahoo.com
Message-ID: <19956e14-cc02-4ea9-8f60-377828d22647@c22g2000prc.googlegroups.com>
Source record: 20332
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

It is NEVER gonna stop, moparhoLICK...NEVER. Get used to it. You can do not a friggin' thing to stop it. HAHAHAHAHHA...ASSCLOWN...sit there and do what you do with truckers...SUCK ON IT! LOL! The more you post the more we will whap your faggy face with your gay lover Chapwoman's deal. Go eat a kitty turd and get over it, queenie.

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
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CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4259. Lawsuit countdown 22 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 01:18:23 UTC
From: kb9rqz@yahoo.com
Message-ID: <hanhh4h4cenk3khf6vopi4lhs5l6np3ria@4ax.com>
Source record: 20333
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Mon, 10 Nov 2008 16:40:45 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>
can the spam

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4260. Lawsuit countdown 22 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 01:18:58 UTC
From: kb9rqz@yahoo.com
Message-ID: <8bnhh4pfpl8bt4dn84r5abmeacbfispea1@4ax.com>
Source record: 20334
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Mon, 10 Nov 2008 16:47:08 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>It is NEVER gonna stop, moparhoLICK...NEVER. Get used to it.
take your stalking else where

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4261. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 01:19:04 UTC
From: kb9rqz@yahoo.com
Message-ID: <6cnhh49v2ri2dettr82ti04h3qms3prefa@4ax.com>
Source record: 20335
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4262. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 01:58:48 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <sF5Sk.1681$xJ3.1480@edtnps83>
Source record: 20336

>Frank, a couple of years ago I explained the inter weaving of Gauss
>law of statics with that of Maxwell. I twas this that met the most
>resistance of the this group.They seemed to see staics as something
>divorced from electromagnetics and thus one could not use equations
>of one with respect to the other. Thus when it was shown
>that the statics mathematics equated with Maxwells laws every body
>said that was not valid.

I don't understand the above comments since Gauss' laws for electric
and magnetic fields are the 3rd and 4th of Maxwell's equations. In
fact the equations for static and the time-varying case are identical,
as follows, in point form:

DEL dot D = rho, and;

DEL dot B = 0

(Paul and Nasar, pp 199, 200.)

The above is identical to that found in the classic EM text:
"Electromagnetic Theory", by Julius Adams Stratton of MIT; published
in 1941. There is nothing new in any of this.
Probably the development of a wave equation from Maxwell's
equation was a bit of overkill to make a point.

>The text you supplied made specific reference to this mathematical
>interplay whilst talking about quasi
>statics tho they never did the interface that I did. It was this
>rejection at the beginning that set the stage
>for years long rebuttle to the ideas that I put forward. To this day
>pretty much all are of the position that interfacing
>statics with dynamic fields or time varying currents was totally
>invalid which I put down to the education they received some 50 years
>ago.
>It was for that reason I was delighted to see a modern book that
>treated the subject with startling clarity.

The "Quasi-static" referred to above only effect displacement
current in Ampere's law.

>About 2 years ago a white paper was put out by two scientists that
>covers the Aether and its driving relationship
>to the Universe as well as revisiting the thinkings of the past with
>which they outlined questions that the present aproach
>seem to gloss over, as well as the revolving constituents(not foam)
>of the fast moving and revolving Aether and comparing present day
>.....

What are the references to the above mentioned paper?

73,

Frank

4263. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 03:10:51 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <4G6Sk.59158$kh2.58501@bignews3.bellsouth.net>
Source record: 20337

>
> The old ARRL handbooks always recommended boiling wooden feedline
> spacers in paraffin wax for weatherproofing. I suppose the idea is
> that it's water-repellent. Don't know how long this can be expected to
> survive weather extremes (ice, heat). In my experiments in my garage,
> the wax coating seems to pretty much rub right off with my fingernail,
> so I'm not sure how much good it does where the feed wires or tie
> wires abrades against it.

I think if you're using an older transmitter - keep up the retro theme by
boiling the wood spacers in parafin like the old book says. (But I would
bake them at 190degrees for an hour to remove all moisture first.)

I would also be tempted (considering your home-making the feed line anyway)
to try what I recall being called "G-line", where on the transmitter end of
the line you keep increasing the spacing then just drop one line - and you
have only one conductor going up.
then of course, you do the same thing at the antenna end, going from
2-conductoe wide spacing to 'normal spacing'.
Experiment.
Report back on how it went.

4264. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 03:41:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a206b02a-fbf8-47a0-a546-7e14dd14f710@c22g2000prc.googlegroups.com>
Source record: 20338

On Nov 10, 7:58 pm, "Frank" <ve...@nospam.telus.net> wrote:
> >Frank, a couple of years ago I explained the inter weaving of Gauss
> >law of statics with that of Maxwell. I twas this that met the most
> >resistance of the this group.They seemed to see staics as something
> >divorced from electromagnetics and thus one could not use equations
> >of one with respect to the other. Thus when it was shown
> >that the statics mathematics equated with Maxwells laws every body
> >said that was not valid.
>
> I don't understand the above comments since Gauss' laws for electric
> and magnetic fields are the 3rd and 4th of Maxwell's equations. In
> fact the equations for static and the time-varying case are identical,
> as follows, in point form:
>
>   DEL dot D = rho, and;
>
>   DEL dot B = 0
>
> (Paul and Nasar, pp 199, 200.)
>
> The above is identical to that found in the classic EM text:
> "Electromagnetic Theory", by Julius Adams Stratton of MIT; published
> in 1941. There is nothing new in any of this.
> Probably the development of a wave equation from Maxwell's
> equation was a bit of overkill to make a point.
>
> >The text you supplied made specific reference to this mathematical
> >interplay whilst talking about quasi
> >statics tho they never did the interface that I did. It was this
> >rejection at the beginning that set the stage
> >for years long rebuttle to the ideas that I put forward. To this day
> >pretty much all are of the position that interfacing
> >statics with dynamic fields or time varying currents was totally
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> The "Quasi-static" referred to above only effect displacement
> current in Ampere's law.
>
> >About 2 years ago a white paper was put out by two scientists that
> >covers the Aether and its driving relationship
> >to the Universe as well as revisiting the thinkings of the past with

> >which they outlined questions that the present aproach
> >seem to gloss over, as well as the revolving constituents(not foam)
> >of the fast moving and revolving Aether and comparing present day
> >.....
>
> What are the references to the above mentioned paper?
>
> 73,
>
> Frank

Brilliant Frank as a mechanical engineer I trust you will excuse me
from knowing this.
Ofcourse I will have to review things for myself so I understand fully
what you have pointed out
The way I put it initially is that if you add radiators and a time
varying field to a gaussian field while holding to the
equilibrium format you arrive at Maxwells law. I asked somebody that
was knoweledgable in the field about it and he stated I had made a
discovery
which now looking back could mean anything.However, I sought this
opinion from a qualified person as I had gone thru a series of
illnesses and at that particular meeting puss was flowing from my
pacemaker chest pocket but it was an excercise that I had to do since
my training originially was that of an mechanical engineer before I
had heart troubles and lost some of my memory faculties Because of
this "discovery" it then becomes obvious that a radiator can be any
shape , size and elevation
when meeting Maxwells laws" as long as the contents of the border is
in equilibrium" Now Frank notable hams have stated that a radiator
must be straight for maximum efficiency which from my observations are
untrue. Knowing that modern day computor programs were formulated
around Maxwells laws
THAT INCLUDE THE WEAK FORCE it would appear an overcheck of the
equilibrium factor should appear when using an optimizer. Well as you
know you overchecked that for yourself and confirmed it, thus the
basis for my theory then started to unravel until I arrived at my
present point where antennas of the highest efficiency can made within
the smaller volume which I have subsequently made many. So it was then
I shared some details to this group as they were supposed experts and
from then on they have thrashed me in every way including a ham who
provided the matjhematics comparing
Gauss and Maxwell which continues to this day.Basicalyl all resisted
the idea of a different antenna design on the assumption that all was
known about antennas Now we have assertions that the Neutrinos has no
mass and no magnetic field and yet itis understood that there are
millions of them for every cubic metre on Earth and it goes on.
Hopefully the above will make things clearer. I will try and get back
to the white papers that I spoke of and hopefully the book that was
published later. I will get back to you after I review the history of

events on my laptop in the hope it still resides there
Best regards
Art Unwin KB9MZ....XG

4265. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 03:50:23 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <27b40ff5-b579-42c8-95b4-ebe0187391ad@a3g2000prm.googlegroups.com>
Source record: 20339

On Nov 10, 9:41 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 10, 7:58 pm, "Frank" <ve...@nospam.telus.net> wrote:
>
>
>
> > >Frank, a couple of years ago I explained the inter weaving of Gauss
> > >law of statics with that of Maxwell. I twas this that met the most
> > >resistance of the this group.They seemed to see staics as something
> > >divorced from electromagnetics and thus one could not use equations
> > >of one with respect to the other. Thus when it was shown
> > >that the statics mathematics equated with Maxwells laws every body
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> >   DEL dot B = 0
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> > (Paul and Nasar, pp 199, 200.)
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> > Probably the development of a wave equation from Maxwell's
> > equation was a bit of overkill to make a point.
>
> > >The text you supplied made specific reference to this mathematical
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> > >statics tho they never did the interface that I did. It was this
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> > >seem to gloss over, as well as the revolving constituents(not foam)
> > >of the fast moving and revolving Aether and comparing present day
> > >.....
>
> > What are the references to the above mentioned paper?
>
> > 73,
>
> > Frank
>
> Brilliant Frank as a mechanical engineer I trust you will excuse me
> from knowing this.
> Ofcourse I will have to review things for myself so I understand fully
> what you have pointed out
> The way I put it initially is that if you add radiators and a time
> varying field to a gaussian field while holding to the
> equilibrium format you arrive at Maxwells law. I asked somebody that
> was knoweledgable in the field about it and he stated I had made a
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> which now looking back could mean anything.However, I sought this
> opinion from a qualified person as I had gone thru a series of
> illnesses and at that particular meeting puss was flowing from my
> pacemaker chest pocket but it was an excercise that I had to do since
> my training originially was that of an mechanical engineer before I
> had heart troubles and lost some of my memory faculties Because of
> this "discovery" it then becomes obvious that a radiator can be any
> shape , size and elevation
> when meeting Maxwells laws" as long as the contents of the border is
> in equilibrium" Now Frank notable hams have stated that a radiator
> must be straight for maximum efficiency which from my observations are
> untrue. Knowing that modern day computor programs were formulated
> around Maxwells laws
> THAT INCLUDE THE WEAK FORCE it would appear an overcheck of the
> equilibrium factor should appear when using an optimizer. Well as you
> know you overchecked that for yourself and confirmed it, thus the
> basis for my theory then started to unravel until I arrived at my
> present point where antennas of the highest efficiency can made within
> the smaller volume which I have subsequently made many. So it was then
> I shared some details to this group as they were supposed experts and
> from then on they have thrashed me in every way including a ham who
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> Gauss and Maxwell which continues to this day.Basicalyl all resisted
> the idea of a different antenna design on the assumption that all was
> known about antennas Now we have assertions that the Neutrinos has no
> mass and no magnetic field and yet itis understood that there are

> millions of them for every cubic metre on Earth and it goes on.
> Hopefully the above will make things clearer. I will try and get back
> to the white papers that I spoke of and hopefully the book that was
> published later. I will get back to you after I review the history of
> events on my laptop in the hope it still resides there
> Best regards
> Art Unwin KB9MZ....XG

Google
Secrets of the aether

Three papers written by two physics peoiple in Southern Illinois
Now also in book form released about two years ago
Art

Art

4266. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 04:57:10 UTC
From: ltdoc@yahoo.com
Message-ID: <4a88f580-9d06-4eea-bc83-b887e14fd1df@c36g2000prc.googlegroups.com>
Source record: 20340

Tim,
Any of the above. Best? Which lasts longer? Which would you
rather use? What's the difference? Not much.
Have fun.
- 'Doc

4267. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 07:01:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <YeednS5bwJAssITUnZ2dnUVZ_tCdnZ2d@posted.easystreetonline>
Source record: 20341

Just one word of advice. The vapor of boiling paraffin is extremely flammable -- I'd guess about like gasoline -- so be extremely careful if you use the old time method. At the very least I'd do it outside and over an electric hot plate rather than an open flame.

Roy Lewallen, W7EL

4268. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 07:22:25 UTC
From: kb9rqz@yahoo.com
Message-ID: <glcih49cjgqjikb1atm4aao93b7dadcq92@4ax.com>
Source record: 20342
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4269. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 17:07:20 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gfce48$20t$4@news.jpl.nasa.gov>
Source record: 20344

Jeff Liebermann wrote:
> On Fri, 31 Oct 2008 16:27:47 -0400, "Ed Cregger"
> <ecregger@bellsouff.net> wrote:
>
>> Perhaps someone can answer a question or two about synthetic aperture radar
>> systems. I'm interested in whether or not the flat plate we see as the
>> receiver antenna actually radiates power, or is a separate transmitter
>> antenna used? TIA
>>
>> Ed, NM2K
>
> As others have mentioned, that's not synthetic aperture radar. See
> the article at:
> <http://en.wikipedia.org/wiki/Synthetic_aperture_radar>
> for explanations and references. Note that either the target or the
> radar has to be moving for SAR to work. A mess of small transmitters,
> scattered over a wide area, will also work. A rotating radar antenna
> (phased array, bedspring, or dish) will not work.
>
> One example is the SRTM (Shuttle Radar Topography Mission), which used
> interferometry and a synthetic aperture radar to map the planet. In
> this case, the shuttle was moving and the ground was relatively
> motionless.
> <http://fas.org/irp/program/collect/ifsar.htm>
> <http://www2.jpl.nasa.gov/srtm/>
> Since there was only one space shuttle in orbit, the antenna must both
> xmit and receive.
>
>
Not precisely true in the case of InSAR.. One transmitter, two
receivers. A Tx and Rx can share, but the second receiver needs its own
antenna. (Modern phased arrays can segment a long array into two receive
arrays to do InSAR, as well).

4270. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 17:08:42 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gfce6q$20t$5@news.jpl.nasa.gov>
Source record: 20346

Ed Cregger wrote:
> <jimlux@earthlink.net> wrote in message
> news:c7f667d8-842d-415e-a73b-a91bc41bcedd@u29g2000pro.googlegroups.com...
>> On Oct 31, 1:27 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
>>> Perhaps someone can answer a question or two about synthetic aperture
>>> radar
>>> systems. I'm interested in whether or not the flat plate we see as the
>>> receiver antenna actually radiates power, or is a separate transmitter
>>> antenna used? TIA
>>>
>>> Ed, NM2K
>> Synthetic Aperture Radar (SAR) isn't usually the rotating antenna
>> thing. SAR would be on some sort of moving platform (a plane or
>> satellite, for instance, although SARs have been done on cars and
>> boats and balloons)
>>
>> Perhaps what you're thinking about is a phased array antenna? The flat
>> plate thing is the antenna, and might be either totally passive (and
>> can work for both transmit and receive) or active, with lots of T/R
>> modules.
>>
>
> ------------
>
> I was thinking of the Aegis class warships.
>
the SPY-1 isn't a SAR (well.. it might be able to do ISAR if the target
is moving or rotating) but it does use the same aperture for Tx and Rx.
(Racks and Racks of L band T/R modules)

4271. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 17:10:46 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gfceam$20t$6@news.jpl.nasa.gov>
Source record: 20345

Sal M. Onella wrote:
> "Jeff Liebermann" <jeffl@cruzio.com> wrote in message
> news:mt4pg4l71d5djj2f37a5apls2m1tjuf46h@4ax.com...
>> On Sat, 1 Nov 2008 11:11:32 -0400, "Ed Cregger"
>> <ecregger@bellsouff.net> wrote:
>>
>>> I was thinking of the Aegis class warships.
>> See: AN/SPY-1. 4 panels with 4 megawatts in S-band.
>> <http://en.wikipedia.org/wiki/AN/SPY-1>
>> <http://www.globalsecurity.org/military/systems/ship/systems/an-spy-1.htm>
>>
> <https://wrc.navair-rdte.navy.mil/warfighter_enc/weapons/SensElec/RADAR/ansp
> y1.htm>
>> Lots of fun when the beam hits an adjacent vessels antenna farm and
>> toasts everything connected to it.
>
>
> It happens but it's not supposed to. A standard rule is that an Aegis ship
> needs to "sector out" other vessels in company when they are within a
> specified distance -- I forget the number. Among the more vulnerable
> equipments are the EW receivers.
>
> The AN/SPY-1 sends a pseudo-random pulse train. When you hear one on a
> suitable receiver, it sounds like corn popping. No joke.
>

Almost all modern radars send some sort of PN coded pulse (e.g. a Barker
code) to be used in pulse compression so the peak/average power ratio is
limited. A few radars use linear FM chirps.

4272. Re: Anyone out there using a HAZER on their Rohn 25 Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 17:38:56 UTC
From: mike harlan <mh855@yahoo.com>
Message-ID: <gfcfvk$158e$1@news.ett.com.ua>
Source record: 20343

yes
"Jim" <nospam@nospam.com> wrote in message
news:c6m1h4lbflh5fhfvc7jm4niqp4t00gmmcp@4ax.com...
>I have been thinking of purchasing a HAZER tram system, but after
> reading all the reviews all over the web I'm kind of leery.
>
> Anyone out there using one? If so, I would like to start a dialog or
> swap E-Mail or call you on phone to find which model you are using,
> and what problems you have had with the system. The reviews seem
> to go 10 to 1 against the Hazer, recommending a crank up tower....
>
> I would appreciate any comments and recommendations and
> in general should I waste my money on the thing or does it work
> as advertised?
>
> 73,
>
> Jim, WA5DXP
> wdxp at cox dot net
>
>
>

4273. Re: Behind the times...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 18:33:15 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <x6kSk.87152$XB4.28591@bignews9.bellsouth.net>
Source record: 20347

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:gfce6q$20t$5@news.jpl.nasa.gov...
> Ed Cregger wrote:
>> <jimlux@earthlink.net> wrote in message
>> news:c7f667d8-842d-415e-a73b-a91bc41bcedd@u29g2000pro.googlegroups.com...
>>> On Oct 31, 1:27 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
>>>> Perhaps someone can answer a question or two about synthetic aperture
>>>> radar
>>>> systems. I'm interested in whether or not the flat plate we see as the
>>>> receiver antenna actually radiates power, or is a separate transmitter
>>>> antenna used? TIA
>>>>
>>>> Ed, NM2K
>>> Synthetic Aperture Radar (SAR) isn't usually the rotating antenna
>>> thing. SAR would be on some sort of moving platform (a plane or
>>> satellite, for instance, although SARs have been done on cars and
>>> boats and balloons)
>>>
>>> Perhaps what you're thinking about is a phased array antenna? The flat
>>> plate thing is the antenna, and might be either totally passive (and
>>> can work for both transmit and receive) or active, with lots of T/R
>>> modules.
>>>
>>
>> ------------
>>
>> I was thinking of the Aegis class warships.
>>
> the SPY-1 isn't a SAR (well.. it might be able to do ISAR if the target
> is moving or rotating) but it does use the same aperture for Tx and Rx.
> (Racks and Racks of L band T/R modules)

Well, I said I was behind the times. <G>

Thanks to everyone for their help on getting me up to date. At least I have
somewhere to begin studying now.

Ed, NM2K

4274. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 21:45:19 UTC
From: Dave <noone@nowhere.com>
Message-ID: <P1nSk.903$U5.385@nwrddc01.gnilink.net>
Source record: 20348

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:a206b02a-fbf8-47a0-a546-7e14dd14f710@c22g2000prc.googlegroups.com...
On Nov 10, 7:58 pm, "Frank" <ve...@nospam.telus.net> wrote:
>Knowing that modern day computor programs were formulated
>around Maxwells laws
>THAT INCLUDE THE WEAK FORCE it would appear an overcheck of the
>equilibrium factor should appear when using an optimizer.

Art, show me ONE program that uses the weak force with maxwell's equations.
or ONE reference to maxwell's equations that say they include the weak force
interactions (besides your own posts of course).

4275. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-11 23:15:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <27d6b7c7-9406-485a-8680-4cbdccb65b48@e38g2000prn.googlegroups.com>
Source record: 20349

On Nov 11, 3:45 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:a206b02a-fbf8-47a0-a546-7e14dd14f710@c22g2000prc.googlegroups.com...
> On Nov 10, 7:58 pm, "Frank" <ve...@nospam.telus.net> wrote:
>
> >Knowing that modern day computor programs were formulated
> >around Maxwells laws
> >THAT INCLUDE THE WEAK FORCE it would appear an overcheck of the
> >equilibrium factor should appear when using an optimizer.
>
> Art, show me ONE program that uses the weak force with maxwell's equations.
> or ONE reference to maxwell's equations that say they include the weak force
> interactions (besides your own posts of course).

Dave
Any AO programs will do it as they both have optimizers
There is a free program Gal-mana or some thing like that which also
has an optimizer
4nec2 is a freebee with optimizer. All of these will provide antennas
in equilibrium
All other antenna programs have inut of the weak force tho I doubt
that those designed
just for Yagis will have it as that is a planar device. My
suggestion is that you stay with minninec programs
and the 4nec2 program by Ari which incorporate Minninec optimizers
additions.
I would imagine that any history books on universal laws would have
reference to it.
The masters worked from basics to get their laws based on equilibrium
which in the mathematical areana is a Gaussian field where all forces
must
add up to zero. All of the laws ddid not add up to zero so they added
a force that completed the circle. They did not identify the "weak
force" but inclusion was a must for all forces/vectors to add up to
zero.All the laws that Maxwell used in his condensation of laws all
had the stipulation of equilibrium.
Wet and cold here so stay in and be a book worm
Regards
Art

4276. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 00:07:36 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c16e74e5-8569-4179-86db-bbcc02ef423b@v22g2000pro.googlegroups.com>
Source record: 20350

On Nov 11, 5:15 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 11, 3:45 pm, "Dave" <no...@nowhere.com> wrote:
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >news:a206b02a-fbf8-47a0-a546-7e14dd14f710@c22g2000prc.googlegroups.com...
> > On Nov 10, 7:58 pm, "Frank" <ve...@nospam.telus.net> wrote:
>
> > > >Knowing that modern day computor programs were formulated
> > > >around Maxwells laws
> > > >THAT INCLUDE THE WEAK FORCE it would appear an overcheck of the
> > > >equilibrium factor should appear when using an optimizer.
>
> > > Art, show me ONE program that uses the weak force with maxwell's equations.
> > > or ONE reference to maxwell's equations that say they include the weak force
> > > interactions (besides your own posts of course).
>
> Dave
> Any AO programs will do it as they both have optimizers
> There is a free program Gal-mana or some thing like that which also
> has an optimizer
> 4nec2 is a freebee with optimizer. All of these will provide antennas
> in equilibrium
> All other antenna programs have inut of the weak force tho I doubt
> that those designed
> just for Yagis will have it as that is a planar device. My
> suggestion is that you stay with minninec programs
> and the 4nec2 program by Ari which incorporate Minninec optimizers
> additions.
> I would imagine that any history books on universal laws would have
> reference to it.
> The masters worked from basics to get their laws based on equilibrium
> which in the mathematical areana is a Gaussian field where all forces
> must
> add up to zero. All of the laws ddid not add up to zero so they added
> a force that completed the circle. They did not identify the "weak
> force" but inclusion was a must for all forces/vectors to add up to
> zero.All the laws that Maxwell used in his condensation of laws all
> had the stipulation of equilibrium.
> Wet and cold here so stay in and be a book worm
> Regards
> Art
"
David I googled" Maxwell equilibrium"

On the first page they have a wiki answer to a question as to why
equilibrium is not a basic for fractional wavelength antennas!
You can kill two birds with one stone on that one
Art

4277. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 01:02:08 UTC
From: kb9rqz@yahoo.com
Message-ID: <eoakh49m7psvaso45r75pkildr23s6e7jv@4ax.com>
Source record: 20401
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4278. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 01:15:00 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <7tmpu5-b35.ln1@mail.specsol.com>
Source record: 20402

Art Unwin <ArthurUnwin@gmail.com> wrote:

> David I googled" Maxwell equilibrium"
> On the first page they have a wiki answer to a question as to why
> equilibrium is not a basic for fractional wavelength antennas!
> You can kill two birds with one stone on that one
> Art

A Google search with that phrase returns several papers on the solution
of Vlasov-Maxwell equations for a plasma, which has nothing to do
with antennas.

A Google Groups search with that phrase returns numorous links to
your own babbling nonsense.

--
Jim Pennino

Remove .spam.sux to reply.

4279. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 01:28:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a23d03e9-9f5b-4639-874b-a4997e9ce731@u29g2000pro.googlegroups.com>
Source record: 20403

On Nov 11, 7:15 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > David I googled" Maxwell equilibrium"
> > On the first page they have a wiki answer to a question as to why
> > equilibrium is not a basic for fractional wavelength antennas!
> > You can kill two birds with one stone on that one
> > Art
>
> A Google search with that phrase returns several papers on the solution
> of Vlasov-Maxwell equations for a plasma, which has nothing to do
> with antennas.
>
> A Google Groups search with that phrase returns numorous links to
> your own babbling nonsense.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Worked for me. Maybe your browser is different
the term wiki or wilki may provide a clue as to the browser I used
Jim you are starting to get very rude, I never said that Vlasov-
Maxwell
had anything to do with antennas

4280. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 02:35:00 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <fnrpu5-9t5.ln1@mail.specsol.com>
Source record: 20404

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Nov 11, 7:15 pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > David I googled" Maxwell equilibrium"
>> > On the first page they have a wiki answer to a question as to why
>> > equilibrium is not a basic for fractional wavelength antennas!
>> > You can kill two birds with one stone on that one
>> > Art
>>
>> A Google search with that phrase returns several papers on the solution
>> of Vlasov-Maxwell equations for a plasma, which has nothing to do
>> with antennas.
>>
>> A Google Groups search with that phrase returns numorous links to
>> your own babbling nonsense.
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> Worked for me. Maybe your browser is different

The browser used has nothing to do with the results of a Google
search.

--
Jim Pennino

Remove .spam.sux to reply.

4281. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 03:06:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9916378e-1484-4465-88aa-d98b143196e9@a29g2000pra.googlegroups.com>
Source record: 20405

On Nov 11, 8:35 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Nov 11, 7:15 pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > David I googled" Maxwell equilibrium"
> >> > On the first page they have a wiki answer to a question as to why
> >> > equilibrium is not a basic for fractional wavelength antennas!
> >> > You can kill two birds with one stone on that one
> >> > Art
>
> >> A Google search with that phrase returns several papers on the solution
> >> of Vlasov-Maxwell equations for a plasma, which has nothing to do
> >> with antennas.
>
> >> A Google Groups search with that phrase returns numorous links to
> >> your own babbling nonsense.
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > Worked for me. Maybe your browser is different
>
> The browser used has nothing to do with the results of a Google
> search.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Ask your children for help or maybe somebody in the group will come
forward to help you.
Don't know why you are following the thread it is all blabber. Can';t
you block me?

4282. test

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 06:01:16 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <gfdrfauco1@aioe.org>
Source record: 20406

```
test
```

4283. Stacking beams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 07:15:37 UTC
From: Gary Smith <vk3lcd@gmail.com>
Message-ID: <gfdvtbqrr1@news-01.bur.connect.com.au>
Source record: 20407

Hi, i am going in a VHF/UHF contest this weekend and have a question about stacking beams.
We will have a pole approx 15-20ft long and want to stack the following antennas,

1x20 element UHF yagi
1x10 element 2 Metre Yagi
1x5 element 6 Metre Yagi.

UHF yagi is approx 6-8ft long
VHF is approx 6ft long
6M is approx 17ft long

They are all horisontally mounted. I am guessing it will be UHF at top, then 2 mtr then 6 mtr.
What i would like to know is if this pole is long enough to space them vertically enough or not.
If so, what distance should they be?

Thanks

Gary
VK3LCD

4284. Staying on Topic (was "Unwashed" hams and "washed" hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 11:46:12 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1211080646120001@jbw-mac.itd.nrl.navy.mil>
Source record: 20408

Hello, and I would like to propose that subjects in the area of general electromagnetics be posted to a more appropriate ng such as sci.physics.electromagnetics or sci.physics.research (moderated). I think Mr. Unwin has a better chance of finding more sympathetic ears to his propositions in a more theoretical venue. Along with that recommendation goes a quote from the late Carl Sagan: "Extraordinary claims require extraordinary proof." Sincerely, and 73s from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

4285. Re: Stacking beams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 13:48:15 UTC
From: Dave <joe@somewhere.com>
Message-ID: <J76dnVT7OPUCQ4fUnZ2dnUVZ_hOdnZ2d@earthlink.com>
Source record: 20409

On Wed, 12 Nov 2008 18:15:37 +1100, Gary Smith wrote:

> Hi, i am going in a VHF/UHF contest this weekend and have a question
> about stacking beams.
> We will have a pole approx 15-20ft long and want to stack the following
> antennas,
>
> 1x20 element UHF yagi
> 1x10 element 2 Metre Yagi
> 1x5 element 6 Metre Yagi.
>
> UHF yagi is approx 6-8ft long
> VHF is approx 6ft long
> 6M is approx 17ft long
>
> They are all horisontally mounted. I am guessing it will be UHF at top,
> then 2 mtr then 6 mtr.
> What i would like to know is if this pole is long enough to space them
> vertically enough or not.
> If so, what distance should they be?
>
> Thanks
>
> Gary
> VK3LCD

It should work. Try to get at least a 1/4 wavelength between them (a half wavelength would be better. If you can get the 50 MHz 3 meters off the ground and the 70 CM on top, and split the difference with the 2 meters, it should be a good place to start. Do you have a VSWR meter e.g. MFJ-956?

4286. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 15:47:34 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <630ec6bb-81a4-4f12-8f4a-1151cf8e06ba@35g2000pry.googlegroups.com>
Source record: 20410

On Nov 11, 9:06 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 11, 8:35 pm, j...@specsol.spam.sux.com wrote:
>
>
>
> > Art Unwin <ArthurUn...@gmail.com> wrote:
> > > On Nov 11, 7:15 pm, j...@specsol.spam.sux.com wrote:
> > >> Art Unwin <ArthurUn...@gmail.com> wrote:
> > >> > David I googled" Maxwell equilibrium"
> > >> > On the first page they have a wiki answer to a question as to why
> > >> > equilibrium is not a basic for fractional wavelength antennas!
> > >> > You can kill two birds with one stone on that one
> > >> > Art
>
> > >> A Google search with that phrase returns several papers on the solution
> > >> of Vlasov-Maxwell equations for a plasma, which has nothing to do
> > >> with antennas.
>
> > >> A Google Groups search with that phrase returns numorous links to
> > >> your own babbling nonsense.
>
> > >> --
> > >> Jim Pennino
>
> > >> Remove .spam.sux to reply.
>
> > > Worked for me. Maybe your browser is different
>
> > The browser used has nothing to do with the results of a Google
> > search.
>
> > --
> > Jim Pennino
>
> > Remove .spam.sux to reply.
>
> Ask your children for help or maybe somebody in the group will come
> forward to help you.
> Don't know why you are following the thread it is all blabber. Can';t
> you block me?

Wikianswers statement referred to
The question raised was that Maxwells laws require equilibrium
Full wave antennas are in equilibrium buf fractional wavelengths are

not.
(((((((!!!!!(Seems like I have heard that a lot on this
newsgroup)))))!!!!!~
The answer was basically in agreement and stated that for fractional
wavelength antennas
requires compromises when applying Maxwell laws..
You can now ask where the curfrent goes when it reaches the end of a
fractional
wavelength radiatorand get what some say "is the rest of the story"
On the other side you can bombard Wilkianswers that HAM RADIO REJECT
the idea of associating equilibrium with Maxwells laws or any other
laws in Physics.as it just blabber
and does NOT represent the present day thinking of ham radio
enthusiasts in the U.S.and the American Navy reseach centers
in Washington DC
You, the experts, can also ask the ARRL to print same in QST otherwise
change will become unstopable
Regards
Art

4287. Re: Staying on Topic (was "Unwashed" hams and "washed" hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 16:17:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfevlbkff1@news.albasani.net>
Source record: 20411

J. B. Wood wrote:
>> ... Along with that recommendation
> goes a quote from the late Carl Sagan: "Extraordinary claims require
> extraordinary proof." Sincerely, and 73s from N4GGO,
>
> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

I would like to add:

Gaining the "extraordinary proof[s]" to validate "extraordinary claims"
requires the extraordinary pissing-off of personalities who are deeply
rooted in common knowledge/theory/equations/accepted-beliefs/etc. -- JS

But then, a "tempest in a teapot" would, quite likely, result in the
same action(s.) Ya' never know, ya' just never know ...

Regards,
JS

4288. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 18:06:21 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <xWESk.7$jr4.0@edtnps82>
Source record: 20412

>You can now ask where the current goes when it reaches the end of a
>fractional wavelength radiator and get what some say "is the rest of the
>story".

Current is always zero at the end of a radiator of any length.

Frank

4289. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 18:44:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6c7fc6e6-f3f1-47db-a22a-64e14d4a3e2b@k1g2000prb.googlegroups.com>
Source record: 20413

On Nov 12, 12:06 pm, "Frank" <ve...@nospam.telus.net> wrote:
> >You can now ask where the current goes when it reaches the end of a
> >fractional wavelength radiator and get what some say "is the rest of the
> >story".
>
> Current is always zero at the end of a radiator of any length.
>
> Frank

Maybe Frank but it never came to a stop!!!!.
When you look at it as not being equilibrium one must show the sharges
moving to the ends of the radiator
where end effect is created. Now you draw a line to the right on the
outside of the radiator with an arrow at the end to show the movement
of the charge.
Now the original notion that there is no charge or current goes away
because a reactive line and arrow must be assigned for quasi
equilibrium
to be established and that line or vector has only the center of the
radiator to flow to form a closed circuit.
When a radiator is in equilibrium the charge does NOT move to the end
so that there is no vector to the right
thus physics state that the need for an opposing vector does not
exist. Thus for a radiator in equilibrium current will move along the
surface but the charges will not. So do the charges really stay in a
static possition? No it doesn't It was on the surface over the skin
provided by the eddy current which when combined with moving current
both produce a combination magnetic field that provides a vector force
away from the surface of the radiator.
The charge static position.is thus over powered by the combination
magnetic field that places a spin upon the partiucle and ejects it in
a straight line trajectory. These ejections have a reberatory effect
on the radiator and also on the receiving radiator so that
communication occurs in a vibratory manner
Now the extension of gaussian static field shows up in actual
radiation phenomina in the same way the eddy current fields provide
levitation which thus agrees with other known laws Tho it can be shown
that the law of statics is part of Maxwells laws mathematically I know
of no disclosure where the same was approached from a strictly flux
flow position which brings static particles into the mode of radiation
as well as defining the eddy current creating the "weak" force as
anticipated by Einstein till he died.Nowhere is a physics law violated
physics laws have been solidified and the theory is solid
Best regards

Art Unwin.....KB9MZ........XG

4290. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 20:57:49 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <66343bec-e268-4e1c-8005-28efe1e89573@k24g2000pri.googlegroups.com>
Source record: 20414

On Nov 5, 11:00 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "Well Richard I don`t go along with that unless the definition of a wave
> is made clear."
>
> We deal with sinusoidal waves because all other shapes can be nade from
> combinations of these.
>
> Particle aspects of radiation come to the fore only when radiation
> interaxts with matter.
>
> Physics tells us a particle that moves with constant momentum in a
> straight line according to Newton`s first law (inertia statement) has
> wave motion, according to the "de Broglie hypothesis". Lambda = Planck`s
> constant / momentum.
>
> The wave aspect of EM radiation is used as a model to make the
> phenomenon intelligible in terms of familiar laws and events of our
> everyday, large-scale world.
>
> The 3rd edition of Kraus` "Antennas" says on page 904:
> "They (computer program designers) could develop software to simulate
> the performance of antennas. In general, these techniques either
> numerically solve Maxwell`s equations by descretizing the problem using
> integral techniques, such as Moment Methods (MoM) as discussed in
> Sec.14-11, or differential technuques, such as finite elements or finite
> difference-time domain."
>
> Maxwell gave us everything we need.
>
> Best regards, Richard Harrison, KB5WZI

Again you are misquoting and this time it is Planck
His constant evolved around a proton where the results has some
conflicts to this day
with respect to classical science. When he was studying black holes in
the aether he saw it as PROTONS escaping
and not particles such as neutrinos which have since proven to have
mass where he was using the term momentum which is a varient of mass
and gravitational effects. There is nothing that suggests that energy
can be carried without the presence of mass and thus the wave of
energy as inferred by many is debunked, Yes Maxwell left a lot but he

nevver alluded to static particles and piossibly not even to the pre condition pf equilibrium.
What he is famous for is noting all the observations and equations of his predecessors and used his mathematical acumen to reduce or condense the laws given to him of which he did not individually contribute as personal observations at that particular time. Gauss specifically mentioned static particles where
Maxwell omitted such references thus leaving radiation as a mystery where the "wave" format gained strength because of the magnetic field format b ut with which Einstein disagreed. Einsteins foray into relativity further debunked the idea of waves or energy without mass to carry potential energy or to
show the effects of kinetic energy and the association between gravity and momentum and the importance of frequency of movement.

You cannot rely on the forever continuance of old books that were used in your part of the centuries as being imbedded in stone based on your own particular life span.History shows that new generations come along using the education of their fore fathers on whose shoulders they stand and where the human race requires challenge that the past may or may not accept when their time comes about and thoughts go with them. Remember a constant as used by Planck is purely a mathematical condition which describes an event that occurrs physically without change such that a number can be prented in the place of a full description of the actual event in a similar way the "wek force" has been calculatedf for the past century.
Art
Art

4291. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 21:47:50 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <aaISk.66$o15.54@edtnps83>
Source record: 20415

>> Current is always zero at the end of a radiator of any length.
>>
>> Frank

>Maybe Frank but it never came to a stop!!!!.
>When you look at it as not being equilibrium one must show the sharges
>moving to the ends of the radiator

The charges (electrons) do not realy move. They vibrate
at the applied E-field frequency. The charge displacement,
depending on frequency; for example at 10 MHz, is of the
order of 10 atomic diameters -- approximately 2*10^(-9) m.
http://www.geocities.com/ferman30/AtomsDimTable.html

Frank

4292. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 22:30:46 UTC
From: Dave <noone@nowhere.com>
Message-ID: <qOISk.108$4g5.7@nwrddc01.gnilink.net>
Source record: 20416

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:27d6b7c7-9406-485a-8680-4cbdccb65b48@e38g2000prn.googlegroups.com...
On Nov 11, 3:45 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:a206b02a-fbf8-47a0-a546-7e14dd14f710@c22g2000prc.googlegroups.com...
> On Nov 10, 7:58 pm, "Frank" <ve...@nospam.telus.net> wrote:
>
> >Knowing that modern day computor programs were formulated
> >around Maxwells laws
> >THAT INCLUDE THE WEAK FORCE it would appear an overcheck of the
> >equilibrium factor should appear when using an optimizer.
>
> Art, show me ONE program that uses the weak force with maxwell's
> equations.
> or ONE reference to maxwell's equations that say they include the weak
> force
> interactions (besides your own posts of course).

reply garbage off topic snipped... you are worse than a politician art...
answer the question. show me a program that uses the weak force. i will
guarantee you that nec and ao DO NOT use the weak force. keep searching,
quote the manual, don't make your own assumptions based on what you believe.

4293. Re: Stacking beams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 23:51:17 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <S_adnRQQ0PYM9obUnZ2dnUVZ_szinZ2d@earthlink.com>
Source record: 20417

"Gary Smith" <vk3lcd@gmail.com> wrote in message
news:gfdvtbqrr1@news-01.bur.connect.com.au...
> Hi, i am going in a VHF/UHF contest this weekend and have a question about
> stacking beams.
> We will have a pole approx 15-20ft long and want to stack the following
> antennas,
>
> 1x20 element UHF yagi
> 1x10 element 2 Metre Yagi
> 1x5 element 6 Metre Yagi.
>
> UHF yagi is approx 6-8ft long
> VHF is approx 6ft long
> 6M is approx 17ft long
>
> They are all horisontally mounted. I am guessing it will be UHF at top,
> then 2 mtr then 6 mtr.
> What i would like to know is if this pole is long enough to space them
> vertically enough or not.
> If so, what distance should they be?
>
> Thanks
>
> Gary
> VK3LCD
>

There seems to be too many elements on the VHF and UHF antennas. I wold
think the booms should be twice as long.

I did not have too much choice when I mounted my antennas on the tower. I
had about 15 feet of pipe out of the top of the tower. I put a M2 432
antenna at the top, went down 4 feet and put a M2 2 meter beam, both had
about a 14 foot long boom. Then 5 feet below that is a 5 element 6 meter
beam on an 18 foot boom and then the triband beam for the low bands. I am
sure they interact to some extent, but they do seem to work ok and not much
interaction of the swr when mounted on the tower. All beams are horizontal.

4294. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-12 23:54:35 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <61KSk.10368$Ws1.878@nlpi064.nbdc.sbc.com>
Source record: 20418

Dave wrote:
> show me a program that uses the weak force.

Didn't the weak force and the electromagnetic force get
united into the "electroweak" force in the late 60's?
In which case, aren't the two forces interchangable?
--
73, Cecil http://www.w5dxp.com

4295. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 00:52:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a3a86711-efec-4875-a789-0e5416032490@q30g2000prq.googlegroups.com>
Source record: 20419

On Nov 12, 5:54 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Dave wrote:
> > show me a program that uses the weak force.
>
> Didn't the weak force and the electromagnetic force get
> united into the "electroweak" force in the late 60's?
> In which case, aren't the two forces interchangable?
> --
> 73, Cecil http://www.w5dxp.com

Yes tho some use the term electroweak incorrectly as equal to the weak force aloneinstead of the combination force (I may have described that incorrectly).
Some have now reduced the number of forces down to three where some also infere
that it can be reduced to one.(gravity being a subset of electromagnetism) Problem is that electroweak bundles the mathematical terms
as if the weak force is the only other action whereas the weak force is a bundling of all mathematical factors(a constant by any other name)
required in addition to the other forces to allow all forces to sum to zero.(Newton) I have not seen anything that quantifies the eddy current
as being equal in itself as being equal to the missing vector but then science has not found the weak force to prove that it is in singular form and equal to the vector required for equilibrium. If somebody would pick up my theorem that could easily be solved by taking the periphary of the eddy current traveling at the speed of light (frrequency dependant)
Regards
Art

4296. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 00:56:52 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <25f9330a-fc01-4270-91c8-88401be07b42@h20g2000yqn.googlegroups.com>
Source record: 20420

On Nov 12, 3:47 pm, "Frank" <ve...@nospam.telus.net> wrote:
> >> Current is always zero at the end of a radiator of any length.
>
> >> Frank
> >Maybe Frank but it never came to a stop!!!!.
> >When you look at it as not being equilibrium one must show the sharges
> >moving to the ends of the radiator
>
> The charges (electrons) do not realy move. They vibrate
> at the applied E-field frequency. The charge displacement,
> depending on frequency; for example at 10 MHz, is of the
> order of 10 atomic diameters -- approximately 2*10^(-9)
m.http://www.geocities.com/ferman30/AtomsDimTable.html
>
> Frank

Correct but only if the equilibrium rule is respected
other wise it does move in line with the applied current
Art

4297. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 01:03:02 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f23fbee8-1f91-48ea-8b98-4c069934a76c@t39g2000prh.googlegroups.com>
Source record: 20421

On Nov 12, 6:56 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 12, 3:47 pm, "Frank" <ve...@nospam.telus.net> wrote:
>
> > >> Current is always zero at the end of a radiator of any length.
>
> > >> Frank
> > >Maybe Frank but it never came to a stop!!!!.
> > >When you look at it as not being equilibrium one must show the sharges
> > >moving to the ends of the radiator
>
> > The charges (electrons) do not realy move. They vibrate
> > at the applied E-field frequency. The charge displacement,
> > depending on frequency; for example at 10 MHz, is of the
> > order of 10 atomic diameters -- approximately 2*10^(-9)
m.http://www.geocities.com/ferman30/AtomsDimTable.html
>
> > Frank
>
> Correct but only if the equilibrium rule is respected
> other wise it does move in line with the applied current
> Art

Would also like to point ouyt that we have bound electrons as part of
the diamagnetic
material of the radiator the other is an unbound electron or particle
that resides on the surface of the diagmatic
material. It is the charge of this unbound particle we are talking
about when levitated by the eddy current aqnd not the electons that
are bound within the material
Art

4298. Life For Your Xtra Digital Clock

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 01:43:03 UTC
From: Howard Kowall <hkowall@shaw.ca>
Message-ID: <LCLSk.360$Cn3.38@newsfe20.iad>
Source record: 20422

This is not Antenna related,but it applies to Amateur Radio
I had a couple of extra digital clocks at home and I needed two or the ham shack (Local,UTC)
I wanted both clocks in 24hr mode,so I goggled the clock IC used in the digital clock,and found most of the using a very general purpose clock IC and all capable of doing 24hrs format buy a small modification,usually this mod is just a matter of shorting a couple of pins on the IC
My ic was a LM8560 so all I had to do was jump pins 15 to 28 to make the clock work in 24hr mode
works great,now all I have to do is glance at the clocks and with an instance of have both times .I know its an easy conversion to do in you head but this makes it much more convenient and its a way of using some of the old stuff around the house and utilizing it rather then throwing it away or even better having to buy two clocks for the ham shack
Just my contribution to the group
Howard
VE4ISP

4299. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 02:13:39 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <gfg2gligp1@aioe.org>
Source record: 20423

{Note: I tried posting this yesterday but Charter's NNTP server was having problems.}

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message news:4G6Sk.59158$kh2.58501@bignews3.bellsouth.net...

> I think if you're using an older transmitter - keep up the retro theme by
> boiling the wood spacers in parafin like the old book says. (But I would
> bake them at 190degrees for an hour to remove all moisture first.)
>
> I would also be tempted (considering your home-making the feed line
> anyway) to try what I recall being called "G-line", where on the
> transmitter end of the line you keep increasing the spacing then just drop
> one line - and you have only one conductor going up. then of course, you
> do the same thing at the antenna end, going from 2-conductor wide spacing
> to 'normal spacing'.

G-line, more correctly known as Goubau line, is not practical for use in the HF range. It is generally limited to UHF frequencies and above due to the physical size of the "launchers" which generate a surface wave along the line. For details, see: Geog Goubau, "Surface waves and their Application to Transmission Lines," Journal of Applied Physics, Volume 21, Nov. (1950).

What I believe Hal is talking about was the early practice of using a single wire from the transmitter to connect to an essentially horizontal antenna. Of course that single wire did not behave as a transmission line, but rather became part of the antenna working against ground. In many cases this wire became the actual antenna with the horizontal portion acting as capacitive loading. The resulting antenna pattern is often quite distorted from that expected of the dipole. A good ground is needed on the transmitter, yet problems of RF in the shack are common.

If you do decide to use wood spacers, acrylic urethane varnish applied to dry wood will last the longest and have the best ultraviolet resistance. Shellac, a natural product, actually has a surprisingly good ultraviolet resistance too. While boiling the wood in paraffin wax is authentic, be very careful as Roy, W7EL, points out. The flash point of typical paraffin wax is approximately 380 to 390 F. Use a double boiler with water in the lower boiler to melt the wax keeping it well below the flash temperature. Be very careful as the hot wax causes very bad burns. Work outdoors and keep a fire extinguisher handy. If you have a local source of bamboo, consider using it as it is light and often free.

I have made open wire line using poly(ethylene terephthalate) tensile test bars liberated from the trash where I worked. These PET "dog biscuits" worked well in this application as PET has good resistance to UV and is

extremely tough.

73, Barry WA4VZQ

4300. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 02:25:13 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <MbMSk.2377$Lv6.1922@bignews8.bellsouth.net>
Source record: 20424

Thanks, Barry on helping to wake up my recollections. I had forgotten that the increasingnes of the spacing of the conductors go into multiple wavelengths, which as you reminded us, is not practical for HF frequencies. But for 2-meters and above, it may be worth a try.
The Bamboo suggestion sounds good, by the way. I used to use 300-ohm twinlead because of the light weight because I wanted the antenna up as high as possible, and more weight made it droop.

"NoSPAM" <unknown@nospam.org> wrote in message news:gfg2gligp1@aioe.org...
> {Note: I tried posting this yesterday but Charter's NNTP server was having
> problems.}
>
> G-line, more correctly known as Goubau line, is not practical for use in
> the
> HF range. It is generally limited to UHF frequencies and above due to the
> physical size of the "launchers" which generate a surface wave along the
> line. For details, see: Geog Goubau, "Surface waves and their Application
> to Transmission Lines," Journal of Applied Physics, Volume 21, Nov.
> (1950).
>
> What I believe Hal is talking about was the early practice of using a
> single
> wire from the transmitter to connect to an essentially horizontal antenna.
> Of course that single wire did not behave as a transmission line, but
> rather
> became part of the antenna working against ground. In many cases this
> wire
> became the actual antenna with the horizontal portion acting as capacitive
> loading. The resulting antenna pattern is often quite distorted from that
> expected of the dipole. A good ground is needed on the transmitter, yet
> problems of RF in the shack are common.
>
> 73, Barry WA4VZQ
>
>
>
>

4301. Re: Life For Your Xtra Digital Clock

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 04:14:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <udOdncFTk_E5NIbUnZ2dnUVZ_r_inZ2d@posted.easystreetonline>
Source record: 20425

I tried this a long time ago and discovered that at least some of the consumer clocks sold here in the U.S. have only a single segment in the tens of hours display digit. That's true of the most recent LED clock I've purchased, so I think it's still common. Don't know how common it is for LCD clocks, but it's possible that only a single segment is connected. I think the problem is that the U.S. is a big enough market that it's cost effective for the manufacturers to make a special version just for it.

Self-setting "atomic" clocks are getting pretty inexpensive these days, so I've got two in my shack beside each other, one set to local and one UTC. The one I use for UTC is made by LaCrosse, and it has a 24 hour display option.

Roy Lewallen, W7EL

Howard Kowall wrote:
> This is not Antenna related,but it applies to Amateur Radio
> I had a couple of extra digital clocks at home and I needed two or the ham
> shack (Local,UTC)
> I wanted both clocks in 24hr mode,so I goggled the clock IC used in the
> digital clock,and found most of the using a very general purpose clock IC
> and all capable of doing 24hrs format buy a small modification,usually this
> mod is just a matter of shorting a couple of pins on the IC
> My ic was a LM8560 so all I had to do was jump pins 15 to 28 to make the
> clock work in 24hr mode
> works great,now all I have to do is glance at the clocks and with an
> instance of have both times .I know its an easy conversion to do in you head
> but this makes it much more convenient and its a way of using some of the
> old stuff around the house and utilizing it rather then throwing it away or
> even better having to buy two clocks for the ham shack
> Just my contribution to the group
> Howard
> VE4ISP
>
>

4302. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 04:39:42 UTC
From: "pdrahn@coinet.com" <co_farmer@yahoo.com>
Message-ID: <116cb368-2930-43f8-b9f4-b90655af87c0@1g2000prd.googlegroups.com>
Source record: 20426

>
> But I have a hankering to use wooden insulators next time I put an
> antenna up.
>
> The old ARRL handbooks always recommended boiling wooden feedline
> spacers in paraffin wax for weatherproofing. I suppose the idea is
> that it's water-repellent. Don't know how long this can be expected to
> survive weather extremes (ice, heat). In my experiments in my garage,
> the wax coating seems to pretty much rub right off with my fingernail,
> so I'm not sure how much good it does where the feed wires or tie
> wires abrades against it.
>

Hi.
I think some Thompson's water seal would be a good substitute for the
boiling paraffin wax. I think the Thompson's is wax dissolved in
kerosene or Diesel. I have been putting two coats on some posts going
into the ground.

Paul

4303. Re: Stacking beams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 07:01:00 UTC
From: Erich <n6fd@mchsi.com>
Message-ID: <MgQSk.377097$TT4.245424@attbi_s22>
Source record: 20427

Gary,

For VHF contests I usually put the lowest frequency beam on top. After doing some modeling with 4NEC2, the higher you get in terms of wavelengths, the lower your takeoff angle on the radiation.

I also did some modeling to look at the interaction between yagis in a stack. For your set-up, it looks like the 6M yagi should be at the top, the 432 in the middle and the 2M at the bottom.

73, N6FD Erich
Usually QRP Portable in DM15 50, 144, 222, 432, 902, and 1296 MHz

Gary Smith wrote:
> Hi, i am going in a VHF/UHF contest this weekend and have a question
> about stacking beams.
> We will have a pole approx 15-20ft long and want to stack the following
> antennas,
>
> 1x20 element UHF yagi
> 1x10 element 2 Metre Yagi
> 1x5 element 6 Metre Yagi.
>
> UHF yagi is approx 6-8ft long
> VHF is approx 6ft long
> 6M is approx 17ft long
>
> They are all horisontally mounted. I am guessing it will be UHF at top,
> then 2 mtr then 6 mtr.
> What i would like to know is if this pole is long enough to space them
> vertically enough or not.
> If so, what distance should they be?
>
> Thanks
>
> Gary
> VK3LCD
>

4304. Re: Life For Your Xtra Digital Clock

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 07:52:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfgmdh$3t9$1@news.albasani.net>
Source record: 20428

Howard Kowall wrote:
> This is not Antenna related,but it applies to Amateur Radio
> I had a couple of extra digital clocks at home and I needed two or the ham
> shack (Local,UTC)
> I wanted both clocks in 24hr mode,so I goggled the clock IC used in the
> digital clock,and found most of the using a very general purpose clock IC
> and all capable of doing 24hrs format buy a small modification,usually this
> mod is just a matter of shorting a couple of pins on the IC
> My ic was a LM8560 so all I had to do was jump pins 15 to 28 to make the
> clock work in 24hr mode
> works great,now all I have to do is glance at the clocks and with an
> instance of have both times .I know its an easy conversion to do in you head
> but this makes it much more convenient and its a way of using some of the
> old stuff around the house and utilizing it rather then throwing it away or
> even better having to buy two clocks for the ham shack
> Just my contribution to the group
> Howard
> VE4ISP
>
>

A few years ago, I was caught out of town. Missing the sound of SW/AR,
I purchased a DX-392 by Radio Shack (hey, it was cheap and has a stable
BFO. I have a few cheap radios, just from such "forget-full-ness" ...)

This radio has two clocks, both ONLY operate in 24hr mode. This cheap
radio has served me well ... and of course, one clock is pacific time
and one is UTC/GMT.

However, the wife ONLY thinks in 12hr mode :-) and, ALWAYS corrects the
time, telling it to me in the 12hr format LOL!

Warm regards,
JS

4305. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 07:59:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfgmqv$4f2$1@news.albasani.net>
Source record: 20429

Tim Shoppa wrote:

> ...
> Shellac is another option I suppose, but shellac seems to me to be
> something like the enamel coating on magnet wire, and having used this
> in rooftop antennas in the past I was quite surprised that in the
> summer it gets hot enough up there to burn off the enamel.
>
> Spar varnish seems to be the ultimate in wood coatings for weather
> resistance.
> ...
> Tim N3QE

If those ancient OT's heard you state the above, after desiring
materials better than dehydrated wood with hydrocarbons for
preservatives, as their insulators ... well, just suffice it to say,
they'd strike you up the side of the head, HARD! <grin>

Regards,
JS

4306. Re: Stacking beams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 15:04:28 UTC
From: ltdoc@yahoo.com
Message-ID: <f55c134e-0001-4430-aee8-6c9871dba5ec@q26g2000prq.googlegroups.com>
Source record: 20430

Gary,
The 'best' separation distance is as much as you can get. After that, it's more a practical thing, use what you got, do what you can. Will that result in the 'best'/'perfect' situation? Of course not, but it will work in the majority of cases.
A very rough ROT (Rule Of Thumb) is that UHF antennas require less separation than VHF antennas, which require less separation than HF antennas.
- 'Doc

Absolute best distance between antennas is at least 1 mile... in all directions. I'm still working on mine.

4307. FS: AT-271 Military Collapsible Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 19:22:05 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <y7%Sk.167$Je.112@read2.cgocable.net>
Source record: 20431
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

> Have available the AT-271 Military Collabsible Antenna.... $30 USD Plus
> Shipping
>
> This portable antenna can be used for the top section of a Vertical
> Antenna
> OR Horizontal elements for an Antenna System such as the Buddipole tm
> ..... A Great QRP / Portable Antenna weighs only 400 Grams [14 Oz]
> and measures 104" extended yet only 14" long when folded.
> The construction is the same as is used for sectional fishing poles. Each
> of the 8 hollow tubular metal sections has a plug one one end and a socket
> on the other end. All the sections are connected by a string made of
> either
> a cloth or metal cord. At the bottom of the base element there's a spring
> inside the tube to tension the cord. Some units may use an elastic
> shock-cord material. This way all the elements are kept in order when
> they are disconnected from each other and are held together when assembled
> into a 104" [8.6 Ft] long antenna. When the elements are folded or
> disassembled the package is only 14 inches long.
> The base has a male 3/8-24 thread which is the same as is used on most Ham
> Radio and CB antennas. Some sort of spring base could be used when this
> antenna is used because the hollow antenna elements will "fold" if too
> much
> force is applied to them.
> These units are in Like New Condition.. Sold AS-IS but will not be DOA.
> Have access to more...ASK!
>
> Pictures on www.rodemi.com
>
> Thanks for looking....Norm VE3CZI
>
>

4308. Re: Stacking beams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 19:56:21 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B564696B5C2Dnonenowhere@61.9.191.5>
Source record: 20443

"Gary Smith" <vk3lcd@gmail.com> wrote in
news:gfdvtbqrr1@news-01.bur.connect.com.au:

> Hi, i am going in a VHF/UHF contest this weekend and have a question
> about stacking beams.

Gary,

You may find subscribing to vklogger.com helpful in the upcoming field day.

There is discussion in the associated forums on stacking... search for the work stacking.

The situation is a little different for a field station with low mast height to a home station. Traditional advice might not be best for the low mast scenario.

You didn't mention your power level, or whether you are using a sensitive preamp.

Separation of antennas helps to isolate one transmitter from another receiver, and the harmonic relationship is important in that isolation. For example, your 2m antenna will capture more power from a 70cm transmitter than vice versa, all else equal.

At such low heights, I would be trying to get the 6m antenna as high as possible, BUT, I would separate the 2m and 70cm antennas, especially if running high power. Don't overlook a stack of 2m, 6m, 70cm (top down).

Owen

4309. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 19:59:46 UTC
From: kb9rqz@yahoo.com
Message-ID: <gthnh4dqv5uqakjvqlbpl5h25j1aht1ner@4ax.com>
Source record: 20432
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
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nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
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but the cowards asking lack the gut to act

4310. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 21:52:14 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ik1Tk.1183$mi4.1103@nwrddc02.gnilink.net>
Source record: 20433

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:a3a86711-efec-4875-a789-0e5416032490@q30g2000prq.googlegroups.com...
On Nov 12, 5:54 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Dave wrote:
> > show me a program that uses the weak force.
>
> Didn't the weak force and the electromagnetic force get
> united into the "electroweak" force in the late 60's?
> In which case, aren't the two forces interchangable?
> --
> 73, Cecil http://www.w5dxp.com

only at temperatures over 10^15K... see
http://en.wikipedia.org/wiki/Electroweak_interaction

so if you are living just after the big bang maybe you could consider them
the same.

4311. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 21:57:56 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Ep1Tk.1184$mi4.1071@nwrddc02.gnilink.net>
Source record: 20434

"Dave" <noone@nowhere.com> wrote in message
news:qOISk.108$4g5.7@nwrddc01.gnilink.net...
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:27d6b7c7-9406-485a-8680-4cbdccb65b48@e38g2000prn.googlegroups.com...
> On Nov 11, 3:45 pm, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:a206b02a-fbf8-47a0-a546-7e14dd14f710@c22g2000prc.googlegroups.com...
>> On Nov 10, 7:58 pm, "Frank" <ve...@nospam.telus.net> wrote:
>>
>> >Knowing that modern day computor programs were formulated
>> >around Maxwells laws
>> >THAT INCLUDE THE WEAK FORCE it would appear an overcheck of the
>> >equilibrium factor should appear when using an optimizer.
>>
>> Art, show me ONE program that uses the weak force with maxwell's
>> equations.
>> or ONE reference to maxwell's equations that say they include the weak
>> force
>> interactions (besides your own posts of course).
>
> reply garbage off topic snipped... you are worse than a politician art...
> answer the question. show me a program that uses the weak force. i will
> guarantee you that nec and ao DO NOT use the weak force. keep searching,
> quote the manual, don't make your own assumptions based on what you
> believe.
>
>

you know, it took me a while, but i have finally figured out art. art is a politician, and worse than that, he is a democrat. all that talk about equilibrium should have tipped me off earlier! art is all for the weak (force) and wants to get everything into equilibrium by taking away from the strong and giving to the weak. He is also excellent at not answering questions as most of you may have noticed. his slipperyness is only topped by our new president, maybe art has been taking lessons from the big chicago politicians in how not to get pinned down. Just think about it, who else but a politician could go on this long doing nothing but asserting beliefs, even in the face of overwhelming evidence to the contrary. politicians do that all the time, they live on repeating sound bites and bumper sticker slogans for years never saying any more than a dozen words on any particular topic... and the more they get pressed the more they fall back on the same repetitive statements. art does exactly the same thing, always falling back

on 'equilibrium', can't you just picture that as a bumper sticker?!?! maybe
if he repeats it long enough he will get voted into some big science post
and get a big grant, after all, if it gets repeated enough if must be right!

4312. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-13 22:15:44 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <gG1Tk.8212$YU2.4694@nlpi066.nbdc.sbc.com>
Source record: 20435

Dave wrote:
> so if you are living just after the big bang maybe you could consider them
> the same.

How can you possibly believe that the universe was
9 billion years old in earth years before earth
years even existed? We *are* living just after the
big bang.
--
73, Cecil http://www.w5dxp.com

4313. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 00:20:30 UTC
From: kb9rqz@yahoo.com
Message-ID: <d2hph49cdbhecebe91m0c0ktour6md6i84@4ax.com>
Source record: 20436
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

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nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4314. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 05:29:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfj2dt$65v$1@news.albasani.net>
Source record: 20437

Cecil Moore wrote:
> Dave wrote:
>> so if you are living just after the big bang maybe you could consider
>> them the same.
>
> How can you possibly believe that the universe was
> 9 billion years old in earth years before earth
> years even existed? We *are* living just after the
> big bang.

Cecil:

I can be a bit dense, yanno?

Could you elaborate a bit ... I lost you somewhere? I mean I understand time could not be measured in earth years before the earth existed ... but after it did exist (and we invented time based on its' spinning) can't we just extrapolate backwards? Or, what?

Regards,
JS

4315. That drug addled convicted crack dealer, Randy Chapman, KB5URP, is in burning love with moparhoLICK!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 06:42:52 UTC
From: mopeyzakween@yahoo.com
Message-ID: <5ed80372-2229-429f-99df-d5eab1404295@g17g2000prg.googlegroups.com>
Source record: 20438
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

morons and druggies, they gravitate together in homo lust.

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE

GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4316. AKC shut the weenie holders of gay Randy Chapman, KB5URP, by exposing his crack dealing conviction!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 07:21:06 UTC
From: mopeyzakween@yahoo.com
Message-ID: <c2e0580c-9ccb-4c32-a6e2-786d0557e14c@z28g2000prd.googlegroups.com>
Source record: 20439
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

Enjoy, Chapwoman...enjoy...it will now never cease.

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

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ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE

GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4317. Re: shownatovah day 127 o0f the lawsuit the suit is of course still MIA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 10:47:30 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <0ad9d9d0-927f-48d7-8475-430e728de913@w1g2000prk.googlegroups.com>
Source record: 20440
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb

On Oct 11, 10:38 am, "kb9rq...@hotmail.com" <kb9rq...@hotmail.com>
wrote:
> On Oct 10, 9:22 pm, Steve <kenwood1...@hotmail.com> wrote:
>
> > FYI, THE "TINYURL.COM" BELOW IS LOADED WITH SPYWARE!!!
>
> course that is the games they play
.
Deleted : Rec.Radio.Shortwave
.
Added : Alt.Idiots to Follow-Up
.

4318. Re: KC8QJP and N8WWM Glory Hole Party - KC8QJP will be offering discount tax consulting through the gloryhole while N8WWM is on his knees

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 10:48:33 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <2eceb07a-394e-4006-a601-ae2b0688c33a@v39g2000pro.googlegroups.com>
Source record: 20441
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb

On Oct 10, 5:22 pm, Steve <kenwood1...@hotmail.com> wrote:
> FYI, THE "TINYURL.COM" BELOW IS LOADED WITH SPYWARE!!!
>
> Leland C Scott wrote:
> >"n8wwm mrbindwell (fatboy)" wrote:
>
> >http://img254.imageshack.us/my.php?image=dougpetro3yk1.jpg
>
> >>Pick up some crisco on your way over tonight, KC8QJP needs a good
> >>slathering on her hind quarters.
>
> >>She's also getting ready to start her tax return posts again like she does
> >>every year. You remember those..
>
> >>http://tinyurl.com/46teqq
>
> >>She says she wants to add some pics of her and me to them this year.
>
> >Cool!
>
>

.
Deleted : Rec.Radio.Shortwave
.
Added : Alt.Idiots to Follow-Up
.

4319. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 12:34:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hceTk.4342$8_3.4311@flpi147.ffdc.sbc.com>
Source record: 20442

John Smith wrote:
> Could you elaborate a bit ... I lost you somewhere? I mean I understand
> time could not be measured in earth years before the earth existed ...
> but after it did exist (and we invented time based on its' spinning)
> can't we just extrapolate backwards? Or, what?

As you know, relativistic effects change the length of seconds. Just after the Big Bang, everything must have been traveling close to the speed of light. (The inflation of the universe is supposed to have happened at much faster than the speed of light.) But what if seconds were simply extremely long due to velocity. As the particles slowed down, seconds got shorter until today we have the shortest second ever to exist - shorter than it was yesterday. Now take today's short second, lay them end to end, and extrapolate the age of the universe. You get a number that is much too large. Conceptually, but not to scale:

BB|-----------------------------------|first second ...
... |--|today's second

What if the first second was actually one trillion of our present-day seconds? Extrapolation would lead to an error of 12 magnitudes in the length of that first second.

Not only are there time effects - there are also space effects. Things are not getting farther away from each other - light-years are getting longer as we speak, i.e. space itself is expanding, i.e. the standard meter in the National Bureau of Standards is getting longer as we speak.

What happens when me measure the light frequency of distant galaxies while, during the travel of that light, light-years were getting longer and seconds were getting shorter? Hint: same thing that happens when the time base knob on an oscilloscope gets loose and slips. (That actually happened to me and the result was an epiphany about space/time.)
--
73, Cecil http://www.w5dxp.com

4320. : Lawsuit countdown 17 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 14:42:45 UTC
From: kb9rqz@yahoo.com
Message-ID: <fi3rh49iiqejo5prha6d62pk4uhtk90cjj@4ax.com>
Source record: 20444
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Thu, 13 Nov 2008 22:42:52 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>morons and druggies, they gravitate together in homo lust.
>

sapming rigth along

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4321. : Lawsuit countdown 17 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 14:43:04 UTC
From: kb9rqz@yahoo.com
Message-ID: <9j3rh4ddklkisl4rm21lkr1dpobecfcn53@4ax.com>
Source record: 20445
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Thu, 13 Nov 2008 23:21:06 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>Enjoy, Chapwoman...enjoy...it will now never cease.

spam

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4322. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 14:46:39 UTC
From: kb9rqz@yahoo.com
Message-ID: <dq3rh49bq5kgrqnvvcjqov282ehd82v7oj@4ax.com>
Source record: 20446
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

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but the cowards asking lack the gut to act

4323. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 16:06:02 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <LIhTk.5614$W06.1874@flpi148.ffdc.sbc.com>
Source record: 20447

I recall an article that HROs were also used but can't find much. Does anyone know if National made a tone decoder, I'm using RCAs nomenclature because that's were I got most of my info. What were some other names for the device, that RCA called a tone decoder?

--
Thanks & 73
Hank WD5JFR
"Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in message news:SSBQk.4258$W06.1779@flpi148.ffdc.sbc.com...
>I know that Hallicrafters made a dual diversity set up and RCA used
>three AR-88s in a trioka, selecting the best signal with a tone decoder
>that switched in the best and let the other/s idle or squelched. I've
>heard that Collins used the R 390 (51J or 51S?) , and Hammarlund the
>Super Pros (only 600s or others?). It seems like three antennas spaced
>about 1000 feet apart on an equilateral triangle was a 100% solution.
>Did the Brits use it a Bletchley? But I don't see anything these days
>and have to wonder if diversity reception was made obsolete by SSB or
>the news & financial services using wire for TTY. I also know that
>Telstar was the final nail. Was the primary use for RTTY or was it used
>to voice well as CW? Anyone have some real personal experience to
>offer?
> Thanks
> Hank WD5JFR

4324. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 18:09:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfkeu0$6nb$1@news.albasani.net>
Source record: 20448

Cecil Moore wrote:

> ...
> What happens when me measure the light frequency of
> distant galaxies while, during the travel of that
> light, light-years were getting longer and seconds
> were getting shorter? Hint: same thing that happens
> when the time base knob on an oscilloscope gets loose
> and slips. (That actually happened to me and the
> result was an epiphany about space/time.)

OK. Reading you clear now.

Just one of those "DUH!" moments I have. Thanks for your time; I am
embarrassed ...

Regards,
JS

4325. FA: BUDDIPOLE Deluxe Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 19:07:53 UTC
From: DC <nobody@pseudo.borked.net>
Message-ID: <62ae4d96a036240a1d3a2a0934d5ef61@pseudo.borked.net>
Source record: 20449

http://snipr.com/BUDDIPOLE

4326. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 19:11:46 UTC
From: richardharrison@webtv.net
Message-ID: <15198-491DCD72-728@storefull-3253.bay.webtv.net>
Source record: 20450

Henry Kolesnik wrote:
"What were some other names for the device that RCA called a tone decoder?"

CTCSS is often called PL tone (for Private Line, a trademark of Motorola to describe their implementation of Continuous Tone Coded Squelch System).

Best regards, Richaard Harrison, KB5WZI

4327. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 20:25:30 UTC
From: kb9rqz@yahoo.com
Message-ID: <olnrh4lf6l1g7rp4kenpuh3kkqstp8f7qb@4ax.com>
Source record: 20201
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

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btw i can be found at
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Chassel Mi

but the cowards asking lack the gut to act

4328. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-14 21:11:22 UTC
From: richardharrison@webtv.net
Message-ID: <15198-491DE97A-746@storefull-3253.bay.webtv.net>
Source record: 20202

Art Unwin wrote:
"I am still of the belief that on a fractional wave antenna the current travels on both the outside and the inside of the radiator."

That`s so at DC but not at HF.

HF only travels on the outside layer of a conductor as more current-opposing flux lines encircle the conductor`s center than encircle the conductor`s surface or outer layer. See Fig. 2-10 on page 22 of Terman`s 1955 opus.

Art also is confused about current distribution on resonant antennas of various lengths. Terman can help there too. On page 866 Terman wrote:
"The current distribution as observed in such a resonant wire (1/2-wave open at both ends) serving as an antenna ordinarily approximates very closely the distribution that would be obtained on the assumption of zero loss. provided the wire length does not exceed 8 to 10 wavelengths. The current distribution, accordingly has the character illustrated in Fig. 23-3."
Also on page 866:
"----to a first approximation the current distribution can be taken as that for a line with zero losses; it then has the characteristics discussed in Sec.4-5."

Page 91, Fig. 4-3 shows the vectors (phasors) E1 & E2 at an open-circuited load as happens at the antenna tips, Conduction current ends at the conductor tip. Current interruption collapses the magnetic field and induces an opposite current causing a zero sum current at the tip, but the induced voltage is of the same polarity as the incident votage making a voltage double at the antenna tip. Energy is conserved.

Best regards, Richard Harrison, KB5WZI

4329. Re: Life For Your Xtra Digital Clock

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 00:39:00 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-6CF3E2.19385914112008@nntp.aioe.org>
Source record: 20203

In article <LCLSk.360$Cn3.38@newsfe20.iad>,
"Howard Kowall" <hkowall@shaw.ca> wrote:

> I wanted both clocks in 24hr mode,so I goggled the clock IC used in the
> digital clock,and found most of the using a very general purpose clock IC
> and all capable of doing 24hrs format buy a small modification,usually this
> mod is just a matter of shorting a couple of pins on the IC

Howard-

I built a clock from Radio Shack plans and parts back in the 1970s.
That chip had the 24 hour option, but used the same pin to change from
60 Hz to 50 Hz! I got around that by using an SN7410 to convert 60 Hz
to 50 Hz.

Fred

4330. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 00:41:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <767bd853-bc13-4d17-8cee-bfb0356624b6@q30g2000prq.googlegroups.com>
Source record: 20204

On Nov 14, 3:11 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art Unwin wrote:
>
> "I am still of the belief that on a fractional wave antenna the current
> travels on both the outside and the inside of the radiator."
>
> That`s so at DC but not at HF.
>
> HF only travels on the outside layer of a conductor as more
> current-opposing flux lines encircle the conductor`s center than
> encircle the conductor`s surface or outer layer. See Fig. 2-10 on page
> 22 of Terman`s 1955 opus.
>
> Art also is confused about current distribution on resonant antennas of
> various lengths. Terman can help there too. On page 866 Terman wrote:
> "The current distribution as observed in such a resonant wire (1/2-wave
> open at both ends) serving as an antenna ordinarily approximates very
> closely the distribution that would be obtained on the assumption of
> zero loss. provided the wire length does not exceed 8 to 10 wavelengths.
> The current distribution, accordingly has the character illustrated in
> Fig. 23-3."
> Also on page 866:
> "----to a first approximation the current distribution can be taken as
> that for a line with zero losses; it then has the characteristics
> discussed in Sec.4-5."
>
> Page 91, Fig. 4-3 shows the vectors (phasors) E1 & E2 at an
> open-circuited load as happens at the antenna tips, Conduction current
> ends at the conductor tip. Current interruption collapses the magnetic
> field and induces an opposite current causing a zero sum current at the
> tip, but the induced voltage is of the same polarity as the incident
> votage making a voltage double at the antenna tip. Energy is conserved.
>
> Best regards, Richard Harrison, KB5WZI

Could you give a similar description only this time make it a 5/8
wavelength antenna?

4331. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 03:51:40 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <gHrTk.435$jr4.240@edtnps82>
Source record: 20205

>Google
>Secrets of the aether

>Three papers written by two physics peoiple in Southern Illinois
>Now also in book form released about two years ago
>Art

Reference found at: http://16pi2.com/

I guess you mean "Two phyicists". Problem is they are not physicis:
No degrees listed, no university affiliation, no publishing list, no
professional society affiliation, papers not published in scholarly
journals therefore no peer review. Probably more that I have
missed.

Even where the three papers were presented (PIRT 2006)
looks like it would not stand up to too much scrutiny. At
that point I lost interest.

73,

Frank

4332. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 04:11:09 UTC
From: Dave <dave@dave.dave>
Message-ID: <491e4bdd$0$31786$bd467cd0@news.dslextreme.com>
Source record: 20206

Richard Harrison wrote:
> Henry Kolesnik wrote:
> "What were some other names for the device that RCA called a tone
> decoder?"
>
> CTCSS is often called PL tone (for Private Line, a trademark of Motorola
> to describe their implementation of Continuous Tone Coded Squelch
> System).
>
> Best regards, Richaard Harrison, KB5WZI
>
Continuous Tone Coded Subaudible Squelch

4333. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 07:34:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gflu4opvj1@news.albasani.net>
Source record: 20207

Richard Harrison wrote:

> ...
> Best regards, Richard Harrison, KB5WZI
>

Sorry I "clipped" your text so severely, my text will be brief ...

It surprises me anyone would think RF would not choose the outside of ANY RADIATING element--this is where is MUST make the "jump" to the ether ... isn't logic enough?

Regards,
JS

4334. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 07:45:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfluog$qi8$1@news.albasani.net>
Source record: 20208

Frank wrote:

> ...
> I guess you mean "Two phyicists". Problem is they are not physicis:
> No degrees listed, no university affiliation, no publishing list, no
> professional society affiliation, papers not published in scholarly
> journals therefore no peer review. Probably more that I have
> missed.
>
> Even where the three papers were presented (PIRT 2006)
> looks like it would not stand up to too much scrutiny. At
> that point I lost interest.
>
> 73,
>
> Frank

Hmmm, that is sad, so very sad ...

In other words, your logic, education and reasoning powers make you highly dependent upon "rubber stamps", and, unable to think for yourself, reason for yourself, use high mental capacities--you are stuck with dependance on a "USDA stamp" telling you the "meat" of the matter is fit for you consumption?

You, certainly, must be the product of this generation ... this is so unfortunate, when I was in college they taught us "how to reason", and "how to research"--NOT WHAT TO THINK, HOW TO THINK or IF IT WAS OK TO THINK ... I guess just like cheap crud made in china ... so has gone the education given to this new generation ... perhaps you could complain to the college who has turned out this "inferior merchandise?"

... sad, so very sad ... :-(Best of luck, may you find better on the path yet left before you ...

Regards,
JS

4335. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 12:18:02 UTC
From: kb9rqz@yahoo.com
Message-ID: <mffth4l0a9oka168cqfqpv43jusp2m24u0@4ax.com>
Source record: 20209
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 14 Nov 2008 15:25:30 -0500, kb9rqz@yahoo.com wrote:

>On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
><assemblywizard@gmail.com> wrote:
>
>>K4YZ wrote:
>>> Nope.
>>>
>>> The IP Address and servers are complete proof that I do NOT share
>>> any annonymous character's "address".
>>>
>>> Sounds like Lennie, to me....
>>>
>>> Steve, K4YZ
>>>
>>
>>To anyone with even an elementary understanding of anonymous proxies,
>>anonymous remailers, zombie backdoors, etc., the ability to change ones
>>IP address and header details is simplistic, indeed, with little time
>>spent anyone can appear to be "coming" from anywhere in the world.
>>
>>You waste my time. Worse, you think us all idiots here. You remind me
>>of the "street smart" prosecutors and defense attorneys who stack jurys
>>with members of little or no technical knowledge and then call in
>>"expert witnesses" and propose arguments of technical details to boggle
>>their minds.
>>
>>You have only proven that you, yourself are either ignorant to such
>>technical details, or else you are indeed street smart, I favor the
>>latter in this case (however, if you in the dark about such things, 15
>>minutes on google will enlighten you.)
>>
>>JS
>
>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
>adams
>
>woger you are a Congress all in your own head
>
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>but the cowards asking lack the gut to act

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but the cowards asking lack the gut to act

4336. Kilo Bravo niner Romeo Quebec Zulu

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 14:00:51 UTC
From: Dave <dave@dave.dave>
Message-ID: <491ed613$0$31794$bd467cd0@news.dslextreme.com>
Source record: 20210
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

kb9rqz@yahoo.com wrote:
> On Fri, 14 Nov 2008 15:25:30 -0500, kb9rqz@yahoo.com wrote:
>
>> On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
>> <assemblywizard@gmail.com> wrote:
>>
>>> K4YZ wrote:
>>>> Nope.
>>>>
>>>> The IP Address and servers are complete proof that I do NOT share
>>>> any annonymous character's "address".
>>>>
>>>> Sounds like Lennie, to me....
>>>>
>>>> Steve, K4YZ
>>>>
>>> To anyone with even an elementary understanding of anonymous proxies,
>>> anonymous remailers, zombie backdoors, etc., the ability to change ones
>>> IP address and header details is simplistic, indeed, with little time
>>> spent anyone can appear to be "coming" from anywhere in the world.
>>>
>>> You waste my time. Worse, you think us all idiots here. You remind me
>>> of the "street smart" prosecutors and defense attorneys who stack jurys
>>> with members of little or no technical knowledge and then call in
>>> "expert witnesses" and propose arguments of technical details to boggle
>>> their minds.
>>>
>>> You have only proven that you, yourself are either ignorant to such
>>> technical details, or else you are indeed street smart, I favor the
>>> latter in this case (however, if you in the dark about such things, 15
>>> minutes on google will enlighten you.)
>>>
>>> JS
>> "one useless man is disgrace 2 become a law firm 3 or more become a congress"
>> adams
>>
>> woger you are a Congress all in your own head
>>
>> http://kb9rqz.bravejournal.com/
>> altopia is never used by KB9RQZ
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>> btw i can be found at
>> 17366 N River Rd

>> Chassel Mi
>>
>> but the cowards asking lack the gut to act
>
> "one useless man is disgrace 2 become a law firm 3 or more become a congress"
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> btw i can be found at
> 17366 N River Rd
> Chassel Mi
>
> but the cowards asking lack the gut to act

Your posts don't make any sense.

You are the government, quit tearing yourself down, and seek
professional help.

4337. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 14:03:13 UTC
From: Dave <noone@nowhere.com>
Message-ID: <BEATk.661$4g5.529@nwrddc01.gnilink.net>
Source record: 20211

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:767bd853-bc13-4d17-8cee-bfb0356624b6@q30g2000prq.googlegroups.com...
On Nov 14, 3:11 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art Unwin wrote:

nothing that answered the question.. as expected.

well, art... lets try it even simpler... what term(s) in maxwell's equations
specify the contribution of the weak force? maybe from that we can
determine where they are implemented in art's fantasy about modeling
software.

4338. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 16:44:13 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <YXCTk.5609$D32.2425@flpi146.ffdc.sbc.com>
Source record: 20212

Hey Guys
I made an error when I called the RCA device that selects the best Rx a
Tone Decoder, it's called a Tone Keyer. It selects the strongest of 3
HF Rx signals and amplifies it. What did the other HF diversity makers
call Tone Keyer.
I know about CTCSS but its unrelated to my query.
Thanks
Hank

Hank
"Dave" <dave@dave.dave> wrote in message
news:491e4bdd$0$31786$bd467cd0@news.dslextreme.com...
> Richard Harrison wrote:
>> Henry Kolesnik wrote:
>> "What were some other names for the device that RCA called a tone
>> decoder?"
>>
>> CTCSS is often called PL tone (for Private Line, a trademark of
>> Motorola
>> to describe their implementation of Continuous Tone Coded Squelch
>> System).
>>
>> Best regards, Richaard Harrison, KB5WZI
>>
> Continuous Tone Coded Subaudible Squelch

4339. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 17:49:01 UTC
From: Dave <dave@dave.dave>
Message-ID: <491f0b8d$0$31758$bd467cd0@news.dslextreme.com>
Source record: 20213

Henry Kolesnik wrote:
> Hey Guys
> I made an error when I called the RCA device that selects the best Rx a
> Tone Decoder, it's called a Tone Keyer. It selects the strongest of 3
> HF Rx signals and amplifies it. What did the other HF diversity makers
> call Tone Keyer.
> I know about CTCSS but its unrelated to my query.
> Thanks
> Hank
>
> Hank
> "Dave" <dave@dave.dave> wrote in message
> news:491e4bdd$0$31786$bd467cd0@news.dslextreme.com...
>> Richard Harrison wrote:
>>> Henry Kolesnik wrote:
>>> "What were some other names for the device that RCA called a tone
>>> decoder?"
>>>
>>> CTCSS is often called PL tone (for Private Line, a trademark of Motorola
>>> to describe their implementation of Continuous Tone Coded Squelch
>>> System).
>>>
>>> Best regards, Richaard Harrison, KB5WZI
>>>
>> Continuous Tone Coded Subaudible Squelch
>
I had a "Westinghouse" dual version of the Racal RA-117 with 2 RF
chains. There was a "voter" of some kind that went with it, but I did
not have that part.

4340. A-4S Issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 18:43:16 UTC
From: "R. Scott" <w7psk@w7psk.net>
Message-ID: <gfn57l$k5v$1@news.motzarella.org>
Source record: 20214

My A4S is acting wierd and I cannot figure it out.

20 meters its got great SWR. 15 is so so but tunable with a tuner
and stays relatively flat.

However 10 meters, the SWR stinks and I can try to tune it with a tuner
but then it goes out again. And I can swing the beam and hear the
Noise pick up and go down with the turning of the beam and when it stops
it wiggles a bit and the SWR changes. The tube and trap connections all
see secure.

Do I have a bad trap or ?????

Scotty W7PSK

4341. Re: A-4S Issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 20:06:55 UTC
From: nm5k@wt.net
Message-ID: <5cedab80-e867-4e39-ab20-f521b8bd22ff@a3g2000prm.googlegroups.com>
Source record: 20215

On Nov 15, 12:43 pm, "R. Scott" <w7...@w7psk.net> wrote:
> My A4S is acting wierd and I cannot figure it out.
>
> 20 meters its got great SWR. 15 is so so but tunable with a tuner
> and stays relatively flat.
>
> However 10 meters, the SWR stinks and I can try to tune it with a tuner
> but then it goes out again. And I can swing the beam and hear the
> Noise pick up and go down with the turning of the beam and when it stops
> it wiggles a bit and the SWR changes. The tube and trap connections all
> see secure.
>
> Do I have a bad trap or ?????
>
> Scotty W7PSK

Do you have the water drain holes pointing down?

4342. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-15 20:07:25 UTC
From: richardharrison@webtv.net
Message-ID: <14250-491F2BFD-205@storefull-3251.bay.webtv.net>
Source record: 20216

Art Unwin wrote:
"Could you give a similar description only this time make it a 5/8 wavelength antenna."

My previous resume` regarded current distribution on a 1/2-wave standing-wave antenna.

A 1/2-wave antenna is resonant, that is it has no reactance, and it is open-circuited at both ends. Its feed point is in its center, at its high-current point, and it is a pure resistance.

The 5/8 wavelength antenna consists of a 1/2 wavelength section of radiation resistance but no reactance plus a 1/8 wavelength section of small radiation resistance and a large capacitive reactance. To receive maximum energy, the capacitive reactance must be compensated. A unity power factor is desirable.

As with the 1/2-wave antenna, current distribution in the 5/8-wave antenna is controlled by its open-circuited ends. On page 187 of the 3rd edition of Kraus` "Antennas" he says:
"A sinusoidal current distribution may be regarded as the standing wave produced by two uniform (unattenuated) traveling waves of equal amplitude moving in opposite directions along the antenna."

We know there`s radiation and loss as the current travels to and fro between the open-circuited ends of the antenna, but if unattenuated is good nough for most purposes for Kraus, it is good enough for me.

Best regards, Richard Harrison, KB5WZI

4343. Re: A-4S Issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 00:59:54 UTC
From: ltdoc@yahoo.com
Message-ID: <72d52d42-5417-4d40-9ab9-b5d66d41b289@a29g2000pra.googlegroups.com>
Source record: 20217

First thought is a 'not good' electrical connection somewhere. A 'joint' may seem secure but be a bad electrical connection. No idea if you have a bad trap. Making sure that they are not filled with water or whatever else would be a good idea (drain holes pointed down??). I would think that having to use a tuner means that maybe the antenna isn't adjusted correctly? If you can get it to a point where you can do all that checking of joints, etc, why not just take it apart, clean it, and put it back? (Easy for me to suggest, I ain't the one doing it, right? ;))
- 'Doc

4344. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 03:39:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <54c0d218-e203-41bd-9da3-e24fbda5a7c8@i24g2000prf.googlegroups.com>
Source record: 20218

On Nov 15, 2:07 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art Unwin wrote:
>
> "Could you give a similar description only this time make it a 5/8
> wavelength antenna."
>
> My previous resume` regarded current distribution on a 1/2-wave
> standing-wave antenna.
>
> snip
"We know that..........." !!!!!!! hmmmm

I don't know who "we" is but for one I don't know
Could you explain who "we" is and on what authority or explanation
has "we": got for such an implausable statement?
I do thank you for responding. Oh what a web we weave when we try....

May be this is why scientists have not yet been able to rationalize
radiation
and we are just left with theories with holes as in cheese.
Industry shows us not just talk about it they show us every day what
happens to a particle
on their conveyor. They even let you show the particle levitated and
revolving.
Industry also shows you that eddy currents occur in a closed loop
circuit
and one must see that the combination of the alternating current flow
and the resulting eddy current can
levitate a particle. They don't just talk about it they can
demonstrate it.
This is much more plausable and reproduceable than wireing a house
with an open circuit to plug into.
Also the old books that you read on both argue that a fractional
wavelength is represented by a series circuit that is not open!
They also say that a full wave antenna is represented by a parallel or
tank circuit and again the circuit is not open!
No wonder radiation has not been explained fully when so many
paradoxes are present. Oh and if my house is wired as an open circuit
asit is time related why on earth would one need fuses and where would
they put them if it is an open circuit?
The idea of two currents opposing each other on the same surface of an
open circuit where the eddy currents is thus cancelled
by revolving in opposite directions and the same thing going for the
time varying current tells me you have discovered the "big bang"

by not placing a fuse in an open circuit.
Kraus was not perfect otherwise he would have improved on his thinking
during his life time
by studying radiation and it's creation.

Regards
Art

>
> We know there`s radiation and loss as the current travels to and fro
> between the open-circuited ends of the antenna, but if unattenuated is
> good nough for most purposes for Kraus, it is good enough for me.
>
> Best regards, Richard Harrison, KB5WZI

4345. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 06:43:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfofgg$i8a$1@news.albasani.net>
Source record: 20219

Richard Harrison wrote:
> Art Unwin wrote:
> "Could you give a similar description only this time make it a 5/8
> wavelength antenna."
> ...
> Best regards, Richard Harrison, KB5WZI
>

Richard:

I certainly don't want to engage in a large argument.

Rather, I would just venture an opinion directly related to my real world construction experiences, and the results from the same:

If there are notable gains from constructing a 5/8 wave antenna, as opposed to a 1/2 wave--I have NOT seen them.

It all looks good in EZNEC and/or mmana-gal (or, "on paper"), however, in real world s-meter/signal-reports, "it" does not.

Perhaps I have experienced a anomaly(s?)

Or, put simply, the extra "hassle" in dealing with these extended lengths is simply "not worth it!"

Regards,
JS

4346. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 13:37:40 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <1680i497ad0u8jm2ohkf3bt7peglgo63vm@4ax.com>
Source record: 20220

On Wed, 5 Nov 2008 10:31:59 -0800 (PST), nm5k@wt.net wrote:

>On Nov 5, 12:01ï¿½pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>>
>> Richard you have not come up with anything that contradicts what I
>> have apothosized, nothing !
>
> The word you've entered isn't in the dictionary. Click on a spelling
>suggestion below or try again using the search bar above.
>Suggestions for apothosized:
>
> 1. apotheosis 2. hypothesize
>
>Spelling Help Powered by Franklin Electronic Publishers
>
>>Now it is YOU who have a problem.
>
>Yep, just like I said.. Always blame it on the other guy.
>It's always his fault. Art is never wrong. What a horses ass.. :/
>
>

Two things.
Why are you still bothering with him? He loves the attention he is
getting, he is off in some other NG spewing about being the most
responded to poster. The correct response is to kill file him. I have
only read responses to his posts.
Many of you could benefit by setting your newsreader to quote
correctly. Outhouse Express can do it, it may even do it by default.

4347. Re: A-4S Issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 15:26:18 UTC
From: JB <nospam@goofball.net>
Message-ID: <uYWTk.849$4g5.453@nwrddc01.gnilink.net>
Source record: 20221

"R. Scott" <w7psk@w7psk.net> wrote in message
news:gfn57l$k5v$1@news.motzarella.org...
> My A4S is acting wierd and I cannot figure it out.
>
> 20 meters its got great SWR. 15 is so so but tunable with a tuner
> and stays relatively flat.
>
> However 10 meters, the SWR stinks and I can try to tune it with a tuner
> but then it goes out again. And I can swing the beam and hear the
> Noise pick up and go down with the turning of the beam and when it stops
> it wiggles a bit and the SWR changes. The tube and trap connections all
> see secure.
>
> Do I have a bad trap or ?????

Coax connectors or water intrusion are often a problem.

4348. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 16:16:00 UTC
From: Dave <noone@nowhere.com>
Message-ID: <4HXTk.1779$mi4.125@nwrddc02.gnilink.net>
Source record: 20222

"JosephKK" <quiettechblue@yahoo.com> wrote in message
news:1680i497ad0u8jm2ohkf3bt7peglgo63vm@4ax.com...
> On Wed, 5 Nov 2008 10:31:59 -0800 (PST), nm5k@wt.net wrote:
>
>>On Nov 5, 12:01 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>>
>>>
>>> Richard you have not come up with anything that contradicts what I
>>> have apothosized, nothing !
>>
>> The word you've entered isn't in the dictionary. Click on a spelling
>>suggestion below or try again using the search bar above.
>>Suggestions for apothosized:
>>
>> 1. apotheosis 2. hypothesize
>>
>>Spelling Help Powered by Franklin Electronic Publishers
>>
>>>Now it is YOU who have a problem.
>>
>>Yep, just like I said.. Always blame it on the other guy.
>>It's always his fault. Art is never wrong. What a horses ass.. :/
>>
>>
>
> Two things.
> Why are you still bothering with him? He loves the attention he is
> getting, he is off in some other NG spewing about being the most
> responded to poster. The correct response is to kill file him. I have
> only read responses to his posts.
> Many of you could benefit by setting your newsreader to quote
> correctly. Outhouse Express can do it, it may even do it by default.

art is fun! he gives me something to laugh at when the wx is bad.

usually oe does quote properly, but something is different about art's
posts, they must be in a format that oe doesn't like so it won't
automatically indent and quote them.

4349. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 16:57:27 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <cc57d3a5-f500-43e3-88a1-65653f5ca0f0@t39g2000prh.googlegroups.com>
Source record: 20223

On Nov 16, 10:16 am, "Dave" <no...@nowhere.com> wrote:
> "JosephKK" <quiettechb...@yahoo.com> wrote in message
>
> news:1680i497ad0u8jm2ohkf3bt7peglgo63vm@4ax.com...
>
>
>
> > On Wed, 5 Nov 2008 10:31:59 -0800 (PST), n...@wt.net wrote:
>
> >>On Nov 5, 12:01 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> >>> Richard you have not come up with anything that contradicts what I
> >>> have apothosized, nothing !
>
> >> The word you've entered isn't in the dictionary. Click on a spelling
> >>suggestion below or try again using the search bar above.
> >>Suggestions for apothosized:
>
> >>   1. apotheosis   2. hypothesize
>
> >>Spelling Help Powered by Franklin Electronic Publishers
>
> >>>Now it is YOU who have a problem.
>
> >>Yep, just like I said.. Always blame it on the other guy.
> >>It's always his fault. Art is never wrong. What a horses ass.. :/
>
> > Two things.
> > Why are you still bothering with him? He loves the attention he is
> > getting, he is off in some other NG spewing about being the most
> > responded to poster. The correct response is to kill file him. I have
> > only read responses to his posts.
> > Many of you could benefit by setting your newsreader to quote
> > correctly. Outhouse Express can do it, it may even do it by default.
>
> art is fun! he gives me something to laugh at when the wx is bad.
>
> usually oe does quote properly, but something is different about art's
> posts, they must be in a format that oe doesn't like so it won't
> automatically indent and quote them.

David
There is something odd about that post. I have not been dabbling in
other newsgroups other than a short stint

on Eham. I have not stated that I get more resposes than anybody else on the net. So I really don't know where he is coming from
I have no problem in people killing my file as that would leave people who want to discuss antennas instead
of staying purely for insults and argueing reasons. Perhaps he is one of the kb9.... group that are intent on destroying newsgroups
before somebody divulges where he lives so that people can decide how to react. Maybe when the table turns on him he will ponder
if his behaviour justified the response he gets!

Now back to antennas, how can one determine if current does or does not flow in the centre of a conductor? by separating It was the basis of equilibrium of a radiator
that allowed the use of Newtrons law to determine that if a charge does not move in sync with the current then no current can be flowing thru the center.
Nobody used Newtons laws in the case of a fractional wavelength antenna.
but of a bound electron breaking away from the orbits of the material. This thinking says that a antenna will dissapate over time so we must consider the possibility of an unbound electron at rest upon the surface which brings us back to the Newton domain Is it beyond the sensabilities to see it as an action and a reacgtion between the settlement of particles on a surface and the reaction to this action by the application of current which provides a reactionary field. This idea of waves moving along with the current flow and various other ideas put forward by the likes of book authors seems to be a never ending attempt to provide substanced to a long ago thought out bad theory which would be disrupted if current was observed to flow in the centre of a radiator
Regards
Art
Art

4350. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 17:11:28 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <4vYTk.5106$hc1.4505@flpi150.ffdc.sbc.com>
Source record: 20224

John Smith wrote:
> Richard Harrison wrote:
>> Art Unwin wrote:
>> "Could you give a similar description only this time make it a 5/8
>> wavelength antenna."
>> ...
>> Best regards, Richard Harrison, KB5WZI
>
> Richard:
>
> I certainly don't want to engage in a large argument.
>
> Rather, I would just venture an opinion directly related to my real
> world construction experiences, and the results from the same:
>
> If there are notable gains from constructing a 5/8 wave antenna, as
> opposed to a 1/2 wave--I have NOT seen them.
>
> It all looks good in EZNEC and/or mmana-gal (or, "on paper"), however,
> in real world s-meter/signal-reports, "it" does not.
>
> Perhaps I have experienced a anomaly(s?)
>
> Or, put simply, the extra "hassle" in dealing with these extended
> lengths is simply "not worth it!"
>
> Regards,
> JS

I think that we all should remember that it is the "ART" of antenna
design not the "SCIENCE" of antenna design.

Dave WD9BDZ

4351. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 17:58:13 UTC
From: Dave <noone@nowhere.com>
Message-ID: <VaZTk.1807$mi4.569@nwrddc02.gnilink.net>
Source record: 20225

"David G. Nagel" <nagel.david@sbcglobal.net> wrote in message
news:4vYTk.5106$hc1.4505@flpi150.ffdc.sbc.com...
> John Smith wrote:
>> Richard Harrison wrote:
>>> Art Unwin wrote:
>>> "Could you give a similar description only this time make it a 5/8
>>> wavelength antenna."
>>> ...
>>> Best regards, Richard Harrison, KB5WZI
>>
>> Richard:
>>
>> I certainly don't want to engage in a large argument.
>>
>> Rather, I would just venture an opinion directly related to my real world
>> construction experiences, and the results from the same:
>>
>> If there are notable gains from constructing a 5/8 wave antenna, as
>> opposed to a 1/2 wave--I have NOT seen them.
>>
>> It all looks good in EZNEC and/or mmana-gal (or, "on paper"), however, in
>> real world s-meter/signal-reports, "it" does not.
>>
>> Perhaps I have experienced a anomaly(s?)
>>
>> Or, put simply, the extra "hassle" in dealing with these extended lengths
>> is simply "not worth it!"
>>
>> Regards,
>> JS
>
> I think that we all should remember that it is the "ART" of antenna design
> not the "SCIENCE" of antenna design.
>
> Dave WD9BDZ

its only an art to art its a science to everyone else. art paints his
antennas with magical mystery jumping diamagnetic neutrinos that levitate in
the breeze. sounds like paintings like the melted watch and distorted
perceptions to me.

4352. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 18:09:23 UTC
From: richardharrison@webtv.net
Message-ID: <14249-492061D3-1491@storefull-3251.bay.webtv.net>
Source record: 20227

Art wrote:
"This idea of waves moving along with the current flow and various other ideas put forward by book authors seems to be a never ending attempt to provide substance(d) to long ago thought out bad theory which would be disrupted if current was observed to flow in the center of a radiator."

The theory is well tested and good.

Authors often write books to inform. They are paid for their efforts.

Skin effect is a fact of agreement among the scientific community. A proof is readily at hand. Coaxial cable keeps what`s inside in and what`s outside out.

The best exposition of "skin effect" that I know of is found in chapter 27 of "Radio-Electronic Transmission Fundamentals" by B. Whitfield Griffith. The 1st edition was published in 1962. It was republished by Scitech in 2006. Art would enjoy and benefit from all 638 pages.

Best regards, Richard Harrison, KB5WZI

4353. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 18:13:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4740f7a9-c3b9-44c9-841e-1f1be5ab2d2c@o4g2000pra.googlegroups.com>
Source record: 20226

On Nov 16, 11:58 am, "Dave" <no...@nowhere.com> wrote:
> "David G. Nagel" <nagel.da...@sbcglobal.net> wrote in
messagenews:4vYTk.5106$hc1.4505@flpi150.ffdc.sbc.com...
>
>
>
> > John Smith wrote:
> >> Richard Harrison wrote:
> >>> Art Unwin wrote:
> >>> "Could you give a similar description only this time make it a 5/8
> >>> wavelength antenna."
> >>> ...
> >>> Best regards, Richard Harrison, KB5WZI
>
> >> Richard:
>
> >> I certainly don't want to engage in a large argument.
>
> >> Rather, I would just venture an opinion directly related to my real world
> >> construction experiences, and the results from the same:
>
> >> If there are notable gains from constructing a 5/8 wave antenna, as
> >> opposed to a 1/2 wave--I have NOT seen them.
>
> >> It all looks good in EZNEC and/or mmana-gal (or, "on paper"), however, in
> >> real world s-meter/signal-reports, "it" does not.
>
> >> Perhaps I have experienced a anomaly(s?)
>
> >> Or, put simply, the extra "hassle" in dealing with these extended lengths
> >> is simply "not worth it!"
>
> >> Regards,
> >> JS
>
> > I think that we all should remember that it is the "ART" of antenna design
> > not the "SCIENCE" of antenna design.
>
> > Dave WD9BDZ
>
> its only an art to art its a science to everyone else. art paints his
> antennas with magical mystery jumping diamagnetic neutrinos that levitate in
> the breeze. sounds like paintings like the melted watch and distorted
> perceptions to me.

No David, I am trying to lead people away from the idea of break away elements from the radiator
substance itself. We all recognise that the rotation of the Sun has a pivitable place in radiation.
It is also estimated that there are billions of particles per cubic meter here on Earth which came from the Sun.
So what is so wrong in looking for a connection between these particles and radiatiation? After all we are aware that they will come to rest on a material that will not apply a bond to these particles such as a diagmatic material which radiators are made of?
We also know that these particles in flight must have a straight line projection that exceeds the gravitational pull and possibly this is the weak force which is acknoweledged in the science community! Yet we hang on to the idea that current cannot flow in the center of a fractional wavelkength radiator
purely on similar speculation since it has never been observed or proven. It just isn't a lot of sense and the ARRL could not care less relying on a cycle of informing new hams how to solder a connector on coax.
Good grief
Regards
Art

4354. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 18:26:34 UTC
From: richardharrison@webtv.net
Message-ID: <14249-492065DA-1492@storefull-3251.bay.webtv.net>
Source record: 20228

Dave wrote:
"Continuous Tone Coded Subaudible Squelch"

I like that better than "Continuous Tone Coded Squelch System" as
"System" is nondescriptive.

Best regards, Richard Harrison, KB5WZI

4355. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 19:18:03 UTC
From: Dave <dave@dave.dave>
Message-ID: <492071eb$0$31742$bd467cd0@news.dslextreme.com>
Source record: 20229

Richard Harrison wrote:
> Art wrote:
> "This idea of waves moving along with the current flow and various other
> ideas put forward by book authors seems to be a never ending attempt to
> provide substance(d) to long ago thought out bad theory which would be
> disrupted if current was observed to flow in the center of a radiator."
>
> The theory is well tested and good.
>
> Authors often write books to inform. They are paid for their efforts.
>
> Skin effect is a fact of agreement among the scientific community. A
> proof is readily at hand. Coaxial cable keeps what`s inside in and
> what`s outside out.
>
> The best exposition of "skin effect" that I know of is found in chapter
> 27 of "Radio-Electronic Transmission Fundamentals" by B. Whitfield
> Griffith. The 1st edition was published in 1962. It was republished by
> Scitech in 2006. Art would enjoy and benefit from all 638 pages.
>
> Best regards, Richard Harrison, KB5WZI
>
>
>
High power coaxial transmission lines have hollow center conductors.

4356. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 19:18:47 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <b87adb61-fce2-4e08-a503-e1ed22c3afd5@d36g2000prf.googlegroups.com>
Source record: 20230

On Nov 16, 1:09 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "This idea of waves moving along with the current flow and various other
> ideas put forward by book authors seems to be a never ending attempt to
> provide substance(d) to long ago thought out bad theory which would be
> disrupted if current was observed to flow in the center of a radiator."
>
> The theory is well tested and good.
>
> Authors often write books to inform. They are paid for their efforts.
>
> Skin effect is a fact of agreement among the scientific community. A
> proof is readily at hand. Coaxial cable keeps what`s inside in and
> what`s outside out.
>
> The best exposition of "skin effect" that I know of is found in chapter
> 27 of "Radio-Electronic Transmission Fundamentals" by B. Whitfield
> Griffith. The 1st edition was published in 1962. It was republished by
> Scitech in 2006. Art would enjoy and benefit from all 638 pages.
>
> Best regards, Richard Harrison, KB5WZI

Isnt this all a little bit like acknowleging someone who is causing
intentional interference on the bands?

Jimmie

4357. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 19:20:11 UTC
From: Dave <dave@dave.dave>
Message-ID: <4920726b$0$31742$bd467cd0@news.dslextreme.com>
Source record: 20231

```
Richard Harrison wrote:
> Dave wrote:
> "Continuous Tone Coded Subaudible Squelch"
>
> I like that better than "Continuous Tone Coded Squelch System" as
> "System" is nondescriptive.
>
> Best regards, Richard Harrison, KB5WZI
>

I think it's from the MOCOM 70 Service Manual. Motorola called it
"Private Line".
```

4358. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 19:33:38 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <417ca092-4691-416a-af83-66e64a5414a4@w1g2000prk.googlegroups.com>
Source record: 20232

On Nov 16, 12:09 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "This idea of waves moving along with the current flow and various other
> ideas put forward by book authors seems to be a never ending attempt to
> provide substance(d) to long ago thought out bad theory which would be
> disrupted if current was observed to flow in the center of a radiator."
>
> The theory is well tested and good.
>
> Authors often write books to inform. They are paid for their efforts.
>
> Skin effect is a fact of agreement among the scientific community. A
> proof is readily at hand. Coaxial cable keeps what`s inside in and
> what`s outside out.
>
> The best exposition of "skin effect" that I know of is found in chapter
> 27 of "Radio-Electronic Transmission Fundamentals" by B. Whitfield
> Griffith. The 1st edition was published in 1962. It was republished by
> Scitech in 2006. Art would enjoy and benefit from all 638 pages.
>
> Best regards, Richard Harrison, KB5WZI

Richard I have made my thoughts known on radiation as well as the path
I followed
that brought me to where I am. In the past 100 years or more science
has not come to a consensus as to what energy is.
Einstein seached all his life for the weak force which he considered a
major part of radiatiation which leads to a Unified theory.
Today there is not one book thaat can provide a satisfactory answer as
to how radiattion is created.
What I am saying that there are to many theories that are being tagged
upon one another leading to an incorrect trail upon which books are
being printed
for a individual generation. So I proposed to myself a retreat from
the books and go back to Maxwells laws plus those of the masters that
provided the information to him and then with an open mind looked at
it with the 21st century in mind and the information garnered by
observation as opposed to theory.
Present day science is all a buzz about Neutrinos, CERN and the Sun
which is in a continually burning state creating partly burnt
constituents.
Gauss has a law dealing with particles and I have an interest in ham

radio. It is therefore natuaral to me that in light of present day observances
Einstein may well have been correct even tho not aware of discoveries found after his death. Thus my concentration was on outside particles and not the wave style theorem and thus eventually arrived at the weak force phenomina which is in use in many ways on Earyth which can also be subcribed to radiation. But saying is not enough so I have used Maxwellian computor programs to design these antennas with good results all of which are bound
to the edict of equilibrium which all the past masters adhered to. Einstein was not privy to a lot of things that I used on my jorney but many hams do
and can easily confirm my findings which are observables not dreams that support Maxwell. Books cannot and do not provide an actual journey that provides a trail without gaps for the generation of radiation. I have by starting the trail at the beginning with present day science in mind and not pursuing the mode of academics who seek favor by piggy backing theories of those who have received award thus shutting out a;ll other aproaches.
Yes my thinking is known and yes I think for myself with no formal attachment to the books upon which my education started where it is incumbent on graduates to continue to hone and secure futher information for the next generation rather than the sole pursuit of personal wealth.
Best regards
Art Unwin KB9MZ.....xg (uk)

4359. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 19:38:30 UTC
From: nm5k@wt.net
Message-ID: <9bac4561-09bd-4e6e-b0e9-1da9229c1cf9@r36g2000prf.googlegroups.com>
Source record: 20233

On Nov 16, 7:37 am, JosephKK <quiettechb...@yahoo.com> wrote:

>
> Two things.
> Why are you still bothering with him?

Because it's wholesome entertainment for the whole family.

> He loves the attention he is
> getting, he is off in some other NG spewing about being the most
> responded to poster.

I'm sure he does. But I don't care what he does on other sites.

> The correct response is to kill file him. I have
> only read responses to his posts.

I don't kill file anyone. If he bothers you, be my guest.

4360. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 19:44:25 UTC
From: richardharrison@webtv.net
Message-ID: <15198-49207819-1317@storefull-3253.bay.webtv.net>
Source record: 20234

Dave wrote:
"High power coaxial transmission lines have hollow center conductors."

Yes, and the metal which could have filled the hollow space would add no conductivity at HF.

Best regards, Richard Harrison, KB5WZI

4361. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 20:08:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfpul2ogn1@news.albasani.net>
Source record: 20235

JosephKK wrote:

> ...
> Two things.
> Why are you still bothering with him? He loves the attention he is
> getting, he is off in some other NG spewing about being the most
> responded to poster. The correct response is to kill file him. I have
> only read responses to his posts.
> Many of you could benefit by setting your newsreader to quote
> correctly. Outhouse Express can do it, it may even do it by default.

I am certainly impressed; it is good to stand in the shadow of someone like you, so freely ready to shovel out your "good advise."

However, right now I don't really require the services of some "great intellectual" such as yourself. Being capable of handling my own thinking and affairs at this time, I will pass, at least for the time being.

Frankly, I will be honest will you, I never realized there were so many stupid people who stand around waiting for someone as gifted as you to "guide them!" Thanks for the heads-up!

ROFLOL ... me and the wife needed a good laugh, thanks! I bet most miss you "tongue in the cheek humor! :-) I mean, that is what you intended, right? <smirk>

Regards,
JS

4362. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 20:46:01 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ae116488-d132-4375-a6ad-40cda82a6b33@b38g2000prf.googlegroups.com>
Source record: 20236

On Nov 16, 12:09 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "This idea of waves moving along with the current flow and various other
> ideas put forward by book authors seems to be a never ending attempt to
> provide substance(d) to long ago thought out bad theory which would be
> disrupted if current was observed to flow in the center of a radiator."
>
> The theory is well tested and good.
>
> Authors often write books to inform. They are paid for their efforts.
>
> Skin effect is a fact of agreement among the scientific community. A
> proof is readily at hand. Coaxial cable keeps what`s inside in and
> what`s outside out.
>
> The best exposition of "skin effect" that I know of is found in chapter
> 27 of "Radio-Electronic Transmission Fundamentals" by B. Whitfield
> Griffith. The 1st edition was published in 1962. It was republished by
> Scitech in 2006. Art would enjoy and benefit from all 638 pages.
>
> Best regards, Richard Harrison, KB5WZI

Oh My Richard, are you suggesting, but frightened to suggest, that
skin effect is something other than the
swirling eddy current and its negative magnetic effect on the main
magnetic field provided by the applied varying current?
Forget the constant lines of books that you have brought in to the
discussion, what exactly do you think that provides the resistive
action of
skin effect using your own 19 century smarts? On the other hand, if
you have no thoughts of your own then by all means steal an idea from
the Witfield book and share it with all of us. The fact that this old
book is being republished by the publisher is to obtain money and
should not be seen of verification of its contents. Neither should you
accept everything you read without challenge in the absence of any of
your own thinking obtained some 50 years ago.
when you had to listen to a professor so you obtain conformity with
him when the examination paper is judged by him no less?
Art
Art

4363. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 21:14:23 UTC
From: richardharrison@webtv.net
Message-ID: <18633-49208D2F-273@storefull-3252.bay.webtv.net>
Source record: 20237

Art wrote:
"Einstein may well have been correct even tho not aware of discovries found after his death."

Wouldn`t anyone like to be aware of all the discoveries made before his death?

Einstein said something like: "Keep it simple, but not too simple!"

Scientists have in many instances followed Einstein`s advice and reduced things to simplest terms. Maxwell`s equations as simplified and explained by Heaviside have been used to successfully predict EM behavior for a century. They give the answers needed so there has been no great search for a replacement.

The research at CERN on colliding beams is more likely of interest to those working with ionizing radiation than to those working with the nonionizing type we use in radio telecommunications.

There is and was agreement among many with Kraus when he wrote on page 37 of the 3rd edition of "Antennas":
"Although a charge moving with uniform velocity along a straight conductor does not radiate, a charge moving back and forth in simple harmonic motion along the conductor is subject to acceleration (and deceleration) and radiates."

An interesting view of the mechanism of radiation is given by B. Whitfield Griffith, Jr. on page 315 of "Radio-Electronic Transmission Fundamentals".

Best regards, Richard Harrison, KB5WZI

4364. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 21:44:07 UTC
From: Dave <dave@dave.dave>
Message-ID: <49209428$0$31807$bd467cd0@news.dslextreme.com>
Source record: 20238

Richard Harrison wrote:
> Dave wrote:
> "High power coaxial transmission lines have hollow center conductors."
>
> Yes, and the metal which could have filled the hollow space would add no
> conductivity at HF.
>
> Best regards, Richard Harrison, KB5WZI
>

Power handling and efficiency increase as the frequency decreases; a
solid center conductor doesn't help at LF either.

http://www.myat.com/index.html

4365. Re: Kilo Bravo niner Romeo Quebec Zulu

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 21:53:31 UTC
From: kb9rqz@yahoo.com
Message-ID: <ii51i452mp2b1ns0hsgqu30io3o6ehcvnc@4ax.com>
Source record: 20239
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Sat, 15 Nov 2008 14:00:51 +0000, Dave <dave@dave.dave> wrote:

>
fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4366. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 21:57:48 UTC
From: richardharrison@webtv.net
Message-ID: <15200-4920975C-50@storefull-3253.bay.webtv.net>
Source record: 20240

Art wrote:
"The fact that this old book is being republished by the publisher is to obtain money and should not be seen of (as) verification of its contents."

I`ve had both editions. They are identical in content (no corrections). Terman says essentially the same things about "skin effect". Griffith`s examples and drawings are more extensive.

Charges are moved to the surface by reduced inductive opposition there.

Imagine a wire made of many concentric layers. Each layer`s current produces inductive opposition. This is generated by the current that layer carries. The inner layer is encircled by all the lines of all the layers while the exterior layer is encircled by only the lines generated by its current and none from the lines generated by the current in the layers under it. Thus, there is little inductive opposition to current on the surface of the wires.

Best regards, Richard Harrison, KB5WZI

4367. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 22:53:29 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f7a4bd3b-0b1f-4835-8a1a-15e11756bab0@v22g2000pro.googlegroups.com>
Source record: 20241

On Nov 16, 3:57 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "The fact that this old book is being republished by the publisher is to
> obtain money and should not be seen of (as) verification of its
> contents."
>
> I`ve had both editions. They are identical in content (no corrections).
> Terman says essentially the same things about "skin effect". Griffith`s
> examples and drawings are more extensive.
>
> Charges are moved to the surface by reduced inductive opposition there.
>
> Imagine a wire made of many concentric layers. Each layer`s current
> produces inductive opposition. This is generated by the current that
> layer carries. The inner layer is encircled by all the lines of all the
> layers while the exterior layer is encircled by only the lines generated
> by its current and none from the lines generated by the current in the
> layers under it. Thus, there is little inductive opposition to current
> on the surface of the wires.
>
> Best regards, Richard Harrison, KB5WZI

Thank you for that Richard. I suspected that such an old book as with
Terman
would not be abreast of the present times and still hanging on to
ideas that are
not in sync with the present day thinking. You surely must know that
a time varying field
upon a diamagnetic material also creates what is known as the Foucault
or eddy current field.
Present day non destructive material testing duplicate this method to
provide a means of looking for a crack or fissure in
materials often after heat treatment or welding. On a unimpared
surface the eddy current swirls
in a closed circuit form on the surface as a result of a applied time
varying current. Relly a reaction in terms of Newtons law.
If there is a crack or fissure in the surface the closed circuit of
the eddy current is broken and it is this that todays inspection
equipment relies upon.
Ofcourse this created magnetic field is in opposition to the applied
magnetic field and this opposition is called a skin effect.
It is called a skin effect because like the aplied current the eddy

current flows on the surface of a conductor and is limited in
penetration.
Ofcourse when this rotating magnetic field is combined with the main
magnetic field its rotary action makes short use of particles that
abide on the surface
where it supplies spin to the particle while excellarating the
particle in opposition to gravity. Ofcourse Richard your term in the
military taught you that a rifle has as groove that curls inside the
barrel which you know is to provide a spin to the bullet so that it
does not wobble end over end and thus lose its accuracy. The particles
by the way are sub atomic and so small that they can pass thru
retaining threads as it were on most materials so its mass and energy
content is quite small such that it will bounce off of rthe shields
surrounding our earth but not so much that it looses its resistance to
gravity before it finds a suitable radiature of resonance that it can
rest upon according to the direction aimed by the transmitter. It will
not deviate from this course if the receiving antenna is not directed
in substantially the same direction. Since there are a lot of these
particles around on Earth there is a scramble for a suitable place to
rest so any vacancy is immediately occupied such that radiation is a
huge lot of levitated particles. Fortunately the Sun keeps on burning
pushing particles away from its own gravitational field otherwise the
11 year cycle would become a century old plus cycle and we would look
for another hobby.Another thing Richard these particles are extremely
small so we will not finish up knee deep. On top of that they also
decay because of diminishing
nuclear content which we see the results of when there is a sun burst
and the clustered particles get into our power system and overloads
it.
Regards
Art Unwin.......KB9MZ.......XG (UK)

4368. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 23:30:08 UTC
From: Dave <noone@nowhere.com>
Message-ID: <422Uk.1867$mi4.1832@nwrddc02.gnilink.net>
Source record: 20242

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:b87adb61-fce2-4e08-a503-e1ed22c3afd5@d36g2000prf.googlegroups.com...
>Isnt this all a little bit like acknowleging someone who is causing
>intentional interference on the bands?

yeah, but not like someone who is nasty, more like someone who is funny and
keeps blabbering on saying more and more ridiculous things.

4369. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 23:35:38 UTC
From: Dave <noone@nowhere.com>
Message-ID: <e72Uk.1869$mi4.1819@nwrddc02.gnilink.net>
Source record: 20243

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:f7a4bd3b-0b1f-4835-8a1a-15e11756bab0@v22g2000pro.googlegroups.com...
On Nov 16, 3:57 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
>Another thing Richard these particles are extremely
>small so we will not finish up knee deep. On top of that they also
>decay because of diminishing
>nuclear content which we see the results of when there is a sun burst
>and the clustered particles get into our power system and overloads
>it.
>Regards
>Art Unwin.......KB9MZ.......XG (UK)

OH NO! they are getting into the power system! heaven forbid, what shall we
ever do!?!?!

it just keeps getting better and better.

4370. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-16 23:36:58 UTC
From: Dave <noone@nowhere.com>
Message-ID: <u82Uk.1871$mi4.574@nwrddc02.gnilink.net>
Source record: 20244

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:4740f7a9-c3b9-44c9-841e-1f1be5ab2d2c@o4g2000pra.googlegroups.com...
On Nov 16, 11:58 am, "Dave" <no...@nowhere.com> wrote:
> After all we are aware that they will come
>to rest on a material that will not apply a bond to these particles
>such as a diagmatic material which radiators are made of?

you still haven't explained how my ferromagnetic radiators work.

4371. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 00:01:16 UTC
From: nm5k@wt.net
Message-ID: <3923cc0e-0ff1-4700-9c08-b4a53ed0af72@o4g2000pra.googlegroups.com>
Source record: 20245

On Nov 16, 7:37 am, JosephKK <quiettechb...@yahoo.com> wrote:

>
> Two things.

And for the second thing... I happen to have problems with
portraying a dummy load on a stick as the answer to all things
of a radiating nature.
I've seen his antenna, and I know how it was built.
It's a dummy load on a stick.
See for yourself. Don't just take my word for it.
http://www.k8gu.com/webpost/unwin-antenna.jpg
Note that this antenna is for 160m use.
My MW receiving loop would likely out radiate that thing.
If I used my mobile antenna, it would get ugly.
All his antenna is, is a helical whip, with contra wound
windings to make it even more lossy than if it were wound
in a normal military manner.
The extra "coil" on top is basically useless, and only adds
a small bit more inductance to the antenna. Maybe enough
to scoot down the band a few kc's.. :/
He says it needs no ground plane, but being it is a vertical,
it sure as heck does, if reducing ground loss is an issue.
Of course, if one is willing to ignore massive coil loss, it's
no large stretch to assume he has no problem ignoring
ground losses either.
What is hilarious to most, is that he uses bafflegab mumbo
jumbo to try to explain the workings of an antenna that is
not only prior art I'm sure, but also a very perverted version
at that. I compared his antenna to a MW loopstick used for
receive purposes only.
Look at the picture and tell me your analysis.
You can apply plain old known vertical antenna technology
and come up with a pretty accurate assessment of the
efficiency of his antenna.
Mumbo jumbo is not required for this task.
Fairy tales won't cut it either. Nor neutrinos, the weak
force, or the shoe size of Captain Kirk.
Maybe this will shed some light on my persistent
skepticism of his illustrious, but stinky design.

4372. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 00:33:40 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <775eb657-f5c7-4954-af2f-05f6a90ded3f@f37g2000pri.googlegroups.com>
Source record: 20246

On Nov 16, 6:01 pm, n...@wt.net wrote:
> On Nov 16, 7:37 am, JosephKK <quiettechb...@yahoo.com> wrote:
>
>
>
> > Two things.
>
> And for the second thing... I happen to have problems with
> portraying a dummy load on a stick as the answer to all things
> of a radiating nature.
> I've seen his antenna, and I know how it was built.
> It's a dummy load on a stick.
> See for yourself. Don't just take my word for
it.http://www.k8gu.com/webpost/unwin-antenna.jpg
> Note that this antenna is for 160m use.
> My MW receiving loop would likely out radiate that thing.
> If I used my mobile antenna, it would get ugly.
> All his antenna is, is a helical whip, with contra wound
> windings to make it even more lossy than if it were wound
> in a normal military manner.
> The extra "coil" on top is basically useless, and only adds
> a small bit more inductance to the antenna. Maybe enough
> to scoot down the band a few kc's.. :/
> He says it needs no ground plane, but being it is a vertical,
> it sure as heck does, if reducing ground loss is an issue.
> Of course, if one is willing to ignore massive coil loss, it's
> no large stretch to assume he has no problem ignoring
> ground losses either.
> What is hilarious to most, is that he uses bafflegab mumbo
> jumbo to try to explain the workings of an antenna that is
> not only prior art I'm sure, but also a very perverted version
> at that. I compared his antenna to a MW loopstick used for
> receive purposes only.
> Look at the picture and tell me your analysis.
> You can apply plain old known vertical antenna technology
> and come up with a pretty accurate assessment of the
> efficiency of his antenna.
> Mumbo jumbo is not required for this task.
> Fairy tales won't cut it either. Nor neutrinos, the weak
> force, or the shoe size of Captain Kirk.
> Maybe this will shed some light on my persistent
> skepticism of his illustrious, but stinky design.

The antenna you are referring to is an antenna that does not transmit but does receive. This being contrary to accepted amateur lore that all antennas are reciprocal
It was given to a future doctorate from the University of Illinois a University who as a whole actively disses any
ideas from outside the academic field So I gave him a antenna that he expected to get.
Prior to this "gift" which I also related to this group in detail. I found out that when you superimpose a helix over a helix in contra wound form the
eddy current magnetic fields cancelled each other such that the particles were not levitatedwhich is required for transmissionthe latter which
From this I learned that a radiator can only be of a varied shape and in equilibrium as long as there was no interference
to distributed loads. Removing this inter action from the radiator allowed levitatiuon of the particles such that it CAN transmit as well as recieve which is not determined by a levitation action. Try it for your self and do not compare a resistance with out distributed inductance and capacitance with multi windings of distributed capacitance and inductance. I know that you never completed high school but there is no reason to stop reading technical books
just because you were thrown out which is foolhardy not vengance. The photo in question was displayed solely as a prop by those who wanted to diss my theory which is exactly why I suspect that you are using it now. and good enough reason for me to supply a antenna that I did.
areana. Now any antenna can apply an overlapping helix to any antenna computor program including the very limited EZNEC program to determine the results for themselves, it is not essential to have a optimizer so there is no need to imitate a talking head in dissing what I am sharing.
Art

4373. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 00:53:40 UTC
From: nm5k@wt.net
Message-ID: <e4ea9f5d-df39-4cef-ba04-255a53e4cc4f@g17g2000prg.googlegroups.com>
Source record: 20247

On Nov 16, 6:33 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 16, 6:01 pm, n...@wt.net wrote:
>
>
>
> > On Nov 16, 7:37 am, JosephKK <quiettechb...@yahoo.com> wrote:
>
> > > Two things.
>
> > And for the second thing... I happen to have problems with
> > portraying a dummy load on a stick as the answer to all things
> > of a radiating nature.
> > I've seen his antenna, and I know how it was built.
> > It's a dummy load on a stick.
> > See for yourself. Don't just take my word for
it.http://www.k8gu.com/webpost/unwin-antenna.jpg
> > Note that this antenna is for 160m use.
> > My MW receiving loop would likely out radiate that thing.
> > If I used my mobile antenna, it would get ugly.
> > All his antenna is, is a helical whip, with contra wound
> > windings to make it even more lossy than if it were wound
> > in a normal military manner.
> > The extra "coil" on top is basically useless, and only adds
> > a small bit more inductance to the antenna. Maybe enough
> > to scoot down the band a few kc's.. :/
> > He says it needs no ground plane, but being it is a vertical,
> > it sure as heck does, if reducing ground loss is an issue.
> > Of course, if one is willing to ignore massive coil loss, it's
> > no large stretch to assume he has no problem ignoring
> > ground losses either.
> > What is hilarious to most, is that he uses bafflegab mumbo
> > jumbo to try to explain the workings of an antenna that is
> > not only prior art I'm sure, but also a very perverted version
> > at that. I compared his antenna to a MW loopstick used for
> > receive purposes only.
> > Look at the picture and tell me your analysis.
> > You can apply plain old known vertical antenna technology
> > and come up with a pretty accurate assessment of the
> > efficiency of his antenna.
> > Mumbo jumbo is not required for this task.
> > Fairy tales won't cut it either. Nor neutrinos, the weak
> > force, or the shoe size of Captain Kirk.
> > Maybe this will shed some light on my persistent
> > skepticism of his illustrious, but stinky design.

>
> The antenna you are referring to is an antenna that does not transmit
> but does receive. This being contrary to accepted amateur lore that
> all antennas are reciprocal

Duhhhh... I guess it never occurred to you that the overall signal
and noise levels at that frequency are so high as to let nearly any
length of metal act as a decent antenna.
I'm sure the theory of reciprocal antenna operation was not
broken in your case. I'm sure that the level you saw was about
20-30 db down from the level you would have had from a 1/2 wave
dipole. But.. being as you seem to refuse a reference antenna to
compare to, you would never realize this.
Of course, a loss of 20-30 db is not enough to kill you at
that frequency. My un-amplified MW loops are a prime
example of that fact.
Your antenna should be less efficient than my 5 turn loop,
but still should be usable as a receive antenna.
Art, for someone with such a self proclaimed vast education,
you are as thick as a brick.
Note that this was a popular song from a fairly popular English
band back in the last century.

Rest of rambling jibber jabber mumbo jumbo deleted to help
preserve sanity among the various readers.

4374. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 01:18:44 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <12d0abbc-7614-4611-aee0-0bf74d490bf1@z6g2000pre.googlegroups.com>
Source record: 20248

On Nov 16, 6:53 pm, n...@wt.net wrote:
> On Nov 16, 6:33 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > On Nov 16, 6:01 pm, n...@wt.net wrote:
>
> > > On Nov 16, 7:37 am, JosephKK <quiettechb...@yahoo.com> wrote:
>
> > > > Two things.
>
> > > And for the second thing... I happen to have problems with
> > > portraying a dummy load on a stick as the answer to all things
> > > of a radiating nature.
> > > I've seen his antenna, and I know how it was built.
> > > It's a dummy load on a stick.
> > > See for yourself. Don't just take my word for
it.http://www.k8gu.com/webpost/unwin-antenna.jpg
> > > Note that this antenna is for 160m use.
> > > My MW receiving loop would likely out radiate that thing.
> > > If I used my mobile antenna, it would get ugly.
> > > All his antenna is, is a helical whip, with contra wound
> > > windings to make it even more lossy than if it were wound
> > > in a normal military manner.
> > > The extra "coil" on top is basically useless, and only adds
> > > a small bit more inductance to the antenna. Maybe enough
> > > to scoot down the band a few kc's.. :/
> > > He says it needs no ground plane, but being it is a vertical,
> > > it sure as heck does, if reducing ground loss is an issue.
> > > Of course, if one is willing to ignore massive coil loss, it's
> > > no large stretch to assume he has no problem ignoring
> > > ground losses either.
> > > What is hilarious to most, is that he uses bafflegab mumbo
> > > jumbo to try to explain the workings of an antenna that is
> > > not only prior art I'm sure, but also a very perverted version
> > > at that. I compared his antenna to a MW loopstick used for
> > > receive purposes only.
> > > Look at the picture and tell me your analysis.
> > > You can apply plain old known vertical antenna technology
> > > and come up with a pretty accurate assessment of the
> > > efficiency of his antenna.
> > > Mumbo jumbo is not required for this task.
> > > Fairy tales won't cut it either. Nor neutrinos, the weak
> > > force, or the shoe size of Captain Kirk.

> > > Maybe this will shed some light on my persistent
> > > skepticism of his illustrious, but stinky design.
>
> > The antenna you are referring to is an antenna that does not transmit
> > but does receive. This being contrary to accepted amateur lore that
> > all antennas are reciprocal
>
> Duhhhh... I guess it never occurred to you that the overall signal
> and noise levels at that frequency are so high as to let nearly any
> length of metal act as a decent antenna.
> I'm sure the theory of reciprocal antenna operation was not
> broken in your case. I'm sure that the level you saw was about
> 20-30 db down from the level you would have had from a 1/2 wave
> dipole. But.. being as you seem to refuse a reference antenna to
> compare to, you would never realize this.
> Of course, a loss of 20-30 db is not enough to kill you at
> that frequency. My un-amplified MW loops are a prime
> example of that fact.
> Your antenna should be less efficient than my 5 turn loop,
> but still should be usable as a receive antenna.
> Art, for someone with such a self proclaimed vast education,
> you are as thick as a brick.
> Note that this was a popular song from a fairly popular English
> band back in the last century.
>
> Rest of rambling jibber jabber mumbo jumbo deleted to help
> preserve sanity among the various readers.

So you think I should succumb to those who diss me without foundation
and give then
a proper antenna? Not me, I say gottcha.! And as far as your assertion
that all verticals must have a ground plain
that is exactly what I would expect of you. Read books instead of
looking for vengance on who stayed in school.
Somebody on this group offered you a wager of $1000 or was it more, to
refute your assetrtion that I didn't have such an antenna.
He stated he would supply the wager up front and I stated I would go
along and supply the antenna. What did you do?
You squeeled and groaned and got lost for a while and revealed
yourself as a talking head. I am done with you. I am not going to
respond in like nastiness but just avoid contact
Art Unwin KB9MZ....xg...(uk)

4375. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 02:01:51 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <7ej1i45a1p739eiq1tfo5jdibi9q1e9hdu@4ax.com>
Source record: 20249

On Sun, 16 Nov 2008 17:18:44 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>So you think I should succumb to those who diss me without foundation
>and give then a proper antenna?

Yes, I think you should. I have yet to see a model, photo, prototype, description, patent, test results, or other physical manifestation of your antenna. I would really like to see an antenna design based on equilibrium, that ignores skin effect by having current flow in the middle of a conductor, and that is any way superior to conventional designs. I'm quite open to radical new theories and implementations. Hopefully, it will be built from something more common that unobtainium.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4376. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 02:07:38 UTC
From: nm5k@wt.net
Message-ID: <669f639a-6221-48da-950c-e633378499b8@v39g2000pro.googlegroups.com>
Source record: 20250

On Nov 16, 7:18 pm, Art Unwin <ArthurUn...@gmail.com> wrote:

>
> So you think I should succumb to those who diss me without foundation
> and give then
> a proper antenna?

We have quite a solid foundation to "diss" your theories.

>Not me, I say gottcha.! And as far as your assertion
> that all verticals must have a ground plain
> that is exactly what I would expect of you. Read books instead of
> looking for vengance on who stayed in school.

Typical Art response. I've read the books, and I've used the
real antennas. Have you? Oh yea, you dismiss everything you
read in books. :/
Anyone with a clue knows that even "complete" verticals such
as a 1/2 wave can still suffer the effects of ground loss.
The loss is not quite as large as with the 1/4 wave monopole
due to the change in current distribution, but it is still there.
Why do you think that AM broadcasters that use 1/2 wave
verticals, also use a radial set of 1/2 wave radials?
For their health? To spend money that otherwise could be spent
on donuts for the fat slob at the mike? To be stylish?
Cuz Uncle Joe Bob is in the copper industry and needs more
work?
Good grief.. :/
The 5/8 radiator really should have an opposite 5/8 radiator,
rather than a ground plane. The usual 1/4 wave radial set for
an elevated ground plane is a poor choice.
But the problem in that case is not so much ground loss,
as it is perversion of the pattern due to using what I consider
a perverted unsymmetrical antenna.
This is why some people whine that their 5/8's antennas don't
live up to their expectations.
But if a 5/8 radiator is ground mounted, it too requires a radial
set to reduce ground losses. Go call WBAP and ask the
engineer if they have any wire in the ground.
This also applies to elevated dual 5/8 verticals if they are low
to the ground vs wavelength.

> Somebody on this group offered you a wager of $1000 or was it more, to
> refute your assetrtion that I didn't have such an antenna.
> He stated he would supply the wager up front and I stated I would go
> along and supply the antenna. What did you do?

> You squeeled and groaned and got lost for a while and revealed
> yourself as a talking head.

No one did any such thing that I'm aware of. Show me the google
archives. You are either totally full of crap, or must have me
confused with someone else. "that actually gives a @#$%" :/
Why would I care if you have an antenna or not?
You need to get a grip on reality.
I could give a rats heiney, and most certainly would not bother to
make any wager over you having one or not.
The reason I suspect this, is #1, I don't gamble. At all.
Even at Vegas. I don't even play the lottery.

>I am done with you.

You can bet I'm not done with you though if you persist with
the usual mumbo jumbo jibber jabber.
I consider it my moral duty to expose all the stinky I run across.
So go ahead, make my day.

4377. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 02:35:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <43da5a1e-6421-4153-87fd-abca9c2b3a75@v13g2000pro.googlegroups.com>
Source record: 20101

On Nov 16, 8:01 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 16 Nov 2008 17:18:44 -0800 (PST), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >So you think I should succumb to those who diss me without foundation
> >and give then a proper antenna?
>
> Yes, I think you should. I have yet to see a model, photo, prototype,
> description, patent, test results, or other physical manifestation of
> your antenna. I would really like to see an antenna design based on
> equilibrium, that ignores skin effect by having current flow in the
> middle of a conductor, and that is any way superior to conventional
> designs. I'm quite open to radical new theories and implementations.
> Hopefully, it will be built from something more common that
> unobtainium.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

Jeff I tried to share everything over the years with fellow hams but
all I got were insults
I have applied for patent an as wilh the later forms as I learn more
they eventually will come to light. I also have a page which
is now empty as after a deluge of insults so
I took it off the web.Hams got angry. It seems that hams feel that
they have the right
to everything regarding antennas and they did get all the information
I have but the dissing goes
on as they are not willing to think for themselves. Should I go hell
bent on supplying samples to the ham community
when they refuse to recognise the veracity of any thing I say?
Ofcourse not and I thus care not for similar talk from you.
The group cannot prevent the disclosure and the "me to": attitude will
come back when all is revealed, Until that time I will not reward
those who automatically diss everything I share in the hope that they
will shame me into giving them a sample.
I am happy that they continue to post despite the lack of responses as
their practice of using free speech allows us to measure who and what
they are so that we do not involve ourselves with the like oif them
and KB9......all of which seem to be of the same type of miscreants.
I received a posting today from the likes of KB9... which all can read

for themselves, he will not get anymore responses from me as I do not wish to be assdociated with such a group which judging by other lack of postings is the attitude of most of this group.
Have a happy day
Art Unwin KB9MZ...xg...(UK)

4378. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 02:38:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfqlhb$ik2$1@news.albasani.net>
Source record: 20103

Richard Harrison wrote:
> Art wrote:
> "Einstein may well have been correct even tho not aware of discovries
> found after his death."
>
> Wouldn`t anyone like to be aware of all the discoveries made before his
> death?
>
> Einstein said something like: "Keep it simple, but not too simple!"
>
> Scientists have in many instances followed Einstein`s advice and reduced
> things to simplest terms. Maxwell`s equations as simplified and
> explained by Heaviside have been used to successfully predict EM
> behavior for a century. They give the answers needed so there has been
> no great search for a replacement.
> ...
> Best regards, Richard Harrison, KB5WZI
>

I love Einstein, but then, I have met few Germans I didn't like ...

However, gravity serves a prime example of what you suggest, here. We know nothing about it, but a lot about its' affects and effects; we have many formulas to tell us about those and a few theories to tell us what it (gravity) actually is. So, I doubt it surprises anyone that we stand at, almost, this exact situation with EM.

However, to lift the blanket and peer upon the true substance and nature of these things would take us to a whole 'nother level of possibilities in their uses ...

So, if you argument is going to become, "We already know enough of these things, let us go no further"; well, some just may follow you--some not ... personally, I'd "druther" not ...

Warm regards,
JS

4379. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 02:40:37 UTC
From: kb9rqz@yahoo.com
Message-ID: <3dm1i4p09qca94454rv7i7udmvohldnlmm@4ax.com>
Source record: 20102
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4380. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 02:48:39 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9a9709ee-5c91-4ae8-8974-1e22c191ce40@s1g2000prg.googlegroups.com>
Source record: 20104

On Nov 16, 8:01 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 16 Nov 2008 17:18:44 -0800 (PST), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >So you think I should succumb to those who diss me without foundation
> >and give then a proper antenna?
>
> Yes, I think you should. I have yet to see a model, photo, prototype,
> description, patent, test results, or other physical manifestation of
> your antenna. I would really like to see an antenna design based on
> equilibrium, that ignores skin effect by having current flow in the
> middle of a conductor, and that is any way superior to conventional
> designs. I'm quite open to radical new theories and implementations.
> Hopefully, it will be built from something more common that
> unobtainium.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

If a time varying current is flowing thru the center of a conductor
it cannot, I repeat cannot produce either a field from the applied
current
or provide an eddy current. The only loss it experiences is a copper
loss
which is minimal and I "beieve" such resistences are limited to
certain value by the FCC;(6 ohms) for broadcast stations
It can be seen then that the radiation from a radiator not in
equilibrium is relatively efficient with respect to applied power
even tho it is not radiating from the center of the radiator. If you
know of an experiment that was devised to show that no current flow in
the center I would apreciate a heads up. But I would also remind you
that it was Newtons law with respect to equilibrium that led
scientists to declare that current travels on the outside without the
need for furthur experiment.
Art

4381. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 02:54:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfqme4$j1h$1@news.albasani.net>
Source record: 20105

Richard Harrison wrote:
> Art wrote:
> "Einstein may well have been correct even tho not aware of discovries
> found after his death."
>
> Wouldn`t anyone like to be aware of all the discoveries made before his
> death?
>
> Einstein said something like: "Keep it simple, but not too simple!"
>
> Scientists have in many instances followed Einstein`s advice and reduced
> things to simplest terms. Maxwell`s equations as simplified and
> explained by Heaviside have been used to successfully predict EM
> behavior for a century. They give the answers needed so there has been
> no great search for a replacement.
> ...
> Best regards, Richard Harrison, KB5WZI
>

I love Einstein, but then, I have met few Germans I didn't like ...

However, gravity serves a prime example of what you suggest, here. We know nothing about it, but a lot about its' affects and effects; we have many formulas to tell us about those and a few theories to tell us what it (gravity) actually is. So, I doubt it surprises anyone that we stand at, almost, this exact situation with EM.

However, to lift the blanket and peer upon the true substance and nature of these things would take us to a whole 'nother level of possibilities in their uses ...

So, if your argument is going to become, "We already know enough of these things, let us go no further"; well, some just may follow you--some not ... personally, I'd "druther" not ...

Warm regards,
JS

4382. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 03:09:37 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <u1n1i4hi2bep71g3jc7k2pj6114h9pqae0@4ax.com>
Source record: 20106

On Sun, 16 Nov 2008 18:35:33 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Nov 16, 8:01ï¿½pm, Jeff Liebermann <je...@cruzio.com> wrote:
>> On Sun, 16 Nov 2008 17:18:44 -0800 (PST), Art Unwin
>>
>> <ArthurUn...@gmail.com> wrote:
>> >So you think I should succumb to those who diss me without foundation
>> >and give then a proper antenna?
>>
>> Yes, I think you should. ï¿½I have yet to see a model, photo, prototype,
>> description, patent, test results, or other physical manifestation of
>> your antenna. ï¿½I would really like to see an antenna design based on
>> equilibrium, that ignores skin effect by having current flow in the
>> middle of a conductor, and that is any way superior to conventional
>> designs. ï¿½I'm quite open to radical new theories and implementations.
>> Hopefully, it will be built from something more common that
>> unobtainium.

>I have applied for patent an as wilh the later forms as I learn more
>they eventually will come to light.

Yep. This one? (Application No 20080231540)
<http://appft1.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=%2Fnetahtml%2FPTO%2Fsearch-adv.html&r=1&p=1&f=G&l=50&d=PG01&S1=%28Unwin.IN.+AND+antenna%29&OS=IN/Unwin+and+antenna&RS=(IN/Unwin+AND+antenna)>

Gaussian radiative cluster

A resonant radiating array comprising of a cluster of randomly
arranged resonant elements for producing a radiation field

Inventors: Unwin; Art; (Bloomington, IL)
Correspondence Name and Address:
ART UNWIN
15394 OLD COLONIAL RD
BLOOMINGTON
IL
61704
US
Serial No.: 655899
Series Code: 11
Filed: March 16, 2007

>I also have a page which
>is now empty as after a deluge of insults so

>I took it off the web.

When and what was the URL? It should be on the internet time machine
<http://archive.org>

>Have a happy day

Bah Humbug. T'is (almost) the season.

>Art Unwin KB9MZ...xg...(UK)

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4383. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 03:23:35 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <sho1i49cd1bbkqgr7eoq4heum2pc7o9a0l@4ax.com>
Source record: 20107

On Sun, 16 Nov 2008 18:48:39 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Nov 16, 8:01ï¿½pm, Jeff Liebermann <je...@cruzio.com> wrote:
>> On Sun, 16 Nov 2008 17:18:44 -0800 (PST), Art Unwin
>>
>> <ArthurUn...@gmail.com> wrote:
>> >So you think I should succumb to those who diss me without foundation
>> >and give then a proper antenna?
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>> Yes, I think you should. ï¿½I have yet to see a model, photo, prototype,
>> description, patent, test results, or other physical manifestation of
>> your antenna. ï¿½I would really like to see an antenna design based on
>> equilibrium, that ignores skin effect by having current flow in the
>> middle of a conductor, and that is any way superior to conventional
>> designs. ï¿½I'm quite open to radical new theories and implementations.
>> Hopefully, it will be built from something more common that
>> unobtainium.

>If a time varying current is flowing thru the center of a conductor
>it cannot, I repeat cannot produce either a field from the applied
>current
>or provide an eddy current.
(...)

I'm really not interested in reading any more assertions, allegations,
accusations, theories, analysis, or repetitions of your previous
postings. Please re-read what I wrote. I would like to see a model,
photo, prototype, description, patent, test results, or other
physical manifestation of your antenna based on equilibrium and/or
whatever you're claiming about conduction through the center of a
conductor. Show me a *REAL* antenna that works according to your
rather unique principles. I'm open to proof and demonstration, but
not to furthur allegations and claims.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4384. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 03:56:12 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2bfc4e9c-b9b9-46fe-be22-72ff540aaa5c@b31g2000prb.googlegroups.com>
Source record: 20108

On Nov 16, 9:23 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 16 Nov 2008 18:48:39 -0800 (PST), Art Unwin
>
>
>
> <ArthurUn...@gmail.com> wrote:
> >On Nov 16, 8:01 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> >> On Sun, 16 Nov 2008 17:18:44 -0800 (PST), Art Unwin
>
> >> <ArthurUn...@gmail.com> wrote:
> >> >So you think I should succumb to those who diss me without foundation
> >> >and give then a proper antenna?
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> >> Yes, I think you should. I have yet to see a model, photo, prototype,
> >> description, patent, test results, or other physical manifestation of
> >> your antenna. I would really like to see an antenna design based on
> >> equilibrium, that ignores skin effect by having current flow in the
> >> middle of a conductor, and that is any way superior to conventional
> >> designs. I'm quite open to radical new theories and implementations.
> >> Hopefully, it will be built from something more common that
> >> unobtainium.
> >If a time varying current is flowing thru the center of a conductor
> >it cannot, I repeat cannot produce either a field from the applied
> >current
> >or provide an eddy current.
>
> (...)
>
> I'm really not interested in reading any more assertions, allegations,
> accusations, theories, analysis, or repetitions of your previous
> postings. Please re-read what I wrote. I would like to see a model,
> photo, prototype, description, patent, test results, or other
> physical manifestation of your antenna based on equilibrium and/or
> whatever you're claiming about conduction through the center of a
> conductor. Show me a *REAL* antenna that works according to your
> rather unique principles. I'm open to proof and demonstration, but
> not to furthur allegations and claims.
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> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

Jeff you are not telling the truth again it is becoming a habit of
yours .
Sometime ago you asked me to confide with you some facts about the
antenna as you were of open mind
I then gave you the Gaussian extension information which you could
then compare with Maxwells laws mathematics or alternatively
place it in a Pointings circle. You immediately came back and dissed
the aproach without mathematical evidence so you could join others and
throw stones. I like to keep to the truth especially as I get older.
Apparently you are not afraid to show your true colours when your lies
are detected.
Frankly I can't see me going out of my way to provide a demonstration
thus leaving it to real open minded hams to pursue. Apparently a lot
of hams do not
want to know the truth. As Richard has stated we already have an
antenna so there is no need for another one, seems like he is not
alone in that thinking
when one is not proficient enough to do the math
Art Unwin ...KB9MZ....xg (UK)

4385. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 04:06:03 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <009319e8-bd0c-40c8-9056-b2ec41f18903@x16g2000prn.googlegroups.com>
Source record: 20109

On Nov 16, 6:30 pm, "Dave" <no...@nowhere.com> wrote:
> "JIMMIE" <JIMMIEDEE...@YAHOO.COM> wrote in message
>
> news:b87adb61-fce2-4e08-a503-e1ed22c3afd5@d36g2000prf.googlegroups.com...
>
> >Isnt this all a little bit like acknowleging someone who is causing
> >intentional interference on the bands?
>
> yeah, but not like someone who is nasty, more like someone who is funny and
> keeps blabbering on saying more and more ridiculous things.

The funny part is trying to figure out who is the commedian and who is
the straight man. Sometimes I think Art is just someone from the CB
groups bashing y'all around. There is just too much consistency to his
insanity.

Jimmie

4386. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 04:22:43 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <702ed23b-f100-4088-b136-bb00fa0ef7c7@o4g2000pra.googlegroups.com>
Source record: 20110

On Nov 16, 10:06 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Nov 16, 6:30 pm, "Dave" <no...@nowhere.com> wrote:
>
> > "JIMMIE" <JIMMIEDEE...@YAHOO.COM> wrote in message
>
> >news:b87adb61-fce2-4e08-a503-e1ed22c3afd5@d36g2000prf.googlegroups.com...
>
> > > >Isnt this all a little bit like acknowleging someone who is causing
> > > >intentional interference on the bands?
>
> > > yeah, but not like someone who is nasty, more like someone who is funny and
> > > keeps blabbering on saying more and more ridiculous things.
>
> The funny part is trying to figure out who is the commedian and who is
> the straight man. Sometimes I think Art is just someone from the CB
> groups bashing y'all around. There is just too much consistency to his
> insanity.
>
> Jimmie

If you only speak the truth then consistency becomes the natural
outcome.
No need for me to apologise. Your measure of insanity is just
different from mine
Goodnight
Art

4387. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 04:33:13 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <cfr1i41tcot13uihir6o93qa436lapd9v4@4ax.com>
Source record: 20111

On Sun, 16 Nov 2008 19:56:12 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Jeff you are not telling the truth again it is becoming a habit of
>yours .

I ask for a real antenna, and you call me a liar. Somehow, the
connection is difficult for me to establish. Even if I were a liar,
how does that affect your inability to produce a working antenna?

>Sometime ago you asked me to confide with you some facts about the
>antenna as you were of open mind

I don't recall any such request. Please not that you are making the
claims and allegations. I'm merely suspicious and curious if there is
anything substantial behind your claims. I do have an open mind and
am willing to accept some rather odd theories as possible. I've made
some rather bad mistakes in the past by pre-judging various
technologies. For example, at first glance, I declared MIMO to be
impossible. Such mistakes make me more tolerant of your theories, but
only to a point. I've been reading some of your postings for several
months, and have yet to see a real antenna.

I am rather impressed that you would go through the effort of applying
for a patent on a random array of elements. If granted, it should
give you the rights to most ham radio antennas that were assembled
without a clue or calculation.

>I then gave you the Gaussian extension information which you could
>then compare with Maxwells laws mathematics or alternatively
>place it in a Pointings circle.

There is no Pointing circle. It's a Poynting Vector:
<http://en.wikipedia.org/wiki/Poynting_vector>

>You immediately came back and dissed
>the aproach without mathematical evidence so you could join others and
>throw stones.

It's not my position to supply equations for your theories. If you've
found some mathematical extension, principle, or approach that is
based on Gauss, Maxwell, Heaviside, or Poynting, it's your
responsibility to supply those equations. I haven't read all your
postings, so it's conceivable I've missed them. Could you provide a
searchable reference to those equations so I can decide for myself if
they make any sense?

>I like to keep to the truth especially as I get older.

Personally, I find it easier to lie as I get older. Credibility and
authority tend to improve with age.

>Apparently you are not afraid to show your true colours when your lies
>are detected.

That's the 2nd time you've accused me of lying. I don't care. I'm
only interested in your theories on antennas. If you find it
necessary to divert your production of suitable evidence of your
antenna, I'll gladly cooperate by admitting to lying at all times,
about all things, and for any reason, simply so that you do not feel
compelled to avoid the question. Where's your antenna design?

>Frankly I can't see me going out of my way to provide a demonstration
>thus leaving it to real open minded hams to pursue.

Frankly, that the only thing I'm interested in seeing. You've done
everything EXCEPT provide such a demonstration.

>Apparently a lot
>of hams do not
>want to know the truth.

Would my lies suffice as a reasonable substitute? It really doesn't
matter. The only thing that is important is whether a real antenna
can be built, analyzed, and demonstrated.

>As Richard has stated we already have an
>antenna so there is no need for another one, seems like he is not
>alone in that thinking
>when one is not proficient enough to do the math

Ummmm.... this one?
<http://www.k8gu.com/webpost/unwin-antenna.jpg>

>Art Unwin ...KB9MZ....xg (UK)

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4388. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 05:14:32 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <afe03975-1c6f-4250-bc51-f28ce61206bf@d42g2000prb.googlegroups.com>
Source record: 20112

On Nov 16, 10:33 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 16 Nov 2008 19:56:12 -0800 (PST), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >Jeff you are not telling the truth again it is becoming a habit of
> >yours .
>
> I ask for a real antenna, and you call me a liar. Somehow, the
> connection is difficult for me to establish. Even if I were a liar,
> how does that affect your inability to produce a working antenna?
>
> >Sometime ago you asked me to confide with you some facts about the
> >antenna as you were of open mind
>
> I don't recall any such request. Please not that you are making the
> claims and allegations. I'm merely suspicious and curious if there is
> anything substantial behind your claims. I do have an open mind and
> am willing to accept some rather odd theories as possible. I've made
> some rather bad mistakes in the past by pre-judging various
> technologies. For example, at first glance, I declared MIMO to be
> impossible. Such mistakes make me more tolerant of your theories, but
> only to a point. I've been reading some of your postings for several
> months, and have yet to see a real antenna.
>
> I am rather impressed that you would go through the effort of applying
> for a patent on a random array of elements. If granted, it should
> give you the rights to most ham radio antennas that were assembled
> without a clue or calculation.
>
> >I then gave you the Gaussian extension information which you could
> >then compare with Maxwells laws mathematics or alternatively
> >place it in a Pointings circle.
>
> There is no Pointing circle. It's a Poynting Vector:
> <http://en.wikipedia.org/wiki/Poynting_vector>
>
> >You immediately came back and dissed
> >the aproach without mathematical evidence so you could join others and
> >throw stones.
>
> It's not my position to supply equations for your theories. If you've
> found some mathematical extension, principle, or approach that is
> based on Gauss, Maxwell, Heaviside, or Poynting, it's your
> responsibility to supply those equations. I haven't read all your

> postings, so it's conceivable I've missed them. Could you provide a
> searchable reference to those equations so I can decide for myself if
> they make any sense?
>
> >I like to keep to the truth especially as I get older.
>
> Personally, I find it easier to lie as I get older. Credibility and
> authority tend to improve with age.
>
> >Apparently you are not afraid to show your true colours when your lies
> >are detected.
>
> That's the 2nd time you've accused me of lying. I don't care. I'm
> only interested in your theories on antennas. If you find it
> necessary to divert your production of suitable evidence of your
> antenna, I'll gladly cooperate by admitting to lying at all times,
> about all things, and for any reason, simply so that you do not feel
> compelled to avoid the question. Where's your antenna design?
>
> >Frankly I can't see me going out of my way to provide a demonstration
> >thus leaving it to real open minded hams to pursue.
>
> Frankly, that the only thing I'm interested in seeing. You've done
> everything EXCEPT provide such a demonstration.
>
> >Apparently a lot
> >of hams do not
> >want to know the truth.
>
> Would my lies suffice as a reasonable substitute? It really doesn't
> matter. The only thing that is important is whether a real antenna
> can be built, analyzed, and demonstrated.
>
> >As Richard has stated we already have an
> >antenna so there is no need for another one, seems like he is not
> >alone in that thinking
> >when one is not proficient enough to do the math
>
> Ummmm.... this one?
> <http://www.k8gu.com/webpost/unwin-antenna.jpg>
>
> >Art Unwin ...KB9MZ....xg (UK)
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

You can look in the archives for yourself to remind you of that incident, you have not been on this newsgroup for any length of time so it should be easy
As for requiring a demonstration I have other patents on antennas which are purely for my personal record I did not hawk it around to vendors but I did share it with hams. When at work samples are required and the company attorney vets the application, as an individual I can and do put down what is required to back up claims leaving it to the examiner to provide suggestions of same such that it has a tad of credability if challenged. I would add that I had to provide a sample of one antenna to the PTO before a application award was accepted. One person offered to provide the majority share of a company if I would assist in a start up for one of my antennas. I refused because my intent was to enjoy my retirement without the need of obtaining more money when I have enough. Now I am doing a similar thing with a different antenna that has broader academic appeal beyond antennas and yes I paid the money to the PTO purely for my records, and there is more to be revealed as per what I have disclosed previously to this group.and nothing more.
I am what I am and do as I say and share it with all so they may discard if they wish as it is my personal .satisfaction that I search for,. If you or anybody else are offended I have no problem if you block my posts which would then remove the need for offending comments back and forth
Art Unwin....,KB9MZ....XG..(UK)
Art Unwin

4389. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 06:25:48 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ph12i4pmvr0ukg37faiigummj7p5tohggm@4ax.com>
Source record: 20113

On Sun, 16 Nov 2008 21:14:32 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>You can look in the archives for yourself to remind you of that
>incident, you have not been on this newsgroup for any length of time
>so it should be easy

Oh? I have to do the searching to prove YOUR accusations? Forgive my
laziness but I'm a bit busy tonite defrosting the fridge (hammer and
chisel required).

>As for requiring a demonstration I have other patents on antennas
>which are purely for my personal record I did not hawk it around to
>vendors but I did share it with hams.

These?

Constant impedance matching system
<http://www.google.com/patents?id=hCMpAAAAEBAJ&dq=5,790,081>

Variable capacitance antenna for multiband reception and transmission
<http://www.google.com/patents?id=GEsbAAAAEBAJ&dq=5,625,367>

Push button arranged for mounting to a panel
<http://www.google.com/patents?id=qaY3AAAAEBAJ>

Push button assembly
<http://www.google.com/patents?id=YF0tAAAAEBAJ>

Very nice. I like the motorized matching or tuning capacitor inside
the yagi boom idea.

>and there is more to be revealed as per what I have disclosed
>previously to this group.and nothing more.

I'm patient. Let me know when you have something substantial to
disclose.

>I am what I am and do as I say and share it with all so they may
>discard if they wish as it is my personal .satisfaction that I search
>for,.

It's your right to do with your designs as you please. I asked you to
demonstrate one that uses equilibrium and/or conduction in the center
of a conductor. I guess that's not going to happen.

>If you or anybody else are offended I have no problem if you
>block my posts which would then remove the need for offending comments
>back and forth

No problem. However, other than you calling me a liar twice (without direct substantiation), I would be interested in which of my comments offended you? I expend some effort in trying to be technically accurate and non-offensive. Apparently, I've failed and would like to know precisely where.

>Art Unwin....,KB9MZ....XG..(UK)
>Art Unwin

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4390. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 12:25:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ApdUk.6342$as4.4747@nlpi069.nbdc.sbc.com>
Source record: 20114

Richard Harrison wrote:
> Charges are moved to the surface by reduced inductive opposition there.

From a QED standpoint, electrons at the center of a
conductor cannot absorb or emit photons and therefore
cannot radiate.
--
73, Cecil http://www.w5dxp.com

4391. A WONDER FULL ART IN THER

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 13:08:53 UTC
From: lucky time <luckytime2@gmail.com>
Message-ID: <df382afe-70a7-49c4-b350-f9d29966c67c@v16g2000prc.googlegroups.com>
Source record: 20115

www.goodplaces4.blogspot.com

4392. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 16:30:35 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <l_gUk.6716$x%.3470@nlpi070.nbdc.sbc.com>
Source record: 20116

Dave wrote:
> "David G. Nagel" <nagel.david@sbcglobal.net> wrote in message
> news:4vYTk.5106$hc1.4505@flpi150.ffdc.sbc.com...
>> John Smith wrote:
>>> Richard Harrison wrote:
>>>> Art Unwin wrote:
>>>> "Could you give a similar description only this time make it a 5/8
>>>> wavelength antenna."
>>>> ...
>>>> Best regards, Richard Harrison, KB5WZI
>>> Richard:
>>>
>>> I certainly don't want to engage in a large argument.
>>>
>>> Rather, I would just venture an opinion directly related to my real world
>>> construction experiences, and the results from the same:
>>>
>>> If there are notable gains from constructing a 5/8 wave antenna, as
>>> opposed to a 1/2 wave--I have NOT seen them.
>>>
>>> It all looks good in EZNEC and/or mmana-gal (or, "on paper"), however, in
>>> real world s-meter/signal-reports, "it" does not.
>>>
>>> Perhaps I have experienced a anomaly(s?)
>>>
>>> Or, put simply, the extra "hassle" in dealing with these extended lengths
>>> is simply "not worth it!"
>>>
>>> Regards,
>>> JS
>> I think that we all should remember that it is the "ART" of antenna design
>> not the "SCIENCE" of antenna design.
>>
>> Dave WD9BDZ
>
> its only an art to art its a science to everyone else. art paints his
> antennas with magical mystery jumping diamagnetic neutrinos that levitate in
> the breeze. sounds like paintings like the melted watch and distorted
> perceptions to me.
>
>
The last time that I built an antenna I used the formula to get the
appropriate length then I had to adjust it to obtain the optimal
readings for the frequency I was using.

4393. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 16:34:11 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <42hUk.6717$x%.3022@nlpi070.nbdc.sbc.com>
Source record: 20117

Richard Harrison wrote:
> Dave wrote:
> "High power coaxial transmission lines have hollow center conductors."
>
> Yes, and the metal which could have filled the hollow space would add no
> conductivity at HF.
>
> Best regards, Richard Harrison, KB5WZI
>

Ever seen the coax used on TV transmission lines? In rough numbers is is
a pipe about 6" in diameter with another pipe about 1" in diameter held
centered inside the larger one by spacers.

4394. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 19:05:07 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <9cr8v5-kuo.ln1@mail.specsol.com>
Source record: 20118

David G. Nagel <nagel.david@sbcglobal.net> wrote:

> The last time that I built an antenna I used the formula to get the
> appropriate length then I had to adjust it to obtain the optimal
> readings for the frequency I was using.

Did "the formula" take into account any insulation, conductor resistivity,
conductor diameter, height above ground, characteristics of the ground,
and objects in the near field including supports?

If not, what is your point?

--
Jim Pennino

Remove .spam.sux to reply.

4395. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 19:10:52 UTC
From: kb9rqz@yahoo.com
Message-ID: <3912i4hcpotdhubl98gtlq7l0r2o5uunog@4ax.com>
Source record: 20119
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
well said and agood reminder

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4396. Is blockage of Jpole bottom stub ok?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 19:45:22 UTC
From: xray66@earthlink.net
Message-ID: <82834cbc-8ba8-4bb8-80e6-32b43fd83032@q26g2000prq.googlegroups.com>
Source record: 20120

Just wondering what people's opinion is on this... I'm trying to decrease the overall mounted size of a jpole design. In the past I've always tried to keep the bottom 1/4 wave stub section well above the mast top. Just for the heck of it, I started testing with the stub below the top of the mast (mast blocking the bottom 1/4 wave stub). The antenna is still electrically isolated from the mast of course... but what I found is that I was able to mount the antenna to the mast and have it go up the first 1/4 wave stub part of the antenna at least 2/3 of the way, before there was any SWR problem at all. In fact, there was virtually no difference in the SWR doing that, as compared with having the very bottom of the antenna well above the mast top. Can anybody think of any other adverse effect in doing this? On a fairly low band it reduces the overall size of the antenna significantly, so it's definitely an advantage to mount it lower, assuming there's no adverse effect on the performance. The SWR doesn't seem to change at all until you start getting the top of the mast up near the actual 1/2 wave portion of the antenna.

Thanks for any help,

4397. Re: Is blockage of Jpole bottom stub ok?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 19:53:09 UTC
From: JB <nospam@goofball.net>
Message-ID: <FYjUk.1140$4g5.473@nwrddc01.gnilink.net>
Source record: 20121

<xray66@earthlink.net> wrote in message
news:82834cbc-8ba8-4bb8-80e6-32b43fd83032@q26g2000prq.googlegroups.com...
> Just wondering what people's opinion is on this... I'm trying to
> decrease the overall mounted size of a jpole design. In the past I've
> always tried to keep the bottom 1/4 wave stub section well above the
> mast top. Just for the heck of it, I started testing with the stub
> below the top of the mast (mast blocking the bottom 1/4 wave stub).
> The antenna is still electrically isolated from the mast of course...
> but what I found is that I was able to mount the antenna to the mast
> and have it go up the first 1/4 wave stub part of the antenna at least
> 2/3 of the way, before there was any SWR problem at all. In fact,
> there was virtually no difference in the SWR doing that, as compared
> with having the very bottom of the antenna well above the mast top.
> Can anybody think of any other adverse effect in doing this? On a
> fairly low band it reduces the overall size of the antenna
> significantly, so it's definitely an advantage to mount it lower,
> assuming there's no adverse effect on the performance. The SWR doesn't
> seem to change at all until you start getting the top of the mast up
> near the actual 1/2 wave portion of the antenna.
>
> Thanks for any help,

There may be a problem with mounting hardware detuning the stub.

4398. Re: Is blockage of Jpole bottom stub ok?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 21:32:13 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <splUk.5857$W06.2525@flpi148.ffdc.sbc.com>
Source record: 20122

xray66@earthlink.net wrote:
> Thanks for any help,

The rule is that a conductive support needs to be kept
a few diameters away from the spacing of the non-radiating
stub. If that condition is met, it should be OK.
--
73, Cecil http://www.w5dxp.com

4399. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 21:49:18 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <FDlUk.6339$Ei5.2047@flpi143.ffdc.sbc.com>
Source record: 20123

jimp@specsol.spam.sux.com wrote:
> David G. Nagel <nagel.david@sbcglobal.net> wrote:
>
>> The last time that I built an antenna I used the formula to get the
>> appropriate length then I had to adjust it to obtain the optimal
>> readings for the frequency I was using.
>
> Did "the formula" take into account any insulation, conductor resistivity,
> conductor diameter, height above ground, characteristics of the ground,
> and objects in the near field including supports?
>
> If not, what is your point?
>
>

The point is that those items are not part of "Antenna Theory: The Science" but are a large part of "Antenna theory: The Art". Art has been talking as if they are one and the same.

Something you could answer if you can. I am planning to install a dipole antenna in NVIS configuration adjacent to a mobile home type structure. The wire will be within about 10 to 15 feet of the metal covered structure. How much will the metal warp the radiation pattern of the antenna. It will be in the 75 to 60 meter bands.

Dave WD9BDZ

4400. Re: Digisateliittiko taloon?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 22:32:56 UTC
From: Juhana Nyman <juhana@angled.net>
Message-ID: <1215799092_22811@246.254.134.15>
Source record: 20124

"L.S. 03.05-08.Jyrki Niittymaa.Ydinvoiman�k�kanta tulevaisuuteen on, ett� jo olemassaolevistakin yksik�ist� tulee luopua puhumattakin uusien rakentamissuunnitelmasuunnitelmista. Mielipidekirjoituksissa ja tekstipalstoilla tuodaan usein esille, ett� Suomi olisi yksin��n ydinvoimahuumamaa.Vastustajat korostaa laitosten vaarallisuutta tavalla, jolla viitataan katastrofaalisiin seurauksiin mittaamattomaksi ajaksi. IAEA:n tilastojen mukaan kaikkiaan ydinvoimaloita on j�ljell� EN�� 439kpl! (Tilanne tarkoittaa sit�, ett� aiempi ydinvoiman 2% maailman energiantuotanto-osuus on rajussa laskussa, koska jopa ydinvoimaloitten KOKONAISM��R� on kovassa pudotuksessa muun energiantuotannon noustessa vuosittain maailmalla taustassa useita prosentteja. Siksi esim. Kiina 5-kertaistaa satsaustaan suhteessa nyanssiseen ydinvoimaansa jopa viimewvuotisia suunitelmiaan enemm�n. Syyn� on kuulema se, ettei ydinvoima sovi energiakalliina ja hitaana s��t�kyvytt�m�n� perustarpeisiin, ja kansalaiset vierastavat ydinvoimaa nyttemmin my�s siel�! Siksi Niittymaa jatkaa tiet�ess��n, ett� mm. t�n� vuona maailman valloittavat p��st�tt�m�t , piiputtomat voimalat alkavat dominoimaan maailman energiamarkkinoita , kuten TVO:n mm. Nikula ja Luhta kommentoivat taannoisessa YVA-kokouksessaan, Jyrki jatkaa:)

Korostettakoon taas kerran t�ss�kin yhteydess�, ett� muita tuotantomuotoja, erityisesti uusiutuvia, ei pid� v�heksy�, tai j�tt�� k�ytt�m�tt�! Viimek�dess� mm. k�ytetyn polttoaineen loppusijoittaminen tuntuu pelottavimmalta uhalta kauhukuvineen satojen vuosituhansien p��h�n!" Hei siis VAUTSI, kaveri alkanee heijastella syit� siihen miksi jopa SDP on luopumassa ydinhysteriastaan!)

*Koska maailman ydinvoimaloita tunutaan alati vaan purkavan enemm�n ydinvoimaloita, kuin hidas ja ponneton rakentaminen on vuosikymmenten odottelussa tuottanut. Juuri kuten IAEA ennakoi tapahtuvan energiapositiivisen uraanintuotannon loputtua -07. Mutta on t�ss� toki my�s muita motiiveja. Kuten monet muistavat TVO k�ytt�� nyky��n JOKAISEEN ydinvoimalaan sukupuuttoon kuolevan valaan/vuosi. T�m� n�kyy n�iss� mm. MTC-palojen rasvank�yt�iss� ja vastaavissa sitten n�in, kun kampamaneettikasvattamot tyhjent�v�t valailta my�s kiihtyv�sti ruuat:"Norjalaiset valaanpyyt�j�t ovat saaneet saaliikseen viisi lahtivalasta. Kertoi norjalaislehti perjantaina. Valaanpyyntikausi on on ollut k�ynniss� jo runsaan kuukauden, mutta pyynti� on haitannut huono s�� ja jatkuvasti kohoavat polttoainekustannukset. Norjan itselleen asettamat valaanpyyntikiinti�t t�lle vuodelle on reilut 1000 lahtivalasta. Kiinti� oli saman suuruinen my�s viime vuona. Norja irtisanoutui kansainv�lisest� valaanpyyntikiellosta vuonna 1993 v�itt�en, ett� valaanpyynti on v�ltt�m�t�nt� lahtivalaskantojen pit�miseksi sellaisena, ettei haittaa kalastusta. Lahtivalaat kasvavat 11-metrisiksi ja painavat kahdeksan

tonnia."

*Ja tosiaan n�ill� tappokinti�ill��n juuri ja juuri hoidetaan alati katoavaa ydinperint�� ja hiukan rasvaa riitt�� my�s varastok�ytt��n.

4401. Re: Randy Chapman, KB5URP, convicted crack dealer, has his buttocks slurped by nymboi moaprhoLICK!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 22:59:33 UTC
From: mopeyzakween@yahoo.com
Message-ID: <c2dd422f-cf12-4981-80a0-da27c99f1197@i24g2000prf.googlegroups.com>
Source record: 20125
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Nov 10, 7:47 pm, mopeyzakw...@yahoo.com wrote:
> It is NEVER gonna stop, moparhoLICK...NEVER. Get used to it. You can
> do not a friggin' thing to stop it. HAHAHAHAHHA...ASSCLOWN...sit there
> and do what you do with truckers...SUCK ON IT! LOL! The more you post
> the more we will whap your faggy face with your gay lover Chapwoman's
> deal. Go eat a kitty turd and get over it, queenie.
>
> Batch Search Summary
> SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
> 3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS
>
> RESULTS FOR 'CHAPMAN,RANDALL '
> Search ID 3930206 Back to Top
> NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
> CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW
>
> CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
> SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
> MALE WHITE 508 195 BROWN Brown 10/26/1995
> NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
> CHAPMAN,RANDY
>
> BIRTHDATES 03/22/1961 (Primary)
>
> Arrest Summary (TRN)
> DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
> 01/16/1995 A 0007369727 TEXAS CITY PD View
>
> Arrest Date: 01/16/1995 Arrest Summary
>
> DATE OF ARREST 01/16/1995
> SEQUENCE CODE A
> TRACKING NUMBER 0007369727
> AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
> CHARGE
> TRACKING SUFFIX A001
> OFFENSE DETAIL
> INTERNAL AGENCY PERSON NUMBER 020130
> INTERNAL AGENCY CASE NUMBER 95633
> ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
> ARREST OFFENSE CITATION 481.115(b)
> LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)

> DATE OF OFFENSE 01/16/1995
> ARREST DISPOSITION 205 (HELD)
> ARREST DISPOSITION DATE 01/16/1995
> PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
> GALVESTON)
> PROSECUTION DETAIL
> AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
> GALVESTON)
> PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
> PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
> PROSECUTOR OFFENSE CITATION 481.115(b)
> LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
> COURT STATUS
> COURT SEQUENCE a
> AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
> COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
> CITATION 481.115(b)
> LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
> COURT DISPOSITION 312 (DEFERRED)
> COURT DISPOSITION DATE 09/21/1995
> DATE OF SENTENCE/STATUS 09/21/1995
> CAUSE NUMBER 95CR0800
> FINAL PLEADING G (GUILTY)
> COURT PROBATION 4Y
> COURT FINE 200
> COURT COSTS 157
> AGENCY RECEIVING CUSTODY GCCSCD

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4402. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-17 23:45:04 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <jsb9v5-v1q.ln1@mail.specsol.com>
Source record: 20126

David G. Nagel <nagel.david@sbcglobal.net> wrote:
> jimp@specsol.spam.sux.com wrote:
>> David G. Nagel <nagel.david@sbcglobal.net> wrote:
>>
>>> The last time that I built an antenna I used the formula to get the
>>> appropriate length then I had to adjust it to obtain the optimal
>>> readings for the frequency I was using.
>>
>> Did "the formula" take into account any insulation, conductor resistivity,
>> conductor diameter, height above ground, characteristics of the ground,
>> and objects in the near field including supports?
>>
>> If not, what is your point?
>>
>>
>
> The point is that those items are not part of "Antenna Theory: The
> Science" but are a large part of "Antenna theory: The Art". Art has been
> talking as if they are one and the same.

Science is fully accounting for all variables and their effects giving
you exact answers.

Art is experience and rules of thumb that get you close enough.

> Something you could answer if you can. I am planning to install a dipole
> antenna in NVIS configuration adjacent to a mobile home type structure.
> The wire will be within about 10 to 15 feet of the metal covered
> structure. How much will the metal warp the radiation pattern of the
> antenna. It will be in the 75 to 60 meter bands.
>
> Dave WD9BDZ

I can't but it should be easy enough to model in EZNEC.

--
Jim Pennino

Remove .spam.sux to reply.

4403. Re: Tikulla simaan

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 00:01:31 UTC
From: Jonni Lappalainen <jonni@aquatic.org>
Message-ID: <Ttudk.30848$_03.28035@80.215.223.103>
Source record: 20127

Alan arvostuksesta kertoo varsin suoraan se miten alan ammattity�v�est�
suhtautuu tekemiseens�. Siit� voidaan ottaa esimerkkej� laajasti.
Ammattilaiset haluavat usein my�s j�lkikasvustaan ty�ns� jatkajia.
Yritysmaailma on pullollaan ty�st� ylpeit� is�lt� pojalle siirretty�
sukuosaamista. Mutta yksi ala loistaa poissaolollaan. Yksik��n ydinalan
ammattilainen ei kehu firmaansa julkisesti netiss�, lehdiss�, ei edes asiaa
kyselev�lle lapselleen. Jos katsomme ketk� julkisuudessa ydinlobbailevat,
niin yht��n alan ammattilaista ei taatusti n�y lehtiotsikoissa, netiss�
saati mualla. Vain rahalla ostettavia politikkoja ja vastaavia, jotka eiv�t
erota uraania hiilimustasta taatusti.

Rupesin todella ihmettelem��n miksi. Ja ennenkaikkea KETK� ovat maassamme
nyky��n ydinalan ammattilaisia? Heit� on maassamme tietysti tuhansittain,
mutta keit�? Heille on yhteinen piirre se, ettei n�ill� ole esim.
perustuslakiemme mukaista lakko-oikeutta, kell��n! Toinen keskeinen piirre
on niinik�� lainvastaiset ylipitk�t jopa 12h ty�vuorot ja loputtomat
ylity�jaksot vailla omaa p��t�nt�oikeutta. Kolmas ominaisuus on tekem�ns�
ty�n arkaluontoisuus, mik� tarkoittaa orjallista vaitiololupauspakotetta
uhkailu-ukaaseineen ydinjohdolta. Esim. OL-1,OL-2 ja OL-3 ty�mailla ei
KET��N saa menn� vapaasti jututtamaan tekemisist��n ja m��r�ys on ehdoton,
vaikka maamme pit�isi olla demokratia. Mik� kertoo my�s alan valonarkuudesta
ja h�m�ryydest� enemm�n kuin paljon.

Niinik�� ydinty�l�isten palkkataso on enmemm�n kuin romahtanut loistonsa
p�ivist�. Jos lasketaan Suomen ydinty�l�isten ansiotasot saadaan tyyty� jopa
7 euron tuntipalkkoihin! Reippaasti alle jopa siivoojaminimist� puhutaan
ydinalan ammattilaisistamme keskim��rin kautta maamme! Kun viel� 70-luvulla
ydinosaaja oli huippupalkkalainen ja arvostettu, on h�n t�n��n l�hinn�
kansan hyljeksim� reppupuolalainen, liettualaisorja, turkkilainen, yms.
joita katsotaan pitkin nen�nvartta, jopa kaupan kassalla, koska heit�
arvotetaan toki my�s olemattoman orjapalkkaostovopimansa mukaan
olemattomuuksiin. Ja tieto siit�, ett� suurin osa ei maksa edes veroja,
saati sotuja ja vastaavia alentaa tasoa mutasarjaan kansan silmin.

Vaarallisesta ty�st� johtuvat moninkymmenkertaiset sairastumisriskit
ty�tapaturmista, kielitaidottomuutensa takia tulee valtavasti
onnettomuuslis�riskej�, samoin kouluttautumattomuuksistaan, s�teilyst� ja
vastaavista lis�riskeist� kiistatta puhutaan ydinty�l�isiss�. Hyv�ll� ei
n�ihin pitk�lti "slummiparakeissaan "huuhaleviin" ydinorjin suhtauduta en��
edes harmistuneitten kauppiaitten piiriss�. S�teilyvaaransa takia heill� on
normaality�l�isi� ankarammat
l��k�rintarkastusvaateet jne. Ydinty�l�iselle on kauhistus , jos lapsensa
tulisivat samaan ty�h�n jatkajiksi.Voi vaan h�mm�stell� kuinka nopeasti
ydinalan mega-arvostus on romahtanut nykyiseen mit��nsanomattomuuteensa.

heijastellen sit&#65533; pettymyst&#65533; mit&#65533; ydinvoiman loisteliaitten lupausten romahdettua tshernobyliin on tuottanut. Voi vaan arvailla, ett&#65533; kuinkan n&#65533;in totaalisen pettymyksen ala saa en&#65533;&#65533; jatkossa KET&#65533;&#65533;N kiinostumaan sen yll&#65533;pidosta?

4404. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 00:27:13 UTC
From: nm5k@wt.net
Message-ID: <b62d1585-160f-47d5-baa3-29f6710d07d5@a17g2000prm.googlegroups.com>
Source record: 20128

On Nov 17, 3:49 pm, "David G. Nagel" <nagel.da...@sbcglobal.net>
wrote:

>
> Something you could answer if you can. I am planning to install a dipole
> antenna in NVIS configuration adjacent to a mobile home type structure.
> The wire will be within about 10 to 15 feet of the metal covered
> structure. How much will the metal warp the radiation pattern of the
> antenna. It will be in the 75 to 60 meter bands.
>
> Dave WD9BDZ

I don't know about warping the pattern so much as making it possibly
hard to tune. You can expect some pretty serious coupling to all
that metal. So expect to have to prune it to a good match, and
maybe vary the exact tie off points of the dipole to move it a few
feet. Sometimes just a few feet can mean quite a bit of difference
in tuning.
As far as NVIS use, I wouldn't worry about the pattern too much.
It may skew it a bit, but I doubt it would really be much of a
problem.

4405. Re: Is blockage of Jpole bottom stub ok?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 00:29:38 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-741F64.19293817112008@nntp.aioe.org>
Source record: 20129

In article
<82834cbc-8ba8-4bb8-80e6-32b43fd83032@q26g2000prq.googlegroups.com>,
xray66@earthlink.net wrote:

> I'm trying to
> decrease the overall mounted size of a jpole design.

Xray-

Why not use the top of the mast as part of the antenna?

You could either measure 3/4 wavelengths down from the top and bolt-on
the 1/4 wave stub, or measure 1/4 wave down and bolt-on a 3/4 wave main
element!

You could run the coax inside the bolt-on element, and out through a
hole at the matching point.

Fred
K4DII

4406. Lawsuit countdown 14 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 00:35:35 UTC
From: kb9rqz@yahoo.com
Message-ID: <6e34i4tiivkelh3lsaf6liiqpf7d9bik68@4ax.com>
Source record: 20130
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Mon, 17 Nov 2008 14:59:33 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>
spamer

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4407. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 00:37:06 UTC
From: kb9rqz@yahoo.com
Message-ID: <nog3i4dgqktk428cb3enaj25t4qpmkr0de@4ax.com>
Source record: 20131
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4408. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 00:58:22 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <PqoUk.8577$YU2.5339@nlpi066.nbdc.sbc.com>
Source record: 20132

nm5k@wt.net wrote:
> On Nov 17, 3:49 pm, "David G. Nagel" <nagel.da...@sbcglobal.net>
> wrote:
>
>> Something you could answer if you can. I am planning to install a dipole
>> antenna in NVIS configuration adjacent to a mobile home type structure.
>> The wire will be within about 10 to 15 feet of the metal covered
>> structure. How much will the metal warp the radiation pattern of the
>> antenna. It will be in the 75 to 60 meter bands.
>>
>> Dave WD9BDZ
>
> I don't know about warping the pattern so much as making it possibly
> hard to tune. You can expect some pretty serious coupling to all
> that metal. So expect to have to prune it to a good match, and
> maybe vary the exact tie off points of the dipole to move it a few
> feet. Sometimes just a few feet can mean quite a bit of difference
> in tuning.
> As far as NVIS use, I wouldn't worry about the pattern too much.
> It may skew it a bit, but I doubt it would really be much of a
> problem.
>
>

Thanks, your information is pretty much what I expected. The antenna
will be off the long side of the trailer and I didn't know if the NVIS
pattern would favor one direction or the other. I need a west favoring
direction.

Dave WD0BDZ

4409. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 04:41:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <MLOdnabBo_sW2r_UnZ2dnUVZ_hydnZ2d@posted.easystreetonline>
Source record: 20133

David G. Nagel wrote:
> jimp@specsol.spam.sux.com wrote:
>> David G. Nagel <nagel.david@sbcglobal.net> wrote:
>>
>>> The last time that I built an antenna I used the formula to get the
>>> appropriate length then I had to adjust it to obtain the optimal
>>> readings for the frequency I was using.
>>
>> Did "the formula" take into account any insulation, conductor
>> resistivity,
>> conductor diameter, height above ground, characteristics of the ground,
>> and objects in the near field including supports?
>>
>> If not, what is your point?
>>
>
> The point is that those items are not part of "Antenna Theory: The
> Science" but are a large part of "Antenna theory: The Art". . .

I disagree. Antenna operation (or "theory") is dictated by science. How the mentioned factors affect antenna performance can all be calculated from well established, known scientific principles -- no "art" is required.

However, there are some ways where art does get into the picture. Practical antenna design usually requires tradeoffs, and there isn't necessarily one optimum solution. Weighing the tradeoffs, often including cost and time, requires knowledge and skill, and is a creative process that could properly be described as art -- although the more science you know, the bigger the bag of tricks you'll have for your "art" project. And there are often factors which, although completely deterministic in principle, aren't well enough known or are too complex to practically include in calculations. There, the skill or "art" comes in having a sufficient knowledge of the likely effects of those factors to choose or adjust the design accordingly.

What a lot of people call the "art" of antenna design is just a substitute for understanding. If you don't understand the underlying science or how to apply it, the only tool you have is Kentucky windage and guesswork, often called "art" as opposed to real understanding. While people can very often arrive at a usable solution by using nearly all "art" and little "science", they have more and better solutions to choose from as they replace some of that "art" with "science".

Roy Lewallen, W7EL

4410. Re: Is blockage of Jpole bottom stub ok?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 05:39:13 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <cysUk.8465$ev2.1618@newsfe12.iad>
Source record: 20134

<xray66@earthlink.net> wrote in message
news:82834cbc-8ba8-4bb8-80e6-32b43fd83032@q26g2000prq.googlegroups.com...
> Just wondering what people's opinion is on this... I'm trying to
> decrease the overall mounted size of a jpole design. In the past I've
> always tried to keep the bottom 1/4 wave stub section well above the
> mast top. Just for the heck of it, I started testing with the stub
> below the top of the mast (mast blocking the bottom 1/4 wave stub).
> The antenna is still electrically isolated from the mast of course...
> but what I found is that I was able to mount the antenna to the mast
> and have it go up the first 1/4 wave stub part of the antenna at least
> 2/3 of the way, before there was any SWR problem at all. In fact,
> there was virtually no difference in the SWR doing that, as compared
> with having the very bottom of the antenna well above the mast top.
> Can anybody think of any other adverse effect in doing this? On a
> fairly low band it reduces the overall size of the antenna
> significantly, so it's definitely an advantage to mount it lower,
> assuming there's no adverse effect on the performance. The SWR doesn't
> seem to change at all until you start getting the top of the mast up
> near the actual 1/2 wave portion of the antenna.

That's interesting. My experience is related to yours, although what I did was bring the mast close to the entire long part of the "J" and found I had to get within an inch before I saw any measurable effects, rcv or xmit. I did it with a 2m copper J.

In your situation, possibly the quarter-wave section is a tank circuit and would need proximity of a mast section of size close to its resonant freq to be detuned by it. I don't know ... just musing. Others will mug me for getting it wrong and that's OK.

More musing: Does the entire "J" have to be upright? Can't I put an elbow where the quarter-wave and half-wave sections meet, so the radiating element is vertical, but the quarter-wave section is horizontal? (In the case of a tower side-mount, this would position the radiating section a nice distance from the tower. Inverted OK.)

"Sal"

4411. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 05:53:35 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <HLsUk.8466$ev2.7835@newsfe12.iad>
Source record: 20135

"David G. Nagel" <nagel.david@sbcglobal.net> wrote in message
news:42hUk.6717$x%.3022@nlpi070.nbdc.sbc.com...
> Richard Harrison wrote:
> > Dave wrote:
> > "High power coaxial transmission lines have hollow center conductors."
> >
> > Yes, and the metal which could have filled the hollow space would add no
> > conductivity at HF.
> >
> > Best regards, Richard Harrison, KB5WZI
> >
>
> Ever seen the coax used on TV transmission lines? In rough numbers is is
> a pipe about 6" in diameter with another pipe about 1" in diameter held
> centered inside the larger one by spacers.

Yup. Also applies to rigid coax used for 400 MHz Naval radars.

4412. Re: Is blockage of Jpole bottom stub ok?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 05:59:02 UTC
From: gsm@mendelson.com
Message-ID: <slrngi4mc9.rsa.gsm@cable.mendelson.com>
Source record: 20136

Sal M. Onella wrote:
> More musing: Does the entire "J" have to be upright? Can't I put an elbow
> where the quarter-wave and half-wave sections meet, so the radiating element
> is vertical, but the quarter-wave section is horizontal? (In the case of a
> tower side-mount, this would position the radiating section a nice distance
> from the tower. Inverted OK.)

Sal, I think that the position of the J affects its polarization. Around
1995, I did some informal experiments with an MFJ 300 ohm twinlead J-Pole
and 2m SSB. I used a Yaesu FT-290RII with 2 watts output.

At 2m, polarization is important and I found that by laying the J-Pole
horizontaly, I was able to extend the range of my signals, even if
I layed the antenna on a wood picnic table.

I did not experiment with the antenna in a mixed orientation as you describe
above.

Another posibility is to place a 300 ohm J-Pole antenna inside a rigid
PVC pipe. If the pipe is long enough, the base can be clamped without
affecting the antenna. This does move the feed line from being extended
horizontaly at the feed point to being extended verticaly downward, but
this did not seem to effect the antenna, and the MFJ unit I have is
designed that way.

The 450 ohm ladder line units I have made are built with a horizontal
feed, but that's more lazyness than anything else.

73,

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

4413. Re: Is blockage of Jpole bottom stub ok?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 06:38:26 UTC
From: dplatt@radagast.org
Message-ID: <2g4av5-t7t.ln1@radagast.org>
Source record: 20137

>More musing: Does the entire "J" have to be upright? Can't I put an elbow
>where the quarter-wave and half-wave sections meet, so the radiating element
>is vertical, but the quarter-wave section is horizontal?

No, it doesn't, and yes, you can.

The quarter-wave matching section may radiate somewhat (it's not a perfectly-balanced transmission line) but the effect should be minimal.

You'll still want to mount the antenna so that the quarter-wave section remains some distance from the mast.

You can extend this approach a bit further, and make a fully- balanced version of a bent J-pole - a.k.a. a "double zepp". This would be two half-wave radiating sections, fed through a quarter-wave matching section.

The coax is connected along the matching section, using a 4:1 coaxial balun.

A further variant of this is an "extended double Zepp" (or "double extended Zepp"), which is two 5/8-wave radiators with a somewhat shorter matching section.

For both the standard and extended double Zepp antennas, the use of a balanced feed allows the "inner" end of the matching section to be grounded to the mast - it can even be part of a metal mast, or can have extensions addd to allow it to be clamped to the mast.

See http://www.tcarc.ca/public/2mdez.php for complete plans for the extended double Zepp. The simple "double Zepp" can be made in a similar fashion, with shorter radiators and a longer matching section.

I built a 440 version of the EDZ for use as a linking-radio antenna for a local repeater system. It works nicely. One thing I'd do a bit differently - I'd actually do the matching (selection of feedline attachment point and shorting bar) after mounting it on the tower, rather than in free space - the tower mast does have enough of an effect on the impedance to change the SWR a bit.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4414. Re: Is blockage of Jpole bottom stub ok?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 06:45:25 UTC
From: xray66@earthlink.net
Message-ID: <75db397e-bc77-4e6b-9158-a1bf334c3a85@s9g2000prg.googlegroups.com>
Source record: 20138

Thanks for the info... I'm should have added that the one I was working with was contained in RF transparent plastic tube. So that's how I can mount the whole thing right next to the mast. Maybe if you were using a traditional copper model, it might be different. But with the one I have, there was no difference with the mast next to the stub section. Though I have noticed similar commercial models do seem to leave an air gap between the mount area and the element.

4415. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 12:01:36 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1811080701360001@jbw-mac.itd.nrl.navy.mil>
Source record: 20139

In article <MLOdnabBo_sW2r_UnZ2dnUVZ_hydnZ2d@posted.easystreetonline>, Roy Lewallen <w7el@eznec.com> wrote:

> I disagree. Antenna operation (or "theory") is dictated by science. How
> the mentioned factors affect antenna performance can all be calculated
> from well established, known scientific principles -- no "art" is required.
>

Hello, Roy and all. While I aggree with the above I think one has to keep in mind that 50 years ago there weren't software MoM (e.g. NEC) and FDTD tools around to implement calculations that don't lend themselves to pencil-and-paper calculation. As a result back then there was considerable "art" (I would call it engineering) involved in antenna design. Hams, too, were coming up with many practical designs back then as well as now. Practical experience was important then and still is.

> However, there are some ways where art does get into the picture.
> Practical antenna design usually requires tradeoffs, and there isn't
> necessarily one optimum solution. Weighing the tradeoffs, often
> including cost and time, requires knowledge and skill, and is a creative
> process that could properly be described as art -- although the more
> science you know, the bigger the bag of tricks you'll have for your
> "art" project. And there are often factors which, although completely
> deterministic in principle, aren't well enough known or are too complex
> to practically include in calculations. There, the skill or "art" comes
> in having a sufficient knowledge of the likely effects of those factors
> to choose or adjust the design accordingly.

I think you've just summed up what engineering is all about. Mathematics is an exact science; engineering is not.

>
> What a lot of people call the "art" of antenna design is just a
> substitute for understanding. If you don't understand the underlying
> science or how to apply it, the only tool you have is Kentucky windage
> and guesswork, often called "art" as opposed to real understanding.
> While people can very often arrive at a usable solution by using nearly
> all "art" and little "science", they have more and better solutions to
> choose from as they replace some of that "art" with "science".

That's the difference between hobbyist tinkering and engineering. It's what allowed the Wright Brothers to be successful when others (who may have been close to success) failed. The Wrights took the time to understand the science/physics, performed pertinent experiments and meticulously collected and analyzed data. These endeavors set them apart from their comtemporaries in pursuit of powered, heavier-than-air flight.

The Wrights were much more than bicycle mechanics; in their "off" time they were (aeronautical) engineers. Sincerely,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

4416. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 13:53:15 UTC
From: Dave <dave@dave.dave>
Message-ID: <4922c8cb$0$31762$bd467cd0@news.dslextreme.com>
Source record: 20140

jimp@specsol.spam.sux.com wrote:
> David G. Nagel <nagel.david@sbcglobal.net> wrote:
>> jimp@specsol.spam.sux.com wrote:
>>> David G. Nagel <nagel.david@sbcglobal.net> wrote:
>>>
>>>> The last time that I built an antenna I used the formula to get the
>>>> appropriate length then I had to adjust it to obtain the optimal
>>>> readings for the frequency I was using.
>>> Did "the formula" take into account any insulation, conductor resistivity,
>>> conductor diameter, height above ground, characteristics of the ground,
>>> and objects in the near field including supports?
>>>
>>> If not, what is your point?
>>>
>>>
>> The point is that those items are not part of "Antenna Theory: The
>> Science" but are a large part of "Antenna theory: The Art". Art has been
>> talking as if they are one and the same.
>
> Science is fully accounting for all variables and their effects giving
> you exact answers.
>
> Art is experience and rules of thumb that get you close enough.
>
As I understand it, science is trying ideas out to see what happens in
the real world. That would involve "experience" to a certain degree, as
an "educated guess" is involved in the design of the experiment.

4417. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 17:05:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfuskkmlm1@news.albasani.net>
Source record: 20141

J. B. Wood wrote:

> ...
> Hello, Roy and all. While I aggree with the above I think one has to keep
> in mind that 50 years ago there weren't software MoM (e.g. NEC) and FDTD
> tools around to implement calculations that don't lend themselves to
> pencil-and-paper calculation. As a result back then there was
> considerable "art" (I would call it engineering) involved in antenna
> design. Hams, too, were coming up with many practical designs back then
> as well as now. Practical experience was important then and still is.
> ...
> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

Your points are well taken here.

However, I do believe there is a lot of "art" involved. We don't even know what our signals are really composed of. We don't even really know how propagation and movement of our signals takes place though the medium which transports them; And, indeed, we don't even know the medium through which they travel ... if not for brilliant and "artful" men, this never would have occurred.

If this all does not make men stand in awe and wonder of these artistic accomplishment and beauty of engineering achievements, I just don't know what would!

Our imaginations have allowed us to reach out and use powers far beyond the horizons of our vision. Sometime in the future, we will even refine all of this ... as our vision(s) become clearer.

Warm regards,
JS

4418. Re: Is blockage of Jpole bottom stub ok?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 17:25:24 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gfutq4ftb2@news.jpl.nasa.gov>
Source record: 20144

Cecil Moore wrote:
> xray66@earthlink.net wrote:
>> Thanks for any help,
>
> The rule is that a conductive support needs to be kept
> a few diameters away from the spacing of the non-radiating
> stub. If that condition is met, it should be OK.

essentially, that stub is a openwire balanced transmission line, so all the usual rules about spacing of openwire line from things that will perturb the field apply. As Cecil says.. a few spacings away..

4419. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 17:36:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6c6852f1-5604-4ee4-b111-8d77fdfce31c@w39g2000prb.googlegroups.com>
Source record: 20142

On Nov 18, 11:05 am, John Smith <assemblywiz...@gmail.com> wrote:
> J. B. Wood wrote:
> > ...
> > Hello, Roy and all. While I aggree with the above I think one has to keep
> > in mind that 50 years ago there weren't software MoM (e.g. NEC) and FDTD
> > tools around to implement calculations that don't lend themselves to
> > pencil-and-paper calculation. As a result back then there was
> > considerable "art" (I would call it engineering) involved in antenna
> > design. Hams, too, were coming up with many practical designs back then
> > as well as now. Practical experience was important then and still is.
> > ...
> > John Wood (Code 5550)   e-mail: w...@itd.nrl.navy.mil
> > Naval Research Laboratory
> > 4555 Overlook Avenue, SW
> > Washington, DC 20375-5337
>
> Your points are well taken here.
>
> However, I do believe there is a lot of "art" involved. We don't even
> know what our signals are really composed of. We don't even really know
> how propagation and movement of our signals takes place though the
> medium which transports them; And, indeed, we don't even know the
> medium through which they travel ... if not for brilliant and "artful"
> men, this never would have occurred.
>
> If this all does not make men stand in awe and wonder of these artistic
> accomplishment and beauty of engineering achievements, I just don't know
> what would!
>
> Our imaginations have allowed us to reach out and use powers far beyond
> the horizons of our vision. Sometime in the future, we will even refine
> all of this ... as our vision(s) become clearer.
>
> Warm regards,
> JS

Science is the use of known laws to determine fault or to pursue a
predefined result.
Art is to follow intuitive ideas in the hope of producing an
acceptable result

4420. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 17:56:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gfuvk8$q1r$1@news.albasani.net>
Source record: 20143

Art Unwin wrote:

> ...
> Science is the use of known laws to determine fault or to pursue a
> predefined result.
> Art is to follow intuitive ideas in the hope of producing an
> acceptable result

Point well taken ... Einstein seemed to have a real "art" of predicting which areas would bear fruit, and a path to follow to deduce their inner workings.

Regards,
JS

4421. FS Ham IV Rotor Controller

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 18:58:55 UTC
From: Charlie Hugg <k5mbx@sbcglobal.net>
Message-ID: <QfEUk.8034$be.2464@nlpi061.nbdc.sbc.com>
Source record: 20145

FS: Ham IV rotor controller. Made by CDE, this is the metal case version. Will work with any HyGain, CDE or Telex eight wire rotor. Price 50.00 plus shipping.In very nice shape and works good. Pictures by request.
Thanks, Charlie Hugg, K5MBX

4422. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 20:12:13 UTC
From: kb9rqz@yahoo.com
Message-ID: <qc86i41f2dr1imrhsfgv5rgb99gu4hqh3g@4ax.com>
Source record: 20146
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4423. Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-18 23:02:43 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <dcdab5f2-8601-421a-9303-f9bb3994bc51@d10g2000pra.googlegroups.com>
Source record: 20147

As a mechanical engineer I am not particularly qualified with respect
to the following so I am hoping others will discuss it so it becomes
clearer to me.
Reviewing the time of Maxwell it seems his real niche was as a
mathematician
and not necessarilly on par with Faraday, Gauss, Newton and others
that supplied the various observations and formulas with which Maxwell
worked with. From my standpoint he apparently did not give due
preference to the idea of equilibriums as did ALL of his formula
suppliers and considering his object it was not that big a deal. I
then read that the formulas that were condensed in numbers did not
exactly jive! So Maxwell, the mathematician, invented displacement
current which apparently has nothing to do with radiation according to
what I read. Apparently this same current does not create a magnetic
field as the main current does e.t.c. but in mathematical terms it
gave a conclusion to what he wanted to do. From my point of view I
find it odd that a current could flow of a time varient nature does
not include a magnetic field UNLESS the current flowed in the center
of the conductor. I am not saying that displacement current travels in
the center but I do ask those educated in this field if displacement
current has been obseved, measured and is present BEYOND DOUBT? Also
as the generation of radiation is not precisely known at this time,
how could it be said it does not contribute to radiation? Starting
from that presented to Maxwell initially, exactly how did the concept
of a time varying current traveling along a radiators surface yet
without producing a magnetic field pass muster of those who study
such?
Best regards
Art

4424. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 10:46:39 UTC
From: ml <m@di.net>
Message-ID: <m-540259.05463919112008@news.optonline.net>
Source record: 20148

In article <MbMSk.2377$Lv6.1922@bignews8.bellsouth.net>,
"Hal Rosser" <hmrosser@bellsouth.net> wrote:

> Thanks, Barry on helping to wake up my recollections. I had forgotten that
> the increasingnes of the spacing of the conductors go into multiple
> wavelengths, which as you reminded us, is not practical for HF frequencies.
> But for 2-meters and above, it may be worth a try.
> The Bamboo suggestion sounds good, by the way. I used to use 300-ohm
> twinlead because of the light weight because I wanted the antenna up as high
> as possible, and more weight made it droop.
>
> "NoSPAM" <unknown@nospam.org> wrote in message news:gfg2gligp1@aioe.org...
> > {Note: I tried posting this yesterday but Charter's NNTP server was having
> > problems.}
> >
> > G-line, more correctly known as Goubau line, is not practical for use in
> > the
> > HF range. It is generally limited to UHF frequencies and above due to the
> > physical size of the "launchers" which generate a surface wave along the
> > line. For details, see: Geog Goubau, "Surface waves and their Application
> > to Transmission Lines," Journal of Applied Physics, Volume 21, Nov.
> > (1950).
> >
> > What I believe Hal is talking about was the early practice of using a
> > single
> > wire from the transmitter to connect to an essentially horizontal antenna.
> > Of course that single wire did not behave as a transmission line, but
> > rather
> > became part of the antenna working against ground. In many cases this
> > wire
> > became the actual antenna with the horizontal portion acting as capacitive
> > loading. The resulting antenna pattern is often quite distorted from that
> > expected of the dipole. A good ground is needed on the transmitter, yet
> > problems of RF in the shack are common.
> >
> > 73, Barry WA4VZQ
> >
> >
> >
> >

find some of that oil they soak telephone poles in then coat it
w/sealer

ultimately wood prob wont last as long as some good plastic and
i guess would be heaver stressing the wires more

it will prob still hold more water than a smooth plastic dunno

and prob not have as good insulative prop's but might be moot

4425. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 12:54:43 UTC
From: joe <none@home.now>
Message-ID: <gg11l6$qb6$1@aioe.org>
Source record: 20149

Art Unwin wrote:

> As a mechanical engineer I am not particularly qualified with respect
> to the following so I am hoping others will discuss it so it becomes
> clearer to me.
> Reviewing the time of Maxwell it seems his real niche was as a
> mathematician
> and not necessarilly on par with Faraday, Gauss, Newton and others
> that supplied the various observations and formulas with which Maxwell
> worked with. From my standpoint he apparently did not give due
> preference to the idea of equilibriums as did ALL of his formula
> suppliers and considering his object it was not that big a deal. I
> then read that the formulas that were condensed in numbers did not
> exactly jive! So Maxwell, the mathematician, invented displacement
> current which apparently has nothing to do with radiation according to
> what I read. Apparently this same current does not create a magnetic
> field as the main current does e.t.c.

From:
http://en.wikipedia.org/wiki/Displacement_current
you will find
" Displacement current has the units of electric current and it has an
associated magnetic field. "

> but in mathematical terms it
> gave a conclusion to what he wanted to do. From my point of view I
> find it odd that a current could flow of a time varient nature does
> not include a magnetic field UNLESS the current flowed in the center
> of the conductor.

You are trying to justify your misbeliefs by referencing incorrect
information. Familiar with GIGO ?

> I am not saying that displacement current travels in
> the center

Then how can you connect the two?

> but I do ask those educated in this field if displacement
> current has been obseved, measured and is present BEYOND DOUBT? Also
> as the generation of radiation is not precisely known at this time,
> how could it be said it does not contribute to radiation? Starting
> from that presented to Maxwell initially, exactly how did the concept
> of a time varying current traveling along a radiators surface yet
> without producing a magnetic field pass muster of those who study
> such?

> Best regards
> Art

You repeatedly say your facts are not disputed. Well, I'm disputing them again.

4426. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 14:08:39 UTC
From: Dave <dave@dave.dave>
Message-ID: <49241de7$0$31189$bd467cd0@news.dslextreme.com>
Source record: 20150

```
Dave wrote:
> jimp@specsol.spam.sux.com wrote:
>> David G. Nagel <nagel.david@sbcglobal.net> wrote:
>>> jimp@specsol.spam.sux.com wrote:
>>>> David G. Nagel <nagel.david@sbcglobal.net> wrote:
>>>>
>>>>> The last time that I built an antenna I used the formula to get the
>>>>> appropriate length then I had to adjust it to obtain the optimal
>>>>> readings for the frequency I was using.
>>>> Did "the formula" take into account any insulation, conductor
>>>> resistivity,
>>>> conductor diameter, height above ground, characteristics of the ground,
>>>> and objects in the near field including supports?
>>>>
>>>> If not, what is your point?
>>>>
>>> The point is that those items are not part of "Antenna Theory: The
>>> Science" but are a large part of "Antenna theory: The Art". Art has
>>> been talking as if they are one and the same.
>>
>> Science is fully accounting for all variables and their effects giving
>> you exact answers.
>>
>> Art is experience and rules of thumb that get you close enough.
>>
> As I understand it, science is trying ideas out to see what happens in
> the real world. That would involve "experience" to a certain degree, as
> an "educated guess" is involved in the design of the experiment.

And one could say the "design of the experiment" could be an art.
```

4427. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 14:34:39 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngi88vu.2ss4.bit-bucket@shell.config.com>
Source record: 20151
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

On Thu, 6 Nov 2008 02:24:48 -0500, Ed Cregger wrote:
> "Tehrasha Darkon" <darkon@netins.net> wrote:
>> On Wed, 5 Nov 2008, Mark wrote:
>>
>>> I've been a ham for over 30 years and I have a lot of experience with
>>> EMI, but this one has me scratching my head. The wheel static
>>> changes repeatably in different locations for no apparent reason.
>>> It's got to be something to do with the pavement. Anybody have any
>>> experience with this?
>>
>> My guess is different lengths/types/orientation of rebar in the roadbed.
>
> Or electronic/magnetic sensors embedded in the road.

I've been able to associate _hash_ , not *static* , to DOT-type roadside
traffic informational signs -- usually the solar-assisted, battery
operated style. My guess is they use some high-KHz power conversion
and/or some not-so-well shielded electronics to operate the sign. The
effect, though, is seen over a quarter mile, or less, section of the road.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
* Killfiling google & XXXXbanter.com: jonz.net/ng.htm

4428. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 15:15:40 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6bf076e4-3023-465f-925e-209027537129@v39g2000pro.googlegroups.com>
Source record: 20152

On Nov 19, 6:54 am, joe <n...@home.now> wrote:
> Art Unwin wrote:
> > As a mechanical engineer I am not particularly qualified with respect
> > to the following so I am hoping others will discuss it so it becomes
> > clearer to me.
> > Reviewing the time of Maxwell it seems his real niche was as a
> > mathematician
> > and not necessarilly on par with Faraday, Gauss, Newton and others
> > that supplied the various observations and formulas with which Maxwell
> > worked with. From my standpoint he apparently did not give due
> > preference to the idea of equilibriums as did ALL of his formula
> > suppliers and considering his object it was not that big a deal. I
> > then read that the formulas that were condensed in numbers did not
> > exactly jive! So Maxwell, the mathematician, invented displacement
> > current which apparently has nothing to do with radiation according to
> > what I read. Apparently this same current does not create a magnetic
> > field as the main current does e.t.c.
>
> From:http://en.wikipedia.org/wiki/Displacement_current
> you will find
> " Displacement current has the units of electric current and it has an
> associated magnetic field. "
>
> > but in mathematical terms it
> > gave a conclusion to what he wanted to do. From my point of view I
> > find it odd that a current could flow of a time varient nature does
> > not include a magnetic field UNLESS the current flowed in the center
> > of the conductor.
>
> You are trying to justify your misbeliefs by referencing incorrect
> information. Familiar with GIGO ?
>
> > I am not saying that displacement current travels in
> > the center
>
> Then how can you connect the two?
>
> > but I do ask those educated in this field if displacement
> > current has been obseved, measured and is present BEYOND DOUBT? Also
> > as the generation of radiation is not precisely known at this time,
> > how could it be said it does not contribute to radiation? Starting
> > from that presented to Maxwell initially, exactly how did the concept
> > of a time varying current traveling along a radiators surface yet
> > without producing a magnetic field pass muster of those who study

> > such?
> > Best regards
> > Art
>
> You repeatedly say your facts are not disputed. Well, I'm disputing them
> again.

To Joe the plummer
Please read the last paragraph of Wilkpedia that you urged all to read

4429. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 17:46:05 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gg1jct$1jp4$1@f04n12.cac.psu.edu>
Source record: 20153

Roy Lewallen wrote:

> What a lot of people call the "art" of antenna design is just a
> substitute for understanding. If you don't understand the underlying
> science or how to apply it, the only tool you have is Kentucky windage
> and guesswork, often called "art" as opposed to real understanding.
> While people can very often arrive at a usable solution by using nearly
> all "art" and little "science", they have more and better solutions to
> choose from as they replace some of that "art" with "science".

What I have found is that the antennas I design tend to mirror the software. The times they have not, I can usually look around and find the thing that causes it, maybe the height I ended up at wasn't the one used for the design, maybe a metal structure, ground characteristics were not the same. etc.

I think we attribute to "art" that which we do not know at the time. As we know more, it all turns into science.

- 73 de Mike N3LI -

4430. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 18:39:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c2n8i45e9n5hkrcplag1kt6dttqqh33erl@4ax.com>
Source record: 20154

On Wed, 19 Nov 2008 07:15:40 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:
>> Art Unwin wrote:
>>>Apparently this same current does not create a magnetic
>>> field as the main current does e.t.c.
>Please read the last paragraph of Wilkpedia that you urged all to read

"displacement current therefore simply refers to the fact that a
changing electric field has an associated magnetic field."

73's
Richard Clark, KB7QHC

4431. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 20:33:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b55e91b3-4bd2-42a2-8e19-1068e0a02e0a@l39g2000yqn.googlegroups.com>
Source record: 20155

On Nov 19, 12:39 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Wed, 19 Nov 2008 07:15:40 -0800 (PST), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >> Art Unwin wrote:
> >>>Apparently this same current does not create a magnetic
> >>> field as the main current does e.t.c.
> >Please read the last paragraph of Wilkpedia that you urged all to read
>
>   "displacement current therefore simply refers to the fact that a
>   changing electric field has an associated magnetic field."
>
> 73's
> Richard Clark, KB7QHC
To the group

That's the modern version I was alluding to and not the original
phrase. The part that Maxwell added is not now acceptable and has been
removed. After all, no current or magnetic field that could be
attribitable to Maxwells belated addition to a prior masters findings
was just a whim to satisfy his mathematics and his paper on Forces.The
field or the current has not been ratified
Wilkpedia makes that quite clear if you read the whole article. This
does not render Maxwell's laws as incorrect it just means that like
the weak force he cannot explain the portion which he name
Displacement current even tho he applied mathematical data. All
because he overlooked the term requilibrium and thus assumed that
displacement meant what he termed in his white paper on forces. It was
this reference that shows he overlooked the need for a full wave
antenna and thus the suggestion that force or current deflected off
the end of the radiator back on the path from whence it came., I
suppose that I can now conclude that the book Reflections
based on a hypotheses that was completely incorrect the rest of the
material can be considered suspect. There is no reflection from the
top of a fractional wavelength anttena just a perbatation called
cavitation as with all current flow which is sharply diverted from iys
initial direction.
Art Unwin KB9MZ.......XG..(UK)

4432. KB5URP, Convicted CRACK DEALER Randy Chapman, is sure tucking in his tail now!! HAHAHHAHA!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 21:06:03 UTC
From: mopeyzakween@yahoo.com
Message-ID: <26ed423b-66d0-4471-9ce8-4370084dd7b3@f13g2000yqj.googlegroups.com>
Source record: 20156
Cross-posted to: rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

Shoe's on the other foot now, pump boy!

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE

GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

4433. teh kosher ham with teh knee high EME anttena

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 21:57:53 UTC
From: kb9rqz <kb9rqz@puncemail.com>
Message-ID: <gg225a$i1r$1@aioe.org>
Source record: 20157
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

it indeed four moon buonce of coarse
http://www.geocities.com/kb9rqz/

4434. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 22:21:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2449i4dnf5vtfmudh0400vpvjc6cnssv2o@4ax.com>
Source record: 20158

On Wed, 19 Nov 2008 12:33:08 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>On Nov 19, 12:39ï¿½pm, Richard Clark <kb7...@comcast.net> wrote:
>> On Wed, 19 Nov 2008 07:15:40 -0800 (PST), Art Unwin
>>
>> <ArthurUn...@gmail.com> wrote:
>> >> Art Unwin wrote:
>> >>>Apparently this same current does not create a magnetic
>> >>> field as the main current does e.t.c.
>> >>Please read the last paragraph of Wilkpedia that you urged all to read
>>
>> ï¿½ ï¿½ ï¿½ ï¿½ "displacement current therefore simply refers to the fact that a
>> ï¿½ ï¿½ ï¿½ ï¿½ changing electric field has an associated magnetic field."

>he cannot explain the portion which he name
>Displacement current even tho he applied mathematical data.

From the same authority (sic) of wikipedia:
"Ampï¿½re's law with Maxwell's correction states that magnetic
fields can be generated in two ways: By electrical current (this
was the original "Ampï¿½re's law") and by changing electric fields
(this was Maxwell's correction, also called the displacement
current term)."

73's
Richard Clark, KB7QHC

4435. Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 22:45:19 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.19.22.45.03.655469@example.net>
Source record: 20159
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

My current UHF antenna is a 14" Radio Shack clip lead clipped from the
center of my coax to the venetian blind. I have to hand-adjust it
for the channel, weather conditions, phase of the moon, etc. I can
do this because I can _see_ an indication of signal strength.

Well, with this new Fascist "No More Free TV" crap, I'm gonna need
a real UHF antenna. My budget is exceedingly limited, but I have
a supply of materials (GTAW filler rod, with some coppery-colored
coating, so it solders like a dream, and is as stiff as piano wire)
to build an antenna with.

But I've been searching the web for some weeks now, and I can't
seem to find any kind of formula, except there was this program
I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
in Russian or Polish or Uzbekistani - one of those East Yurp
languages. Here's a screen snap:
http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif

Which I went through pretty much by-guess-and-by-gosh - can
anybody read that stuff?

There are a lot of factors I don't know about, like "Tau", and
all of the specific designs on the web are flat - something is
telling me I want one of those pyramid-shaped ones, but I really
don't know the difference (between that and flat) - it's probably
something to do with bandwidth or F/B ratio or whatever.

My local library has no ARRL Antenna Book (!), and did I mention
I have a seriously limited budget?

So, how do I pursue this? It'd be nice to have a program that will
calculate the whole thing for me, but am I dreaming? If I want to
send myself to Log-Periodic School, where should I start?

Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)

Thanks,
Rich

4436. no todo es lo que parece.....

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 22:55:29 UTC
From: marc3art@gmail.com
Message-ID: <18dfcbd2-7fd9-43ac-af44-ce46199c2421@l42g2000yqe.googlegroups.com>
Source record: 20160

……..Arte, diseño, arquitectura, exposiciones de arte, premios de arte, convocatorias literarias, ferias de arte, talleres, conferencias, becas de arte, matte painting, fotografía, 3D, arte, pintura, arte digital , (((http://WWW.MARCDISSENY.ES"))) diseño gráfico, diseño industrial, escultura, videos de arte (((WWW.MARC3ART.EU))) - diseño, weblog, arte conceptual, estudios y agencias creativas de diseño y publicidad, libros de diseño, selección de los mejores (((WWW.MARCDISSENY.ES))) trabajos en diseño gráfico y campañas de publicidad, spots TV , animación digital, (((WWW.MARC3ART.EU))) publicidad de guerrilla, viral……

4437. Lawsuit countdown 12 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 23:05:48 UTC
From: kb9rqz@yahoo.com
Message-ID: <tt69i45mm6nl0b8ha5ccuu03h62vp4av80@4ax.com>
Source record: 20161
Cross-posted to: rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Wed, 19 Nov 2008 13:06:03 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>Shoe's on the other foot now, pump boy!
spaming stalker

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4438. Lawsuit countdown 12 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 23:06:29 UTC
From: kb9rqz@yahoo.com
Message-ID: <cv69i4htnsd7o6m7fmflf3ehip23g2aalg@4ax.com>
Source record: 20162
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

On Wed, 19 Nov 2008 16:57:53 -0500, "kb9rqz" <kb9rqz@puncemail.com>
wrote:

>
fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4439. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 23:14:27 UTC
From: Tam <t-tammaru@comcast.net>
Message-ID: <X9ydnSQN-NtWNrnUnZ2dnUVZ_sPinZ2d@comcast.com>
Source record: 20169
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Rich Grise" <rich@example.net> wrote in message
news:pan.2008.11.19.22.45.03.655469@example.net...
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen snap:
> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?
>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Thanks,
> Rich
Before you get too far, be sure you know what you need. This is based on
post 2/09 channel assignments. You will need to cover either
a) CH2 - CH51

b)CH7 - CH51
c) CH14 - CH51

Tam

4440. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 23:19:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2h79i4pjute56kmp64ma37lfkt44460sb8@4ax.com>
Source record: 20163

On Wed, 19 Nov 2008 12:33:08 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>he overlooked the term requilibrium

From Maxwell himself (with correct spelling):

"About the beginning of this century, the properties of bodies
were investigated by several distinguished French mathematicians
on the hypothesis that they are systems of molecules in
equilibrium. The somewhat unsatisfactory nature of the results of
these investigations produced, especially in this country, a
reaction in favour of the opposite method of treating bodies as if
they were, so far at least as our experiments are concerned, truly
continuous. This method, in the hands of Green, Stokes, and
others, has led to results, the value of which does not at all
depend on what theory we adopt as to the ultimate constitution of
bodies."

It would appear that equilibrium (by any variant of spelling) is:
1. French;
2. unsatisfactory;
3. a poorer relation to continuous (i.e. employing time which
equilibrium does not).

73's
Richard Clark, KB7QHC

4441. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 23:20:13 UTC
From: dplatt@radagast.org
Message-ID: <dijev5-fgs.ln1@radagast.org>
Source record: 20168
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <pan.2008.11.19.22.45.03.655469@example.net>,
Rich Grise <rich@example.net> wrote:

>Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)

Most of the wideband TV antennas I've seen, seem to be log-periodic in
the VHF range, but to use a reflector and a bunch of auxiliary
elements (which don't appear to stick to the L-P taper schedule) for
the UHF.

You might want to consider a different approach - have you seen this
one?

http://www.digitalhome.ca/ota/superantenna/index.htm

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4442. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 23:26:20 UTC
From: "David L. Jones" <altzone@gmail.com>
Message-ID: <a55342ea-8b55-4e58-9fd0-6a4b7c294ded@k36g2000pri.googlegroups.com>
Source record: 20164
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 20, 9:45 am, Rich Grise <r...@example.net> wrote:
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen
snap:http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?

Are you seriously THAT hard up for cash? :->

> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)

Try this - go to your local hardware or whatever store that sells a
suitable log-periodic antenna with camera and tape measure in hand.
Record it all and then go home and duplicate. Or easier still, buy it,
take home, duplicate, then return for a refund.

Dave.

4443. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 23:50:19 UTC
From: Carl Ijames <no@no.com>
Message-ID: <%C1Vk.2465$mi4.843@nwrddc02.gnilink.net>
Source record: 20165
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

It's not log periodic but it looks cheap to toss together and they claim
great performance: http://www.digitalhome.ca/ota/superantenna/index.htm

---
Regards,
Carl Ijames

"Rich Grise" <rich@example.net> wrote in message
news:pan.2008.11.19.22.45.03.655469@example.net...
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen snap:
> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?
>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)

>
> Thanks,
> Rich
>

4444. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-19 23:52:01 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <ZE1Vk.11986$Ws1.239@nlpi064.nbdc.sbc.com>
Source record: 20166
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

David L. Jones wrote:
> On Nov 20, 9:45 am, Rich Grise <r...@example.net> wrote:
>> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>> center of my coax to the venetian blind. I have to hand-adjust it
>> for the channel, weather conditions, phase of the moon, etc. I can
>> do this because I can _see_ an indication of signal strength.
>>
>> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
>> a real UHF antenna. My budget is exceedingly limited, but I have
>> a supply of materials (GTAW filler rod, with some coppery-colored
>> coating, so it solders like a dream, and is as stiff as piano wire)
>> to build an antenna with.
>>
>> But I've been searching the web for some weeks now, and I can't
>> seem to find any kind of formula, except there was this program
>> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
>> in Russian or Polish or Uzbekistani - one of those East Yurp
>> languages. Here's a screen
snap:http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>>
>> Which I went through pretty much by-guess-and-by-gosh - can
>> anybody read that stuff?
>>
>> There are a lot of factors I don't know about, like "Tau", and
>> all of the specific designs on the web are flat - something is
>> telling me I want one of those pyramid-shaped ones, but I really
>> don't know the difference (between that and flat) - it's probably
>> something to do with bandwidth or F/B ratio or whatever.
>>
>> My local library has no ARRL Antenna Book (!), and did I mention
>> I have a seriously limited budget?
>
> Are you seriously THAT hard up for cash? :->
>
>> So, how do I pursue this? It'd be nice to have a program that will
>> calculate the whole thing for me, but am I dreaming? If I want to
>> send myself to Log-Periodic School, where should I start?
>>
>> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Try this - go to your local hardware or whatever store that sells a
> suitable log-periodic antenna with camera and tape measure in hand.
> Record it all and then go home and duplicate. Or easier still, buy it,

> take home, duplicate, then return for a refund.
>
> Dave.

You don't really need a new antenna. If your current antenna is working such that you get a good picture then it should work as a digital tv antenna.

Another Dave

4445. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 00:03:02 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <s6a9i4110bjssn8amdl6guqlnth9vdia12@4ax.com>
Source record: 20167
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 19 Nov 2008 22:45:19 GMT, Rich Grise <rich@example.net> wrote:

>My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>center of my coax to the venetian blind. I have to hand-adjust it
>for the channel, weather conditions, phase of the moon, etc. I can
>do this because I can _see_ an indication of signal strength.

Reminds me of the famous, very expensive Dick Smith Electronics
Coa-Thanger antenna.

John

4446. new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 00:34:15 UTC
From: F5SLD <vvv@ggfff.fr>
Message-ID: <4924b050$0$18979$426a74cc@news.free.fr>
Source record: 20170

Hi,

A new emagazine for ham will be make soon.
Have a look at :
http://www.ham-mag.com

Best 73's
Vincent F5SLD

4447. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 00:49:03 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gg2c5v$5k0$1@news.jpl.nasa.gov>
Source record: 20174
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen snap:
> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?

Interlibrary loan is your answer. Your library may not have it, but
someone else's does.

>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?

Looking for a cookbook design, or the theory to do it yourself?

>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)

>
> Thanks,
> Rich
>

4448. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 00:53:33 UTC
From: TheM <DontNeedSpam@test.com>
Message-ID: <Ey2Vk.7668$x84.230682@news.siol.net>
Source record: 20171
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Rich Grise" <rich@example.net> wrote in message
news:pan.2008.11.19.22.45.03.655469@example.net...
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen snap:
> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?
>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Thanks,
> Rich

Upisi najnizju radnu frekvenciju : enter lowest frequency
Upisi najvisju radnu frekvenciju : enter highest frequency

Duzina antene: length of antena
Broj elemenata: number of elements

Pritisni taster za proracun antene: press a key to calculate antenna

Duzina 1. elem. length of first element

Pritisni taster za nastavak Press any key to continue

Duzina zavrsnog kratkospojenog odsecka: length of final shorted section
Upisi precnik dipola: enter diameter of the dipole

Upisi ulaznu otpornost (ohm): Entry resistance (weird in original)

Impedanca napojnog voda: feeder impedance (not sure what this is)

Upisi precnik napojnih provodnika: diameter of feeding leeds (my guess these are two bars that hold elements)

razmak izmedju napojnih provodnika: distance between feeder leeds (and distance between two bard holding elements)

You owe me a beer. BTW, its Croatian or Serbian. I kind of understand some 90%.

M

4449. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 00:55:58 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.00.55.38.807243@example.net>
Source record: 20172
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

```
On Wed, 19 Nov 2008 18:14:27 -0500, Tam wrote:
> "Rich Grise" <rich@example.net> wrote in message
> news:pan.2008.11.19.22.45.03.655469@example.net...
>> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>> center of my coax to the venetian blind. I have to hand-adjust it for
>> the channel, weather conditions, phase of the moon, etc. I can do this
>> because I can _see_ an indication of signal strength.
>>
>> Well, with this new Fascist "No More Free TV" crap, I'm gonna need a
>> real UHF antenna. My budget is exceedingly limited, but I have a supply
>> of materials (GTAW filler rod, with some coppery-colored coating, so it
>> solders like a dream, and is as stiff as piano wire) to build an antenna
>> with.
>>
>> But I've been searching the web for some weeks now, and I can't seem to
>> find any kind of formula, except there was this program I downloaded -
>> LPDA.EXE, which runs on DOS. Unfortunately, it's in Russian or Polish or
>> Uzbekistani - one of those East Yurp languages. Here's a screen snap:
>> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>>
>> Which I went through pretty much by-guess-and-by-gosh - can anybody read
>> that stuff?
>>
>> There are a lot of factors I don't know about, like "Tau", and all of
>> the specific designs on the web are flat - something is telling me I
>> want one of those pyramid-shaped ones, but I really don't know the
>> difference (between that and flat) - it's probably something to do with
>> bandwidth or F/B ratio or whatever.
>>
>> My local library has no ARRL Antenna Book (!), and did I mention I have
>> a seriously limited budget?
>>
>> So, how do I pursue this? It'd be nice to have a program that will
>> calculate the whole thing for me, but am I dreaming? If I want to send
>> myself to Log-Periodic School, where should I start?
>>
>> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>>
> Before you get too far, be sure you know what you need. This is based on
> post 2/09 channel assignments. You will need to cover either a) CH2 - CH51
> b)CH7 - CH51
> c) CH14 - CH51
>
```

This won't do at all! Two of my favorite stations are ch. 56 & ch. 58.
=:-O

I've got 2-13 covered by my external VHF folded dipole. (It's an RV).

Are the channel frequencies going to be all changed around? I suppose I should email those two stations. I don't know much about DTV, other than I have to buy a damn box and I need a "better" antenna.

Thanks,
Rich

4450. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 00:59:57 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.00.59.40.5963@example.net>
Source record: 20173
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 19 Nov 2008 15:20:13 -0800, Dave Platt wrote:
> In article <pan.2008.11.19.22.45.03.655469@example.net>, Rich Grise
> <rich@example.net> wrote:
>
>>Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Most of the wideband TV antennas I've seen, seem to be log-periodic in the
> VHF range, but to use a reflector and a bunch of auxiliary elements (which
> don't appear to stick to the L-P taper schedule) for the UHF.
>
> You might want to consider a different approach - have you seen this one?
>
> http://www.digitalhome.ca/ota/superantenna/index.htm

Thanks, but that thing's HUGE! I was thinking something more along the
lines of 1' square. (or a 1' cube)

Thanks,
Rich

4451. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 01:03:01 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.01.02.44.422136@example.net>
Source record: 20175
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 19 Nov 2008 17:52:01 -0600, David G. Nagel wrote:
>
> You don't really need a new antenna. If your current antenna is working
> such that you get a good picture then it should work as a digital tv
> antenna.

I've heard that there's no "signal strength" meter or anything - it's
either there, or not. With my analog, I can zero in on the proper tuning
(I just futz around with the clip lead until it's "good enough") so
I need something I don't have to screw around with.

Thanks,
Rich

4452. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 01:10:42 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <GpOdnUhJ_6eKJLnUnZ2dnUVZ8rednZ2d@bt.com>
Source record: 20176
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Rich Grise" <rich@example.net> wrote in message
news:pan.2008.11.19.22.45.03.655469@example.net...
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen snap:
> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?
>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Thanks,
> Rich

You probably don't need a program, just a decent text book that covers the
topic adequately, which, undoubtedly is what the program writers worked

from, and they might not have got it right! 'Antennas' by John Kraus contains enough detail to make a start and it's probably more general than someone's program which might involve specific choices of some parameter values. So my recommendation would be to find a technical library that offers access to non-members and send yourself to Log-Periodic School as you put it. The IET library in London does this, for free. Do you have an equivalent institution (e.g. IEEE), or a local university that covers electronic engineering? You might be surprised how much access you can gain to libraries to which you have contributed through taxes, or which need to maintain an 'altruistic' public appearance.

The pyramidal form has greater aperture in the vertical plane for all but the highest frequencies. It behaves like a vertically-stacked pair of Log-Periodic Dipole Arrays and achieves a bit more gain. Its pattern in the vertical plane is consistently sharper over a range of frequencies because of the vertical taper, but it is a bit more difficult to design. Not all 'wideband' UHF antennas are based on the LPDA - some are Yagi-Uda arrays designed using NEC and its derivatives, achieving a useful compromise between bandwidth, gain, and pattern shapes. But if you want to include channels below 21 as well as the UHF band, with consistent directivity, then LPDA is probably the only way to go.

Chris

4453. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 01:16:34 UTC
From: dplatt@radagast.org
Message-ID: <icqev5-8mc.ln1@radagast.org>
Source record: 20177
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

>This won't do at all! Two of my favorite stations are ch. 56 & ch. 58.
>=:-O

Not after The Big Day. Their frequencies will be changing. Channels
which are broadcasting NTSC in channels 52 and above will be moving
down to a lower frequency.

>I've got 2-13 covered by my external VHF folded dipole. (It's an RV).
>
>Are the channel frequencies going to be all changed around? I suppose
>I should email those two stations. I don't know much about DTV, other
>than I have to buy a damn box and I need a "better" antenna.

A lot of them will be.

Take a look at:

http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-150A1.pdf

I don't think it's the latest set of assignments but it's pretty well
up to date.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4454. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 01:17:49 UTC
From: "David L. Jones" <altzone@gmail.com>
Message-ID: <73538522-3b05-47bf-861a-1930531beea1@b38g2000prf.googlegroups.com>
Source record: 20178
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 20, 12:03 pm, Rich Grise <r...@example.net> wrote:
> On Wed, 19 Nov 2008 17:52:01 -0600, David G. Nagel wrote:
>
> > You don't really need a new antenna. If your current antenna is working
> > such that you get a good picture then it should work as a digital tv
> > antenna.
>
> I've heard that there's no "signal strength" meter or anything

Most digital STB's have a "signal strength" indicator on screen for
each channel.

>it's either there, or not.

That's true of the displayed picture, but not the signal.
Poor (or even too much) signal strength can lead to "drop outs" or
"freezing" of the video image.

Dave.

4455. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 01:23:15 UTC
From: "David L. Jones" <altzone@gmail.com>
Message-ID: <ce5fac71-1700-43e5-8254-24307db5c399@z28g2000prd.googlegroups.com>
Source record: 20179
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 20, 11:55 am, Rich Grise <r...@example.net> wrote:
> On Wed, 19 Nov 2008 18:14:27 -0500, Tam wrote:
> > "Rich Grise" <r...@example.net> wrote in message
> >news:pan.2008.11.19.22.45.03.655469@example.net...
> >> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> >> center of my coax to the venetian blind. I have to hand-adjust it for
> >> the channel, weather conditions, phase of the moon, etc. I can do this
> >> because I can _see_ an indication of signal strength.
>
> >> Well, with this new Fascist "No More Free TV" crap, I'm gonna need a
> >> real UHF antenna. My budget is exceedingly limited, but I have a supply
> >> of materials (GTAW filler rod, with some coppery-colored coating, so it
> >> solders like a dream, and is as stiff as piano wire) to build an antenna
> >> with.
>
> >> But I've been searching the web for some weeks now, and I can't seem to
> >> find any kind of formula, except there was this program I downloaded -
> >> LPDA.EXE, which runs on DOS. Unfortunately, it's in Russian or Polish or
> >> Uzbekistani - one of those East Yurp languages. Here's a screen snap:
> >>http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> >> Which I went through pretty much by-guess-and-by-gosh - can anybody read
> >> that stuff?
>
> >> There are a lot of factors I don't know about, like "Tau", and all of
> >> the specific designs on the web are flat - something is telling me I
> >> want one of those pyramid-shaped ones, but I really don't know the
> >> difference (between that and flat) - it's probably something to do with
> >> bandwidth or F/B ratio or whatever.
>
> >> My local library has no ARRL Antenna Book (!), and did I mention I have
> >> a seriously limited budget?
>
> >> So, how do I pursue this? It'd be nice to have a program that will
> >> calculate the whole thing for me, but am I dreaming? If I want to send
> >> myself to Log-Periodic School, where should I start?
>
> >> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> > Before you get too far, be sure you know what you need. This is based on
> > post 2/09 channel assignments. You will need to cover either a) CH2 - CH51
> > b)CH7 - CH51
> > c) CH14 - CH51

>
> This won't do at all! Two of my favorite stations are ch. 56 & ch. 58.
> =:-O
>
> I've got 2-13 covered by my external VHF folded dipole. (It's an RV).
>
> Are the channel frequencies going to be all changed around?

Yes.
Channels will vary depending upon your country and location. You
should have some sort of official digital TV website for your country
that lists and explains all this stuff.
Australia for instance is:
http://www.dba.org.au/
(server down?)

Dave.

4456. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 02:13:13 UTC
From: mpm <mpmillard@aol.com>
Message-ID: <3ae9ccf9-59c7-4a53-9d3f-c71b6f3a830d@n10g2000yqm.googlegroups.com>
Source record: 20180
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 19, 6:14 pm, "Tam" <t-tamm...@comcast.net> wrote:
> "Rich Grise" <r...@example.net> wrote in message
>
> news:pan.2008.11.19.22.45.03.655469@example.net...
>
>
>
> > My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> > center of my coax to the venetian blind. I have to hand-adjust it
> > for the channel, weather conditions, phase of the moon, etc. I can
> > do this because I can _see_ an indication of signal strength.
>
> > Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> > a real UHF antenna. My budget is exceedingly limited, but I have
> > a supply of materials (GTAW filler rod, with some coppery-colored
> > coating, so it solders like a dream, and is as stiff as piano wire)
> > to build an antenna with.
>
> > But I've been searching the web for some weeks now, and I can't
> > seem to find any kind of formula, except there was this program
> > I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> > in Russian or Polish or Uzbekistani - one of those East Yurp
> > languages. Here's a screen snap:
> >http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> > Which I went through pretty much by-guess-and-by-gosh - can
> > anybody read that stuff?
>
> > There are a lot of factors I don't know about, like "Tau", and
> > all of the specific designs on the web are flat - something is
> > telling me I want one of those pyramid-shaped ones, but I really
> > don't know the difference (between that and flat) - it's probably
> > something to do with bandwidth or F/B ratio or whatever.
>
> > My local library has no ARRL Antenna Book (!), and did I mention
> > I have a seriously limited budget?
>
> > So, how do I pursue this? It'd be nice to have a program that will
> > calculate the whole thing for me, but am I dreaming? If I want to
> > send myself to Log-Periodic School, where should I start?
>
> > Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)

>
> > Thanks,
> > Rich
>
> Before you get too far, be sure you know what you need. This is based on
> post 2/09 channel assignments. You will need to cover either
> a) CH2 - CH51
> b)CH7 - CH51
> c) CH14 - CH51
>
> Tam- Hide quoted text -
>
> - Show quoted text -

I agree. How much can a coat hanger cost?
If you are really rubbing pennies together, I would ditch the log-periodic approach and go with something simpler, like a monopole or folded unipole antenna. (All you need is wire.)

I just want to mention (again) here that: Hopefully, we'll be able to knock out Ch-5 and Ch-6 from this antenna scenario very soon (and move them to the FM Band, as the FCC is presently considering. I'm a huge proponent of this possibility!

I will try to find the Comments link at the FCC web site so those of you who agree can chime in....

This idea has been floated before, of course. This time it seems to have "legs".
I don't know how much you can read into it, but... the FCC has yet to explain how Non-Commercial Educational (NCE) vertical only stations can obtain authorization for horiz/vertical operation once this DTV transition occurs - which is now less than 90 days away.

There are many pending Construction Permits (CP's) and NCE facilities that proposed Vertical-Only operation in order to protect local ANALOG TV-6 stations. These new NCE facilities will undoubtedly delay construction until a decision is made how to obtain dual polarization licensing. (Due to increased transmitter power requirements and/or RF Safety exposure issues, tower height requirements, etc..)

To date, the FCC has yet to adopt ANY relaxed TV-6 digital protection criteria for NCE FM stations. Instead, these stations must use the old Analog standard - which is MUCH stricter than is necessary to fully protect a Digital TV operation!

And of course, there are only (8) full service TV's on digital channel 6. (Which is a really, really good reason to move TV-6, and possibly TV-5 to the FM band!! -- What a huge waste of spectrum!!) Yes, there are some low-power DTV 6's out there (translators, boosters, LPTV's). Not very many, and all of which are in locations where other spectrum is, or will be, avaialble after the DTV transition...

Anyway, any NCE or CP not near a digital-6 would obviously qualify for dual-polarization. It remains to be seen what the FCC will do about this. Hopefully, they will grow a brain and shift this "un-used" spectrum to alleviate the very crowded FM band.

I don't know if I should hold my breath or not.?

-mpm

4457. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 02:22:06 UTC
From: mpm <mpmillard@aol.com>
Message-ID: <216fa446-b814-4630-87cb-3084cb4280e7@v4g2000yqa.googlegroups.com>
Source record: 20181
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 19, 9:13 pm, mpm <mpmill...@aol.com> wrote:

> I don't know if I should hold my breath or not.?

Oops. that post was directed at Rich.
My apologies for responding at the wrong thread entry point...

4458. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 02:31:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg2i59$8o1$2@news.albasani.net>
Source record: 20182
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>

LOL ... talk about trolls! That HAS TO BE THE BEST TROLL OPENING LINE I
HAVE EVER SEEN!

> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>

Well, that is the second best ...

> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen snap:
> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>

hmmm ....

> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?
>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>

> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Thanks,
> Rich
>

Ever heard of amplifed rabbit ears?

Regards,
JS

4459. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 02:36:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg2if4$8o1$3@news.albasani.net>
Source record: 20183

Art Unwin wrote:
> ...
> Art Unwin KB9MZ.......XG..(UK)

Obviously, you will win this one, long past the time we weed out the idiots ...

When the magnetic field, induced in the skin of the conductor, carrying the rf field is seen by the inner most material is seen, it will induce an electric current into the inner most material ... however true this is, is should be considered "insignificant" to the actual signal which is finally radiated ... there IS LOSS, yanno'! I would venture, it ends up "mostly" heat!

Regards,
JS

4460. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 02:40:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg2ing$8o1$4@news.albasani.net>
Source record: 20184

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

OMG ...

... they woke up the sleeping idiot, again ... :-(

Regards,
JS

4461. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 02:48:49 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <je4Vk.850$VC6.161@newsfe25.iad>
Source record: 20185

"ml" <m@di.net> wrote in message
news:m-540259.05463919112008@news.optonline.net...
> In article <MbMSk.2377$Lv6.1922@bignews8.bellsouth.net>,
> "Hal Rosser" <hmrosser@bellsouth.net> wrote:
>
>> Thanks, Barry on helping to wake up my recollections. I had forgotten
>> that

{snip}

> find some of that oil they soak telephone poles in then coat it
> w/sealer
>
> ultimately wood prob wont last as long as some good plastic and
> i guess would be heaver stressing the wires more
>
> it will prob still hold more water than a smooth plastic dunno
>
> and prob not have as good insulative prop's but might be moot

I consider this a poor suggestion for a number of reasons...

Several methods of wood treatment have been used over the years. The three main methods used to be pressure treatment with creosote, pentachlorophenol, or inorganic arsenic salts. These were generally replaced by chromated copper arsenate. Other treatments involved copper napthenate, zinc napthenate, and tributyl tin oxide. All of these methods provide fungus protection and some limited moisture protection.

Creosote, as used for treating wood, is generally coal tar creosote. This material is distilled from coke oven tar and it contains polycyclic aromatic hydrocarbons, phenols, and cresols, all of which are quite toxic and most are either proven or suspected carcinogens.

Pentachlorophenol is registered by the Environmental Protection Agency as an insecticide (termicide), fungicide, herbicides, molluscide, algaecide, disinfectant, and as an ingredient in antifouling paint. Stated simply. it is toxic to just about all life.

Chromated copper arsenate, at one time, was the most widely used wood treatment. Hexavalent chromium and arsenic in any form are both extremely toxic, so newer treatments were developed including ammoniacal copper quaternary. The EPA lists this as a general use pesticide and it is far less toxic than chromated copper arsenate. Other newer wood treatments used today are based on borax and other borate salts. These too are less toxic than the older copper salts.

The oil treatment that "ml" refers to is most likely creosote. However creosote or any other of the treatments described above will not make the wood a good electrical insulator for use as spacers in open wire transmission line. Raw wood or wood treated with any of the metal salts shows a high dielectric loss. Even pentachlorophenol is not very suitable as its dielectric constant is around 8 to 10. But then the wood itself usually has a radio frequency dielectric constant around 10 or more too, even if completely dried. Increases are seen at frequencies below the MHz region, and with increasing moisture. The loss tangent of wood also increases rapidly with moisture content.

The reason that old timers boiled their wood dowels in paraffin wax was twofold. The first was to completely dry the wood, and the second was to provide moisture protection. The preservation of the wood against fungus or termites was generally inconsequential for use as spacers in transmission lines.

Polyvinyl chloride and chlorinated polyvinyl chloride plastics are moderately lossy at radio frequencies but are far better than wood in this respect, and I have seen them used with homebrew transmission lines. However, from the standpoint of RF losses and ultraviolet radiation damage, acrylic plastics are my choice as true ladder line insulators.

One suggestion I have is to look at cheap plastic coathangers. These are about 1/4 inch in diameter and are not vinyl coated wire hangers. Several insulators can be cut from a single coathanger. Since you can often buy these hangers for around $1.00 for ten, a few dollars could provide a good number of insulators. If you don't like the color, spray paint them with Krylon or another acrylic paint. White will provide the best ultraviolet resistance. I would limit my wire size to 16 Gauge or smaller as this plastic is quite brittle.

73, Dr. Barry L. Ornitz WA4VZQ

4462. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 02:55:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg2jja$9l8$1@news.albasani.net>
Source record: 20186

NoSPAM wrote:

>> ...
> One suggestion I have is to look at cheap plastic coathangers. These are
> about 1/4 inch in diameter and are not vinyl coated wire hangers. Several
> insulators can be cut from a single coathanger. Since you can often buy
> these hangers for around $1.00 for ten, a few dollars could provide a good
> number of insulators. If you don't like the color, spray paint them with
> Krylon or another acrylic paint. White will provide the best ultraviolet
> resistance. I would limit my wire size to 16 Gauge or smaller as this
> plastic is quite brittle.
>
> 73, Dr. Barry L. Ornitz WA4VZQ

Excellent, comprehensive, broad in scope, generally-good-advise, etc.

Thanks for your time,
regards,
JS

4463. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 03:04:27 UTC
From: JB <nospam@goofball.net>
Message-ID: <%s4Vk.1648$4g5.1546@nwrddc01.gnilink.net>
Source record: 20187
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Try a bowtie (like the one that came with sets) 5 inches in front of a piece
of hardware cloth. Most of the boxes (which are almost free after the FCC
rebate) have a signal strength bar (although with a 3-5 sec. delay)

Years ago they used to make one as a magazine rack that you could pick up
and move around.

"Rich Grise" <rich@example.net> wrote in message
news:pan.2008.11.19.22.45.03.655469@example.net...
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen snap:
> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?
>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)

>
> Thanks,
> Rich
>

4464. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 03:30:59 UTC
From: "Ken S. Tucker" <dynamics@vianet.on.ca>
Message-ID: <bbcdc8f4-98c0-4f4d-a398-828bb48f361c@z6g2000pre.googlegroups.com>
Source record: 20188
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Hi John.
On Nov 19, 6:31 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Rich Grise wrote:
> > My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> > center of my coax to the venetian blind. I have to hand-adjust it
> > for the channel, weather conditions, phase of the moon, etc. I can
> > do this because I can _see_ an indication of signal strength.
>
> LOL ... talk about trolls! That HAS TO BE THE BEST TROLL OPENING LINE I
> HAVE EVER SEEN!
>
> > Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> > a real UHF antenna. My budget is exceedingly limited, but I have
> > a supply of materials (GTAW filler rod, with some coppery-colored
> > coating, so it solders like a dream, and is as stiff as piano wire)
> > to build an antenna with.
>
> Well, that is the second best ...
>
> > But I've been searching the web for some weeks now, and I can't
> > seem to find any kind of formula, except there was this program
> > I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> > in Russian or Polish or Uzbekistani - one of those East Yurp
> > languages. Here's a screen snap:
> >http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> hmmm ....
>
>
>
> > Which I went through pretty much by-guess-and-by-gosh - can
> > anybody read that stuff?
>
> > There are a lot of factors I don't know about, like "Tau", and
> > all of the specific designs on the web are flat - something is
> > telling me I want one of those pyramid-shaped ones, but I really
> > don't know the difference (between that and flat) - it's probably
> > something to do with bandwidth or F/B ratio or whatever.
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> > My local library has no ARRL Antenna Book (!), and did I mention
> > I have a seriously limited budget?
>
> > So, how do I pursue this? It'd be nice to have a program that will

> > calculate the whole thing for me, but am I dreaming? If I want to
> > send myself to Log-Periodic School, where should I start?
>
> > Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> > Thanks,
> > Rich
>
> Ever heard of amplifed rabbit ears?
>
> Regards,
> JS

It's not a troll. I bought a fair good UHF-VHF antenna,
assembled it and sat it on a saw horse in the driveway
for test, and it tested perfect for 3 channels + ch.34 .
So I set her up using a roof mount and LOST ch.34,
and no amount of rotating got it back.
(I was a pro antenna/tower installer as a kid).

Next I'm going to tape wire on 1/8" panelling and do
experiments ... ugh, I hate trial and error.
Ken

4465. FA: R-390A built by ECA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 03:40:50 UTC
From: K <K@spam.net>
Message-ID: <4924dc4b$0$4892$9a6e19ea@unlimited.newshosting.com>
Source record: 20189
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

FA: An excellent R-390A built by ECA

http://tinyurl.com/6ydbsg

4466. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 03:51:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1f2b32b0-e844-4234-8d6f-ada6977acc07@g38g2000yqn.googlegroups.com>
Source record: 20190

On Nov 19, 8:36 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > Art Unwin KB9MZ.......XG..(UK)
>
> Obviously, you will win this one, long past the time we weed out the
> idiots ...
>
> When the magnetic field, induced in the skin of the conductor, carrying
> the rf field is seen by the inner most material is seen, it will induce
> an electric current into the inner most material ... however true this
> is, is should be considered "insignificant" to the actual signal which
> is finally radiated ... there IS LOSS, yanno'! I would venture, it ends
> up "mostly" heat!
>
> Regards,
> JS

Certainly the copper loss is insignificant in the center but the
radiation resistance is only present for half the time (1/2 WL) !
Thus the input energy is half that placed on a full WL as well as the
radiated energy (I think that is correct) So I suppose you could also
say that the radiation pulse is half the length in time of that from a
full wave antenna.Since the radiation pulse gap is small compared to
what your ear can sample I suppose the same intelligence would get
thru since the sample size is always much larger than what the ear can
interprete. Ofcourse there is the TOA to be considered in any
comparison.This looks all mixed up but I will post it anyway so that
posters will understand what real jabber jabber looks like. If you
look at it from a tank circuit point of view then it really gets
complicated especially this late in the evening
Regards
Art Unwin KB9MZ......(xg)

4467. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 04:12:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg2o2t$d8n$1@news.albasani.net>
Source record: 20191

Art Unwin wrote:

> ...
> Certainly the copper loss is insignificant in the center but the
> radiation resistance is only present for half the time (1/2 WL) !
> Thus the input energy is half that placed on a full WL as well as the
> radiated energy (I think that is correct) So I suppose you could also
> say that the radiation pulse is half the length in time of that from a
> full wave antenna.Since the radiation pulse gap is small compared to
> what your ear can sample I suppose the same intelligence would get
> thru since the sample size is always much larger than what the ear can
> interprete. Ofcourse there is the TOA to be considered in any
> comparison.This looks all mixed up but I will post it anyway so that
> posters will understand what real jabber jabber looks like. If you
> look at it from a tank circuit point of view then it really gets
> complicated especially this late in the evening
> Regards
> Art Unwin KB9MZ......(xg)

Oh, I see something here ...

I will give this a bit of thought ... damn puzzling. But, not saying
you have something, yet ...

Regards,
JS

4468. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 05:24:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg2saphko1@news.albasani.net>
Source record: 20192

John Smith wrote:
> Art Unwin wrote:
>
>> ...
>> Certainly the copper loss is insignificant in the center but the
>> radiation resistance is only present for half the time (1/2 WL) !
>> Thus the input energy is half that placed on a full WL as well as the
>> radiated energy (I think that is correct) So I suppose you could also
>> say that the radiation pulse is half the length in time of that from a
>> full wave antenna.Since the radiation pulse gap is small compared to
>> what your ear can sample I suppose the same intelligence would get
>> thru since the sample size is always much larger than what the ear can
>> interprete. Ofcourse there is the TOA to be considered in any
>> comparison.This looks all mixed up but I will post it anyway so that
>> posters will understand what real jabber jabber looks like. If you
>> look at it from a tank circuit point of view then it really gets
>> complicated especially this late in the evening
>> Regards
>> Art Unwin KB9MZ......(xg)
>
> Oh, I see something here ...
>
> I will give this a bit of thought ... damn puzzling. But, not saying
> you have something, yet ...
>
> Regards,
> JS

By the way, "what the ear can hear", I "translate" into
milliseconds/nonoseconds/trillo-seconds (or, something only the mind
"can hear") ... but then, you already knew that <sly-smile>

And, still thinking, but then, there is something wrong in your
supposition ... I will find it ...

Regards,
JS

4469. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 05:28:34 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <6A6Vk.16431$sc2.1189@news-server.bigpond.net.au>
Source record: 20194

I take it that it will be in English?

HarryH

"F5SLD" <vvv@ggfff.fr> wrote in message
news:4924b050$0$18979$426a74cc@news.free.fr...
> Hi,
>
> A new emagazine for ham will be make soon.
> Have a look at :
> http://www.ham-mag.com
>
> Best 73's
> Vincent F5SLD
>
>

4470. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 06:05:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg2un4$k2a$1@news.albasani.net>
Source record: 20193
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken S. Tucker wrote:

> ...
> It's not a troll. I bought a fair good UHF-VHF antenna,
> assembled it and sat it on a saw horse in the driveway
> for test, and it tested perfect for 3 channels + ch.34 .
> So I set her up using a roof mount and LOST ch.34,
> and no amount of rotating got it back.
> (I was a pro antenna/tower installer as a kid).
>
> Next I'm going to tape wire on 1/8" panelling and do
> experiments ... ugh, I hate trial and error.
> Ken

OK brother, you may not be what I accuse you of ...

But darn, the antenna you bought was designed with certain parameters in mind ... I would seriously doubt you are going to vastly increase performance with the route(s) you have described here ...

Sorry if I made a joke. But, my advise to you would be, if you saved your receipt, take it back! DON'T HACK THE ANTENNA!

Chat with buddies or someone who has had better experience(s) (or, varied experiences) with a better antenna, one which would serve you better.

Without expensive instrumentation and experience of years of experimenting, it is hard to accomplish what I perceive your goals to be ...

I would never say anything is impossible, just what I feel is the best advise I can provide you with in hoping for your best success.

Wish you the best,
JS

4471. Re: FA: R-390A built by ECA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 06:49:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg319p$mj6$1@news.albasani.net>
Source record: 20195
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

K wrote:
> FA: An excellent R-390A built by ECA
>
> http://tinyurl.com/6ydbsg

Wow, that brings back memories. That is a receiver which came into
being right around when I did (1950's).

The tubes in it alone worth something (can be hard to get replacements
these days, just price them!)

I sat before one of those for untold hours in my younger days ... shame
SW is so empty these days ... :-(It was an EXCELLENT RECEIVER ...

Regards,
JS

4472. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 06:53:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ok1ai4h54tcornrvak4uriumhf1qlhd6f7@4ax.com>
Source record: 20196
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 19 Nov 2008 22:45:19 GMT, Rich Grise <rich@example.net> wrote:

>But I've been searching the web for some weeks now, and I can't
>seem to find any kind of formula, except there was this program
>I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
>in Russian or Polish or Uzbekistani - one of those East Yurp
>languages. Here's a screen snap:
>http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
>Which I went through pretty much by-guess-and-by-gosh - can
>anybody read that stuff?

Hi Rich,

Someone else has already provided the translation, so that will take
care of some of the wholes in data entry and reading.

>There are a lot of factors I don't know about, like "Tau", and
>all of the specific designs on the web are flat - something is
>telling me I want one of those pyramid-shaped ones, but I really
>don't know the difference (between that and flat) - it's probably
>something to do with bandwidth or F/B ratio or whatever.

Tau is related to the shape of what you call the pyramid, or more
actually to the angle of the taper. This defines the smoothness of
matching across the span of frequencies you entered into the program.
As you can see, it also relates to the available gain. Another
correlative is it also relates to its length. All of these things are
trade-offs that lend to the rule of choosing what you want most and
giving up on the rest.

I note elsewhere that you wanted something about 1 foot long. There
is a Tau that will give you this boom length, and you got it on the
first guess.

>So, how do I pursue this? It'd be nice to have a program that will
>calculate the whole thing for me, but am I dreaming? If I want to
>send myself to Log-Periodic School, where should I start?

You should start building what your screen shot gave you IF that is
the span of frequency you need (already questioned by other
correspondents).

73's
Richard Clark, KB7QHC

4473. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 08:53:28 UTC
From: "Helmut Wabnig"
Message-ID: <q99ai4dtqbh8hqgkvb0ts6vlv0lq85plvv@4ax.com>
Source record: 20197
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 19 Nov 2008 22:45:19 GMT, Rich Grise <rich@example.net> wrote:

>My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>center of my coax to the venetian blind. I have to hand-adjust it
>for the channel, weather conditions, phase of the moon, etc. I can
>do this because I can _see_ an indication of signal strength.
>
>Well, with this new Fascist "No More Free TV" crap, I'm gonna need
>a real UHF antenna. My budget is exceedingly limited, but I have
>a supply of materials (GTAW filler rod, with some coppery-colored
>coating, so it solders like a dream, and is as stiff as piano wire)
>to build an antenna with.
>
>But I've been searching the web for some weeks now, and I can't
>seem to find any kind of formula, except there was this program
>I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
>in Russian or Polish or Uzbekistani - one of those East Yurp
>languages. Here's a screen snap:
>http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
>Which I went through pretty much by-guess-and-by-gosh - can
>anybody read that stuff?
>
>There are a lot of factors I don't know about, like "Tau", and
>all of the specific designs on the web are flat - something is
>telling me I want one of those pyramid-shaped ones, but I really
>don't know the difference (between that and flat) - it's probably
>something to do with bandwidth or F/B ratio or whatever.
>
>My local library has no ARRL Antenna Book (!), and did I mention
>I have a seriously limited budget?
>
>So, how do I pursue this? It'd be nice to have a program that will
>calculate the whole thing for me, but am I dreaming? If I want to
>send myself to Log-Periodic School, where should I start?
>
>Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
>Thanks,
>Rich

Why don't you sell your house and move to a place next to the TV
transmitter station. You will only need a piece of wire then.
Or the bare finger.

Must be wet, of course.

w.

4474. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 12:18:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <XzcVk.8227$be.3345@nlpi061.nbdc.sbc.com>
Source record: 20198
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> Are the channel frequencies going to be all changed around?

Here in the Tyler, TX area, the TV stations are continuing
their analog broadcasts on their previous channels. Their
digital signals are on different channels. When the switch-
over comes, they plan to switch their digital channels over
to their previous analog channels.
--
73, Cecil http://www.w5dxp.com

4475. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 12:26:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <jEcVk.5937$D32.3687@flpi146.ffdc.sbc.com>
Source record: 20199
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> I've heard that there's no "signal strength" meter or anything - it's
> either there, or not.

Some of the converter boxes have a signal strength
indication. My "Insignia" box does. It allowed me
to find a sweet spot for channel 10 DTV reception
using RS rabbit ears.
--
73, Cecil http://www.w5dxp.com

4476. Re: KB5URP, Convicted CRACK DEALER Randy Chapman, is sure tucking in his tail now!! HAHAHHAHA!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 12:31:00 UTC
From: mopeyzakween@yahoo.com
Message-ID: <980b9333-b4d6-41db-b47c-79b1156f5ebd@j38g2000yqa.googlegroups.com>
Source record: 20200
Cross-posted to: rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Nov 19, 4:06 pm, mopeyzakw...@yahoo.com wrote:
> Shoe's on the other foot now, pump boy!
>
> Batch Search Summary
> SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
> 3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS
>
> RESULTS FOR 'CHAPMAN,RANDALL '
> Search ID 3930206 Back to Top
> NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
> CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW
>
> CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
> SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
> MALE WHITE 508 195 BROWN Brown 10/26/1995
> NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
> CHAPMAN,RANDY
>
> BIRTHDATES 03/22/1961 (Primary)
>
> Arrest Summary (TRN)
> DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
> 01/16/1995 A 0007369727 TEXAS CITY PD View
>
> Arrest Date: 01/16/1995 Arrest Summary
>
> DATE OF ARREST 01/16/1995
> SEQUENCE CODE A
> TRACKING NUMBER 0007369727
> AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
> CHARGE
> TRACKING SUFFIX A001
> OFFENSE DETAIL
> INTERNAL AGENCY PERSON NUMBER 020130
> INTERNAL AGENCY CASE NUMBER 95633
> ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
> ARREST OFFENSE CITATION 481.115(b)
> LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
> DATE OF OFFENSE 01/16/1995
> ARREST DISPOSITION 205 (HELD)
> ARREST DISPOSITION DATE 01/16/1995
> PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE

> GALVESTON)
> PROSECUTION DETAIL
> AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
> GALVESTON)
> PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
> PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
> PROSECUTOR OFFENSE CITATION 481.115(b)
> LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
> COURT STATUS
> COURT SEQUENCE a
> AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
> COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
> CITATION 481.115(b)
> LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
> COURT DISPOSITION 312 (DEFERRED)
> COURT DISPOSITION DATE 09/21/1995
> DATE OF SENTENCE/STATUS 09/21/1995
> CAUSE NUMBER 95CR0800
> FINAL PLEADING G (GUILTY)
> COURT PROBATION 4Y
> COURT FINE 200
> COURT COSTS 157
> AGENCY RECEIVING CUSTODY GCCSCD

Yep, shoe's on the other foot now, aint it Randy Chapwoman!

4477. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 12:36:37 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <FNcVk.5938$D32.1540@flpi146.ffdc.sbc.com>
Source record: 20001
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

John Smith wrote:
> Ever heard of amplifed rabbit ears?

I bought one, a Phillips MANT310/MNT310F - didn't work
as well as the non-amplified RS one I already had.
--
73, Cecil http://www.w5dxp.com

4478. Re: FA: R-390A built by ECA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 13:46:03 UTC
From: Dave <dave@dave.dave>
Message-ID: <49256a1b$0$31210$bd467cd0@news.dslextreme.com>
Source record: 20002
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

K wrote:
> FA: An excellent R-390A built by ECA
>
> http://tinyurl.com/6ydbsg
>
>
>
What's the green thing by the headphone jack?

4479. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 13:50:57 UTC
From: Dave <dave@dave.dave>
Message-ID: <49256b41$0$31210$bd467cd0@news.dslextreme.com>
Source record: 20003
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen snap:
> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?
>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Thanks,
> Rich
>
Log periodics are not necessary for sub-octave operation.

http://www.youtube.com/watch?v=EWQhlmJTMzw

4480. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 14:16:54 UTC
From: zekfrivo@zekfrivolous.com
Message-ID: <gg3rgn$4k8$3@usenet01.srv.cis.pitt.edu>
Source record: 20004
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <pan.2008.11.19.22.45.03.655469@example.net>, Rich Grise <rich@example.net>
wrote:
>My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>center of my coax to the venetian blind. I have to hand-adjust it
>for the channel, weather conditions, phase of the moon, etc. I can
>do this because I can _see_ an indication of signal strength.

I did the same thing and I was surprised how many digital chanels I got.
I was at a dollar store and saw the RCA UHF/VHF loop/ears for $5 and
that gave me considerable better reception.

greg

4481. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 14:18:47 UTC
From: zekfrivo@zekfrivolous.com
Message-ID: <gg3rk8$4k8$4@usenet01.srv.cis.pitt.edu>
Source record: 20005
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <pan.2008.11.19.22.45.03.655469@example.net>, Rich Grise <rich@example.net>
wrote:
>My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>center of my coax to the venetian blind. I have to hand-adjust it
>for the channel, weather conditions, phase of the moon, etc. I can
>do this because I can _see_ an indication of signal strength.
>
>Well, with this new Fascist "No More Free TV" crap, I'm gonna need
>a real UHF antenna. My budget is exceedingly limited, but I have
>a supply of materials (GTAW filler rod, with some coppery-colored
>coating, so it solders like a dream, and is as stiff as piano wire)
>to build an antenna with.
>
>But I've been searching the web for some weeks now, and I can't
>seem to find any kind of formula, except there was this program
>I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
>in Russian or Polish or Uzbekistani - one of those East Yurp
>languages. Here's a screen snap:
>http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
>Which I went through pretty much by-guess-and-by-gosh - can
>anybody read that stuff?
>
>There are a lot of factors I don't know about, like "Tau", and
>all of the specific designs on the web are flat - something is
>telling me I want one of those pyramid-shaped ones, but I really
>don't know the difference (between that and flat) - it's probably
>something to do with bandwidth or F/B ratio or whatever.
>
>My local library has no ARRL Antenna Book (!), and did I mention
>I have a seriously limited budget?
>
>So, how do I pursue this? It'd be nice to have a program that will
>calculate the whole thing for me, but am I dreaming? If I want to
>send myself to Log-Periodic School, where should I start?
>
>Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
>Thanks,
>Rich

Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide band.
It could be improved by making it a full fractal.

greg

4482. Re: FA: R-390A built by ECA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 14:27:44 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <18c16b47-21b1-4abd-9239-7247964aaed7@u14g2000yqg.googlegroups.com>
Source record: 20006
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

On Nov 20, 8:46 am, Dave <d...@dave.dave> wrote:
> K wrote:
> > FA: An excellent R-390A built by ECA
>
> >http://tinyurl.com/6ydbsg
>
> What's the green thing by the headphone jack?

A very common modification, especially by the Navy, was to add a jack there to monitor the diode load voltage, this makes their regular maintenance much much easier. NAVSHIPS-0967-063-2140 documents this.

Tim N3QE

4483. Re: FA: R-390A built by ECA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 14:50:48 UTC
From: Dave <dave@dave.dave>
Message-ID: <49257948$0$31175$bd467cd0@news.dslextreme.com>
Source record: 20007
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Tim Shoppa wrote:
> On Nov 20, 8:46 am, Dave <d...@dave.dave> wrote:
>> K wrote:
>>> FA: An excellent R-390A built by ECA
>>> http://tinyurl.com/6ydbsg
>> What's the green thing by the headphone jack?
>
> A very common modification, especially by the Navy, was to add a jack
> there to monitor the diode load voltage, this makes their regular
> maintenance much much easier. NAVSHIPS-0967-063-2140 documents this.
>
> Tim N3QE

Isn't there a Diode Load terminal on the back already?

BTW: That paint job looks awful. Too shiny. I had 2 of those beasts
and liked a slightly worn look a lot better.

They aren't that difficult to tweak to superior performance. I
wouldn't spend more than $500 for one with a good RF deck.

4484. Re: FA: R-390A built by ECA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 14:54:45 UTC
From: Dave <dave@dave.dave>
Message-ID: <49257a36$0$31174$bd467cd0@news.dslextreme.com>
Source record: 20008
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Tim Shoppa wrote:
> On Nov 20, 8:46 am, Dave <d...@dave.dave> wrote:
>> K wrote:
>>> FA: An excellent R-390A built by ECA
>>> http://tinyurl.com/6ydbsg
>> What's the green thing by the headphone jack?
>
> A very common modification, especially by the Navy, was to add a jack
> there to monitor the diode load voltage, this makes their regular
> maintenance much much easier. NAVSHIPS-0967-063-2140 documents this.
>
> Tim N3QE

The NAVSHIPS document states that a Dymo label should be affixed by the
jack.

4485. : Lawsuit countdown 11 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 15:00:58 UTC
From: kb9rqz@yahoo.com
Message-ID: <rsuai4tta292l2rmdj3bk5rqefe85epurn@4ax.com>
Source record: 20009
Cross-posted to: rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Thu, 20 Nov 2008 04:31:00 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>
spamer

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4486. Re: FA: R-390A built by ECA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 15:19:36 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <0b26492c-f2a9-4c63-945a-5dc0eee3b2ca@k36g2000yqe.googlegroups.com>
Source record: 20010
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

On Nov 20, 9:54 am, Dave <d...@dave.dave> wrote:
> Tim Shoppa wrote:
> > On Nov 20, 8:46 am, Dave <d...@dave.dave> wrote:
> >> K wrote:
> >>> FA: An excellent R-390A built by ECA
> >>>http://tinyurl.com/6ydbsg
> >> What's the green thing by the headphone jack?
>
> > A very common modification, especially by the Navy, was to add a jack
> > there to monitor the diode load voltage, this makes their regular
> > maintenance much much easier. NAVSHIPS-0967-063-2140 documents this.
>
> > Tim N3QE
>
> The NAVSHIPS document states that a Dymo label should be affixed by the
> jack.

Related to your other comment, I think that the one on the E-place has
been repainted.

My yellow striper came with the decades-old Dymo stickers still
attached. I swear the glues in modern Dymo labels aren't as good.

Tim.

4487. Re: N8WWM, Convicted CRACK DEALER

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 16:14:41 UTC
From: zoltan <zoltan@zoltan.com>
Message-ID: <%1gVk.11172$qh4.7116@newsfe04.iad>
Source record: 20011
Cross-posted to: rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

<mopeyzakween@yahoo.com> wrote in message
news:26ed423b-66d0-4471-9ce8-4370084dd7b3@f13g2000yqj.googlegroups.com...
Shoe's on the other foot now, pump boy!

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD...

yws n8wwm is a convicted criminal

4488. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 16:24:02 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <32b8ebd2-98f9-41bc-ba0f-680e0cfac9d8@d32g2000yqe.googlegroups.com>
Source record: 20012

On Nov 20, 12:28 am, "Harry H" <harryha...@hotmail.com> wrote:
> I take it that it will be in English?
>
> HarryH
>
> "F5SLD" <v...@ggfff.fr> wrote in message
>
> news:4924b050$0$18979$426a74cc@news.free.fr...
>
>
>
> > Hi,
>
> > A new emagazine for ham will be make soon.
> > Have a look at :
> >http://www.ham-mag.com
>
> > Best 73's
> > Vincent F5SLD- Hide quoted text -
>
> - Show quoted text -

I wish them well, but I expect that 3 issues is the lifespan... With
everything available on the web for free, who is going to pay for a
rag?

denny

4489. FS Miiracle Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 16:28:14 UTC
From: Charlie Hugg <k5mbx@sbcglobal.net>
Message-ID: <BegVk.7615$c45.2593@nlpi065.nbdc.sbc.com>
Source record: 20013

FS: As new Miracle Whip antenna for QRP 3.5 to 460Mhz. 57inch
whip. This is the newer version and is about a year old, but used only a
couple of times with my FT-817ND. It comes with the manual and receipt of
purchase. Price is $99 plus shipping. New ones are
$139. Thanks, Charlie Hugg, K5MBX

4490. Re: KC8QJP and N8WWM Glory Hole Party - KC8QJP will be offering discount tax consulting through the gloryhole while N8WWM is on his knees

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 16:32:56 UTC
From: zoltan <zoltan@zoltan.com>
Message-ID: <6jgVk.11173$qh4.10597@newsfe04.iad>
Source record: 20014
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave

"n8wwm mrbindwell (fatboy)" <dougay@nospam.com> wrote in message
news:gcgpfa$ct7$1@news.mixmin.net...
>
> "Leland C Scott" <kc8ldo@madisonhts.com> wrote in message
> news:gc086k$u0v$1@news.tornevall.net...
>> "n8wwm mrbindwell (fatboy)" wrote:
>>
>> http://img254.imageshack.us/my.php?image=dougpetro3yk1.jpg
>>
>>> Pick up some crisco on your way over tonight, KC8QJP needs a good
>>> slathering on her hind quarters.
>>>
>>> She's also getting ready to start her tax return posts again like she
>>> does every year. You remember those..
>>>
>>> http://tinyurl.com/46teqq
>>>
>>> She says she wants to add some pics of her and me to them this year.
>>>
>>>
>>>
>> Cool!
>>
> they're having it over here, queerboy.
>
> Lance & Lisa Adair
> 10431 Jackman Rd
> Temperance, MI 48182-9629
> (734) 854-2426
>
>
n8wwm is a convicted criminal

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=CRB...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRC...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD...

http://www.tmc-clerk.com/criminaltraffic/detailprint.aspx?CaseNum=TRD...

4491. Re: N8WWM, Convicted CRACK DEALER

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 17:04:07 UTC
From: mopeyzakween@yahoo.com
Message-ID: <a2dcd3e7-1369-4476-9eb9-560de7ce21cd@l39g2000yqn.googlegroups.com>
Source record: 20015
Cross-posted to: rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

mopey flails air again

4492. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 17:30:14 UTC
From: richardharrison@webtv.net
Message-ID: <14250-49259EA6-522@storefull-3251.bay.webtv.net>
Source record: 20017

Art wrote:
"I am not saying that displacement current travels in the center but I ask those educated in this field if displacement current has been observed, measured and is present Beyond Doubt?"

Yes.

Displacement current is proportional to the rate of change of the electric field. It moves at right angles to the direction of propagstion.

Like charges repel without electrical conduction so a capacitor passes ac while blocking dc.

A standing wave antenna stores energy in the magnetic field near its center during one half of the cycle and in the electric fields near its ends during the other half cycle.

Dielectric displacement is the electrical strain which occurs in a dielectric medium when an electric field is applied. It is analogous to the magnetic flux density and is expressed in charge per unit area or coulombs per aquare meter.

J.C. Maxwell speculated displacement current produces magnetic lines of force same as conduction current does, therefore an alternating magnetic field would produce an alternating electric field and so on ad infinitum. This was the key to electromagnetic radiation. Hertz later proved Maxwell correct in the laboratory.

Best regards, Richard Harrison, KB5WZI

4493. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 17:31:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg46u6$57p$1@news.albasani.net>
Source record: 20016
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Cecil Moore wrote:
> John Smith wrote:
>> Ever heard of amplifed rabbit ears?
>
> I bought one, a Phillips MANT310/MNT310F - didn't work
> as well as the non-amplified RS one I already had.

Actually, I had to construct my own with a broadband MMIC device, to get decent functionality ... however, my mother has an el-cheapo unit she purchased from some yard sale, it/they work surprisingly well!

Location, reflections, etc. can vary ones experience greatly--but hey, they usually beat a wire coat hanger! :-)

Regards,
JS

4494. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 18:56:45 UTC
From: chrisgj198@googlemail.com
Message-ID: <57a7e9b9-b6f0-44ca-bcab-3b45c125bbbd@g38g2000yqn.googlegroups.com>
Source record: 20018
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On 19 Nov, 22:45, Rich Grise <r...@example.net> wrote:
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen
snap:http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?
>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Thanks,
> Rich

I have used the procedure in the following paper:
http://www.urel.feec.vutbr.cz/ra2008/archive/ra2004/abstracts/116.pdf

I slightly modified the design (e.g. I used several different diameters for the elements), but basically I used the same formulae. I did not use their formula for deciding the right spacing between the support tubes to get the right characteristic impedance, because I suspect that maybe it is only valid over a limited range of spacing. Instead, I measured the characteristic impedance of just the tubes with no elements attached on a VNA that could plot impedance vs distance in a sort of TDR mode, and I adjusted the spacing until it was right. I epoxied some very small (roughly 1mm cube) spacers between the support tubes to keep the distance right, once it was adjusted properly. It is important that the space between the support tubes is mostly filled with air, not epoxy or any other dielectric, because the wave needs to propagate at the right speed between the tubes so that the elements are fed in the right relative phase, and this won't happen if there is something with a higher dielectric constant in there. I used those brass tubes that you can get in hobby shops, but unfortunately brass is fairly resistive and I did not silver plate it. I would have used aluminium if it were easier to solder in a reliable way.

The finished antenna had a good return loss over the desired frequency range (sorry, can't remember the numbers) and it did the job for which it was intended although I don't have a measured gain value etc. because I don't have an antenna range.

I have a spreadsheet for calculating the element lengths (in Openoffice.org format) if you are interested.

Chris

4495. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 19:13:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e2089e1a-8e2a-432e-87ef-72542700259a@w34g2000yqm.googlegroups.com>
Source record: 20019

On Nov 20, 11:30 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "I am not saying that displacement current travels in the center but I
> ask those educated in this field if displacement current has been
> observed, measured and is present Beyond Doubt?"
>
> Yes.
>
> Displacement current is proportional to the rate of change of the
> electric field. It moves at right angles to the direction of
> propagstion.
>
> Like charges repel without electrical conduction so a capacitor passes
> ac while blocking dc.
>
> A standing wave antenna stores energy in the magnetic field near its
> center during one half of the cycle and in the electric fields near its
> ends during the other half cycle.
>
> Dielectric displacement is the electrical strain which occurs in a
> dielectric medium when an electric field is applied. It is analogous to
> the magnetic flux density and is expressed in charge per unit area or
> coulombs per aquare meter.
>
> J.C. Maxwell speculated displacement current produces magnetic lines of
> force same as conduction current does, therefore an alternating magnetic
> field would produce an alternating electric field and so on ad
> infinitum. This was the key to electromagnetic radiation. Hertz later
> proved Maxwell correct in the laboratory.
>
> Best regards, Richard Harrison, KB5WZI

Now why did I expect such an answer from you? The Physics World states
that displacement current does not exist
with respect to radiation and you hang on to outdated books and sneer
at modern day advances
Seems like you will never ever accept change

4496. Re: teh kosher ham with teh knee high EME anttena

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 19:49:06 UTC
From: UberJacker <nohijack@houston-hunks.com>
Message-ID: <7c87670f-841e-4dc3-8f7e-f3647fa0379b@t11g2000yqg.googlegroups.com>
Source record: 20020
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

On Nov 19, 3:57 pm, "kb9rqz" <kb9...@puncemail.com> wrote:
> it indeed four moon buonce of coarsehttp://www.geocities.com/kb9rqz/

Be careful of tricycle riders who will tie a rope to it and pull it
over with the trike. You need to shoot any toddlers who show up to do
that because the Michigan castle law says it's your right. Right?

4497. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 19:49:50 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <AbjVk.271534$4p1.203955@en-nntp-09.dc1.easynews.com>
Source record: 20021

"Denny" <k8do@mailblocks.com> wrote in message
news:32b8ebd2-98f9-41bc-ba0f-680e0cfac9d8@d32g2000yqe.googlegroups.com...
"I wish them well, but I expect that 3 issues is the lifespan... With
everything available on the web for free, who is going to pay for a
rag?"

Plenty of paid magazines -- including QST and QEX -- still have many thousands
of subscribers.

A good magazine presents you with interesting new ideas and insights that many
people may not have the time or desire to ferret out from all the information
available on the Internet, and most magazines subscriptions these days are
quite inexpensive anyway.

4498. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:15:02 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <ctjVk.68215$Ep1.2060@bignews2.bellsouth.net>
Source record: 20022

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
news:AbjVk.271534$4p1.203955@en-nntp-09.dc1.easynews.com...
> "Denny" <k8do@mailblocks.com> wrote in message
> news:32b8ebd2-98f9-41bc-ba0f-680e0cfac9d8@d32g2000yqe.googlegroups.com...
> "I wish them well, but I expect that 3 issues is the lifespan... With
> everything available on the web for free, who is going to pay for a
> rag?"
>
> Plenty of paid magazines -- including QST and QEX -- still have many
> thousands of subscribers.
>
> A good magazine presents you with interesting new ideas and insights that
> many people may not have the time or desire to ferret out from all the
> information available on the Internet, and most magazines subscriptions
> these days are quite inexpensive anyway.
>
>

Take it from a person that used to have over 10 subscriptions a month for mags, printed magazines are dead. The only ones I receive now are the ones that come with being a member in a national association.

Ed, N2ECW

4499. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:17:22 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.20.17.03.933068@example.net>
Source record: 20023
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 19 Nov 2008 16:49:03 -0800, Jim Lux wrote:

> Rich Grise wrote:
...
>> myself to Log-Periodic School, where should I start?
>
> Looking for a cookbook design, or the theory to do it yourself?

Cookbook, if at all possible. Like, element lengths and spacing,
and the angle between the booms - which brings up a question - what
effect does it have when you take a flat L-P and "open it up", like
to a pyramid shape - I was doing a thought experiment with this and
when it's completely "flattened out", (180 degrees between the booms),
it looks like a <drum roll please> Bow Tie!

Thanks,
Rich

4500. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:19:15 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.20.18.53.945779@example.net>
Source record: 20024
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 20 Nov 2008 01:53:33 +0100, TheM wrote:
> "Rich Grise" <rich@example.net> wrote in message
> news:pan.2008.11.19.22.45.03.655469@example.net...
>> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
...
>> myself to Log-Periodic School, where should I start?
>>
>> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Upisi najnizju radnu frekvenciju : enter lowest frequency Upisi najvisju
> radnu frekvenciju : enter highest frequency
>
> Duzina antene: length of antena
> Broj elemenata: number of elements
>
> Pritisni taster za proracun antene: press a key to calculate antenna
>
> Duzina 1. elem. length of first element
>
> Pritisni taster za nastavak Press any key to continue
>
> Duzina zavrsnog kratkospojenog odsecka: length of final shorted section
> Upisi precnik dipola: enter diameter of the dipole
>
> Upisi ulaznu otpornost (ohm): Entry resistance (weird in original)
>
> Impedanca napojnog voda: feeder impedance (not sure what this is)
>
> Upisi precnik napojnih provodnika: diameter of feeding leeds (my guess
> these are two bars that hold elements)
>
> razmak izmedju napojnih provodnika: distance between feeder leeds (and
> distance between two bard holding elements)
>
> You owe me a beer. BTW, its Croatian or Serbian. I kind of understand some
> 90%.
>

Thanks!
Rich

4501. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:24:14 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.20.23.56.414464@example.net>
Source record: 20025
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 19 Nov 2008 18:31:05 -0800, John Smith wrote:

> Rich Grise wrote:
>> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>> center of my coax to the venetian blind. I have to hand-adjust it for
>> the channel, weather conditions, phase of the moon, etc. I can do this
>> because I can _see_ an indication of signal strength.
>>
> LOL ... talk about trolls! That HAS TO BE THE BEST TROLL OPENING LINE I
> HAVE EVER SEEN!

Hey, "John Smith", why don't you go outside and play
hide-and-go-fuck-yourself?

Cheers!
Rich

4502. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:31:47 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.20.31.25.44080@example.net>
Source record: 20026
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 19 Nov 2008 22:53:28 -0800, Richard Clark wrote:
> On Wed, 19 Nov 2008 22:45:19 GMT, Rich Grise <rich@example.net> wrote:
>
>>But I've been searching the web for some weeks now, and I can't seem to
>>find any kind of formula, except there was this program I downloaded -
>>LPDA.EXE, which runs on DOS. Unfortunately, it's in Russian or Polish or
>>Uzbekistani - one of those East Yurp languages. Here's a screen snap:
>>http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>>
>>Which I went through pretty much by-guess-and-by-gosh - can anybody read
>>that stuff?
>
> Someone else has already provided the translation, so that will take care
> of some of the wholes in data entry and reading.
>
>>There are a lot of factors I don't know about, like "Tau", and all of the
>>specific designs on the web are flat - something is telling me I want one
>>of those pyramid-shaped ones, but I really don't know the difference
>>(between that and flat) - it's probably something to do with bandwidth or
>>F/B ratio or whatever.
>
> Tau is related to the shape of what you call the pyramid, or more actually
> to the angle of the taper. This defines the smoothness of matching across
> the span of frequencies you entered into the program. As you can see, it
> also relates to the available gain. Another correlative is it also
> relates to its length. All of these things are trade-offs that lend to
> the rule of choosing what you want most and giving up on the rest.
>
> I note elsewhere that you wanted something about 1 foot long. There is a
> Tau that will give you this boom length, and you got it on the first
> guess.
>
>>So, how do I pursue this? It'd be nice to have a program that will
>>calculate the whole thing for me, but am I dreaming? If I want to send
>>myself to Log-Periodic School, where should I start?
>
> You should start building what your screen shot gave you IF that is the
> span of frequency you need (already questioned by other correspondents).
>
> 73's

"Best Regardses"? ;-)

Anyway, thanks for this - I'm feeling a lot better about this project now thanks to your help and that guy that translated it for me (forgot the name, but he knows who he is - Thanks Again!);

I might even start cutting wire[1] and soldering this weekend! ;-)

Thanks!
Rich

[1] GTAW (Gas Tungsten Arc Welding) filler rod, with some coppery-colored coating that solders even better than copper, about .030 dia., and as stiff as piano wire.

4503. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:39:38 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gg4huaube1@f04n12.cac.psu.edu>
Source record: 20027

NoSPAM wrote:

> One suggestion I have is to look at cheap plastic coathangers. These are
> about 1/4 inch in diameter and are not vinyl coated wire hangers. Several
> insulators can be cut from a single coathanger. Since you can often buy
> these hangers for around $1.00 for ten, a few dollars could provide a good
> number of insulators. If you don't like the color, spray paint them with
> Krylon or another acrylic paint. White will provide the best ultraviolet
> resistance. I would limit my wire size to 16 Gauge or smaller as this
> plastic is quite brittle.

good post, Barry

The suggestion of plastic coat hangers is interesting. I think I might
try home brewing with some pink ones! 8^)

- 73 de Mike N3LI -

4504. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:41:44 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.20.41.25.570691@example.net>
Source record: 20028
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 19 Nov 2008 22:53:28 -0800, Richard Clark wrote:
>
> You should start building what your screen shot gave you IF that is the
> span of frequency you need (already questioned by other correspondents).

Apparently I'll only need up to ch. 52; have to look up the carrier freq.
on that.

Ch. 14 = 470-476 MHz
Ch. 83 = 884-890 MHz I think.

Now all I need to do is the algebra. ;-)

52 - 14 = 38
38 * 6 = 228
228 + 470 = 698
698 + 6 = 704

Cheers!
Rich

4505. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:51:58 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.20.51.39.19147@example.net>
Source record: 20029
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 20 Nov 2008 13:50:57 +0000, Dave wrote:
>>
> Log periodics are not necessary for sub-octave operation.
>
> http://www.youtube.com/watch?v=EWQhlmJTMzw

Dude! Awesome! And this one doesn't even have a reflector!. I
wonder how far I should hang it in front of the venetian blind. ;-)

Thanks!
Rich

4506. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:56:44 UTC
From: mzenier@eskimo.com
Message-ID: <gg6r3u01lt7@enews5.newsguy.com>
Source record: 20095
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <pan.2008.11.19.22.45.03.655469@example.net>,
Rich Grise <rich@example.net> wrote:
>My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>center of my coax to the venetian blind. I have to hand-adjust it
>for the channel, weather conditions, phase of the moon, etc. I can
>do this because I can _see_ an indication of signal strength.

Your clip lead is too long. Try 1/4 wave.

I got good reception using a 4 1/2 inch length of 24 gauge solid poked
into the F connector for a (line of sight) 45 kW station, 20 miles away.
(Most of the local stations run in the 500-1000 kW range).

Mark Zenier mzenier@eskimo.com
Googleproofaddress(account:mzenier provider:eskimo domain:com)

4507. FS W5GI Mystery Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:58:10 UTC
From: Charlie Hugg <k5mbx@sbcglobal.net>
Message-ID: <FbkVk.7631$c45.6433@nlpi065.nbdc.sbc.com>
Source record: 20030

FS: A brand new, never used, completely assembled W5GI Multi-band Mystery Antenna. These are great wire antennas(see e-ham product reviews). I just don't have the room to put it up. I paid $100 for it and will sell it for $59 plus shipping. See W5GI's webpage for more info. Thanks, Charlie Hugg, K5MBX

4508. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 20:59:15 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.20.20.58.56.492815@example.net>
Source record: 20031
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 20 Nov 2008 14:18:47 +0000, GregS wrote:
>
> Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide
> band. It could be improved by making it a full fractal.

Yes - somebody just pointed to a youtube of somebody making one out
of coathangers.

I think I'm gonna do that.

Cheers!
Rich

4509. : Lawsuit countdown 11 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 21:12:22 UTC
From: kb9rqz@yahoo.com
Message-ID: <ukkbi4t00uaf4ls4r071dsrb0025hq7v81@4ax.com>
Source record: 20032
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

On Thu, 20 Nov 2008 11:49:06 -0800 (PST), UberJacker
<nohijack@houston-hunks.com> wrote:

>. You need to shoot any toddlers who show up to do
>that because the Michigan castle law says it's your right. Right?
truly take your meds

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4510. : Lawsuit countdown 11 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 21:15:09 UTC
From: kb9rqz@yahoo.com
Message-ID: <9qkbi4d8h4ii4qag6vjmdh86qv2hp9a94k@4ax.com>
Source record: 20033
Cross-posted to: rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Thu, 20 Nov 2008 11:14:41 -0500, "zoltan" <zoltan@zoltan.com>
wrote:

>

gte a life

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4511. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 21:27:49 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gg4kol$t5f$1@news.jpl.nasa.gov>
Source record: 20036
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

christofire wrote:
> "Rich Grise" <rich@example.net> wrote in message
> news:pan.2008.11.19.22.45.03.655469@example.net...
>> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>> center of my coax to the venetian blind. I have to hand-adjust it
>> for the channel, weather conditions, phase of the moon, etc. I can
>> do this because I can _see_ an indication of signal strength.
>>
>> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
>> a real UHF antenna. My budget is exceedingly limited, but I have
>> a supply of materials (GTAW filler rod, with some coppery-colored
>> coating, so it solders like a dream, and is as stiff as piano wire)
>> to build an antenna with.
>>
>> But I've been searching the web for some weeks now, and I can't
>> seem to find any kind of formula, except there was this program
>> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
>> in Russian or Polish or Uzbekistani - one of those East Yurp
>> languages. Here's a screen snap:
>> http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>>
>> Which I went through pretty much by-guess-and-by-gosh - can
>> anybody read that stuff?
>>
>> There are a lot of factors I don't know about, like "Tau", and
>> all of the specific designs on the web are flat - something is
>> telling me I want one of those pyramid-shaped ones, but I really
>> don't know the difference (between that and flat) - it's probably
>> something to do with bandwidth or F/B ratio or whatever.
>>
>> My local library has no ARRL Antenna Book (!), and did I mention
>> I have a seriously limited budget?
>>
>> So, how do I pursue this? It'd be nice to have a program that will
>> calculate the whole thing for me, but am I dreaming? If I want to
>> send myself to Log-Periodic School, where should I start?
>>
>> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>>
>> Thanks,
>> Rich
>
>

> You probably don't need a program, just a decent text book that covers the
> topic adequately, which, undoubtedly is what the program writers worked
> from, and they might not have got it right! 'Antennas' by John Kraus
> contains enough detail to make a start and it's probably more general than
> someone's program which might involve specific choices of some parameter
> values. So my recommendation would be to find a technical library that
> offers access to non-members and send yourself to Log-Periodic School as you
> put it. The IET library in London does this, for free. Do you have an
> equivalent institution (e.g. IEEE), or a local university that covers
> electronic engineering? You might be surprised how much access you can gain
> to libraries to which you have contributed through taxes, or which need to
> maintain an 'altruistic' public appearance.
>

Orfanidis's book on electromagnetic waves and antennas is online, and
covers LPDAs.. Kraus is better, but you'll have to fork out at least
$20+shipping for a used copy. Kraus *is* my recommendation if you have
to have a single antenna book, though.

4512. Re: teh kosher ham with teh knee high EME anttena

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 21:34:03 UTC
From: kb9rqz <kb9rqz@puncemail.com>
Message-ID: <gg4l4l$r6$2@aioe.org>
Source record: 20034
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

"UberJacker" <nohijack@houston-hunks.com> wrote in message
news:7c87670f-841e-4dc3-8f7e-f3647fa0379b@t11g2000yqg.googlegroups.com...
> On Nov 19, 3:57 pm, "kb9rqz" <kb9...@puncemail.com> wrote:
>> it indeed four moon buonce of coarsehttp://www.geocities.com/kb9rqz/
>
> Be careful of tricycle riders who will tie a rope to it and pull it
> over with the trike. You need to shoot any toddlers who show up to do
> that because the Michigan castle law says it's your right. Right?
>
i shoot frist ask qeustion later

4513. : Lawsuit countdown 11 day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 21:55:04 UTC
From: kb9rqz@yahoo.com
Message-ID: <95nbi41sl8qlg19inljkhe614eogj7h2jp@4ax.com>
Source record: 20035
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

On Thu, 20 Nov 2008 16:34:03 -0500, "kb9rqz" <kb9rqz@puncemail.com>
wrote:

>

> i shoot frist ask qeustion later
>
you too fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4514. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 21:59:52 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <u5lVk.328565$5p1.267605@en-nntp-06.dc1.easynews.com>
Source record: 20037
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Rich Grise" <rich@example.net> wrote in message
news:pan.2008.11.20.20.17.03.933068@example.net...
> I was doing a thought experiment with this and
> when it's completely "flattened out", (180 degrees between the booms),
> it looks like a <drum roll please> Bow Tie!

I think a bow tie's design is actually motivated more by one of the "standard" ultra-wideband antenna designs, that of a pair of opposing cones touching each other at their narrow ends, being translated down into 2D.

4515. Re: FS W5GI Mystery Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 22:03:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <x8lVk.7641$c45.7189@nlpi065.nbdc.sbc.com>
Source record: 20038

Charlie Hugg wrote:
> FS:

Just a friendly reminder in case anyone has forgotten.
Posting buy/sell/trade/auction items on this newsgroup
is a violation of this newsgroup's guidelines.

rec.radio.swap is the proper newsgroup for posting
those items.
--
73, Cecil http://www.w5dxp.com

4516. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 22:05:01 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <balVk.7642$c45.3272@nlpi065.nbdc.sbc.com>
Source record: 20039

Dave wrote:
> Motorola called it "Private Line".

Thanks Dave, I was trying to remember "PL tones".
--
73, Cecil http://www.w5dxp.com

4517. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 23:07:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <b5mVk.9159$ZP4.1114@nlpi067.nbdc.sbc.com>
Source record: 20040
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Jim Lux wrote:
> Kraus is better, but you'll have to fork out at least
> $20+shipping for a used copy. Kraus *is* my recommendation if you have
> to have a single antenna book, though.

Here's a new international 3rd edition available for less
than $10 plus shipping.

http://www.abebooks.com/servlet/SearchResults?an=Kraus&sts=t&tn=Antennas&x=0&y=0
--
73, Cecil http://www.w5dxp.com

4518. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 23:09:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg4qn6$vl2$1@news.albasani.net>
Source record: 20041
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:

> ...
> Hey, "John Smith", why don't you go outside and play
> hide-and-go-fuck-yourself?
>
> Cheers!
> Rich
>

LOL ...

Darn, you just can't get decent psychiatric help with your food stamps,
can you? :-(

Regards,
JS

4519. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 23:25:27 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <vKKdnd8R8d7gbLjUnZ2dnUVZ_hadnZ2d@earthlink.com>
Source record: 20042

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
news:AbjVk.271534$4p1.203955@en-nntp-09.dc1.easynews.com...
> "Denny" <k8do@mailblocks.com> wrote in message
> news:32b8ebd2-98f9-41bc-ba0f-680e0cfac9d8@d32g2000yqe.googlegroups.com...
> "I wish them well, but I expect that 3 issues is the lifespan... With
> everything available on the web for free, who is going to pay for a
> rag?"
>
> Plenty of paid magazines -- including QST and QEX -- still have many
> thousands of subscribers.
>
>
QST is not really a magazine, but a membership in the ARRL and the magazine
is 'free'. I don't subscribe to any electronic magazines now, just two
others and I am dropping Comsumer Reports soon.

Not that I agreed with Wayne Green, but I did like the older 73 Magazines.
Also the Ham Radio magazines. QST is too full of contest/DX and other
things for me, but I do see how others would like it.

4520. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 23:30:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <qP2dnaQaGqWObrjUnZ2dnUVZ_tfinZ2d@posted.easystreetonline>
Source record: 20043
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

GregS wrote:
>
> Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide band.
> It could be improved by making it a full fractal.
>
> greg

That's interesting. In what way(s) is it improved by making it fractal?
How much is the improvement? Can you point me to a reference about this
which gives some quantitative data?

Roy Lewallen, W7EL

4521. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 23:35:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <uZGdncAqbqbBabjUnZ2dnUVZ_h2dnZ2d@posted.easystreetonline>
Source record: 20044
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> On Wed, 19 Nov 2008 22:53:28 -0800, Richard Clark wrote:
>> . . .
>> 73's
>
> "Best Regardses"? ;-)

No, that's "Best Regards's". It's the possessive, not plural, form of "Best Regards". I think the grammar is part of the same dialect as the verb "destinate" (as in "I've just destinated"), but you'd have to ask Richard about that -- he's the one with the English Lit degree.

Roy Lewallen, W7EL

4522. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-20 23:54:02 UTC
From: kb9rqz@yahoo.com
Message-ID: <n4ubi45c72ef2lv674p128gvbpueanb2b8@4ax.com>
Source record: 20045
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4523. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 00:04:34 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <c7ednY3qFIw0Z7jUnZ2dnUVZ_g-dnZ2d@earthlink.com>
Source record: 20046
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Rich Grise" <rich@example.net> wrote in message
news:pan.2008.11.19.22.45.03.655469@example.net...
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
It may not take too much antenna. I picked up one of the converter boxes
and hooked it to a 432 mhz beam at 70 feet and got 21 stations on the auto
tune. Then to a 9 element M2 2 meter bem and it picked up 29 stations.
This was at the end of about 130 feet of low loss rg-8 size coax and then 25
feet of rg-6.
Several of the stations were the same transmitter,but differant chanels on
the TV.

4524. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 00:16:37 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <E5nVk.22074$us4.10578@newsfe14.iad>
Source record: 20047
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
news:u5lVk.328565$5p1.267605@en-nntp-06.dc1.easynews.com...
> I think a bow tie's design is actually motivated more by one of the
> "standard" ultra-wideband antenna designs, that of a pair of opposing
> cones touching each other at their narrow ends, being translated down into
> 2D.

Standard, indeed; this antenna is known as a biconical. It has excellent wideband response making it ideal for EMC testing. Most good antenna texts such as that by Krauss give a detailed analysis of the biconical antenna. I see no relationship between its design and a fractal design other than both are wide bandwidth antennas.

The bowtie antenna which Rich and others have mentioned is a "flattened" form of the biconical. If the bowtie is bent along its major axis, it makes an excellent wideband driven element for a corner reflector antenna.

73, Barry WA4VZQ

4525. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 00:19:25 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngibvkd.1cqq.bit-bucket@shell.config.com>
Source record: 20048

On Wed, 19 Nov 2008 21:48:49 -0500, NoSPAM wrote:
>
> One suggestion I have is to look at cheap plastic coathangers. These are
> about 1/4 inch in diameter and are not vinyl coated wire hangers. Several
> insulators can be cut from a single coathanger. Since you can often buy
> these hangers for around $1.00 for ten, a few dollars could provide a good
> number of insulators. If you don't like the color, spray paint them with
> Krylon or another acrylic paint. White will provide the best ultraviolet
> resistance. I would limit my wire size to 16 Gauge or smaller as this
> plastic is quite brittle.

Another suggestion: "They" make fiberglass driveway-marker rods which
seem to come in either 4' or 6' lengths. The ones I've used are 3/8" in
diameter and usually are painted International Orange and have a
reflective strip at the top. (Maybe more readily available in hardware
stores for "country folks" who need to come home down a gravel road in
the dark, with 2' of freshly fallen snow...)

I've not used these for feedline spacers, but they seem to be another
choice for that application. I've used them for VHF antenna
construction -- for both fixed and portable antennas.

HTH
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
* Killfiling google & XXXXbanter.com: jonz.net/ng.htm

4526. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 00:27:08 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <HfnVk.345109$vK2.41424@en-nntp-03.dc1.easynews.com>
Source record: 20049

Thanks for the details, Barry... tell me though, then, is a discone just a biconical with a ground plane used to create the (image of the) missing cone?

4527. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 00:38:03 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <gg4vta$ci6$1@aioe.org>
Source record: 20050

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
news:HfnVk.345109$vK2.41424@en-nntp-03.dc1.easynews.com...
> Thanks for the details, Barry... tell me though, then, is a discone just
> a biconical with a ground plane used to create the (image of the) missing
> cone?

Yes. It will have less gain than a biconical and the bandwidth is slightly
more restrictive too. But it is much easier to construct!

73, Barry WA4VZQ

4528. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 00:49:27 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.21.00.49.07.825519@example.net>
Source record: 20051
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 20 Nov 2008 15:35:53 -0800, Roy Lewallen wrote:
> Rich Grise wrote:
>> On Wed, 19 Nov 2008 22:53:28 -0800, Richard Clark wrote:
>>> . . .
>>> 73's
>>
>> "Best Regardses"? ;-)
>
> No, that's "Best Regards's". It's the possessive, not plural, form of
> "Best Regards". I think the grammar is part of the same dialect as the
> verb "destinate" (as in "I've just destinated"), but you'd have to ask
> Richard about that -- he's the one with the English Lit degree.
>

I read it in a QST or so back in the 1960's. :-)

Thanks!
Rich
ex-WN0GJS

4529. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 00:51:28 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.21.00.51.06.307702@example.net>
Source record: 20052
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 20 Nov 2008 15:30:26 -0800, Roy Lewallen wrote:
> GregS wrote:
>>
>> Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide
>> band. It could be improved by making it a full fractal.
>
> That's interesting. In what way(s) is it improved by making it fractal?
> How much is the improvement? Can you point me to a reference about this
> which gives some quantitative data?
>

http://www.google.com/search?hl=en&q=%22fractal+antennas%22&btnG=Google+Search&aq=f&oq=

Hope This Helps!
Rich

4530. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 00:58:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <dNudnRgx2fJVmrvUnZ2dnUVZ_rmdnZ2d@posted.easystreetonline>
Source record: 20053
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> On Thu, 20 Nov 2008 15:30:26 -0800, Roy Lewallen wrote:
>> GregS wrote:
>>> Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide
>>> band. It could be improved by making it a full fractal.
>> That's interesting. In what way(s) is it improved by making it fractal?
>> How much is the improvement? Can you point me to a reference about this
>> which gives some quantitative data?
>>
>
> http://www.google.com/search?hl=en&q=%22fractal+antennas%22&btnG=Google+Search&aq=f&oq=
>
> Hope This Helps!
> Rich

Sorry, it doesn't. Among the claims, trolls for investors, and
testimonials, where is the quantitative data showing that a fractal
antenna is in any way better than a bow tie, in what ways, and how much?
In other words, exactly where is the evidence on which you based your
statement?

Roy Lewallen, W7EL

4531. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 02:17:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1c3e266e-eb8a-4016-8085-aebe470d8afc@w34g2000yqm.googlegroups.com>
Source record: 20054

On Nov 20, 5:25 pm, "Ralph Mowery" <rmowery28...@earthlink.net> wrote:
> "Joel Koltner" <zapwireDASHgro...@yahoo.com> wrote in message
>
> news:AbjVk.271534$4p1.203955@en-nntp-09.dc1.easynews.com...> "Denny"
<k...@mailblocks.com> wrote in message
> >news:32b8ebd2-98f9-41bc-ba0f-680e0cfac9d8@d32g2000yqe.googlegroups.com...
> > "I wish them well, but I expect that 3 issues is the lifespan... With
> > everything available on the web for free, who is going to pay for a
> > rag?"
>
> > Plenty of paid magazines -- including QST and QEX -- still have many
> > thousands of subscribers.
>
> QST is not really a magazine, but a membership in the ARRL and the magazine
> is 'free'. I don't subscribe to any electronic magazines now, just two
> others and I am dropping Comsumer Reports soon.
>
> Not that I agreed with Wayne Green, but I did like the older 73 Magazines.
> Also the Ham Radio magazines. QST is too full of contest/DX and other
> things for me, but I do see how others would like it.

I fully agree. 73 and ham radio magazines were not put aside in the
first 30 minuits
as they had a lot of interesting articles. Radcom and QST have just
one article for the ham to read
and the rest is just fluff and district officers reports. The articles
by QST seem to come from a
particular type of ham who agree with the small group of overviews
that pre vet the articles.
How long as it been since you have seen an article about radio that
was contrerversal or even challenging the statuc quo?
You will continue to see articles on code keyers, soldering coax
connectors, power supplies e.t.c for the next decade,
they all abhor change
Art

4532. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 02:38:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg56vt$d85$1@news.albasani.net>
Source record: 20055

Art Unwin wrote:

> ...
> I fully agree. 73 and ham radio magazines were not put aside in the
> first 30 minuits
> as they had a lot of interesting articles. Radcom and QST have just
> one article for the ham to read
> and the rest is just fluff and district officers reports. The articles
> by QST seem to come from a
> particular type of ham who agree with the small group of overviews
> that pre vet the articles.
> How long as it been since you have seen an article about radio that
> was contrerversal or even challenging the statuc quo?
> You will continue to see articles on code keyers, soldering coax
> connectors, power supplies e.t.c for the next decade,
> they all abhor change
> Art

You said a mouthful which I can agree with. Or, in other words, same
old stuff delivered up one more time ... <yawn>

It isn't that repeats are not good for the newbies; it is just, they
carry little for those at the other end of the spectrum. But, now and
then they do toss us a bone ...

Regards,
JS

4533. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 02:43:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5l7ci4lpluu8d9lsbatv6o6puh6uspoh3l@4ax.com>
Source record: 20056
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 21 Nov 2008 00:51:28 GMT, Rich Grise <rich@example.net> wrote:

>On Thu, 20 Nov 2008 15:30:26 -0800, Roy Lewallen wrote:
>> GregS wrote:
>>>
>>> Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide
>>> band. It could be improved by making it a full fractal.
>>
>> That's interesting. In what way(s) is it improved by making it fractal?
>> How much is the improvement? Can you point me to a reference about this
>> which gives some quantitative data?
>>
>
>http://www.google.com/search?hl=en&q=%22fractal+antennas%22&btnG=Google+Search&aq=f&oq=
>
>Hope This Helps!
>Rich
>

Hi Rich,

Tacking the new-age term of "fractal" to antenna does not
automatically bring:
1. Widebandedness;
2. Gain;
3. Small size.

The link above fairly confirms it in the fog of offering.

I could expand upon this - but the interest of those who become
suddenly engaged with the topic rarely translates into a meaningful
discussion, and never leads to an actual construction.

73's
Richard Clark, KB7QHC

4534. multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 03:47:24 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <cde8dec9-5103-41c0-896b-e642ca76be67@t2g2000yqm.googlegroups.com>
Source record: 20057

I've seen several programs that will help you calculate the precise dimensions of a single-turn loop, given the composition of the radiating element, its thickness, and so on. However, none of these programs are written to cover the case of a two or more-turn loop.

Does anyone know of a program that will offer guidance in the construction of a two or more-turn loop?

Thanks,

Steve

4535. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 04:59:01 UTC
From: gsm@mendelson.com
Message-ID: <slrngicfud.ds8.gsm@cable.mendelson.com>
Source record: 20058

Ralph Mowery wrote:
> Not that I agreed with Wayne Green, but I did like the older 73 Magazines.
> Also the Ham Radio magazines. QST is too full of contest/DX and other
> things for me, but I do see how others would like it.

The difference is that you did agree with Wayne Green on what to put in
a magazine and he was smart enough to fill 73 with things that everyone
wanted to read.

I enjoyed reading his editorials as they were very entertaining.

I doubt that he intended them as such, but if you read them or not, agreed
with them or not, you still could get a "good read" out of each issue.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

4536. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 05:32:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bphci4dqb2q98ia8tsg78r4is7i5f800bb@4ax.com>
Source record: 20059

On Thu, 20 Nov 2008 19:47:24 -0800 (PST), Steve
<sdaniel13@speakeasy.net> wrote:

>However, none of these
>programs are written to cover the case of a two or more-turn loop.

Hi Steve,

For transmit, there's nothing to "gain" by it.

Success generally floods the marketplace and few complain about not
finding resources to make a knock-off.

73's
Richard Clark, KB7QHC

4537. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 05:48:43 UTC
From: nm5k@wt.net
Message-ID: <5663a554-4004-437a-98dc-02695f93ffb3@o4g2000pra.googlegroups.com>
Source record: 20060

On Nov 20, 2:15 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:

>
> Ed, N2ECW

Hummm. New call I see...
I liked the old one better, but of course, I'm biased.. :/

4538. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 05:59:02 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <I6sVk.26046$WR6.20861@newsfe03.iad>
Source record: 20061
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:c7ednY3qFIw0Z7jUnZ2dnUVZ_g-dnZ2d@earthlink.com...

< snip >

> It may not take too much antenna.

It doesn't.

I have two converter boxes, one Magnavox, one Zenith. I just now tried my local stations with them using a straight 24-inch alligator clip lead as the antenna. Location is a residential garage in the San Diego suburbs. Stucco walls, metal garage door closed, overhead fluorescent lights on. Transmitters in three different locations.

All the UHF locals came in, 10 transmitters with about twenty total programs. The one low-power VHF did not. Looping the clip lead back and clipping the end to the F-connector produced about the same results. (Lost one TJ station.)

When I "upgraded" to a POS 2-bay bowtie in the rafters (about 8 feet up), all eleven locals came in, plus KCBS from LA . On the Zenith box, arguably a better unit, I got two more LA channels, although one of them had some intermittent freezing and tiling.

If even poor antennas work well, why all the whining?

"Sal"
(KD6VKW)

4539. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 06:19:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <741bd972-08e5-469c-937c-08220e950ca5@35g2000pry.googlegroups.com>
Source record: 20062

On Nov 20, 7:47 pm, Steve <sdanie...@speakeasy.net> wrote:
> I've seen several programs that will help you calculate the precise
> dimensions of a single-turn loop, given the composition of the
> radiating element, its thickness, and so on. However, none of these
> programs are written to cover the case of a two or more-turn loop.
>
> Does anyone know of a program that will offer guidance in the
> construction of a two or more-turn loop?
>
> Thanks,
>
> Steve

Search for Reg Edwards programs. RJELOOP3 is probably what you want.
I'm assuming here that you're talking about loops that are very small
compared with a wavelength, which may offer advantages as receiving
antennas for low frequencies.

Cheers,
Tom

4540. WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 07:38:50 UTC
From: DaveC <me@bogusdomain.net>
Message-ID: <0001HW.C54BA58A0075A070B01AD9AF@news.sf.sbcglobal.net>
Source record: 20063
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

Looking for outdoor omni "whip" antenna for 2.4 GHz.

Is there any reason to not go for the greatest gain antenna, given that cost
is not too important (within reason)?

There are scads of these on the 'net. I'm looking for someone who has
experience with one or more of them and can make a recommendation for one.

Thanks,
--
DaveC
me@bogusdomain.net
This is an invalid return address
Please reply in the news group

4541. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 08:15:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg5qnadfh2@news.albasani.net>
Source record: 20064

DaveC wrote:
> Looking for outdoor omni "whip" antenna for 2.4 GHz.
>
> Is there any reason to not go for the greatest gain antenna, given that cost
> is not too important (within reason)?
>
> There are scads of these on the 'net. I'm looking for someone who has
> experience with one or more of them and can make a recommendation for one.
>
> Thanks,

There are 1/2 wave antennas on the market which do a decent job. I have found their biggest problem is the coax the manufacturer ships with them--too low of quality and too short.

Here is an article on one you can homebrew yourself, from ANY USB wifi card:
http://tinyurl.com/6xdfav

-- or --

How about one of these?:

http://tinyurl.com/5ocovb

used with a 25 ft. USB extension cable, I use it when traveling. Plus, you bypass the need for expensive/lossy SHF coax ...

Regards,
JS

4542. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 08:40:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg5s6cfaq1@news.albasani.net>
Source record: 20065

DaveC wrote:
> Looking for outdoor omni "whip" antenna for 2.4 GHz.
>
> Is there any reason to not go for the greatest gain antenna, given that cost
> is not too important (within reason)?
>
> There are scads of these on the 'net. I'm looking for someone who has
> experience with one or more of them and can make a recommendation for one.
>
> Thanks,

To be complete, here is an example of a 1/2 external with sma connector
and 9 ft. length of coax. Notice, they DO NOT mention what the
attenuation factor for the coax is ... :-(

http://tinyurl.com/653n5y

Regards,
JS

4543. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 08:53:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg5sth$fn8$1@news.albasani.net>
Source record: 20066

DaveC wrote:

>
> There are scads of these on the 'net. I'm looking for someone who has
> experience with one or more of them and can make a recommendation for one.
>
> Thanks,

And, these are probably what you are looking at on the net?

http://tinyurl.com/5kg4cz

or

http://tinyurl.com/5gtjmg

Regards,
JS

4544. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 11:28:18 UTC
From: exray <radioexray@geeemail.com>
Message-ID: <gg660n021nt@news4.newsguy.com>
Source record: 20067
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

DaveC wrote:
> Looking for outdoor omni "whip" antenna for 2.4 GHz.
>
> Is there any reason to not go for the greatest gain antenna, given that cost
> is not too important (within reason)?
>
> There are scads of these on the 'net. I'm looking for someone who has
> experience with one or more of them and can make a recommendation for one.
>
> Thanks,

Hi, not actually 2.4 Gig WiFi but cellular wireless modem card. I
bought one of the small verticals with a magnet mount and cabling for
about $15 ppd as I recall. My situation is that my house is built with
concrete/rebar construction, metal 'persiana' windows and screens and
its hard to get a signal out of here even on the various cellular bands.
I think the highest band there is 1.8 GHz.

I didn't go for gain since the path to the site is only about 1.3 miles
away so I opted for the little guy, about 7 inches tall, that just sits
on the roof. On the other hand, a friend in a different location got
himself into all sorts of problems with reflections and multiple tower
sites and is now looking for a directional antenna to minimize the clutter.

Another consideration is the vertical angle between you and the site.
The "high gain" verticals (I've seen ones claiming 14db) have a rather
flattened omni pattern so that if you have to look upwards to your
intended site you might find the gain to be considerably less, if any.

GL,
Bill
Vieques, PR

4545. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 11:38:42 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <7bd19706-56cf-40d8-ad07-8456aced2a9a@k19g2000yqg.googlegroups.com>
Source record: 20068

On 21 nov, 04:47, Steve <sdanie...@speakeasy.net> wrote:
> I've seen several programs that will help you calculate the precise
> dimensions of a single-turn loop, given the composition of the
> radiating element, its thickness, and so on. However, none of these
> programs are written to cover the case of a two or more-turn loop.
>
> Does anyone know of a program that will offer guidance in the
> construction of a two or more-turn loop?
>
> Thanks,
>
> Steve

Hello Steve,

You probably did some loop calculations and found that in a transmit case the voltage across the tuning capacitor is very high (and bandwidth is limited). Also for small loops, most input power is lost as heat due to copper resistance.

When you make a two turn loop, the radiation resistance will increase with factor 4. So with half the current through the loop, the radiated power is same (as for a single turn loop). When the 2 turns of the loop are relative close together, the inductance increases with factor 4, hence the reactance.

The current has been halved, but because of the reactance, the voltage across the tuning capacitance will be 2 times the value for the single turn loop with higher probability on corona effects. An advantage can be an almost 4 times smaller tuning capacitor.

One may expect that the loss resistance due to heat of a two-turn inductor will be twice as high (w.r.t. single turn case). This is not true; the loss resistance will be more then twice as high because of proximity effect. The current will not equally distribute along the circumference of the tube/wire. So the efficiency of the loop will be less then twice as high (w.r.t. single turn case).

When the turns are far apart (with respect to wire/tube diameter), inductance will not be 4 times higher and proximity effect will be less. You will get better performance than the single turn loop made of same diameter tube/wire. The result will be the same as when you place the two turns in parallel. Inductance will decrease somewhat (hence lower voltage across capacitor), AC resistance also, hence radiation efficiency).

There is an "however". When you make a single turn loop from flat strip that has the same width as the length of your two-turn loop, you will notice: 1. reduced AC resistance (because of the significantly larger circumference of the flat strip with respect to a thin round tube, 2. inductance will decrease (H field lines have to take a longer path around the wide strip), 3. radiation resistance will not change with respect to a single turn loop from wire/tube.
This results in higher efficiency and increased bandwidth. The overall result will be better then for your two-turn loop. I think that is the reason why most programs are for single turn loops.

So for the transmit case, given fixed diameter of your loop, the larger the copper surface (=length*circumference), the better the efficiency. Best thing to enhance conductor surface is to use very wide flat strip (high wind load), or multiple wires (with some spacing in between) in parallel (limited wind load).

Off course for the receive-only case, a multi turn loop can be helpful as you can use a smaller tuning capacitor.

Best regards,

Wim
PA3DJS
www.tetech.nl
In case of PM, don't forget to remove abc.

4546. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 12:15:38 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <JAxVk.67215$kh2.53337@bignews3.bellsouth.net>
Source record: 20069

<nm5k@wt.net> wrote in message
news:5663a554-4004-437a-98dc-02695f93ffb3@o4g2000pra.googlegroups.com...
On Nov 20, 2:15 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:

>
> Ed, N2ECW

Hummm. New call I see...
I liked the old one better, but of course, I'm biased.. :/

Actually, I went back to my original Technician thru Advanced callsign. I'm tired of repeating nm2k fifty different ways from Sunday and then they still can't say it because they learned the alphabet with mn in that order and not nm. On CW they think I'm finished sending with the K at the end of nm2k, then they ask me what kind of callsign is nm2?

Besides, my wife and I had/have consecutive callsigns with N2ECV and N2ECW.

I had nm2k for 23 years. Now it is someone elses turn. <G>

Ed Cregger, N2ECW

4547. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 12:18:37 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <sGxVk.7572$x%.6711@nlpi070.nbdc.sbc.com>
Source record: 20070
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Roy Lewallen wrote:
> Rich Grise wrote:
>> On Wed, 19 Nov 2008 22:53:28 -0800, Richard Clark wrote:
>>> . . .
>>> 73's
>>
>> "Best Regardses"? ;-)
>
> No, that's "Best Regards's". It's the possessive, not plural, form of
> "Best Regards". I think the grammar is part of the same dialect as the
> verb "destinate" (as in "I've just destinated"), but you'd have to ask
> Richard about that -- he's the one with the English Lit degree.

My Webster's unabridged dictionary gives the following
examples of the correct way to pluralize numbers.

"figure 8's", "the 1890's", "the 20's"

73 is a number that stands for "Best Regards"

73's would be "Lots of Best Regards".
--
73, Cecil http://www.w5dxp.com

4548. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 12:28:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <TPxVk.7573$x%.7189@nlpi070.nbdc.sbc.com>
Source record: 20071
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Roy Lewallen wrote:
> Sorry, it doesn't. Among the claims, trolls for investors, and
> testimonials, where is the quantitative data showing that a fractal
> antenna is in any way better than a bow tie, in what ways, and how much?
> In other words, exactly where is the evidence on which you based your
> statement?

http://ieeexplore.ieee.org/Xplore/login.jsp?url=/iel5/10686/33800/01610336.pdf?arnumber=1610336

If you are a member of IEEE, you can access this paper:

Multiband behavior of wideband Sierpinski fractal bow-tie antenna
Yamini, A.H.; Soleimani, M.
Microwave Conference, 2005 European
Volume 3, Issue , 4-6 Oct. 2005 Page(s): 4 pp. -
Digital Object Identifier 10.1109/EUMC.2005.1610336
--
73, Cecil http://www.w5dxp.com, IEEE

4549. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 12:36:32 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <fXxVk.7574$x%.7086@nlpi070.nbdc.sbc.com>
Source record: 20072
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Sal M. Onella wrote:
> If even poor antennas work well, why all the whining?

I've not had any problems with the UHF circular loop
that comes with standard rabbit ears. The only problem
I've had is with VHF channels on the dipole. I need
a weatherproof version of my RS rabbit ears.
Unfortunately, ABC is Channel 7 here in Tyler, TX.
--
73, Cecil http://www.w5dxp.com

4550. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 12:55:35 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <f2f87ea7-225f-4076-b065-7d87e13fbab6@s20g2000yqh.googlegroups.com>
Source record: 20073

On Nov 21, 12:32 am, Richard Clark <kb7...@comcast.net> wrote:
> On Thu, 20 Nov 2008 19:47:24 -0800 (PST), Steve
>
> <sdanie...@speakeasy.net> wrote:
> >However, none of these
> >programs are written to cover the case of a two or more-turn loop.
>
> Hi Steve,
>
> For transmit, there's nothing to "gain" by it.
>
> Success generally floods the marketplace and few complain about not
> finding resources to make a knock-off.
>
> 73's
> Richard Clark, KB7QHC

Yes, I know there's nothing to gain in terms of performance. However, I have very little space to work with. I have a 1 meter diameter loop installed in my (tiny) attic that works very respectably on 10-30 meters. It won't get me onto 40 meters, though, and getting onto 40 is either going to require a much larger diameter single-turn loop, a two-turn loop, or a much more robust capacitor. Trying out a two-turn loop seems like it would be the easiest and least expensive alternative, and I already have the copper tubing I would need.

4551. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 13:53:08 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <33zVk.7624$yr3.2157@nlpi068.nbdc.sbc.com>
Source record: 20074

Ed Cregger wrote:
> On CW they think I'm finished sending with the K at the end of nm2k,
> then they ask me what kind of callsign is nm2?

I had a similar problem with KG7BK.
--
73, Cecil http://www.w5dxp.com

4552. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 14:00:09 UTC
From: Bill Kearney <wkearney99@hotmail.com>
Message-ID: <FfCdnaXCtoZ3I7vUnZ2dnUVZ_gydnZ2d@speakeasy.net>
Source record: 20075
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

"DaveC" <me@bogusdomain.net> wrote in message
news:0001HW.C54BA58A0075A070B01AD9AF@news.sf.sbcglobal.net...
> Looking for outdoor omni "whip" antenna for 2.4 GHz.

Whip antenna? What is this, for a vehicle? For a stationary location it seems like it'd be an extremely bad idea to use an antenna that 'whipped' around.

> Is there any reason to not go for the greatest gain antenna, given that
> cost
> is not too important (within reason)?

Alligator effect. Wide mouth receiving everything. If you don't need to pickup everything then why bother? It just makes it harder for your WiFi router to cut through all the noise of distant stations it doesn't communicate with. Get the right antenna suited for your installation, no more, no less.

Which leads to the constant request, when you ask a question POST WHAT GEAR YOU'RE USING.

In your case it would also help to define what sort of connection you're trying to make. Point to point, metropolitan, etc.

-Bill Kearney

4553. Re: FA: R-390A built by ECA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 14:19:32 UTC
From: Dave <dave@dave.dave>
Message-ID: <4926c374$0$31141$bd467cd0@news.dslextreme.com>
Source record: 20076
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

```
Tim Shoppa wrote:
> On Nov 20, 9:54 am, Dave <d...@dave.dave> wrote:
>> Tim Shoppa wrote:
>>> On Nov 20, 8:46 am, Dave <d...@dave.dave> wrote:
>>>> K wrote:
>>>>> FA: An excellent R-390A built by ECA
>>>>> http://tinyurl.com/6ydbsg
>>>> What's the green thing by the headphone jack?
>>> A very common modification, especially by the Navy, was to add a jack
>>> there to monitor the diode load voltage, this makes their regular
>>> maintenance much much easier. NAVSHIPS-0967-063-2140 documents this.
>>> Tim N3QE
>> The NAVSHIPS document states that a Dymo label should be affixed by the
>> jack.
>
> Related to your other comment, I think that the one on the E-place has
> been repainted.
>
> My yellow striper came with the decades-old Dymo stickers still
> attached. I swear the glues in modern Dymo labels aren't as good.
>
> Tim.
But the P-touch makes suitable substitutes that look great and adhere
very well.
```

4554. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 14:22:37 UTC
From: Dave <dave@dave.dave>
Message-ID: <4926c42d$0$31141$bd467cd0@news.dslextreme.com>
Source record: 20077
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> On Thu, 20 Nov 2008 13:50:57 +0000, Dave wrote:
>> Log periodics are not necessary for sub-octave operation.
>>
>> http://www.youtube.com/watch?v=EWQhlmJTMzw
>
> Dude! Awesome! And this one doesn't even have a reflector!. I
> wonder how far I should hang it in front of the venetian blind. ;-)
>
> Thanks!
> Rich
>
>
I don't have time to search for it, but there's also a dual quad UHF TV
antenna that's easy to build with the same kind of materials. I prefer
steel tie wire to coat hangers because it's easier to work with.

4555. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 14:24:40 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <JqzVk.68566$Ep1.21112@bignews2.bellsouth.net>
Source record: 20078

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:33zVk.7624$yr3.2157@nlpi068.nbdc.sbc.com...
> Ed Cregger wrote:
>> On CW they think I'm finished sending with the K at the end of nm2k, then
>> they ask me what kind of callsign is nm2?
>
> I had a similar problem with KG7BK.
> --
> 73, Cecil http://www.w5dxp.com

I believe it, Cecil.

Besides, it's something different to do (changing callsigns). I was on the fence when I asked for a change originally. I liked N2ECW. It sounds good phonetically too.

Ed, N2ECW

4556. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 14:26:00 UTC
From: Dave <dave@dave.dave>
Message-ID: <4926c4f8$0$31141$bd467cd0@news.dslextreme.com>
Source record: 20079
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

```
Bill Kearney wrote:
> "DaveC" <me@bogusdomain.net> wrote in message
> news:0001HW.C54BA58A0075A070B01AD9AF@news.sf.sbcglobal.net...
>> Looking for outdoor omni "whip" antenna for 2.4 GHz.
>
> Whip antenna? What is this, for a vehicle? For a stationary location it
> seems like it'd be an extremely bad idea to use an antenna that 'whipped'
> around.
>
>> Is there any reason to not go for the greatest gain antenna, given that
>> cost
>> is not too important (within reason)?
>
> Alligator effect. Wide mouth receiving everything. If you don't need to
> pickup everything then why bother? It just makes it harder for your WiFi
> router to cut through all the noise of distant stations it doesn't
> communicate with. Get the right antenna suited for your installation, no
> more, no less.
>
> Which leads to the constant request, when you ask a question POST WHAT GEAR
> YOU'RE USING.
>
> In your case it would also help to define what sort of connection you're
> trying to make. Point to point, metropolitan, etc.
>
> -Bill Kearney
>
>
Short Pringle's can, 1/4 wave probe, 1/2 wave from closed end, soldered
to female TNC.
```

4557. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 14:43:44 UTC
From: mpm <mpmillard@aol.com>
Message-ID: <cb7b371c-e564-49e1-b39e-bff0dfcfe3c3@v13g2000yqm.googlegroups.com>
Source record: 20080
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 21, 7:36 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Sal M. Onella wrote:
> > If even poor antennas work well, why all the whining?
>
> I've not had any problems with the UHF circular loop
> that comes with standard rabbit ears. The only problem
> I've had is with VHF channels on the dipole. I need
> a weatherproof version of my RS rabbit ears.
> Unfortunately, ABC is Channel 7 here in Tyler, TX.
> --
> 73, Cecil http://www.w5dxp.com

Now that the FCC has given a green light to whitespace device deployments (particularly those that rely solely on spectrum-sensing technology), you may find you need a better antenna than a simple loop, bowtie or coat hanger.

For those of you who are not following the issue, a quote in this week's TV Technology pretty much sums it up:

"MSTV (Maximum Service Television) told the Commission Oct 31 that the least the FCC could do is subject the devices to rigorous testing beforehand and ensure fair and reliable tests to prevent interference to DTV. In a filing, MSTV also attacked the FCC proposal that a device should be able to detect signals as low as -114 dBm, a level MSTV equated with setting a smoke detector to only be able to detect a raging fire."

Whitespace devices will also cause great harm to wireless microphones, particularly older models.

-mpm

4558. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 14:52:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg6hv2$ct7$1@news.albasani.net>
Source record: 20081

Bill Kearney wrote:

> ...
> In your case it would also help to define what sort of connection you're
> trying to make. Point to point, metropolitan, etc.
>
> -Bill Kearney

His original post began, "Looking for outdoor omni "whip" antenna for
2.4 GHz. "

Now, why can't I make any sense out of your post, in relationship to
his? "Omni" has more than one meaning?

Regards,
JS

4559. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 15:02:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg6ij2dnp1@news.albasani.net>
Source record: 20082

Cecil Moore wrote:

> ...
> My Webster's unabridged dictionary gives the following
> examples of the correct way to pluralize numbers.
>
> "figure 8's", "the 1890's", "the 20's"
>
> 73 is a number that stands for "Best Regards"
>
> 73's would be "Lots of Best Regards".

A friend of mine is a dispatcher for police/fire/ambulance/etc., in my area. Her 10 code often requires her to use the "10-73" from this ten code--which is a "smoke report."

So, thanks for clarifying this for me. I simply took the 73's on many of the posts sigs as a sign they were "blowing smoke" (actually, "Lots of smoke!" :-)), and giving me fair warning! <straight-face>

Regards,
JS

4560. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 15:19:00 UTC
From: zekfrivo@zekfrivolous.com
Message-ID: <gg6jh3$637$1@usenet01.srv.cis.pitt.edu>
Source record: 20083
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <dNudnRgx2fJVmrvUnZ2dnUVZ_rmdnZ2d@posted.easystreetonline>, Roy Lewallen <w7el@eznec.com> wrote:
>
>
>Rich Grise wrote:
>> On Thu, 20 Nov 2008 15:30:26 -0800, Roy Lewallen wrote:
>>> GregS wrote:
>>>> Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide
>>>> band. It could be improved by making it a full fractal.
>>> That's interesting. In what way(s) is it improved by making it fractal?
>>> How much is the improvement? Can you point me to a reference about this
>>> which gives some quantitative data?
>>>
>>
>>
> http://www.google.com/search?hl=en&q=%22fractal+antennas%22&btnG=Google+Search
>&aq=f&oq=
>>
>> Hope This Helps!
>> Rich
>
>Sorry, it doesn't. Among the claims, trolls for investors, and
>testimonials, where is the quantitative data showing that a fractal
>antenna is in any way better than a bow tie, in what ways, and how much?
>In other words, exactly where is the evidence on which you based your
>statement?
>
>Roy Lewallen, W7EL

I don't have data. I think the home made TV antenna in the video, is very much like a bow tie,
and could have better bandwidth by making the elements different lengths. The gain factor is going to be narrow band since the feed length is constant. I would have also used 12ga copperweld or solid copper. You can also get closer to fractal by using many more different sized elements.

greg

4561. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 15:44:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1be8a00c-5ee4-4dd4-a084-d3ae12effa28@t2g2000yqm.googlegroups.com>
Source record: 20084

On Nov 21, 5:38 am, Wimpie <wimabc...@tetech.nl> wrote:
> On 21 nov, 04:47, Steve <sdanie...@speakeasy.net> wrote:
>
> > I've seen several programs that will help you calculate the precise
> > dimensions of a single-turn loop, given the composition of the
> > radiating element, its thickness, and so on. However, none of these
> > programs are written to cover the case of a two or more-turn loop.
>
> > Does anyone know of a program that will offer guidance in the
> > construction of a two or more-turn loop?
>
> > Thanks,
>
> > Steve
>
> Hello Steve,
>
> You probably did some loop calculations and found that in a transmit
> case the voltage across the tuning capacitor is very high (and
> bandwidth is limited). Also for small loops, most input power is lost
> as heat due to copper resistance.
>
> When you make a two turn loop, the radiation resistance will increase
> with factor 4. So with half the current through the loop, the radiated
> power is same (as for a single turn loop). When the 2 turns of the
> loop are relative close together, the inductance increases with factor
> 4, hence the reactance.
>
> The current has been halved, but because of the reactance, the voltage
> across the tuning capacitance will be 2 times the value for the single
> turn loop with higher probability on corona effects. An advantage can
> be an almost 4 times smaller tuning capacitor.
>
> One may expect that the loss resistance due to heat of a two-turn
> inductor will be twice as high (w.r.t. single turn case). This is not
> true; the loss resistance will be more then twice as high because of
> proximity effect. The current will not equally distribute along the
> circumference of the tube/wire. So the efficiency of the loop will be
> less then twice as high (w.r.t. single turn case).
>
> When the turns are far apart (with respect to wire/tube diameter),
> inductance will not be 4 times higher and proximity effect will be
> less. You will get better performance than the single turn loop made
> of same diameter tube/wire. The result will be the same as when you

> place the two turns in parallel. Inductance will decrease somewhat
> (hence lower voltage across capacitor), AC resistance also, hence
> radiation efficiency).
>
> There is an "however". When you make a single turn loop from flat
> strip that has the same width as the length of your two-turn loop, you
> will notice: 1. reduced AC resistance (because of the significantly
> larger circumference of the flat strip with respect to a thin round
> tube, 2. inductance will decrease (H field lines have to take a longer
> path around the wide strip), 3. radiation resistance will not change
> with respect to a single turn loop from wire/tube.
> This results in higher efficiency and increased bandwidth.   The
> overall result will be better then for your two-turn loop. I think
> that is the reason why most programs are for single turn loops.
>
> So for the transmit case, given fixed diameter of your loop, the
> larger the copper surface (=length*circumference), the better the
> efficiency. Best thing to enhance conductor surface is to use very
> wide flat strip (high wind load), or multiple wires (with some spacing
> in between) in parallel (limited wind load).
>
> Off course for the receive-only case, a multi turn loop can be helpful
> as you can use a smaller tuning capacitor.
>
> Best regards,
>
> Wim
> PA3DJSwww.tetech.nl
> In case of PM, don't forget to remove abc.

Seems to me you are recommending the "?slinky" !
Is that correct?
Art

4562. FS Miracle Whip/Lower Price

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 15:46:58 UTC
From: Charlie Hugg <k5mbx@sbcglobal.net>
Message-ID: <SJAVk.7638$yr3.5420@nlpi068.nbdc.sbc.com>
Source record: 20085

FS: As new Miracle Whip antenna for QRP 3.5 to 460Mhz. 57inch whip. This is the newer version and is about a year old, but used only a couple of times with my FT-817ND. It comes with the manual and receipt of purchase. Price is $89 plus shipping. New ones are $139. Thanks, Charlie Hugg, K5MBX

4563. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 15:52:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg6lf7$hg1$1@news.albasani.net>
Source record: 20086

Art Unwin wrote:

> ...
> Seems to me you are recommending the "?slinky" !
> Is that correct?
> Art

I believe, he is speaking of rotating the flat surfaces of the
conductor(s) 90 degrees to what a "slinkys'" orientation places them at.

In which case, "mondo-capacitive loading to the 'environment'" is also
introduced ... while minimizing capacitive loading between turns.

Regards,
JS

4564. Re: FS Miracle Whip/Lower Price

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 15:58:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg6ls4$i12$1@news.albasani.net>
Source record: 20087

Charlie Hugg wrote:
> FS: As new Miracle Whip antenna for QRP 3.5 to 460Mhz. 57inch whip. This is
> the newer version and is about a year old, but used only a couple of times
> with my FT-817ND. It comes with the manual and receipt of purchase. Price is
> $89 plus shipping. New ones are $139. Thanks, Charlie Hugg, K5MBX

Yeah, got ya':

http://www.miracleantenna.com/MiracleWhip.html

and, here is one guys' version of it (don't know as it would handle the
"full five-watts", however :-)):

http://www.qsl.net/kl7r/mw.html

just for "clarity", mind you ...

Regards,
JS

4565. Re: FS Miracle Whip/Lower Price

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 16:16:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg6ms5jck1@news.albasani.net>
Source record: 20088

John Smith wrote:

> ...
> Yeah, got ya':
>
> http://www.miracleantenna.com/MiracleWhip.html
>
> and, here is one guys' version of it (don't know as it would handle the
> "full five-watts", however :-)):
>
> http://www.qsl.net/kl7r/mw.html
>
> just for "clarity", mind you ...
>
> Regards,
> JS
>

Personally, I have my own version, it uses a fixed resistor (you will
need to use a fixed ascii font to view it properly):

```
---
|
| <<-- telescoping whip
|
|
|---------------------- <<---
/ |-------------- coax
\ |_______________ <<--
/ <<----- 50 ohm, five-watt or better non-inductive
\ |
/ |
| |
----- ---
--- - <<-- ground
-
```

Much superior design! No moving parts. And, for the low price of
$49.99 USD, I will personally construct one for ya' and even pay the
shipping! LIFETIME GUARANTEE TO BOOT! :-)

If you need a different impedance than 50 ohm, just state so in a note,
along with your check! :-P

Sorry the ascii text does not convey just what a miracle this antenna is!

Regards,
JS

4566. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 16:26:27 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <Of-dnbeJSuekfLvUnZ2dnUVZ8o2dnZ2d@bt.com>
Source record: 20089

"NoSPAM" <unknown@nospam.org> wrote in message news:gg4vta$ci6$1@aioe.org...
>
> "Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
> news:HfnVk.345109$vK2.41424@en-nntp-03.dc1.easynews.com...
>> Thanks for the details, Barry... tell me though, then, is a discone just
>> a biconical with a ground plane used to create the (image of the) missing
>> cone?
>
> Yes. It will have less gain than a biconical and the bandwidth is
> slightly more restrictive too. But it is much easier to construct!
>
> 73, Barry WA4VZQ

All else being equal, a lossless 'ground plane' type antenna, be it a monopole developed from a dipole or a discone developed from a biconical dipole, over an infinite ground plane should exhibit 3 dB _more_ gain than the symmetrical 'parent' form of antenna. This is because its radiation pattern is limited to half the solid angle of the parent (e.g. only the space above the ground plane). Then for a given number of watts fed into the antenna, the power-flux density must be greater in the region where it can radiate. In practice, the ground plane isn't infinite so there is some 'undercutting' of the vertical radiation pattern, but the gain should still be somewhat greater.

The apex angle of the cone in a discone can be chosen to yield 50 ohms terminal resistance over part of its usable bandwidth, and that angle is different from the apex angle(s) needed in a biconical dipole for the same impedance. The usable bandwidth is always limited by the limited flare-length of the cone(s) and usually also by the accuracy of the apex or apices where termination is made.

Chris

4567. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 16:34:20 UTC
From: richardharrison@webtv.net
Message-ID: <15198-4926E30C-2944@storefull-3253.bay.webtv.net>
Source record: 20090

Art wrote:
"The Physics World states that displacement current does not exist with respect to radiation---."

Who and where?

Be reasonable. Free space is normally nonconductive. It is a good insulator or dielectric. Light is by all accounts an electrromagnetic radiation. We readily see light from sources throughout space.

Michael Faraday (1791- 1867) wrote:
E = F/Q where E & F are parallel vectors. E = the electric field strength in force per unit charge and F is measured in newtons per coulomb.

Electric charges` force on each other are readily measured. Likewise, magnetic forces` influence on each other and upon electric charges are readily measured.

Radio waves as Terman says:
"---travel with the speed of light and consist of magnetic and electrostatic fields at right angles to each other and to the direction of travel."

Electrostatic does not mean stationary.

There are no conductors in space suited to support an electric current for wave propagation, therefore it is the invisible but readily measurable electric and magnetic fields which invoke action at great distances.

Best regards, Richard Harrison, KB5WZI

4568. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 16:42:46 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <hI2dnQcFH7-ReLvUnZ2dnUVZ8sGdnZ2d@bt.com>
Source record: 20091

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:14250-49259EA6-522@storefull-3251.bay.webtv.net...
> Art wrote:
> "I am not saying that displacement current travels in the center but I
> ask those educated in this field if displacement current has been
> observed, measured and is present Beyond Doubt?"
>
> Yes.
>
> Displacement current is proportional to the rate of change of the
> electric field. It moves at right angles to the direction of
> propagstion.
>
> Like charges repel without electrical conduction so a capacitor passes
> ac while blocking dc.
>
> A standing wave antenna stores energy in the magnetic field near its
> center during one half of the cycle and in the electric fields near its
> ends during the other half cycle.

No, a 'standing wave' antenna stores energy in a magnetic field that has peak intensity at the positive and negative peaks of current, and energy in an electric field that has peak intensity at the positive and negative peaks of voltage. Energy is stored in both fields throughout each cycle (except at the zero crossings of current and voltage, of course) and for the fields associated with radiation the peaks of current and voltage occur at the same times. For a dipole-type antenna, both fields occupy the region of space surrounding the antenna elements. The magnetic field is strongest near the part of the antenna where the current is greatest, the centre of a dipole (with length up to half a wavelength) as stated above, but the electric field is not necessarily stronger near the ends of a dipole's elements - it is developed between them. The formulae for all the field strengths can be found in reliable text books such as Kraus 'Antennas'.

Chris

> Dielectric displacement is the electrical strain which occurs in a
> dielectric medium when an electric field is applied. It is analogous to
> the magnetic flux density and is expressed in charge per unit area or
> coulombs per aquare meter.
>
> J.C. Maxwell speculated displacement current produces magnetic lines of
> force same as conduction current does, therefore an alternating magnetic
> field would produce an alternating electric field and so on ad
> infinitum. This was the key to electromagnetic radiation. Hertz later

> proved Maxwell correct in the laboratory.
>
> Best regards, Richard Harrison, KB5WZI
>

4569. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 16:46:54 UTC
From: JB <nospam@goofball.net>
Message-ID: <2CBVk.23$QX3.20@nwrddc02.gnilink.net>
Source record: 20092

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gg5qnadfh2@news.albasani.net...
> DaveC wrote:
> > Looking for outdoor omni "whip" antenna for 2.4 GHz.
> >
> > Is there any reason to not go for the greatest gain antenna, given that
cost
> > is not too important (within reason)?
> >
> > There are scads of these on the 'net. I'm looking for someone who has
> > experience with one or more of them and can make a recommendation for
one.
> >
> > Thanks,
>
> There are 1/2 wave antennas on the market which do a decent job. I have
> found their biggest problem is the coax the manufacturer ships with
> them--too low of quality and too short.
>
> Here is an article on one you can homebrew yourself, from ANY USB wifi
> card:
> http://tinyurl.com/6xdfav
>
> -- or --
>
> How about one of these?:
>
> http://tinyurl.com/5ocovb
>
> used with a 25 ft. USB extension cable, I use it when traveling. Plus,
> you bypass the need for expensive/lossy SHF coax ...
>
> Regards,
> JS

I concur. I like the Huntgate solution but prefer to use Ethernet for the
run. However, there is a problem with using a high gain omni antenna in an
urban area where there is a lot of channel loading. Your throughput drops
because you are spending a lot of time with collision avoidance. This might
work at night, but not if everyone leaves their wireless up all the time.

WiFi was meant to be short range. When you improve your range, you compound
your interference problem exponentially. If you use a Pringles can you have
a big advantage because it is as if you moved your low gain antenna closer
to the AP but you still have the problem of the connections the AP hears but

you don't hear and can't avoid colliding with. At least you aren't being bombarded with broadcasts.

Simply put, there are limitations to performance when you put yourself in a crowded situation.

4570. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 16:51:42 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <54716600-04ed-4eed-8bca-25db5ba8055c@c1g2000yqg.googlegroups.com>
Source record: 20093

On Nov 21, 9:52 am, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > Seems to me you are recommending the "?slinky" !
> > Is that correct?
> > Art
>
> I believe, he is speaking of rotating the flat surfaces of the
> conductor(s) 90 degrees to what a "slinkys'" orientation places them at.
>
> In which case, "mondo-capacitive loading to the 'environment'" is also
> introduced ... while minimizing capacitive loading between turns.
>
> Regards,
> JS

Wouldn't that take more room than a slinky per turn?
His attic is very small!.I think he would be much better placing the
turns as close together as possible
to obtain axial directivity. The only mod required to the slinky is to
ensure the number of right hand turn loop
are equal to the number of left hand turned loops. Feed could still
be at the center and depending on the amount
of wire used it would radiate like a dipole or axially. What this does
is cancel the lumped loads created in manufacture which
Wim suggests is a problem ie the two supposedly lumped loads will
cancel
such that you have several wavelengths of wire helix style and no or
repetitive points of none reactive impedances. He could ofcourse
place
the windings in a vertical direction to obtain an omnidirectional
pattern and utilise the available room to a maximum.
A lot depends on what frequencies he wishes to use as to what form the
radiator becomes.
Best regards
Art

4571. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 17:14:12 UTC
From: JB <nospam@goofball.net>
Message-ID: <E%BVk.36$us6.21@nwrddc01.gnilink.net>
Source record: 20094
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

> If you are a member of IEEE, you can access this paper:
>
> Multiband behavior of wideband Sierpinski fractal bow-tie antenna

And if you aren't a member, you aren't in on the joke?

With all the added capacitance to the elements, I have little doubt that there would be lots of resonance's, and it would be cool to choose the geometry to bring about the proper feed point impedances, but these things can never be gainful with all the losses introduced.

Neat idea for specific applications like little pocket toys, but certainly not the answer to everything.

I wonder how the Limo's will deal with DTV in motion.

4572. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 17:39:22 UTC
From: JB <nospam@goofball.net>
Message-ID: <enCVk.44$us6.11@nwrddc01.gnilink.net>
Source record: 20096
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

> I don't have data. I think the home made TV antenna in the video, is very much like a bow tie,

Comparable to a 4 bay bowtie. Maybe 6db gain. Brazing rod would be a little lighter and wouldn't rust. Would work much with a reflecting plane and above the house clutter.

Twin lead could make a comeback since there won't be such a worry about the low band interference issue. Actually much less loss than coax. I may yet change over to 300 ohm window line on my bigazz deep fringe at 40ft and switch it to the ham shack for 6/2m SSB work and DTV DX. TV DX won't be dead, you will just have to know where to find it

4573. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 18:27:03 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <Z3DVk.253067$1p1.240397@en-nntp-08.dc1.easynews.com>
Source record: 20097
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"mpm" <mpmillard@aol.com> wrote in message
news:cb7b371c-e564-49e1-b39e-bff0dfcfe3c3@v13g2000yqm.googlegroups.com...
"Whitespace devices will also cause great harm to wireless microphones,
particularly older models."

Isn't the estimate that something like 90% of all wireless mics are being used
by folks who technically never had the authorization to use the spectrum
(...that is used...) is the first place? Something like how only radio and TV
stations had the authority to use the standard wireless mic frequencies, but
these days anyone doing professional sound for theater, sporting events, etc.
is also using those same frequencies?

4574. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 18:28:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o4vdi4h1rs4cbpgf5o734vt7l14h3p01t3@4ax.com>
Source record: 20098

On Fri, 21 Nov 2008 04:55:35 -0800 (PST), Steve
<sdaniel13@speakeasy.net> wrote:

>On Nov 21, 12:32ï¿½am, Richard Clark <kb7...@comcast.net> wrote:
>> On Thu, 20 Nov 2008 19:47:24 -0800 (PST), Steve
>>
>> <sdanie...@speakeasy.net> wrote:
>> >However, none of these
>> >programs are written to cover the case of a two or more-turn loop.
>>
>> Hi Steve,
>>
>> For transmit, there's nothing to "gain" by it.
>>
>> Success generally floods the marketplace and few complain about not
>> finding resources to make a knock-off.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Yes, I know there's nothing to gain in terms of performance. However,
>I have very little space to work with. I have a 1 meter diameter loop
>installed in my (tiny) attic that works very respectably on 10-30
>meters. It won't get me onto 40 meters, though, and getting onto 40 is
>either going to require a much larger diameter single-turn loop, a two-
>turn loop, or a much more robust capacitor. Trying out a two-turn loop
>seems like it would be the easiest and least expensive alternative,
>and I already have the copper tubing I would need.

Hi Steve,

As offered by another corespondent here, the work of Reg Edwards
revealed that a multiturn transmit loop, designed for "efficiency's
sake" is never as efficient as a single turn loop. There are, of
course, any number of alternative designs if you don't want
efficiency. Many of those designs are touted here in this group -
usually appended with hitherto unrealized advances the masters were
never aware of. Usually, the longer the thread, the poorer the
design.

You have already recognized the significant variables you would have
to attend to to go lower in frequency - it is not for the faint of
heart and the Q keeps climbing.

73's
Richard Clark, KB7QHC

4575. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 18:42:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l60ei419cei6e31or1g6m0rnga0qecu0gu@4ax.com>
Source record: 20099

On Fri, 21 Nov 2008 16:26:27 -0000, "christofire"
<christofire@btinternet.com> wrote:

>The apex angle of the cone in a discone can be chosen to yield 50 ohms
>terminal resistance over part of its usable bandwidth, and that angle is
>different from the apex angle(s) needed in a biconical dipole for the same
>impedance. The usable bandwidth is always limited by the limited
>flare-length of the cone(s) and usually also by the accuracy of the apex or
>apices where termination is made.

Hi Chris,

This needs heavy qualification, and probably too much such that a
graphical treatment would outweigh the words for contribution:
http://www.qsl.net/kb7qhc/antenna/Discone/discone.htm

73's
Richard Clark, KB7QHC

4576. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 19:00:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ddf052a9-4d37-43d9-8d6f-d9af00bcc083@j35g2000yqh.googlegroups.com>
Source record: 20100

On Nov 21, 10:51 am, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 21, 9:52 am, John Smith <assemblywiz...@gmail.com> wrote:
>
> > Art Unwin wrote:
> > > ...
> > > Seems to me you are recommending the "?slinky" !
> > > Is that correct?
> > > Art
>
> > I believe, he is speaking of rotating the flat surfaces of the
> > conductor(s) 90 degrees to what a "slinkys'" orientation places them at.
>
> > In which case, "mondo-capacitive loading to the 'environment'" is also
> > introduced ... while minimizing capacitive loading between turns.
>
> > Regards,
> > JS
>
> Wouldn't that take more room than a slinky per turn?
> His attic is very small!.I think he would be much better placing the
> turns as close together as possible
> to obtain axial directivity. The only mod required to the slinky is to
> ensure the number of right hand turn loop
> are equal to the number of left hand turned loops. Feed could still
> be at the center and depending on the amount
> of wire used it would radiate like a dipole or axially. What this does
> is cancel the lumped loads created in manufacture which
> Wim suggests is a problem ie the two supposedly lumped loads will
> cancel
> such that you have several wavelengths of wire helix style and no or
> repetitive points of none reactive impedances. He could ofcourse
> place
> the windings in a vertical direction to obtain an omnidirectional
> pattern and utilise the available room to a maximum.
> A lot depends on what frequencies he wishes to use as to what form the
> radiator becomes.
> Best regards
> Art

I forgot to mention that a similar type radiator is shown in Antenna
Applications
Reference Guide by Johnson and Jasik with slight modification. This
design was succeeded by the helix antenna
to obtain circular polarization which is now universal with respect to

space communications.
The beauty of this design is the multiplicity of resonant points and
the use of different frequencies.
The economy of space is some what altered by the need of multi
wavelength of wire because
of slow wave.but then it enables axial directivity. There are many
hams who are delighted by the slinky performance
and they are still sold in huge numbers to the ham community, so it
must be performing!
Art Unwin

4577. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 19:27:11 UTC
From: dplatt@radagast.org
Message-ID: <flejv5-g4v.ln1@radagast.org>
Source record: 19952
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

>Twin lead could make a comeback since there won't be such a worry about the
>low band interference issue. Actually much less loss than coax.

Maybe... when it's new, of the right type (e.g. tubular), clean, dry,
and carefully installed.

My understanding is that the performance of 300-ohm twinlead
installations tends to deteriorate significantly after a few years
(sunlight and ozone attacks the twinlead, and dirt and pollution
builds up) and during wet weather.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4578. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 19:28:59 UTC
From: Dave <noone@nowhere.com>
Message-ID: <%ZDVk.55$us6.33@nwrddc01.gnilink.net>
Source record: 19951

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:15198-4926E30C-2944@storefull-3253.bay.webtv.net...
> Art wrote:
> "The Physics World states that displacement current does not exist with
> respect to radiation---."
>
> Who and where?
>
> Be reasonable. Free space is normally nonconductive.

remember, art believes space is full of magic jumping diamagnetic levitating neutrinos, obviously they carry the charge so there is no need for displacement current, only the weak force.

4579. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 20:07:46 UTC
From: richardharrison@webtv.net
Message-ID: <18632-49271512-3008@storefull-3252.bay.webtv.net>
Source record: 19953

Chris wrote:
"The formulae for all the field strengths can be found in reliable books such as Kraus "Antennas"."

I agree.

On page 40 of Kraus` 3rd edition of "Antennas" is found:
"For a 1/2-wave dipole antenna, the energy is stored at one instant of time in the electric field, mainly near the ends of the antenna or maximum charge regions, while a 1/2-period later the energy is stored in the magnetic field mainly near the center of the antenna or maximum current region."

My preceding statement was before reading Kraus:
"A standing wave antenna stores energy in the magnetic field near its center during one half of the cycle and in the electric fields near its ends during the other half cycle."

My statement lacks clarity and precision. I am a poor engineer who has never worked as an educator. Chris` point? Close but no cigar? OK, I deserve the critism.

Best regards, Richard Harrison, KB5WZI

4580. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 20:14:56 UTC
From: zekfrivo@zekfrivolous.com
Message-ID: <gg74ru$6bu$1@usenet01.srv.cis.pitt.edu>
Source record: 19954
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <flejv5-g4v.ln1@radagast.org>, dplatt@radagast.org (Dave Platt) wrote:
>>Twin lead could make a comeback since there won't be such a worry about the
>>low band interference issue. Actually much less loss than coax.
>
>Maybe... when it's new, of the right type (e.g. tubular), clean, dry,
>and carefully installed.
>
>My understanding is that the performance of 300-ohm twinlead
>installations tends to deteriorate significantly after a few years
>(sunlight and ozone attacks the twinlead, and dirt and pollution
>builds up) and during wet weather.

Last time I used twinlead, except for fiddling around, was on the family
TV antenna installation using an Allied Radio Corodized VHF antenna,
with Beldon Super Permaohm 300 ohm shielded twinlead. Good stuff.

greg

4581. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 20:21:28 UTC
From: richardharrison@webtv.net
Message-ID: <18632-49271848-3011@storefull-3252.bay.webtv.net>
Source record: 19955

I wrote:
"---electric and magnetic fields which invoke action at great
distances."

I now think "evoke" should have been used in place of "invoke".

Best regards, Richard Harrison, KB5WZI

4582. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 20:47:29 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <24-dnW10ILb1g7rUnZ2dnUVZ8t3inZ2d@bt.com>
Source record: 19956

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:18632-49271512-3008@storefull-3252.bay.webtv.net...
> Chris wrote:
> "The formulae for all the field strengths can be found in reliable books
> such as Kraus "Antennas"."
>
> I agree.
>
> On page 40 of Kraus` 3rd edition of "Antennas" is found:
> "For a 1/2-wave dipole antenna, the energy is stored at one instant of
> time in the electric field, mainly near the ends of the antenna or
> maximum charge regions, while a 1/2-period later the energy is stored in
> the magnetic field mainly near the center of the antenna or maximum
> current region."
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> My preceding statement was before reading Kraus:
> "A standing wave antenna stores energy in the magnetic field near its
> center during one half of the cycle and in the electric fields near its
> ends during the other half cycle."
>
> My statement lacks clarity and precision. I am a poor engineer who has
> never worked as an educator. Chris` point? Close but no cigar? OK, I
> deserve the critism.
>
> Best regards, Richard Harrison, KB5WZI

I hardly dare to say it but, actually that's incorrect for the radiation field (which is what I wrote about). The radiation resistance of an antenna accounts for its ability to radiate power into the surrounding space and, like all other resistances, the peak of current co-insides with the peak of applied voltage - so one doesn't occur '1/2-period later' at all. What's described in the passage above is the situation in respect of the temporary storage of energy in the 'reactive near fields' corresponding to a reactive component of the terminal impedance, not the radiation resistance. I would expect the latter to be of greater importance to those interested in communication.

I wouldn't disagree with the statement that stored energy is concentrated in the regions near the 'maximum charge regions' but if you plot the equipotent lines around a dipole and equate the amount of energy stored to the electric field strength it illustrates that the spatial distribution of energy in the electric field is similar to that in the magnetic field ... as one might expect.

Chris

4583. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 21:00:00 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <a61df030-b558-469c-b069-2a873c19599d@w34g2000yqm.googlegroups.com>
Source record: 19957

On Nov 21, 2:00 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 21, 10:51 am, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
>
>
> > On Nov 21, 9:52 am, John Smith <assemblywiz...@gmail.com> wrote:
>
> > > Art Unwin wrote:
> > > > ...
> > > > Seems to me you are recommending the "?slinky" !
> > > > Is that correct?
> > > > Art
>
> > > I believe, he is speaking of rotating the flat surfaces of the
> > > conductor(s) 90 degrees to what a "slinkys'" orientation places them at.
>
> > > In which case, "mondo-capacitive loading to the 'environment'" is also
> > > introduced ... while minimizing capacitive loading between turns.
>
> > > Regards,
> > > JS
>
> > Wouldn't that take more room than a slinky per turn?
> > His attic is very small!.I think he would be much better placing the
> > turns as close together as possible
> > to obtain axial directivity. The only mod required to the slinky is to
> > ensure the number of right hand turn loop
> > are equal to the number of left hand turned loops. Feed could still
> > be at the center and depending on the amount
> > of wire used it would radiate like a dipole or axially. What this does
> > is cancel the lumped loads created in manufacture which
> > Wim suggests is a problem ie the two supposedly lumped loads will
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> > such that you have several wavelengths of wire helix style and no or
> > repetitive points of none reactive impedances. He could ofcourse
> > place
> > the windings in a vertical direction to obtain an omnidirectional
> > pattern and utilise the available room to a maximum.
> > A lot depends on what frequencies he wishes to use as to what form the
> > radiator becomes.
> > Best regards
> > Art

>
> I forgot to mention that a similar type radiator is shown in Antenna
> Applications
> Reference Guide by Johnson and Jasik with slight modification. This
> design was succeeded by the helix antenna
> to obtain circular polarization which is now universal with respect to
> space communications.
> The beauty of this design is the multiplicity of resonant points and
> the use of different frequencies.
> The economy of space is some what altered by the need of multi
> wavelength of wire because
> of slow wave.but then it enables axial directivity. There are many
> hams who are delighted by the slinky performance
> and they are still sold in huge numbers to the ham community, so it
> must be performing!
> Art Unwin- Hide quoted text -
>
> - Show quoted text -

Art, where did you get the idea a slinky had "axial directivity" at
40M. I hazard a guess that it was from reading about helix antennas.
The axial radiation is only true if the diameter of the helix is
fairly large, on the order of 1/pi wavelength usually.
This would be a huge antenna if designed for the frequency(40M) that
the OP was asking.
I can see how this misunderstanding led you to your shoebox
antenna.design.

Gee I hope you arent spending good money filing for a patent on that
thing. I understand that can cost a couple of thousand these days.
However it would be interesting to see you get it.

Jimmie

4584. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 21:01:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4ce64786-1198-4535-af73-539a5473dc25@g38g2000yqn.googlegroups.com>
Source record: 19958

On Nov 21, 1:28 pm, "Dave" <no...@nowhere.com> wrote:
> "Richard Harrison" <richardharri...@webtv.net> wrote in message
>
> news:15198-4926E30C-2944@storefull-3253.bay.webtv.net...
>
> > Art wrote:
> > "The Physics World states that displacement current does not exist with
> > respect to radiation---."
>
> > Who and where?
>
> > Be reasonable. Free space is normally nonconductive.
>
> remember, art believes space is full of magic jumping diamagnetic levitating
> neutrinos, obviously they carry the charge so there is no need for
> displacement current, only the weak force.

Not so. I am willing to believe what modern science say that the
aether is filled with
a circulating magnetic field thru which particles can pass. If that is
what they think that is fine by me.
After all there must be something inside the arbritary border of the
Aether to prevent it collapsing per Newton
Art

4585. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 21:01:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <HfWdnUvCC9kGvLrUnZ2dnUVZ_hWdnZ2d@posted.easystreetonline>
Source record: 19959

christofire wrote:
>
> I hardly dare to say it but, actually that's incorrect for the radiation
> field (which is what I wrote about). The radiation resistance of an antenna
> accounts for its ability to radiate power into the surrounding space and,
> like all other resistances, the peak of current co-insides with the peak of
> applied voltage - so one doesn't occur '1/2-period later' at all. What's
> described in the passage above is the situation in respect of the temporary
> storage of energy in the 'reactive near fields' corresponding to a reactive
> component of the terminal impedance, not the radiation resistance. I would
> expect the latter to be of greater importance to those interested in
> communication.
>
> I wouldn't disagree with the statement that stored energy is concentrated in
> the regions near the 'maximum charge regions' but if you plot the equipotent
> lines around a dipole and equate the amount of energy stored to the electric
> field strength it illustrates that the spatial distribution of energy in the
> electric field is similar to that in the magnetic field ... as one might
> expect.
>
> Chris

That's a good explanation. It might help some people to visualize the process by comparing it to a series RLC circuit, which its feedpoint impedance resembles over a moderate bandwidth. In both an RLC circuit and an antenna, the current and voltage aren't in phase, but they're not exactly in quadrature (90 degrees out of phase) either. This means that during each cycle, some of the energy entering the RLC circuit or antenna is stored and some is consumed. In the RLC circuit, the stored energy is stored in fields in the capacitor and inductor; in the antenna, it's stored in fields near the antenna -- the near field. And the consumed power is dissipated in the resistor in the RLC circuit; in the antenna, it's radiated. The antenna's equivalent to the RLC circuit resistance is, of course, the radiation resistance, which "consumes" -- radiates -- some of the applied energy each cycle.

Roy Lewallen, W7EL

4586. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 21:15:54 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <gg78oa$q16$1@news.service.uci.edu>
Source record: 19962

Richard Harrison wrote:
> Michael Faraday (1791- 1867) wrote:
> E = F/Q where E & F are parallel vectors. E = the electric field
> strength in force per unit charge and F is measured in newtons per
> coulomb.

Faraday should have written that E is in units of newtons per coulomb,
as F would obviously be in newtons.

> Electrostatic does not mean stationary.

In what way does it not?

73, ac6xg

4587. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 21:18:38 UTC
From: richardharrison@webtv.net
Message-ID: <15198-492725AE-2985@storefull-3253.bay.webtv.net>
Source record: 19961

Chris wrote:
"I hardly dare say it but, actually that`s incorrect for the radiation field (which is what I wrote about)."

That`s chris` prerogative. Note the near field is also called the "induction field". One reason, its energy returns to the source each cycle. The far field emergy has escaped or radiated. Its energy appears as a resistive load on the source.

Best regards, Richard Harrison, KB5WZI

4588. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 21:22:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a92539ba-df10-4aa5-8712-9bc1a31e7015@13g2000yql.googlegroups.com>
Source record: 19960

On Nov 21, 3:00 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Nov 21, 2:00 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > On Nov 21, 10:51 am, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > > On Nov 21, 9:52 am, John Smith <assemblywiz...@gmail.com> wrote:
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> > > > Art Unwin wrote:
> > > > > ...
> > > > > Seems to me you are recommending the "?slinky" !
> > > > > Is that correct?
> > > > > Art
>
> > > > I believe, he is speaking of rotating the flat surfaces of the
> > > > conductor(s) 90 degrees to what a "slinkys'" orientation places them at.
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> > > > In which case, "mondo-capacitive loading to the 'environment'" is also
> > > > introduced ... while minimizing capacitive loading between turns.
>
> > > > Regards,
> > > > JS
>
> > > Wouldn't that take more room than a slinky per turn?
> > > His attic is very small!.I think he would be much better placing the
> > > turns as close together as possible
> > > to obtain axial directivity. The only mod required to the slinky is to
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> > > are equal to the number of left hand turned loops. Feed could still
> > > be at the center and depending on the amount
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> > > such that you have several wavelengths of wire helix style and no or
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> > > the windings in a vertical direction to obtain an omnidirectional
> > > pattern and utilise the available room to a maximum.
> > > A lot depends on what frequencies he wishes to use as to what form the
> > > radiator becomes.
> > > Best regards
> > > Art

> > I forgot to mention that a similar type radiator is shown in Antenna
> > Applications
> > Reference Guide by Johnson and Jasik with slight modification. This
> > design was succeeded by the helix antenna
> > to obtain circular polarization which is now universal with respect to
> > space communications.
> > The beauty of this design is the multiplicity of resonant points and
> > the use of different frequencies.
> > The economy of space is some what altered by the need of multi
> > wavelength of wire because
> > of slow wave.but then it enables axial directivity. There are many
> > hams who are delighted by the slinky performance
> > and they are still sold in huge numbers to the ham community, so it
> > must be performing!
> > Art Unwin- Hide quoted text -
>
> > - Show quoted text -
>
> Art, where did you get the idea a slinky had "axial directivity" at
> 40M. I hazard a guess that it was from reading about helix antennas.
> The axial radiation is only true if the diameter of the helix is
> fairly large, on the order of 1/pi wavelength usually.
> This would be a huge antenna if designed for the frequency(40M) that
> the OP was asking.
> I can see how this misunderstanding led you to your shoebox
> antenna.design.
>
> Gee I hope you arent spending good money filing for a patent on that
> thing. I understand that can cost a couple of thousand these days.
> However it would be interesting to see you get it.
>
> Jimmie

Jimmie
The diameter of the helix and the pitch of the helix is only a couple
of terms that Krauss applied to a helix antenna which is not in
equilibrium.
He also assumed too much when he assigned more gain to a helix that
could be attained by a antenna not in equilibrium which I strongly
suspect is the belief he had in the displacement current. Krauss did a
lot of pioneering work but the passage of time have pointed to many
errors.
If a helix winding wire is less than a couple of wavelengths then the
radiation will be at right angle to the axis. If the wire length is
above two WL preferably 7-10 WL the radiation peak will be axial
regardless of the diameter or helix angle as long as the radiator is
in a state of equiulibrium. the law that I continually state from the
extension of the Gaussian law of statics which I derived. Wind two
inductors with a common wire but wound in opposite directions and view

with MFJ 259 or alternatively review ARRL publications where they show a fully wound dipole and then start thinking for yourself instead of jumping to unfounded conclusions. I also read that the reason that the EH antenna and the cross field antenna does not work as expected because they were founded in part on the non existant displacement current b ut I have not followed up on that from first principles so it is just a statement
Art

4589. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 21:47:23 UTC
From: nm5k@wt.net
Message-ID: <4c19e0e3-9ea9-439f-acac-71f10f921c03@q26g2000prq.googlegroups.com>
Source record: 19963

On Nov 21, 6:15 am, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
> <n...@wt.net> wrote in message
>
> news:5663a554-4004-437a-98dc-02695f93ffb3@o4g2000pra.googlegroups.com...
> On Nov 20, 2:15 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
>
>
>
> > Ed, N2ECW
>
> Hummm. New call I see...
> I liked the old one better, but of course, I'm biased.. :/
>
> ------------
>
> Actually, I went back to my original Technician thru Advanced callsign. I'm
> tired of repeating nm2k fifty different ways from Sunday and then they still
> can't say it because they learned the alphabet with mn in that order and not
> nm. On CW they think I'm finished sending with the K at the end of nm2k,
> then they ask me what kind of callsign is nm2?
>
> Besides, my wife and I had/have consecutive callsigns with N2ECV and N2ECW.
>
> I had nm2k for 23 years. Now it is someone elses turn. <G>
>
> Ed Cregger, N2ECW

I had that problem with my last call.. Sorta.. "WD5CJL"
If I just said "L" , often they would think I said "O" for some
reason.
Some do have a problem telling NM apart if the noise is high or
whatever.. I always use the standard "november -mike-five-kilo"
phonetics if they get confused.
I usually avoid the other versions.. IE: numb-minded-five-kinky"
as an example.. :/

4590. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 21:50:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7ag3$f3l$1@news.albasani.net>
Source record: 19964

Art Unwin wrote:

> ...
> Wouldn't that take more room than a slinky per turn?
> His attic is very small!.I think he would be much better placing the
> turns as close together as possible
> to obtain axial directivity. The only mod required to the slinky is to
> ensure the number of right hand turn loop
> are equal to the number of left hand turned loops. Feed could still
> be at the center and depending on the amount
> of wire used it would radiate like a dipole or axially. What this does
> is cancel the lumped loads created in manufacture which
> Wim suggests is a problem ie the two supposedly lumped loads will
> cancel
> such that you have several wavelengths of wire helix style and no or
> repetitive points of none reactive impedances. He could ofcourse
> place
> the windings in a vertical direction to obtain an omnidirectional
> pattern and utilise the available room to a maximum.
> A lot depends on what frequencies he wishes to use as to what form the
> radiator becomes.
> Best regards
> Art

Art:

The way I "read" him is, he now has a 1m loop, SINGLE TURN (equiv. to resonating a 8-12+ ft. whip on the hf bands?) able to do 10-30m--with WHATEVER "matchbox" he is choosing to run ... he is contemplating on adding a second 1m turn (to add 40m capabilities, apparently) ... are we on the same page? ... and, loops are NEVER omni-directional! Well, other than one constructed to radiate/receive in the plane of the loop and run in a horizontal plane, would, perhaps, do some type of omni-horizontal-polarization?--and a 1m at 10-30m, it ain't such an animal! (well, maybe-kinda-sorta, but I DON'T KNOW! I would have to get hands-on-experience before trusting a ventured reply ... any books I have ever laid hands on are vague on all this ...)

Personally, the only time I have ever used a loop is for AM broadcast radio and direction finding (fox hunts) in the 10 to 2m bands, and, I did NOT want omni capabilities! ... well, there may have been one or two--but so long ago they escape memory ... I never did "like them."

Or, in other words, I am NOT a "loop guru" ... :-(

Anyway, after all that verbiage, the cut-to-the-chase: "I would think a slinky and what he has are two 'different species'."

Regards,
JS

4591. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 21:55:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7aoe$f3l$2@news.albasani.net>
Source record: 19965

JB wrote:

> ...
> I concur. I like the Huntgate solution but prefer to use Ethernet for the
> run. However, there is a problem with using a high gain omni antenna in an
> urban area where there is a lot of channel loading. Your throughput drops
> because you are spending a lot of time with collision avoidance. This might
> work at night, but not if everyone leaves their wireless up all the time.
>
> WiFi was meant to be short range. When you improve your range, you compound
> your interference problem exponentially. If you use a Pringles can you have
> a big advantage because it is as if you moved your low gain antenna closer
> to the AP but you still have the problem of the connections the AP hears but
> you don't hear and can't avoid colliding with. At least you aren't being
> bombarded with broadcasts.
>
> Simply put, there are limitations to performance when you put yourself in a
> crowded situation.
>

Taking in your text, "overall", I fail to find anything I would nit-pick
at ...

But, you know, as well as I, we are going to attempt to expand range to
and even beyond "its' limits", like a mountain--just because it is
there. :-)

I mean, "That is what we do!" <grin>

Regards,
JS

4592. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 22:03:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7b7r$g1v$1@news.albasani.net>
Source record: 19966

Richard Harrison wrote:

> ...
> I now think "evoke" should have been used in place of "invoke".
>
> Best regards, Richard Harrison, KB5WZI
>

Richard:

I am sure there is, most-probably, enough difference for argument ...

However, to a poor country boy like myself, these terms are, for the most part, interchangeable ... both can be found with definitions which bring "magic", "mystery" and the "spiritual realm" into mind ... and, I am sorry, sometimes I "just feel" this way (and, especially when it is the "wifes time of the month!") ... <grin>

Sorry, just thought a bit of sick humor might be appreciated by some ... LOL! <and-a-evil-grin>

Regards,
JS

4593. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 22:07:21 UTC
From: Dave <noone@nowhere.com>
Message-ID: <tiGVk.88$us6.33@nwrddc01.gnilink.net>
Source record: 19967

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:a92539ba-df10-4aa5-8712-9bc1a31e7015@13g2000yql.googlegroups.com...
> the law that I continually state from the
>extension of the Gaussian law of statics which I derived.

you haven't presented anything that you derived... state the equation.

4594. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 22:23:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7cd6$hh5$1@news.albasani.net>
Source record: 19968

Richard Harrison wrote:
> Chris wrote:
> "I hardly dare say it but, actually that`s incorrect for the radiation
> field (which is what I wrote about)."
>
> That`s chris` prerogative. Note the near field is also called the
> "induction field". One reason, its energy returns to the source each
> cycle. The far field emergy has escaped or radiated. Its energy appears
> as a resistive load on the source.
>
> Best regards, Richard Harrison, KB5WZI
>

You mean, those "antenna/rf-magnetic-fields" are NOT leaving the
radiator at the speed of light, but being "stored in the ether?", to
then collapse and induce an electric field back into the element which
first generated-such? <sly-grin>

Sorry, I know, this will be perceived as "troll-territory." :-(

Regards,
JS

4595. Re: Any Toledo hot spots?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 22:34:01 UTC
From: zoltan <zoltan@zoltan.com>
Message-ID: <uHGVk.26086$WR6.20472@newsfe03.iad>
Source record: 19969
Cross-posted to: alt.ohio.toledo,rec.radio.amateur.antenna,rec.radio.shortwave

"N8WWM mrbindwell" <mrbindwell@n8wwm.com> wrote in message
news:galot2$c3h$1@news.tornevall.net...
> Hi everyone!
>
> Anyone know of a nice club or hangout in the Toledo area that caters to
> cross dressing radio operators? I'm a guy from Toledo who enjoys showing a
> submissive man a good time in every way. I have so many interests that
> there probably is some broad common ground between myself and about
> anyone. I love to talk about BDSM issues and interests, and have been
> generally regarded as a funny guy to hang out with who has a good head on
> his shoulders. Send me a message for anything else you'd like to know!
>
> I've attatched a link to my picture below, I consider myself a BBW trapped
> in a mans body and will be dominant to the right gentleman. (ham radio
> operators move to the front of the line)
>
> N8WWM mrbindwell
> http://img293.imageshack.us/img293/1972/dougthecrossdresserpb7.jpg
>
>
>
>
Still sucking truckers cocks at the petro truckstop Doug?

http://i38.tinypic.com/fc5lj9.jpg

4596. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 22:35:38 UTC
From: JB <nospam@goofball.net>
Message-ID: <_IGVk.117$QX3.37@nwrddc02.gnilink.net>
Source record: 19970

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gg7aoe$f3l$2@news.albasani.net...
> JB wrote:
>
> > ...
> > I concur. I like the Huntgate solution but prefer to use Ethernet for
the
> > run. However, there is a problem with using a high gain omni antenna in
an
> > urban area where there is a lot of channel loading. Your throughput
drops
> > because you are spending a lot of time with collision avoidance. This
might
> > work at night, but not if everyone leaves their wireless up all the
time.
> >
> > WiFi was meant to be short range. When you improve your range, you
compound
> > your interference problem exponentially. If you use a Pringles can you
have
> > a big advantage because it is as if you moved your low gain antenna
closer
> > to the AP but you still have the problem of the connections the AP hears
but
> > you don't hear and can't avoid colliding with. At least you aren't
being
> > bombarded with broadcasts.
> >
> > Simply put, there are limitations to performance when you put yourself
in a
> > crowded situation.
> >
>
> Taking in your text, "overall", I fail to find anything I would nit-pick
> at ...
>
> But, you know, as well as I, we are going to attempt to expand range to
> and even beyond "its' limits", like a mountain--just because it is
> there. :-)
>
> I mean, "That is what we do!" <grin>
>
> Regards,
> JS

Any excuse to raise the noise floor--

4597. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 22:43:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7di0iob1@news.albasani.net>
Source record: 19971

JB wrote:

>
> Any excuse to raise the noise floor--
>

Hmmm, I thought you "bright enough", guess I was wrong ... :-(

Your newsreader has no filters? You are not "bright enough" to use them?

You are not "bright enough" to have figured this out?

You are not "bright enough" to get by without someone telling you?

Etc.?

Filter me, IDIOT!

Regards,
(but STOP your incessant bitching, trust me, the wife is enough ... if I need more, I'll ask you ... trust me, I won't go wanting ... ROFLOL!)
JS :-)

4598. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 22:50:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7e0ejdh1@news.albasani.net>
Source record: 19972

JB wrote:

> ...
> Any excuse to raise the noise floor--
>

Whoa ... I apologize to the wife ... she just read the previous post, I made, to this one ...

She pointed out that you are MUCH WORSE than her--she asked me if you were gay or had "problems", she did NOT laugh ...

I will not repeat that mistake (next time I won't show her ... HEHEHEEEEEEEEEEEEEEEEEEEEEEEE!)

Regards,
JS

4599. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 22:53:17 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <71a17da7-787a-4d29-b75b-74f9db2d6953@f20g2000yqg.googlegroups.com>
Source record: 19973

On Nov 21, 4:03 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Richard Harrison wrote:
> > ...
> > I now think "evoke" should have been used in place of "invoke".
>
> > Best regards, Richard Harrison, KB5WZI
>
> Richard:
>
> I am sure there is, most-probably, enough difference for argument ...
>
> However, to a poor country boy like myself, these terms are, for the
> most part, interchangeable ... both can be found with definitions which
> bring "magic", "mystery" and the "spiritual realm" into mind ... and, I
> am sorry, sometimes I "just feel" this way (and, especially when it is
> the "wifes time of the month!") ... <grin>
>
> Sorry, just thought a bit of sick humor might be appreciated by some ...
> LOL! <and-a-evil-grin>
>
> Regards,
> JS

No JS THEY ARE NOT INTERCHANGEABLE
You can't insert units that state it is a current and
in the same breath say it does not produce a magnetic field
Best regards
Art

4600. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 23:02:14 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <78dc8020-50be-4384-9d75-d7b91bd0c534@u14g2000yqg.googlegroups.com>
Source record: 19974

On Nov 21, 3:50 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > Wouldn't that take more room than a slinky per turn?
> > His attic is very small!.I think he would be much better placing the
> > turns as close together as possible
> > to obtain axial directivity. The only mod required to the slinky is to
> > ensure the number of right hand turn loop
> > are equal to the number of left hand turned loops. Feed could still
> > be at the center and depending on the amount
> > of wire used it would radiate like a dipole or axially. What this does
> > is cancel the lumped loads created in manufacture which
> > Wim suggests is a problem ie the two supposedly lumped loads will
> > cancel
> > such that you have several wavelengths of wire helix style and no or
> > repetitive points of none reactive impedances. He could ofcourse
> > place
> > the windings in a vertical direction to obtain an omnidirectional
> > pattern and utilise the available room to a maximum.
> > A lot depends on what frequencies he wishes to use as to what form the
> > radiator becomes.
> > Best regards
> > Art
>
> Art:
>
> The way I "read" him is, he now has a 1m loop, SINGLE TURN (equiv. to
> resonating a 8-12+ ft. whip on the hf bands?) able to do 10-30m--with
> WHATEVER "matchbox" he is choosing to run ... he is contemplating on
> adding a second 1m turn (to add 40m capabilities, apparently) ... are we
> on the same page? ... and, loops are NEVER omni-directional! Well,
> other than one constructed to radiate/receive in the plane of the loop
> and run in a horizontal plane, would, perhaps, do some type of
> omni-horizontal-polarization?--and a 1m at 10-30m, it ain't such an
> animal! (well, maybe-kinda-sorta, but I DON'T KNOW! I would have to get
> hands-on-experience before trusting a ventured reply ... any books I
> have ever laid hands on are vague on all this ...)
>
> Personally, the only time I have ever used a loop is for AM broadcast
> radio and direction finding (fox hunts) in the 10 to 2m bands, and, I
> did NOT want omni capabilities! ... well, there may have been one or
> two--but so long ago they escape memory ... I never did "like them."
>
> Or, in other words, I am NOT a "loop guru" ... :-(

>
> Anyway, after all that verbiage, the cut-to-the-chase: "I would think a
> slinky and what he has are two 'different species'."
>
> Regards,
> JS

I stated Slinky only because I thought that was what Wim was proposing
and then went from there
If the poster now has a loop without a capacitor that is resonant on
40M then a second loop wound
in the opposite direction when added to the other loop. If he is
adding a lumped load in the form
of a capaciter then all bets are off as Maxwell doesn't entertain
lumped loads in his equations.
Art

4601. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 23:06:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7etr$k44$1@news.albasani.net>
Source record: 19975

Art Unwin wrote:

> ...
> No JS THEY ARE NOT INTERCHANGEABLE
> You can't insert units that state it is a current and
> in the same breath say it does not produce a magnetic field
> Best regards
> Art

Interesting ...

EVOKE:
arouse: call forth (emotions, feelings, and responses); "arouse pity"; "raise a smile"; "evoke sympathy"
provoke: evoke or provoke to appear or occur; "Her behavior provoked a quarrel between the couple"
educe: deduce (a principle) or construe (a meaning); "We drew out some interesting linguistic data from the native informant"
raise: summon into action or bring into existence, often as if by magic; "raise the specter of unemployment"; "he conjured wild birds in the air"; "call down the spirits from the mountain"
suggest: call to mind; "this remark evoked sadness"
wordnet.princeton.edu/perl/webwn

INVOKE:
raise: summon into action or bring into existence, often as if by magic; "raise the specter of unemployment"; "he conjured wild birds in the air ...
cite as an authority; resort to; "He invoked the law that would save him"; "I appealed to the law of 1900"; "She invoked an ancient law"
appeal: request earnestly (something from somebody); ask for aid or protection; "appeal to somebody for help"; "Invoke God in times of trouble"
wordnet.princeton.edu/perl/webwn

Gee, I am "feeling for you", just can't "reach you", but then, you already knew that ... :-(

Regards,
JS

4602. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 23:10:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7f4m$k44$2@news.albasani.net>
Source record: 19976

Art Unwin wrote:

>> ...
> If the poster now has a loop without a capacitor that is resonant on
> 40M then a second loop wound
> in the opposite direction when added to the other loop. If he is
> adding a lumped load in the form
> of a capaciter then all bets are off as Maxwell doesn't entertain
> lumped loads in his equations.
> Art

What? You can't read/think?

I don't believe he said anything near that ... indeed, I took for
granted he said something almost opposite to what you "intuit" with you,
apparent, psychic powers?

Did you evoke or invoke all these visions?

Regards,
JS

4603. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 23:10:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7f5u$k44$3@news.albasani.net>
Source record: 19977

Art Unwin wrote:

>> ...
> If the poster now has a loop without a capacitor that is resonant on
> 40M then a second loop wound
> in the opposite direction when added to the other loop. If he is
> adding a lumped load in the form
> of a capaciter then all bets are off as Maxwell doesn't entertain
> lumped loads in his equations.
> Art

What? You can't read/think?

I don't believe he said anything near that ... indeed, I took for
granted he said something almost opposite to what you "intuit" with
your, apparent, psychic powers?

Did you evoke or invoke all these visions?

Regards,
JS

4604. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 23:18:00 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <d08249a7-080e-41e0-a66f-b92be0632dcd@k8g2000yqn.googlegroups.com>
Source record: 19978

On 21 nov, 16:44, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 21, 5:38 am, Wimpie <wimabc...@tetech.nl> wrote:
>
>
>
> > On 21 nov, 04:47, Steve <sdanie...@speakeasy.net> wrote:
>
> > > I've seen several programs that will help you calculate the precise
> > > dimensions of a single-turn loop, given the composition of the
> > > radiating element, its thickness, and so on. However, none of these
> > > programs are written to cover the case of a two or more-turn loop.
>
> > > Does anyone know of a program that will offer guidance in the
> > > construction of a two or more-turn loop?
>
> > > Thanks,
>
> > > Steve
>
> > Hello Steve,
>
> > You probably did some loop calculations and found that in a transmit
> > case the voltage across the tuning capacitor is very high (and
> > bandwidth is limited). Also for small loops, most input power is lost
> > as heat due to copper resistance.
>
> > When you make a two turn loop, the radiation resistance will increase
> > with factor 4. So with half the current through the loop, the radiated
> > power is same (as for a single turn loop). When the 2 turns of the
> > loop are relative close together, the inductance increases with factor
> > 4, hence the reactance.
>
> > The current has been halved, but because of the reactance, the voltage
> > across the tuning capacitance will be 2 times the value for the single
> > turn loop with higher probability on corona effects. An advantage can
> > be an almost 4 times smaller tuning capacitor.
>
> > One may expect that the loss resistance due to heat of a two-turn
> > inductor will be twice as high (w.r.t. single turn case). This is not
> > true; the loss resistance will be more then twice as high because of
> > proximity effect. The current will not equally distribute along the
> > circumference of the tube/wire. So the efficiency of the loop will be
> > less then twice as high (w.r.t. single turn case).
>

> > When the turns are far apart (with respect to wire/tube diameter),
> > inductance will not be 4 times higher and proximity effect will be
> > less. You will get better performance than the single turn loop made
> > of same diameter tube/wire. The result will be the same as when you
> > place the two turns in parallel. Inductance will decrease somewhat
> > (hence lower voltage across capacitor), AC resistance also, hence
> > radiation efficiency).
>
> > There is an "however". When you make a single turn loop from flat
> > strip that has the same width as the length of your two-turn loop, you
> > will notice: 1. reduced AC resistance (because of the significantly
> > larger circumference of the flat strip with respect to a thin round
> > tube, 2. inductance will decrease (H field lines have to take a longer
> > path around the wide strip), 3. radiation resistance will not change
> > with respect to a single turn loop from wire/tube.
> > This results in higher efficiency and increased bandwidth.   The
> > overall result will be better then for your two-turn loop. I think
> > that is the reason why most programs are for single turn loops.
>
> > So for the transmit case, given fixed diameter of your loop, the
> > larger the copper surface (=length*circumference), the better the
> > efficiency. Best thing to enhance conductor surface is to use very
> > wide flat strip (high wind load), or multiple wires (with some spacing
> > in between) in parallel (limited wind load).
>
> > Off course for the receive-only case, a multi turn loop can be helpful
> > as you can use a smaller tuning capacitor.
>
> > Best regards,
>
> > Wim
> > PA3DJSwww.tetech.nl
> > In case of PM, don't forget to remove abc.
>
> Seems to me you are recommending the "?slinky" !
> Is that correct?
> Art

Sorry Art, I am not talking about a slinky.

I am just talking about a multi turn (2 turns) loop where overall wire length is < 0.25 lambda so you can assume that current in wire is constant along the length. It must be tuned by external capacitance.

Regarding the strip. When you take a 3.14m long 20cm wide thin copper strip and make a loop of it (1m diameter), it will have a better efficiency then when you take 6.28m copper tubing with Dtube=2cm and make a two-turn loop (Dloop=1m, turns 18 cm apart).

In the strip case, the current has more circumference to flow (40cm) instead of 6.28cm for the copper tubing. AC resistance of copper

tubing will be about 10 times higher. Off course, current in two-turn loop will be half (for same radiated power), but still heat losses will be 10*0.5^2=2.5 times higher (for the two-turn loop).

When both loops have good efficiency (so radiation resistance dominates), the strip loop will have better bandwidth as flux path is longer and therefore results in less inductance.

I hope this clarifies my posting.

Best regards,

Wim
PA3DJS
Please remove abc in case of PM.

4605. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 23:23:29 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a3987748-60d4-4eb1-8c33-3bc838a586a0@v42g2000yqv.googlegroups.com>
Source record: 19979

On Nov 21, 4:07 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:a92539ba-df10-4aa5-8712-9bc1a31e7015@13g2000yql.googlegroups.com...
>
> > the law that I continually state from the
> >extension of the Gaussian law of statics which I derived.
>
> you haven't presented anything that you derived... state the equation.

Oh come on David I do not work for you, do it for yourself as you have
a superior background than I do.
If you are proficient in mathematics check out the addition of
displacement current of Maxwell and review it as just that.
a current in circular foirm that DOES generate a displacement
magnetic field such that it displaces a charged particle
from the surface of the radiator. This eddy current has the units of
current which somehow would match the
description of the "weak force:". Maybe the other masters needed to
include this same addition If your math is up to it
why not check that out? You stated previously that you wanted to know
where the weak current equation is so, now you can start on a series
of
removal or added equation to all the formulas supplied to Maxwell by
previous masters and determine for yourself,. The correct units are
there
so that all equations jive with each other sfter manipulating the
supplied laws.
Stae equation you ask?> A radiator can be any shape, size or elevation
when providing the maximum radiation as long as it is in equilibrium.
I believe that the helix goes along way in supporting that statement
which comes from changing a static field to a dynamic field and
confirmed by existing antenna programs based ion Maxwell';s work.
Ofcourse you can declare antenna computer programs are in error and
salvage your credability or place such a statement in the practicable
book that you are writing! After all if it is printed in a book it
must be right.......right?
Art Unwin KB9MZ.......XG....(UK)(

4606. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 23:40:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg7gsr$mn8$1@news.albasani.net>
Source record: 19980

JB wrote:

> ...
> Simply put, there are limitations to performance when you put yourself in a
> crowded situation.
>

You know, JB? Ever since you have entered here, I found you to be an idiot? I mean, I don't want to be rude, or anything ... now, you have fertile ground to prove me wrong! I will pause for the words of wisdom which change my life ...

But then, what are you? Do you have a book you quote from? Do you have any antennas you are experimenting with? Are they ancient ones, ones we have seen a dozen times before now? Are you one who wishes to "buddy up with one(s)" already quoting one (or more) of the "great minds of yesterday?" Are you here to quote from books for the poor?; i.e., those who can't afford the books so you "throw quotes out, and bits-of-wisdom for ignorant and starving minds?" Are you here to "enlighten my mind?" Are you here to enlighten us all?

What are you about? Whatever it is, please get on with your "big bad self." My patience grows thin and I am beginning to think you have NOTHING to offer other than I have already seen? (and seen, many, many times <yawn>)

But then, a pause, let us be "be-dazzled!" ... your forum awaits you ... I now hang upon your every word! :-) Go forth and cure my ignorance!

Regards,
JS

4607. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 23:47:05 UTC
From: richardharrison@webtv.net
Message-ID: <14250-49274879-598@storefull-3251.bay.webtv.net>
Source record: 19982

Jim Kelley wrote:
"In what way is it (an electrostatic field) not (stationary)?"

Terman was refering to an electromagnetic (radio) wave. It is a peculiarity of "old-speak" to call an electric field an electrostatic field.

As Cecil reminds us, radio waves are always in motion. But, their superposition may produce a stationary wave called a standing wave.

Best regards, Richard Harrison, KB5WZI

4608. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-21 23:53:15 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.21.23.52.50.420634@example.net>
Source record: 19981
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

```
On Thu, 20 Nov 2008 16:58:46 -0800, Roy Lewallen wrote:
> Rich Grise wrote:
>> On Thu, 20 Nov 2008 15:30:26 -0800, Roy Lewallen wrote:
>>> GregS wrote:
>>>> Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide
>>>> band. It could be improved by making it a full fractal.
>>> That's interesting. In what way(s) is it improved by making it fractal?
>>> How much is the improvement? Can you point me to a reference about this
>>> which gives some quantitative data?
>>>
>> http://www.google.com/search?hl=en&q=%22fractal+antennas%22&btnG=Google+Search&aq=f&oq=
>
> Sorry, it doesn't. Among the claims, trolls for investors, and
> testimonials, where is the quantitative data showing that a fractal
> antenna is in any way better than a bow tie, in what ways, and how much?
> In other words, exactly where is the evidence on which you based your
> statement?

The only "evidence" I have is a "testimonial" by the guy who invented it,
on some PBS show. And they claimed that that's how they pack so much
antenna into a box the size of your thumb. ;-)

And, having a passing familiarity with fractals, it just sounds eminently
plausible to me. :-)

Cheers!
Rich
```

4609. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 00:04:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b8ec3fe5-4834-44dc-94b5-aee7eb5b58c9@k19g2000yqg.googlegroups.com>
Source record: 19983
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 21, 5:53 pm, Rich Grise <r...@example.net> wrote:
> On Thu, 20 Nov 2008 16:58:46 -0800, Roy Lewallen wrote:
> > Rich Grise wrote:
> >> On Thu, 20 Nov 2008 15:30:26 -0800, Roy Lewallen wrote:
> >>> GregS wrote:
> >>>> Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide
> >>>> band. It could be improved by making it a full fractal.
> >>> That's interesting. In what way(s) is it improved by making it fractal?
> >>> How much is the improvement? Can you point me to a reference about this
> >>> which gives some quantitative data?
>
> >>http://www.google.com/search?hl=en&q=%22fractal+antennas%22&btnG=Goog...
>
> > Sorry, it doesn't. Among the claims, trolls for investors, and
> > testimonials, where is the quantitative data showing that a fractal
> > antenna is in any way better than a bow tie, in what ways, and how much?
> > In other words, exactly where is the evidence on which you based your
> > statement?
>
> The only "evidence" I have is a "testimonial" by the guy who invented it,
> on some PBS show. And they claimed that that's how they pack so much
> antenna into a box the size of your thumb. ;-)
>
> And, having a passing familiarity with fractals, it just sounds eminently
> plausible to me. :-)
>
> Cheers!
> Rich

Their advertising budget suggest that they are getting sales and they
do radiate
to the satisfaction of their users They don't have lumped loads so
where ';s the beef?
Art

4610. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 00:04:57 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.22.00.04.33.427090@example.net>
Source record: 19984
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 21 Nov 2008 06:36:32 -0600, Cecil Moore wrote:
> Sal M. Onella wrote:
>> If even poor antennas work well, why all the whining?
>
> I've not had any problems with the UHF circular loop that comes with
> standard rabbit ears. The only problem I've had is with VHF channels on
> the dipole. I need a weatherproof version of my RS rabbit ears.
> Unfortunately, ABC is Channel 7 here in Tyler, TX.

Where I'm sitting here in Whittier, KABC 7 is so strong I can get it without even a cable plugged in!

It's 50, 56, and 58 I worry about; 2-13 and 28 are covered; I'm looking forward to seeing if my new bowtie (from that youtube video, but with ER708-2 x 1/16 filler rod) will pick up PAX on 30. They have some nice oldies sometimes. (I also have some of the ER708-2 in 0.045".)

I'm gonna solder it together and hold it to the board with brass thumb-tacks. ;-)

Just for reference: http://www.youtube.com/watch?v=EWQhlmJTMzw

Cheers!
Rich

4611. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 00:22:15 UTC
From: ps56k <pschuman_no_spam_me@interserv.com>
Message-ID: <2hIVk.8327$be.2733@nlpi061.nbdc.sbc.com>
Source record: 19985
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

"Bill Kearney" <wkearney99@hotmail.com> wrote in message
news:FfCdnaXCtoZ3I7vUnZ2dnUVZ_gydnZ2d@speakeasy.net...
>
> "DaveC" <me@bogusdomain.net> wrote in message
> news:0001HW.C54BA58A0075A070B01AD9AF@news.sf.sbcglobal.net...
>> Looking for outdoor omni "whip" antenna for 2.4 GHz.
>
> Whip antenna? What is this, for a vehicle? For a stationary location it
> seems like it'd be an extremely bad idea to use an antenna that 'whipped'
> around.
>
>> Is there any reason to not go for the greatest gain antenna, given that
>> cost
>> is not too important (within reason)?
>
> Alligator effect. Wide mouth receiving everything. If you don't need to
> pickup everything then why bother? It just makes it harder for your WiFi
> router to cut through all the noise of distant stations it doesn't
> communicate with. Get the right antenna suited for your installation, no
> more, no less.
>
> Which leads to the constant request, when you ask a question POST WHAT
> GEAR YOU'RE USING.
>
> In your case it would also help to define what sort of connection you're
> trying to make. Point to point, metropolitan, etc.
>
> -Bill Kearney
Since you have included the HAM radio newsgroups as your first choices,
with the Internet Wireless as your last choice,
then - as was mentioned above - what are you trying to accomplish
with this 2.4Ghz outdoor antenna ??

Since you used the term "whip" it tends to imply some physical motion or
vehicle,
vs a "vertical" which implies a stationary location.
And both imply a omni pattern - like a general Access Point -

4612. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 01:10:30 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ae56fea5-6433-493e-b95c-affb3fa0b9de@r40g2000yqj.googlegroups.com>
Source record: 19986

On Nov 21, 5:10 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> > If the poster now has a loop without a capacitor that is resonant on
> > 40M then a second loop wound
> > in the opposite direction when added to the other loop. If he is
> > adding a lumped load in the form
> > of a capaciter then all bets are off as Maxwell doesn't entertain
> > lumped loads in his equations.
> > Art
>
> What? You can't read/think?
>
> I don't believe he said anything near that ... indeed, I took for
> granted he said something almost opposite to what you "intuit" with you,
> apparent, psychic powers?
>
> Did you evoke or invoke all these visions?
>
> Regards,
> JS

Maybe I was to quick in replying. Hope I haven't ruined your week end.
My car battery went down so I filled it with distilled water and tried
to charge it
But the meter on the charger is not working/moving so I am not sure if
it is charging,
Strike the two charger together and get a spark but the weather is
below freezing
Don't know what to do now. I am confused Maybe the water is frozen

4613. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 01:22:02 UTC
From: highlandham <rfburns@nospam.com>
Message-ID: <gb6dneuUo5Ygw7rUnZ2dnUVZ8qbinZ2d@pipex.net>
Source record: 19987
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

Dave wrote:
> Short Pringle's can, 1/4 wave probe, 1/2 wave from closed end, soldered
> to female TNC.
==========
Yes these cans work well ; the problem is the type and length of coax .
A suitable arangement is a WiFi router near the antenna (if necessary in
a wx proof box) with an ethernet cat5 cable running to the equipment.

Another possibility is a USB WiFi adaptor in the focal point of a
satellite dish with a USB to ethernet converter.

Frank KN6WH

4614. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 01:47:25 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <e3cf8449-a500-4d01-9692-0d6159cd42d3@q9g2000yqc.googlegroups.com>
Source record: 19988
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Nov 21, 2:38 am, DaveC <m...@bogusdomain.net> wrote:
> Looking for outdoor omni "whip" antenna for 2.4 GHz.
>
> Is there any reason to not go for the greatest gain antenna, given that cost
> is not too important (within reason)?
>
> There are scads of these on the 'net. I'm looking for someone who has
> experience with one or more of them and can make a recommendation for one.
>
> Thanks,
> --
> DaveC
> m...@bogusdomain.net
> This is an invalid return address
> Please reply in the news group

I recently built a Franklin antenna for 2.4Ghz.
I highly reccommend it. Google WiFi and franklin antenna.

Jimmie

4615. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 02:15:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b84c9b8d-2974-4e56-a40e-43d09de9de6e@s20g2000yqh.googlegroups.com>
Source record: 19989

On Nov 21, 5:47 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Jim Kelley wrote:
>
> "In what way is it (an electrostatic field) not (stationary)?"
>
> Terman was refering to an electromagnetic (radio) wave. It is a
> peculiarity of "old-speak" to call an electric field an electrostatic
> field.
>
> As Cecil reminds us, radio waves are always in motion. But, their
> superposition may produce a stationary wave called a standing wave.
>
> Best regards, Richard Harrison, KB5WZI

But Cecil has never said you can have current flow without a magnetic
field!
So now one must determine where the reflection occurs and science
puports that it is not at the end of the antenna!
Thus the term "standing wave" must be thougherly defined in line with
the newly disclosed facts so that all jive.
Also, Gauss never assumed the wave description over a particle
description, The answer regarding waves and particles
with respect to radiation has not yet been resolved by the scientific
community because of the Maxwell additive dillema.
And "Old speak" doesn't cut the mustard in present day debate. It is
completely wrong to call a static field an electrical field.
It is either a static or a dynamic field so guessing what Terman
really ment or meant to say just does not have any standing.

4616. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 02:24:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <m_6dnfDA7-bK8LrUnZ2dnUVZ_judnZ2d@posted.easystreetonline>
Source record: 19990

Wimpie wrote:
> . . .
> There is an "however". When you make a single turn loop from flat
> strip that has the same width as the length of your two-turn loop, you
> will notice: 1. reduced AC resistance (because of the significantly
> larger circumference of the flat strip with respect to a thin round
> tube, 2. inductance will decrease (H field lines have to take a longer
> path around the wide strip), 3. radiation resistance will not change
> with respect to a single turn loop from wire/tube.
> This results in higher efficiency and increased bandwidth. The
> overall result will be better then for your two-turn loop. I think
> that is the reason why most programs are for single turn loops.
>
> So for the transmit case, given fixed diameter of your loop, the
> larger the copper surface (=length*circumference), the better the
> efficiency. Best thing to enhance conductor surface is to use very
> wide flat strip (high wind load), or multiple wires (with some spacing
> in between) in parallel (limited wind load).
> . . .

Flat conductors aren't as attractive as they look at first glance. The problem is the same proximity effect mentioned earlier in the posting. Current is distributed evenly around a round conductor (assuming the perimeter is a very small fraction of a wavelength), but not along a flat strip. Because of proximity effect, the current is much more concentrated near the edges than at the middle. The result is that the resistance is considerably higher than for a wire with the same surface area. In figuring an "equivalent diameter" of a thin flat strip in order to get the same L and C properties, the rule is that a strip is equivalent to a wire whose diameter is half the strip width. This means that a strip of width w or total "circumference" 2 * w is equivalent to a wire with a circumference of pi * w / 2 ~ 1.6 w, in so far as L and C go. Since the same phenomenon affects the inductance and resistance, this would also be a good working rule for estimating the relative R of a strip or wire.

Roy Lewallen, W7EL

4617. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 02:35:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <muydnTGX3f118rrUnZ2dnUVZ_umdnZ2d@posted.easystreetonline>
Source record: 19991

christofire wrote:
>
> All else being equal, a lossless 'ground plane' type antenna, be it a
> monopole developed from a dipole or a discone developed from a biconical
> dipole, over an infinite ground plane should exhibit 3 dB _more_ gain than
> the symmetrical 'parent' form of antenna. This is because its radiation
> pattern is limited to half the solid angle of the parent (e.g. only the
> space above the ground plane). Then for a given number of watts fed into
> the antenna, the power-flux density must be greater in the region where it
> can radiate. In practice, the ground plane isn't infinite so there is some
> 'undercutting' of the vertical radiation pattern, but the gain should still
> be somewhat greater.
> . . .

This is entirely a fictional scenario, although it's the one used by virtually all the currently available modeling programs. In those programs you can choose "free space" or "ground plane", where the infinite "ground plane" restricts the field, as Chris says, to a single hemisphere while "free space" allows radiation in both hemispheres.

In real life, you can't have either one, except that outer space would be a reasonable approximation of "free space". The only thing that matters is whether the field reflects from a large surface like the Earth on its way to the receiver. If it does, you potentially pick up field strength from reinforcement of the direct and reflected rays -- but of course you can also lose field strength if the two rays cancel rather than reinforcing. This is another way of describing the same phenomenon of increased gain due to a ground plane. Even if you put an antenna hundreds of wavelengths high, some of the signal will reflect from the ground -- it's not truly in "free space". It doesn't matter whether your antenna is a "ground plane" or a dipole -- if a reflection occurs between the transmitter and receiver, you potentially get that extra gain; if it doesn't, you don't.

Roy Lewallen, W7EL

4618. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 02:49:55 UTC
From: mpm <mpmillard@aol.com>
Message-ID: <7b322903-0d9f-4799-bcc9-8cf826aad651@33g2000yqm.googlegroups.com>
Source record: 19992
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 21, 7:04 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 21, 5:53 pm, Rich Grise <r...@example.net> wrote:
>
>
>
>
>
> > On Thu, 20 Nov 2008 16:58:46 -0800, Roy Lewallen wrote:
> > > Rich Grise wrote:
> > >> On Thu, 20 Nov 2008 15:30:26 -0800, Roy Lewallen wrote:
> > >>> GregS wrote:
> > >>>> Ever hear of the BOW TIE. Its a sort of Fractal antenna. Having a wide
> > >>>> band. It could be improved by making it a full fractal.
> > >>> That's interesting. In what way(s) is it improved by making it fractal?
> > >>> How much is the improvement? Can you point me to a reference about this
> > >>> which gives some quantitative data?
>
> > >> >>http://www.google.com/search?hl=en&q=%22fractal+antennas%22&btnG=Goog...
>
> > > Sorry, it doesn't. Among the claims, trolls for investors, and
> > > testimonials, where is the quantitative data showing that a fractal
> > > antenna is in any way better than a bow tie, in what ways, and how much?
> > > In other words, exactly where is the evidence on which you based your
> > > statement?
>
> > The only "evidence" I have is a "testimonial" by the guy who invented it,
> > on some PBS show. And they claimed that that's how they pack so much
> > antenna into a box the size of your thumb. ;-)
>
> > And, having a passing familiarity with fractals, it just sounds eminently
> > plausible to me. :-)
>
> > Cheers!
> > Rich
>
> Their advertising budget suggest that they are getting sales and they
> do radiate
> to the satisfaction of their users They don't have lumped loads so
> where ';s the beef?
> Art- Hide quoted text -
>
> - Show quoted text -

It's a folded, folded, folded, folded, folded,... n(folded) unipole antenna!! ;-)

4619. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 03:01:22 UTC
From: mpm <mpmillard@aol.com>
Message-ID: <466b7ebc-6ea0-43a7-a6ee-c8d0487b7bd6@f13g2000yqj.googlegroups.com>
Source record: 19993
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 21, 7:04 pm, Rich Grise <r...@example.net> wrote:

> Where I'm sitting here in Whittier, KABC 7 is so strong I can get it
> without even a cable plugged in!

Decent power, line of sight (18.2 miles @ 172.2 deg true) will do
that.
Check your email....

-mpm

4620. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 03:20:53 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2e401554-9120-4261-912a-9331d28c032c@n10g2000yqm.googlegroups.com>
Source record: 19994

On Nov 21, 5:18 pm, Wimpie <wimabc...@tetech.nl> wrote:
> On 21 nov, 16:44, Art Unwin <ArthurUn...@gmail.com> wrote:
>
>
>
> > On Nov 21, 5:38 am, Wimpie <wimabc...@tetech.nl> wrote:
>
> > > On 21 nov, 04:47, Steve <sdanie...@speakeasy.net> wrote:
>
> > > > I've seen several programs that will help you calculate the precise
> > > > dimensions of a single-turn loop, given the composition of the
> > > > radiating element, its thickness, and so on. However, none of these
> > > > programs are written to cover the case of a two or more-turn loop.
>
> > > > Does anyone know of a program that will offer guidance in the
> > > > construction of a two or more-turn loop?
>
> > > > Thanks,
>
> > > > Steve
>
> > > Hello Steve,
>
> > > You probably did some loop calculations and found that in a transmit
> > > case the voltage across the tuning capacitor is very high (and
> > > bandwidth is limited). Also for small loops, most input power is lost
> > > as heat due to copper resistance.
>
> > > When you make a two turn loop, the radiation resistance will increase
> > > with factor 4. So with half the current through the loop, the radiated
> > > power is same (as for a single turn loop). When the 2 turns of the
> > > loop are relative close together, the inductance increases with factor
> > > 4, hence the reactance.
>
> > > The current has been halved, but because of the reactance, the voltage
> > > across the tuning capacitance will be 2 times the value for the single
> > > turn loop with higher probability on corona effects. An advantage can
> > > be an almost 4 times smaller tuning capacitor.
>
> > > One may expect that the loss resistance due to heat of a two-turn
> > > inductor will be twice as high (w.r.t. single turn case). This is not
> > > true; the loss resistance will be more then twice as high because of
> > > proximity effect. The current will not equally distribute along the
> > > circumference of the tube/wire. So the efficiency of the loop will be

> > > less then twice as high (w.r.t. single turn case).
>
> > > When the turns are far apart (with respect to wire/tube diameter),
> > > inductance will not be 4 times higher and proximity effect will be
> > > less. You will get better performance than the single turn loop made
> > > of same diameter tube/wire. The result will be the same as when you
> > > place the two turns in parallel. Inductance will decrease somewhat
> > > (hence lower voltage across capacitor), AC resistance also, hence
> > > radiation efficiency).
>
> > > There is an "however". When you make a single turn loop from flat
> > > strip that has the same width as the length of your two-turn loop, you
> > > will notice: 1. reduced AC resistance (because of the significantly
> > > larger circumference of the flat strip with respect to a thin round
> > > tube, 2. inductance will decrease (H field lines have to take a longer
> > > path around the wide strip), 3. radiation resistance will not change
> > > with respect to a single turn loop from wire/tube.
> > > This results in higher efficiency and increased bandwidth.   The
> > > overall result will be better then for your two-turn loop. I think
> > > that is the reason why most programs are for single turn loops.
>
> > > So for the transmit case, given fixed diameter of your loop, the
> > > larger the copper surface (=length*circumference), the better the
> > > efficiency. Best thing to enhance conductor surface is to use very
> > > wide flat strip (high wind load), or multiple wires (with some spacing
> > > in between) in parallel (limited wind load).
>
> > > Off course for the receive-only case, a multi turn loop can be helpful
> > > as you can use a smaller tuning capacitor.
>
> > > Best regards,
>
> > > Wim
> > > PA3DJSwww.tetech.nl
> > > In case of PM, don't forget to remove abc.
>
> > Seems to me you are recommending the "?slinky" !
> > Is that correct?
> > Art
>
> Sorry Art, I am not talking about a slinky.
>
> I am just talking about a multi turn (2 turns) loop where overall wire
> length is < 0.25 lambda so you can assume that current in wire is
> constant along the length. It must be tuned by external capacitance.
>
> Regarding the strip. When you take a 3.14m long 20cm wide thin copper
> strip and make a loop of it (1m diameter), it will have a better
> efficiency then when you take 6.28m copper tubing with Dtube=2cm and
> make a two-turn loop (Dloop=1m, turns 18 cm apart).

>
> In the strip case, the current has more circumference to flow (40cm)
> instead of 6.28cm for the copper tubing. AC resistance of copper
> tubing will be about 10 times higher. Off course, current in two-turn
> loop will be half (for same radiated power), but still heat losses
> will be 10*0.5^2=2.5 times higher (for the two-turn loop).
>
> When both loops have good efficiency (so radiation resistance
> dominates), the strip loop will have better bandwidth as flux path is
> longer and therefore results in less inductance.
>
> I hope this clarifies my posting.
>
> Best regards,
>
> Wim
> PA3DJS
> Please remove abc in case of PM.

I think I am missing something Wim. A slinky has a strip winding that
is edge wound which provides the largest disparity
between the inside radius and the outside radius. On one of the top
transmitters the inductance winding is such that the inner radius
is close to the outside radius. Naturally the different pitch of the
windings is very different as is the inter coil capacitance.
As Roy stated charges accumulate on sharp edges which I see as correct
but I cannot see how that alteres the diference all that much as the
same clearance is required So in the final analysis for less
inductance which form is which., the longer inductance or the shorter
inductance on the assumption that the number of turns are similara nd
I can acceptt your word for it? I referred to a slinky purely to
emphasize the importance of reverse windings so that lumped loadings
applied are cancelled. Actually the modern slinky is not contra wound
for some reason but I assume that is for the novelty movement reasons
for children and not because of radiation reasons. The slinky patent
is now defunct if that matters and iI am assuming that the fed would
be centre fed.
Thank you so much for responding
Best regards
Art

4621. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 05:08:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg844g$9cp$1@news.albasani.net>
Source record: 19995
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Art Unwin wrote:

> ...
> Their advertising budget suggest that they are getting sales and they
> do radiate
> to the satisfaction of their users They don't have lumped loads so
> where ';s the beef?
> Art

Art:

I am ready to bend over backwards, until I can say different ...

However, how much you wanna' pay me for one of these?

```
---
|
| <<-- telescoping whip
|
|
|---------------------- <<---
/ |-------------- coax
\ |_______________ <<--
/ <<----- 50 ohm, five-watt or better non-inductive
\ |
/ |
| |
----- ---
--- - <<-- ground
-
```

Lifetime antenna, virtually perfect SWR, no moving parts, guaranteed a
lifetime, etc., etc.

AND! I bet I can find some to give testimonials to it being an
"excellent antenna." You know the game ... idiots are easily taken
advantage of ... :-(
<BUT-EVIL-GRIN>

... come on, argue something real ...

Regards,
JS

4622. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 05:25:56 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <FJMVk.30273$8T2.4646@newsfe07.iad>
Source record: 19996
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"JB" <nospam@goofball.net> wrote in message
news:E%BVk.36$us6.21@nwrddc01.gnilink.net...

>
> I wonder how the Limo's will deal with DTV in motion.
>

Ahah! Presently they don't. A big issue for opponents of 8VSB modulation
was poor performance in mobile/handheld (M/H) applications. Straight 8VSB
does not handle "dynamic multipath" well.

However ...

Development of the ATSC-M/H Standard for mobile
and handheld applications is moving forward at a
rapid pace. A critical element of that effort is the
Independent Demonstration of Viability (IDOV).
The goal of IDOV is to ensure that the technical
proposals under consideration can meet the goal
of enabling mobile and handheld services in early
2009.

per www.atsc.org/communications/newsletter/2007_december_standard.pdf -

I read some news accounts of supposed successful tests (the "IDOV" ?) this
past spring. We'll see.

BTW, alt.video.digital-tv newsgroup is doing a good job with the TV
transition. Also,
http://www.avsforum.com/ has news, like
http://www.avsforum.com/avs-vb/showthread.php?t=1078353

4623. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 05:51:16 UTC
From: DaveC <me@bogusdomain.net>
Message-ID: <0001HW.C54CDDD400BED186B01AD9AF@news.sf.sbcglobal.net>
Source record: 19997
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

> Since you used the term "whip" it tends to imply some physical motion or
> vehicle,
> vs a "vertical" which implies a stationary location.
> And both imply a omni pattern - like a general Access Point -

-=-=-=-

OK, time to clarify...

Wifi (2.4 GHz). outdoor omni vertical (not whip), permanent mount on pole, to be connected (very short pigtail) to pole-mounted wifi router in client mode. Max output: 250 mW.

Is it true that the higher the gain the flatter the "donut" shape of the sensitivity field?

(And yes, my terminology is rudimentary... please forgive.)

Thanks,
--
DaveC
me@bogusdomain.net
This is an invalid return address
Please reply in the news group

4624. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 06:13:29 UTC
From: ps56k <pschuman_no_spam_me@interserv.com>
Message-ID: <gqNVk.853$jZ1.698@flpi144.ffdc.sbc.com>
Source record: 19998
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

DaveC wrote:
>> Since you used the term "whip" it tends to imply some physical
>> motion or vehicle,
>> vs a "vertical" which implies a stationary location.
>> And both imply a omni pattern - like a general Access Point -
>
> -=-=-=-
>
> OK, time to clarify...
>
> Wifi (2.4 GHz). outdoor omni vertical (not whip), permanent mount on
> pole, to be connected (very short pigtail) to pole-mounted wifi
> router in client mode. Max output: 250 mW.
>
> Is it true that the higher the gain the flatter the "donut" shape of
> the sensitivity field?
>
> (And yes, my terminology is rudimentary... please forgive.)
>
> Thanks,
> --
> DaveC

dropped the x-posting to the ham groups -
--

why omni on a pole in "client mode" ?

If you are attemtping to connect to a specific Access Point,
this has been discussed here zillions of times,
and there are other questions, clarifications, and solutions available -
other than an omni -
Where are you in relation to the Access Point, how far, line of sight, etc

This requires a little different "thinking" than just putting up a bigger
stick
to talk to a 2m, 220, or 450 repeater -

4625. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 06:24:55 UTC
From: exray <radioexray@geeemail.com>
Message-ID: <gg88jr02o7e@news5.newsguy.com>
Source record: 19999
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

DaveC wrote:

> Is it true that the higher the gain the flatter the "donut" shape of the
> sensitivity field?
>
> (And yes, my terminology is rudimentary... please forgive.)

I'm the one who initially committed than terminological crime so forgive ME! Where is that big omni gain going to come from if not from the vertical beamwidth? Start with the isotropic model pictured as a spherical balloon. Squeeze it however you want to. Nothing about an antenna can add volume to the model, its just a matter of how you squeeze it.

-Bill

4626. Re: A-4S Issue

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 07:00:55 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <56mdnZdODdu2M7rUnZ2dnUVZ_hWdnZ2d@giganews.com>
Source record: 20000

R. Scott wrote:
> My A4S is acting wierd and I cannot figure it out.
>
> 20 meters its got great SWR. 15 is so so but tunable with a tuner
> and stays relatively flat.
>
> However 10 meters, the SWR stinks and I can try to tune it with a tuner
> but then it goes out again. And I can swing the beam and hear the
> Noise pick up and go down with the turning of the beam and when it stops
> it wiggles a bit and the SWR changes. The tube and trap connections all
> see secure.
>
> Do I have a bad trap or ?????
>
>
> Scotty W7PSK

I have an A3S (a similar design). It sounds to me like either...
1) oxidized connection(s) between tubing section(s): disassemble, clean and reassemble tubing joints.
2) moisture inside a trap(s): remove trap(s), drain and "bake" the moisture out, and reinstall with drain holes pointing DOWN.
3) a bad 15m trap (actually resonant on 10m): replace if resonant frequency is not approximately 28 MHz.

Bryan WA7PRC

4627. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 07:15:43 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <b1cfi4ddpgnrqsheqf1mk3i782r0mcjsfe@4ax.com>
Source record: 19851
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Fri, 21 Nov 2008 21:51:16 -0800, DaveC <me@bogusdomain.net> wrote:

>Is it true that the higher the gain the flatter the "donut" shape of the
>sensitivity field?

That is the only way to get actual gain from a (horizontally)
omnidirectional antenna (excluding any MIMO designs).

Flattening the vertical radiation pastern may have severe drawbacks
especially if the mast is swinging in the wind or some weak (e.g.
indoors) users are close to the base of the mast.

Paul OH3LWR

4628. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 08:41:45 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9B5E70B1383Cdoldridgsprintca@69.16.185.247>
Source record: 19852

Steve <sdaniel13@speakeasy.net> wrote in news:cde8dec9-5103-41c0-896b-e642ca76be67@t2g2000yqm.googlegroups.com:

>I've seen several programs that will help you calculate the precise
>dimensions of a single-turn loop, given the composition of the
>radiating element, its thickness, and so on. However, none of these
>programs are written to cover the case of a two or more-turn loop.
>
>Does anyone know of a program that will offer guidance in the
>construction of a two or more-turn loop?

Dunno about a program. I made a 2-turn transmitting loop for 160 one time, using a variation of Ted Hart's matching scheme. I did it by cutting it a bit long, then trimming it with an analyzer to see where it resonated. Eventually got it to 1:1 at about 1890khz where I wanted it and it received as well as could be expected. Transmit efficiency was on a par with a hamstick.

--
Dave Oldridge+
ICQ 454777283
VA7CZ

4629. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 09:09:45 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <fegfi4td1mr3c8v6d38tlghbghvncadkfg@4ax.com>
Source record: 19853

On Fri, 21 Nov 2008 18:24:20 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Flat conductors aren't as attractive as they look at first glance. The
>problem is the same proximity effect mentioned earlier in the posting.
>Current is distributed evenly around a round conductor (assuming the
>perimeter is a very small fraction of a wavelength), but not along a
>flat strip. Because of proximity effect, the current is much more
>concentrated near the edges than at the middle. The result is that the
>resistance is considerably higher than for a wire with the same surface
>area. In figuring an "equivalent diameter" of a thin flat strip in order
>to get the same L and C properties, the rule is that a strip is
>equivalent to a wire whose diameter is half the strip width. This means
>that a strip of width w or total "circumference" 2 * w is equivalent to
>a wire with a circumference of pi * w / 2 ~ 1.6 w, in so far as L and C
>go. Since the same phenomenon affects the inductance and resistance,
>this would also be a good working rule for estimating the relative R of
>a strip or wire.
>
>Roy Lewallen, W7EL

Thanks. I think you just explained the cause of a problem I fought in
about 1980. I had "designed" a 930MHz yagi antenna for a utility
telemetry system. In order to cut system costs, I decided to build
the antenna from stamped 0.062" aluminum. My initial dimensions were
stolen from a Scala yagi which used approximately 0.500" diameter
round rods for elements. I reasoned that to obtain the same
bandwidth, I would need to use the same circumference as the rod. That
made the initial prototypes elements 0.8" wide. After some tweaking,
the antenna tuned to the correct center frequency, but the 2:1 VSWR
bandwidth was much less than the original Scala antenna.

So, I increased the width of the stamped elements (with aluminum duct
tape) until the bandwidth improved. I landed at 1.25" or 2.5 times
the width of the rod elements, somewhat larger than the recommended
2.0 times the rod diameter.

However, when I added a coined stiffener groove to the stamped "boom"
and elements, the bandwidth increased again, to much more than
necessary. After the usual all night cut-n-try session, I landed on
2.0 times the width of the rod elements, with the coined stiffeners,
which apparently increased the effective diameter of the elements.

Coining the "boom" also wrecked all the element tuning since it
increases their effective end to end length by the depth of the
coining. I had a hell of a time dealing with the sheet metal vendor,

trying to control the stiffener dimensions. It seems that aluminum stretches when coined, often in a rather unpredictable manner. I eventually gave up and went to 0.125" sheet aluminum and no stiffeners. Unfortunately, only a handful of prototypes were made and shipped, so I have no clue as to how well (or badly) they worked in the field.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4630. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 11:40:34 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <ucudndzBUtYlcrrUnZ2dnUVZ8jidnZ2d@bt.com>
Source record: 19854

"christofire" <christofire@btinternet.com> wrote in message
news:24-dnW10ILb1g7rUnZ2dnUVZ8t3inZ2d@bt.com...
>
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:18632-49271512-3008@storefull-3252.bay.webtv.net...
>> Chris wrote:
>> "The formulae for all the field strengths can be found in reliable books
>> such as Kraus "Antennas"."
>>
>> I agree.
>>
>> On page 40 of Kraus` 3rd edition of "Antennas" is found:
>> "For a 1/2-wave dipole antenna, the energy is stored at one instant of
>> time in the electric field, mainly near the ends of the antenna or
>> maximum charge regions, while a 1/2-period later the energy is stored in
>> the magnetic field mainly near the center of the antenna or maximum
>> current region."
>>
>> My preceding statement was before reading Kraus:
>> "A standing wave antenna stores energy in the magnetic field near its
>> center during one half of the cycle and in the electric fields near its
>> ends during the other half cycle."
>>
>> My statement lacks clarity and precision. I am a poor engineer who has
>> never worked as an educator. Chris` point? Close but no cigar? OK, I
>> deserve the critism.
>>
>> Best regards, Richard Harrison, KB5WZI
>
>
> I hardly dare to say it but, actually that's incorrect for the radiation
> field (which is what I wrote about). The radiation resistance of an
> antenna accounts for its ability to radiate power into the surrounding
> space and, like all other resistances, the peak of current co-insides with
> the peak of applied voltage - so one doesn't occur '1/2-period later' at
> all. What's described in the passage above is the situation in respect of
> the temporary storage of energy in the 'reactive near fields'
> corresponding to a reactive component of the terminal impedance, not the
> radiation resistance. I would expect the latter to be of greater
> importance to those interested in communication.
>
> I wouldn't disagree with the statement that stored energy is concentrated
> in the regions near the 'maximum charge regions' but if you plot the
> equipotent lines around a dipole and equate the amount of energy stored to

> the electric field strength it illustrates that the spatial distribution
> of energy in the electric field is similar to that in the magnetic field
> ... as one might expect.
>
> Chris

Of course, I meant to write 'equipotential' lines, but the doorbell rang at the moment I was typing that. 'Equipotent' sounds a bit like 'omnipotent', but in a shared manner (e.g. Greek gods)!

Reading the quotation again, even the '1/2-period later' seems incorrect. For the reactive part of the terminal impedance, the peaks or zero-crossings of current and voltage are separated in time by 1/4 of the period.

Chris

4631. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 12:30:57 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <660ada8b-1b96-4313-a802-7d9ed1b97ffe@f13g2000yqj.googlegroups.com>
Source record: 19855

On 22 nov, 03:24, Roy Lewallen <w...@eznec.com> wrote:
> Wimpie wrote:
> > . . .
> > There is an "however". When you make a single turn loop from flat
> > strip that has the same width as the length of your two-turn loop, you
> > will notice: 1. reduced AC resistance (because of the significantly
> > larger circumference of the flat strip with respect to a thin round
> > tube, 2. inductance will decrease (H field lines have to take a longer
> > path around the wide strip), 3. radiation resistance will not change
> > with respect to a single turn loop from wire/tube.
> > This results in higher efficiency and increased bandwidth.   The
> > overall result will be better then for your two-turn loop. I think
> > that is the reason why most programs are for single turn loops.
>
> > So for the transmit case, given fixed diameter of your loop, the
> > larger the copper surface (=length*circumference), the better the
> > efficiency. Best thing to enhance conductor surface is to use very
> > wide flat strip (high wind load), or multiple wires (with some spacing
> > in between) in parallel (limited wind load).
> > . . .
>
> Flat conductors aren't as attractive as they look at first glance. The
> problem is the same proximity effect mentioned earlier in the posting.
> Current is distributed evenly around a round conductor (assuming the
> perimeter is a very small fraction of a wavelength), but not along a
> flat strip. Because of proximity effect, the current is much more
> concentrated near the edges than at the middle. The result is that the
> resistance is considerably higher than for a wire with the same surface
> area. In figuring an "equivalent diameter" of a thin flat strip in order
> to get the same L and C properties, the rule is that a strip is
> equivalent to a wire whose diameter is half the strip width. This means
> that a strip of width w or total "circumference" 2 * w is equivalent to
> a wire with a circumference of pi * w / 2 ~ 1.6 w, in so far as L and C
> go. Since the same phenomenon affects the inductance and resistance,
> this would also be a good working rule for estimating the relative R of
> a strip or wire.
>
> Roy Lewallen, W7EL

Hello Roy,

You are right regarding non-uniformity, losses in the flat strip are
higher then based on the uniform current distribution (because of non-
uniformity). But this does not declassify loop antennas out of strip
material.

Based on a uniform current distribution (20cm wide strip versus two-turn loop from tube with D=2cm) one would expect heat loss reduction of 3.2. In my posting on Art's comment a mentioned heat loss reduction w.r.t. the 2-turn loop of factor 2.5 (to account for non-uniformity).

A strip (not near to other constructions) has effective diameter of half the width to have same characteristic impedance (as you mentioned). So a strip with physical circumference of 40cm (width = 20cm) has an effective circumference of 40*0.785=31.4cm. You need to have tube with D=10cm to have same effective circumference. I agree with you that this effective circumference is also a good starting point for calculation of AC loss resistance.

When Dloop is no longer large with respect to Dtube, current in the tube tends to take the shortest path, hence reducing effective diameter (and loop area) of the loop. In case of the strip, effective diameter (hence area) does not reduce. Radiation resistance is proportional to A^2 (for electrically small loops), hence Dloop^4. 10% reduction on loop diameter, gives 34% reduction of radiation resistance.

In my opinion, advantage of a strip is still significant with respect to a tube as long as you use a strip with width > 2*(tube diameter).

Best regards,

Wim
PA3DJS
www.tetech.nl
you can use PM, but please remove abc.

4632. Re: FCC TV Band Devices

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 12:45:17 UTC
From: Dave <dave@dave.dave>
Message-ID: <4927fede$0$31150$bd467cd0@news.dslextreme.com>
Source record: 19856
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Joel Koltner wrote:
> "mpm" <mpmillard@aol.com> wrote in message
> news:cb7b371c-e564-49e1-b39e-bff0dfcfe3c3@v13g2000yqm.googlegroups.com...
> "Whitespace devices will also cause great harm to wireless microphones,
> particularly older models."
>
> Isn't the estimate that something like 90% of all wireless mics are being used
> by folks who technically never had the authorization to use the spectrum
> (...that is used...) is the first place? Something like how only radio and TV
> stations had the authority to use the standard wireless mic frequencies, but
> these days anyone doing professional sound for theater, sporting events, etc.
> is also using those same frequencies?
>

The FCC and the TV broadcasters looked the other way because there is no evidence that such activity has ever caused any interference. I can get 6 microphones to work in an occupied analog TV channel and neither notices the other.

The TV Band Devices the FCC has recently begun the process of authorizing are way more damaging than a 50 mW 65 kHz deviation FM signal.

Luckily, these devices will not be allowed anywhere near where I work. The FCC has banned them from the 13 biggest cities, and from within a kilometer of a venue or stadium using wireless microphones. The proposed rules do not require a Part 74 license for these protections.

4633. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 12:48:05 UTC
From: Dave <dave@dave.dave>
Message-ID: <4927ff85$0$31150$bd467cd0@news.dslextreme.com>
Source record: 19857
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> On Fri, 21 Nov 2008 06:36:32 -0600, Cecil Moore wrote:
>> Sal M. Onella wrote:
>>> If even poor antennas work well, why all the whining?
>> I've not had any problems with the UHF circular loop that comes with
>> standard rabbit ears. The only problem I've had is with VHF channels on
>> the dipole. I need a weatherproof version of my RS rabbit ears.
>> Unfortunately, ABC is Channel 7 here in Tyler, TX.
>
> Where I'm sitting here in Whittier, KABC 7 is so strong I can get it
> without even a cable plugged in!
>
> It's 50, 56, and 58 I worry about; 2-13 and 28 are covered; I'm looking
> forward to seeing if my new bowtie (from that youtube video, but with
> ER708-2 x 1/16 filler rod) will pick up PAX on 30. They have some nice
> oldies sometimes. (I also have some of the ER708-2 in 0.045".)
>
> I'm gonna solder it together and hold it to the board with brass thumb-
> tacks. ;-)
>
> Just for reference: http://www.youtube.com/watch?v=EWQhlmJTMzw
>
> Cheers!
> Rich
>

Ion TV 30 is in Claremont and has a 3.8 Megawatt Signal (elliptically
polarized no less). It should give you a tan in Whittier.

4634. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 13:05:52 UTC
From: mpm <mpmillard@aol.com>
Message-ID: <d45394cc-39ca-481e-a972-7858db0ee17c@v15g2000yqn.googlegroups.com>
Source record: 19858
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 22, 12:08 am, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > Their advertising budget suggest that they are getting sales and they
> > do radiate
> > to the satisfaction of their users They don't have lumped loads so
> > where ';s the beef?
> > Art
>
> Art:
>
> I am ready to bend over backwards, until I can say different ...
>
> However, how much you wanna' pay me for one of these?
>
> --- <<-- telescoping whip
> |---------- <<---
> / | coax
> \ |_____ <<--
> / <<----- 50 ohm, five-watt or better non-inductive
> \ |
> / |
> | |
> ----- ---
> --- - <<-- ground
> -
>
> Lifetime antenna, virtually perfect SWR, no moving parts, guaranteed a
> lifetime, etc., etc.
>
> AND! I bet I can find some to give testimonials to it being an
> "excellent antenna." You know the game ... idiots are easily taken
> advantage of ... :-(
> <BUT-EVIL-GRIN>
>
> ... come on, argue something real ...
>
> Regards,

> JS

Ha!!!

Now, if you can just get that idiot Billy Mayes here with Oxy-Clean to pitch it for you, you can retire! ;-)

4635. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 15:32:11 UTC
From: Dave <noone@nowhere.com>
Message-ID: <%BVVk.183$QX3.180@nwrddc02.gnilink.net>
Source record: 19859

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:a3987748-60d4-4eb1-8c33-3bc838a586a0@v42g2000yqv.googlegroups.com...
On Nov 21, 4:07 pm, "Dave" <no...@nowhere.com> wrote:
>> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>>
>> news:a92539ba-df10-4aa5-8712-9bc1a31e7015@13g2000yql.googlegroups.com...
>>
>> > the law that I continually state from the
>> >extension of the Gaussian law of statics which I derived.
>>
>> you haven't presented anything that you derived... state the equation.

>Oh come on David I do not work for you, do it for yourself as you have
> superior background than I do.

finally he got something right!

>If you are proficient in mathematics check out the addition of
>displacement current of Maxwell and review it as just that.

it works fine for me as is... no weak force, no magic levitating neutrinos,
just a displacement current.

> a current in circular foirm that DOES generate a displacement
>magnetic field such that it displaces a charged particle
> from the surface of the radiator.

bull!

>This eddy current has the units of
>current which somehow would match the
>description of the "weak force:".

eddy currents don't require weak force, nor displacement currents, they are
perfectly well described by existing magnetic field and conduction
equations.

>You stated previously that you wanted to know
>where the weak current equation is so, now you can start on a series

not me, i know where the weak 'force' is, and it has nothing to do with
electrical currents even though it is sometimes refered to as the
electro-weak force. that is a throwback to a VERY short time after the big
bang when the forces were merged, right now, unless you are experimenting
with a supercollider you can ignore the weak force as far as electric fields
are concerned.

>Stae equation you ask?
<handwaving bs snipped>

yes, state your equation that you 'derived'.

>Ofcourse you can declare antenna computer programs are in error and
>salvage your credability or place such a statement in the practicable
>book that you are writing! After all if it is printed in a book it
>must be right.......right?

but the computer programs that exist today, and DON'T use the weak force in anyway are perfectly in tune with maxwell's equations. and my book doesn't mention them at all, so don't hold your breath for that.

4636. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 15:35:04 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ac8f0486-295e-4d9f-808a-83f58977a066@v42g2000yqv.googlegroups.com>
Source record: 19860

On Nov 21, 8:15 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 21, 5:47 pm, richardharri...@webtv.net (Richard Harrison)
> wrote:
>
> > Jim Kelley wrote:
>
> > "In what way is it (an electrostatic field) not (stationary)?"
>
> > Terman was refering to an electromagnetic (radio) wave. It is a
> > peculiarity of "old-speak" to call an electric field an electrostatic
> > field.
>
> > As Cecil reminds us, radio waves are always in motion. But, their
> > superposition may produce a stationary wave called a standing wave.
>
> > Best regards, Richard Harrison, KB5WZI
>
> But Cecil has never said you can have current flow without a magnetic
> field!
> So now one must determine where the reflection occurs and science
> puports that it is not at the end of the antenna!
> Thus the term "standing wave" must be thougherly defined in line with
> the newly disclosed facts so that all jive.
> Also, Gauss never assumed the wave description over a particle
> description, The answer regarding waves and particles
> with respect to radiation has not yet been resolved by the scientific
> community because of the Maxwell additive dillema.
> And "Old speak" doesn't cut the mustard in present day debate. It is
> completely wrong to call a static field an electrical field.
> It is either a static or a dynamic field so guessing what Terman
> really ment or meant to say just does not have any standing.

In my readings I came across a chapter with the title
The electrical field established by charges at rest
this being strangely similar to what you were saying.!
Thus I may have been out of line in my response
so I apologize. Haven't read it yet!
Art

4637. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 15:55:24 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <GXVVk.5395$hc1.3690@flpi150.ffdc.sbc.com>
Source record: 19861

Richard Harrison wrote:
> As Cecil reminds us, radio waves are always in motion. But, their
> superposition may produce a stationary wave called a standing wave.

From "Electrical Communication", by Albert:

"Such a plot of voltage is usually referred to as a
voltage standing wave or as a *stationary wave*.
Neither of these terms is particularly descriptive
of the phenomenon. A plot of effective values of
voltage, appearing as in Fig. 6(e), *is not a wave*
in the usual sense."

From "College Physics", by Bueche and Hecht:

"These ... patterns are called *standing waves*, as
compared to the propagating waves considered above.
They might better not be called waves at all, since
they do not transport energy and momentum."

--
73, Cecil http://www.w5dxp.com

4638. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 16:22:03 UTC
From: JB <nospam@goofball.net>
Message-ID: <LkWVk.202$QX3.76@nwrddc02.gnilink.net>
Source record: 19862

> Any excuse to raise the noise floor--
>
I didn't mean for you to take that as a suggestion. You don't have to do what I tell you to do. That's what we have the news media for.

4639. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 16:47:04 UTC
From: Bill Kearney <wkearney99@hotmail.com>
Message-ID: <3K-dnZg7rqMVqrXUnZ2dnUVZ_obinZ2d@speakeasy.net>
Source record: 19863
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

> OK, time to clarify...

You still don't describe what sort of connection you're trying to make.

4640. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 16:55:19 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <230b4dc2-db8c-4197-8942-28f957943c1d@r40g2000yqj.googlegroups.com>
Source record: 19864

On Nov 22, 9:32 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:a3987748-60d4-4eb1-8c33-3bc838a586a0@v42g2000yqv.googlegroups.com...
> On Nov 21, 4:07 pm, "Dave" <no...@nowhere.com> wrote:
>
> >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >>news:a92539ba-df10-4aa5-8712-9bc1a31e7015@13g2000yql.googlegroups.com...
>
> >> > the law that I continually state from the
> >> >extension of the Gaussian law of statics which I derived.
>
> >> you haven't presented anything that you derived... state the equation.
> >Oh come on David I do not work for you, do it for yourself as you have
> > superior background than I do.
>
> finally he got something right!
>
> >If you are proficient in mathematics check out the addition of
> >displacement current of Maxwell and review it as just that.
>
> it works fine for me as is... no weak force, no magic levitating neutrinos,
> just a displacement current.
>
> > a current in circular foirm that DOES generate a displacement
> >magnetic field such that it displaces a charged particle
> > from the surface of the radiator.
>
> bull!
>
> >This eddy current has the units of
> >current which somehow would match the
> >description of the "weak force:".
>
> eddy currents don't require weak force, nor displacement currents, they are
> perfectly well described by existing magnetic field and conduction
> equations.
>
> >You stated previously that you wanted to know
> >where the weak current equation is so, now you can start on a series
>
> not me, i know where the weak 'force' is, and it has nothing to do with
> electrical currents even though it is sometimes refered to as the

> electro-weak force. that is a throwback to a VERY short time after the big
> bang when the forces were merged, right now, unless you are experimenting
> with a supercollider you can ignore the weak force as far as electric fields
> are concerned.
>
> >Stae equation you ask?
>
> <handwaving bs snipped>
>
> yes, state your equation that you 'derived'.
>
> >Ofcourse you can declare antenna computer programs are in error and
> >salvage your credability or place such a statement in the practicable
> >book that you are writing! After all if it is printed in a book it
> >must be right.......right?
>
> but the computer programs that exist today, and DON'T use the weak force in
> anyway are perfectly in tune with maxwell's equations. and my book doesn't
> mention them at all, so don't hold your breath for that.

You must be older than I thought, you never are going to change.
Before you fade away
this last bit that you are now supporting regarding the weak force.
Can you account for every action
that reside in Maxwells laws including his addition? Can you state
that without doubt that eddy currents do not exist
during radiation? Or more importantly, that Maxwell's laws also omit
the presence of the eddy current?
Are you still of the opinion that radiation is a wave which implies a
string of connected energies instead of individual particle ejection?
Then pray tell me how exactly does the transmition of communication
eminate from a radiator and do a reverse action
in the transportation of intelligence? And then comes the biggy, How
does the Universe exist without being in equilibrium
a term you resist with abandon. Your knee jerk reactions to me are
starting to be absurd but as you are unemployed
you do not need now to answer to anybody regarding the thoughts of an
old man or concern yourself of the possibility of being fired.
Art

4641. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 17:59:48 UTC
From: Dave <noone@nowhere.com>
Message-ID: <oMXVk.213$QX3.27@nwrddc02.gnilink.net>
Source record: 19865

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:230b4dc2-db8c-4197-8942-28f957943c1d@r40g2000yqj.googlegroups.com...
>this last bit that you are now supporting regarding the weak force.
>Can you account for every action
>that reside in Maxwells laws including his addition?

yes

>Can you state
>that without doubt that eddy currents do not exist
>during radiation? Or more importantly, that Maxwell's laws also omit
>the presence of the eddy current?

where did you ever get this idea. eddy current are currents in a conductor caused by exposure to an electromagnetic field. of course they are covered by maxwell's equations. you just have to use the proper boundry conditions and permeability/conductivity of the conductor to account for them. i have written software that modeled eddy currents from fields set up by power transformers, every equation was out of a standard text book.

>Are you still of the opinion that radiation is a wave which implies a
>string of connected energies instead of individual particle ejection?

yes, particle ejection, your magical levitating diamagnetic neutrino theory, is not necessary for electromagnetic propagation.

>Then pray tell me how exactly does the transmition of communication
>eminate from a radiator and do a reverse action
>in the transportation of intelligence?

energy my dear man, energy is conveyed by the electromagnetic waves and hence can carry intelligence... as opposed to what goes on between your ears, which must be quite a vaccuum.

> And then comes the biggy, How
>does the Universe exist without being in equilibrium
>a term you resist with abandon.

i abandoned equilibrium long ago. it is neither necessary nor desirable for any possible use of electromagnetic propagation that i want to make use of. if everything were in equilibrium the universe would be dead, it takes energy moving from here to there to make everything work. without flowing energy, hence non-equilibrium, nothing would exist... much like the space between your ears, maybe that is the problem, you brain has reached equilibrium with the outside world, hence nothing can flow in... though that doesn't explain the outpouring of bafflegab.

>Your knee jerk reactions to me are
>starting to be absurd but as you are unemployed
>you do not need now to answer to anybody regarding the thoughts of an
>old man or concern yourself of the possibility of being fired.

my reactions to your are pure humor. i love the pure illogic of your writings, reminds me of some old science fiction stuff by writers who didn't care if their proposals made any physical sense in this universe. perhaps that would be a good line of work for you art, you could write science fiction in the 'alternate universe' genre. maybe there you could come up with a story line that would make use of your distorted physics. and no, i am gainfully employed, someone has to contribute to the welfare system so you can collect your checks.

4642. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 19:10:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <56f0d61c-e3a9-4161-80c5-2d3143b98f57@h5g2000yqh.googlegroups.com>
Source record: 19866

On Nov 22, 11:59 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:230b4dc2-db8c-4197-8942-28f957943c1d@r40g2000yqj.googlegroups.com...
>
> >this last bit that you are now supporting regarding the weak force.
> >Can you account for every action
> >that reside in Maxwells laws including his addition?
>
> yes
>
> >Can you state
> >that without doubt that eddy currents do not exist
> >during radiation? Or more importantly, that Maxwell's laws also omit
> >the presence of the eddy current?
>
> where did you ever get this idea. eddy current are currents in a conductor
> caused by exposure to an electromagnetic field. of course they are covered
> by maxwell's equations. you just have to use the proper boundry conditions
> and permeability/conductivity of the conductor to account for them. i have
> written software that modeled eddy currents from fields set up by power
> transformers, every equation was out of a standard text book.
>
> >Are you still of the opinion that radiation is a wave which implies a
> >string of connected energies instead of individual particle ejection?
>
> yes, particle ejection, your magical levitating diamagnetic neutrino theory,
> is not necessary for electromagnetic propagation.
>
> >Then pray tell me how exactly does the transmition of communication
> >eminate from a radiator and do a reverse action
>
> >in the transportation of intelligence?
>
> energy my dear man, energy is conveyed by the electromagnetic waves and
> hence can carry intelligence... as opposed to what goes on between your
> ears, which must be quite a vaccuum.
>
> > And then comes the biggy, How
> >does the Universe exist without being in equilibrium
> >a term you resist with abandon.
>
> i abandoned equilibrium long ago. it is neither necessary nor desirable for
> any possible use of electromagnetic propagation that i want to make use of.

> if everything were in equilibrium the universe would be dead, it takes
> energy moving from here to there to make everything work. without flowing
> energy, hence non-equilibrium, nothing would exist... much like the space
> between your ears, maybe that is the problem, you brain has reached
> equilibrium with the outside world, hence nothing can flow in... though that
> doesn't explain the outpouring of bafflegab.
>
> >Your knee jerk reactions to me are
> >starting to be absurd but as you are unemployed
> >you do not need now to answer to anybody regarding the thoughts of an
> >old man or concern yourself of the possibility of being fired.
>
> my reactions to your are pure humor. i love the pure illogic of your
> writings, reminds me of some old science fiction stuff by writers who didn't
> care if their proposals made any physical sense in this universe. perhaps
> that would be a good line of work for you art, you could write science
> fiction in the 'alternate universe' genre. maybe there you could come up
> with a story line that would make use of your distorted physics. and no, i
> am gainfully employed, someone has to contribute to the welfare system so
> you can collect your checks.

Well your background on this subject is far superior to mine so you
have the last word
and I must wander off to ponder my silly ideas. It was several years
ago that I brought up the subject
of pulses with respect to the tank circuit and the propersition that
current flows thru the center
of a radiator that was not in equilibrium. When you banish the idea of
equilibrium
I have nothing left to support what I say such that I have now reached
the Rubicon which
requires me to succumb to the teachings of books and abolishion of all
personal thought and reasoning.
Fortinately I am retired and thus cannot be fired or put to death on
account of my personal thoughts
so in my own little world I can still continue in what I am doing
except with regard to sharing or suggesting change
which on this group is a impenatrational barrier.
It was fun for a while but as I stated you have the last word.
Now await my next posting on a different subject!
Regards
Art

4643. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 19:14:15 UTC
From: richardharrison@webtv.net
Message-ID: <23608-49285A07-47@storefull-3251.bay.webtv.net>
Source record: 19868

Art wrote:
"So now one must determine where the reflection occurs and science puports that it is not at the end of the antenna!"

Check your 1955 Terman opus. On page 887 is Fig. 23-24 showing current on a 1/4-wave antenna. Current discontinues at the tip.

On page 893 Terman says:
"An antenna can therefore be regarded as a resonant system with distributed constants. As a result, the impedance of an antenna behaves in much the same manner as does the impedance of a transmission line (see Sec. 4-7)."

Sec. (4-7) says on page 99:
"Similarly, with an open-circuited receiver, or with a resistance load greater than the characteristic impedance so that the voltage distribution of the open-circuit type (Fig.4-5),
the power factor is capacitive for lengths less than the distance to the first minimum. Thereafter, the power factor alternates between capacitive and inductive at intervals of a quarter wavelength, exactly as in the short-circuited case.

If Cecil were asked where a reflection occurs on an antenna or a transmission line, I`d wager he would reply, at the same place the impedance discontinuity occurs.

Art has asked similar questions several times. Art should answer some questions. What has his examination of Gauss` work produced that allows quicker, more precise or easier answers to the problems readily solved using Maxwell`s equations? What mistake has Art found in Maxwell`s equations?

Best regards, Richard Harrison, KB5WZI

4644. FA: EAC R-390A

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 19:17:13 UTC
From: K <K@spam.net>
Message-ID: <49285abc$0$4867$9a6e19ea@unlimited.newshosting.com>
Source record: 19867
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

FA: very nice EAC R-390A click here http://tinyurl.com/556eo5

K

4645. Re: FA: R-390A built by ECA

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 19:24:19 UTC
From: highlandham <rfburns@nospam.sco>
Message-ID: <MoKdnbyAK710UbXUnZ2dneKdnZzinZ2d@pipex.net>
Source record: 19882
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

```
>> My yellow striper came with the decades-old Dymo stickers still
>> attached. I swear the glues in modern Dymo labels aren't as good.
>>
>> Tim.
> But the P-touch makes suitable substitutes that look great and adhere
> very well.
==================================
If you mean the P-touch from Brother, yes that's an excellent type of
label(er)

Frank
```

4646. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 19:42:04 UTC
From: highlandham <rfburns@nospam.sco>
Message-ID: <ftKdnfQTmcyKTLXUnZ2dnUVZ8qydnZ2d@pipex.net>
Source record: 19883
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

> I have need of a directional antenna for a 30 foot path within the house.
> (the microwave oven wipes out the signal).
>
> Do you have any better details on construction?
==========
If your WiFi device is near the microwave oven , you indeed have a problem.
In my situation the oven is away (approx 7 - 8 metres) from the Wifi
system ,both router and laptop ,and I no longer had interference when
setting the WiFI System to the highest frequency (channel) with the
microwave oven freq at about 2390MHz.

Frank KN6WH

4647. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 20:08:54 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <55fa82bf-331e-47b1-b0ad-e02e009eb7b0@20g2000yqt.googlegroups.com>
Source record: 19869
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Nov 21, 8:47 pm, JIMMIE <jimmi...@gmail.com> wrote:
> On Nov 21, 2:38 am, DaveC <m...@bogusdomain.net> wrote:
>
> > Looking for outdoor omni "whip" antenna for 2.4 GHz.
>
> > Is there any reason to not go for the greatest gain antenna, given that cost
> > is not too important (within reason)?
>
> > There are scads of these on the 'net. I'm looking for someone who has
> > experience with one or more of them and can make a recommendation for one.
>
> > Thanks,
> > --
> > DaveC
> > m...@bogusdomain.net
> > This is an invalid return address
> > Please reply in the news group
>
> I recently built a Franklin antenna for 2.4Ghz.
> I highly reccommend it. Google WiFi and franklin antenna.
>
> Jimmie

Also look up AMOS antenna. They are easy to make and work well

Jimmie

4648. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 20:22:12 UTC
From: ml <m@di.net>
Message-ID: <m-6C57E7.15221222112008@news.optonline.net>
Source record: 19870

Guess no spam didn't read my post fully

I also acknowledged that using oil was bad , thats why i then stated
that plastic is a way to go

but it can't be poor per say because the original post asked for
comments on wood, so we gave comments on wood

he also asked about plastics he got comments on plastic

also acknowledged was some pro's and cons

only the user and his applications and desires will determine what
is 'best'

In article <je4Vk.850$VC6.161@newsfe25.iad>,
"NoSPAM" <unknown@nospam.org> wrote:

> "ml" <m@di.net> wrote in message
> news:m-540259.05463919112008@news.optonline.net...
> > In article <MbMSk.2377$Lv6.1922@bignews8.bellsouth.net>,
> > "Hal Rosser" <hmrosser@bellsouth.net> wrote:
> >
> >> Thanks, Barry on helping to wake up my recollections. I had forgotten
> >> that
>
> {snip}
>
> > > find some of that oil they soak telephone poles in then coat it
> > > w/sealer
> > >
> > > ultimately wood prob wont last as long as some good plastic and
> > > i guess would be heaver stressing the wires more
> > >
> > > it will prob still hold more water than a smooth plastic dunno
> > >
> > > and prob not have as good insulative prop's but might be moot
>
> I consider this a poor suggestion for a number of reasons...
>
> Several methods of wood treatment have been used over the years. The three
> main methods used to be pressure treatment with creosote, pentachlorophenol,
> or inorganic arsenic salts. These were generally replaced by chromated
> copper arsenate. Other treatments involved copper napthenate, zinc
> napthenate, and tributyl tin oxide. All of these methods provide fungus
> protection and some limited moisture protection.

>
> Creosote, as used for treating wood, is generally coal tar creosote. This
> material is distilled from coke oven tar and it contains polycyclic aromatic
> hydrocarbons, phenols, and cresols, all of which are quite toxic and most
> are either proven or suspected carcinogens.
>
> Pentachlorophenol is registered by the Environmental Protection Agency as an
> insecticide (termicide), fungicide, herbicides, molluscide, algaecide,
> disinfectant, and as an ingredient in antifouling paint. Stated simply. it
> is toxic to just about all life.
>
> Chromated copper arsenate, at one time, was the most widely used wood
> treatment. Hexavalent chromium and arsenic in any form are both extremely
> toxic, so newer treatments were developed including ammoniacal copper
> quaternary. The EPA lists this as a general use pesticide and it is far
> less toxic than chromated copper arsenate. Other newer wood treatments used
> today are based on borax and other borate salts. These too are less toxic
> than the older copper salts.
>
> The oil treatment that "ml" refers to is most likely creosote. However
> creosote or any other of the treatments described above will not make the
> wood a good electrical insulator for use as spacers in open wire
> transmission line. Raw wood or wood treated with any of the metal salts
> shows a high dielectric loss. Even pentachlorophenol is not very suitable
> as its dielectric constant is around 8 to 10. But then the wood itself
> usually has a radio frequency dielectric constant around 10 or more too,
> even if completely dried. Increases are seen at frequencies below the MHz
> region, and with increasing moisture. The loss tangent of wood also
> increases rapidly with moisture content.
>
> The reason that old timers boiled their wood dowels in paraffin wax was
> twofold. The first was to completely dry the wood, and the second was to
> provide moisture protection. The preservation of the wood against fungus or
> termites was generally inconsequential for use as spacers in transmission
> lines.
>
> Polyvinyl chloride and chlorinated polyvinyl chloride plastics are
> moderately lossy at radio frequencies but are far better than wood in this
> respect, and I have seen them used with homebrew transmission lines.
> However, from the standpoint of RF losses and ultraviolet radiation damage,
> acrylic plastics are my choice as true ladder line insulators.
>
> One suggestion I have is to look at cheap plastic coathangers. These are
> about 1/4 inch in diameter and are not vinyl coated wire hangers. Several
> insulators can be cut from a single coathanger. Since you can often buy
> these hangers for around $1.00 for ten, a few dollars could provide a good
> number of insulators. If you don't like the color, spray paint them with
> Krylon or another acrylic paint. White will provide the best ultraviolet
> resistance. I would limit my wire size to 16 Gauge or smaller as this
> plastic is quite brittle.

>
> 73, Dr. Barry L. Ornitz WA4VZQ

4649. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 20:33:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6cc26708-1f03-4519-b00b-26b5813158f3@q9g2000yqc.googlegroups.com>
Source record: 19871

On Nov 22, 1:14 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "So now one must determine where the reflection occurs and science
> puports that it is not at the end of the antenna!"
>
> Check your 1955 Terman opus. On page 887 is Fig. 23-24 showing current
> on a 1/4-wave antenna. Current discontinues at the tip.
>
> On page 893 Terman says:
> "An antenna can therefore be regarded as a resonant system with
> distributed constants. As a result, the impedance of an antenna behaves
> in much the same manner as does the impedance of a transmission line
> (see Sec. 4-7)."
>
> Sec. (4-7) says on page 99:
> "Similarly, with an open-circuited receiver, or with a resistance load
> greater than the characteristic impedance so that the voltage
> distribution of the open-circuit type (Fig.4-5),
> the power factor is capacitive for lengths less than the distance to the
> first minimum. Thereafter, the power factor alternates between
> capacitive and inductive at intervals of a quarter wavelength, exactly
> as in the short-circuited case.
>
> If Cecil were asked where a reflection occurs on an antenna or a
> transmission line, I`d wager he would reply, at the same place the
> impedance discontinuity occurs.
>
> Art has asked similar questions several times. Art should answer some
> questions. What has his examination of Gauss` work produced that allows
> quicker, more precise or easier answers to the problems readily solved
> using Maxwell`s equations? What mistake has Art found in Maxwell`s
> equations?
>
> Best regards, Richard Harrison, KB5WZI

Ouch. Maxwell works O,.KJ for me. I use computer programs based on
Maxwell. Gauss gave me pointers that Maxwell failed to do i.e he never
gave a true account of radiation
or explained the role of the weak force.Thus I have to solve these
things for myself or follow the other lemmings
What I do not understand is not his thinking but the interpretation
that others place on his thinking. It is this I challkenge.

For instance all the masters stipulated the condition of equilibrium.
Somehow those very same equationsapparently missed
the equilibrium content in their equations. Maxwell came along and
placed an addfition to their combined formular. So how come this was
concieved to be necessary and is this connected to a ommision of
equilibrium portion of there observations? So Richard that should be
considered as a
answer to a question. I then changed Gauss law of statics by changing
it to a dynamic field following the stipulation of equilibrium.
Maxwells laws via computor programs provided an array in equilibrium
so Maxwell has included everything in his equations.
Absolutely no problems there. It also provided by the inclusion of
equilibrium that a radiaoir can be comprised of many shapes which to
me brings the helix antenna into the subject. That to me is a answer
to a question as to how helix antennas enter the picture. All of this
point to management of the edict of equilibrium . Now I am confronted
by those who believe that current only flows on the surface of a
radiatorwhich clashes with equilibrium. Then it is disclosed that the
Maxwell addition was a current that did not provide a magnetic field!,
another clash that does not follow the equilibrium edict tho a tank
circuit used as an equivalent of a full wave radiator has no open
circuit which again clashes with the thinking of this group. I am
suggesting various alternative thinking to these aberations because
they just don;'t jive. I believe I am answering questioins as to why I
look for alternatives it is others that refuse to supply acceptable
answerts that marry with my questions.Now to the present problem.
Maxwells additive to the equations have the units of cuurent such that
Newtons laws are satisfied. Previous thought was it was a reflection
of the impact of the aether which has now fallen into disfavour
so what do we put in its place>? I gave that question to myself and
then provided effort to find a possible answer which I shared.
So Richard I am answering questions to the best of my ability which
includes explanations and not by clips uttered from booksthat are out
of date.
So you find it objectionable that I probe or challenge prior thinking
well.....write to physics departments and wilkipedia and demand
retraction of the recent statement made on behalf of the Physics
community but don't just blame me as it is your generation that have
provided the present mix up as to what radiation is comprised of by
hanging on to sky hooks
Art

4650. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 20:44:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg9r08$rf6$1@news.albasani.net>
Source record: 19872

JB wrote:
>> Any excuse to raise the noise floor--
>>
> I didn't mean for you to take that as a suggestion. You don't have to do
> what I tell you to do. That's what we have the news media for.
>

You actually think I might ... damn, I'll work on my image! :-)

Regards,
JS

4651. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 20:46:29 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Fc_Vk.249$QX3.143@nwrddc02.gnilink.net>
Source record: 19873

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:6cc26708-1f03-4519-b00b-26b5813158f3@q9g2000yqc.googlegroups.com...
On Nov 22, 1:14 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
<more drivel snipped>

art, you already admitted you don't know anything and are making all this
up... now go away until you can prove it with equations and actual
scientific evidence.

4652. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 20:47:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg9r4n$rf6$3@news.albasani.net>
Source record: 19874

DaveC wrote:

> OK, time to clarify...
>
> Wifi (2.4 GHz). outdoor omni vertical (not whip), permanent mount on pole, to
> be connected (very short pigtail) to pole-mounted wifi router in client mode.
> Max output: 250 mW.
>
> Is it true that the higher the gain the flatter the "donut" shape of the
> sensitivity field?
>
> (And yes, my terminology is rudimentary... please forgive.)
>
> Thanks,

Then this should serve you well:

http://tinyurl.com/5gtjmg

Regards,
JS

4653. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 20:50:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gg9ram$rf6$4@news.albasani.net>
Source record: 19875

JIMMIE wrote:

>
> Also look up AMOS antenna. They are easy to make and work well
>
>
> Jimmie

Jimmie:

Excellent link, thanks; I will homebrew this when I get the time ...

However, with the reflector plate, it is not OMNI; but, for me this
would NOT be a problem ...

Good work,
regards,
JS

4654. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 21:39:48 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8f9ea926-f4c3-4990-b69f-f56d398455bc@k8g2000yqn.googlegroups.com>
Source record: 19876

On Nov 22, 2:46 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:6cc26708-1f03-4519-b00b-26b5813158f3@q9g2000yqc.googlegroups.com...
> On Nov 22, 1:14 pm, richardharri...@webtv.net (Richard Harrison)
> wrote:> Art wrote:
>
> <more drivel snipped>
>
> art, you already admitted you don't know anything and are making all this
> up... now go away until you can prove it with equations and actual
> scientific evidence.

Yes sir!

4655. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 22:48:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dv2hi45eqhtk501se75mp3gc4u16rv6mor@4ax.com>
Source record: 19877

On Sat, 22 Nov 2008 12:33:41 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Then it is disclosed that the
>Maxwell addition was a current that did not provide a magnetic field!,

>On Wed, 19 Nov 2008 14:21:04 -0800, Richard Clark <kb7qhc@comcast.net> wrote:
>
>> "Ampï¿½re's law with Maxwell's correction states that magnetic
>> fields can be generated in two ways: By electrical current (this
>> was the original "Ampï¿½re's law") and by changing electric fields
>> (this was Maxwell's correction, also called the displacement
>> current term)."

73's
Richard Clark, KB7QHC

4656. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 23:04:15 UTC
From: richardharrison@webtv.net
Message-ID: <22051-49288FEF-267@storefull-3253.bay.webtv.net>
Source record: 19879

Art wrote:
"Maxwell`s additive to the equations have the units of current such that Newton`s laws are satisfied."

Many experimenters wrapped wire around magnets hoping current would be produced in the wire. It never worked until Michael Faraday discovered that moving a magnet with respect to the wire or connecting and disonnecting a battery to a coil of wire induced a transient current in an adjacent coil.

Maxwell was a brilliant mathematician and theoretical physicist. He found he could formulate a set of equations which expressed all the known electromagnetic phenomena at once from all the earlier laws.

Maxwell noted his equations were similar to those which expressed the motion of waves on water. He was convinced that electromagnetic waves could exist and was able to calculate the speed at which they would travel.

To show that Maxwell`s equations actually represent wave equations, an equation is written in a form so that the magnetic vector potential varies in all three spatial directions and in addition, a source term (current density) is included.

If the source does not exist, we get a homogeneous wave equation for the magnetic vector potential.

Other potential functions or the various field variables themselves may be used to obtain similar wave equations.

Best regards, Richard Harrison, KB5WZI

4657. Re: Shellac, varnish, parrafin wax for wood feedline spacers?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-22 23:08:59 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <ii0Wk.4478$jV1.666@newsfe13.iad>
Source record: 19878

"ml",.

I apologize if I offended you, but your comments were so poorly written that it was difficult to understand entirely just what you intended to say.

You suggested using the same methods used to preserve telephone poles. I discussed both the older methods as well as present day methods of wood preservation. Wood preservatives and sealers, such as creosote, pentachlorophenol, and chromated copper arsenate are far too toxic to use. But more importantly, they are also _very_ poor from an electrical standpoint in the _original_ application, i.e. for use on wood dowels as ladderline spreaders. I also clearly stated why boiling the wood dowels in paraffin wax, as done by oldtimers, did a better job electrically than than creosote. Previous posts I had written already covered the safety aspects of using hot paraffin, especially its flash point temperature., and the extreme danger of skin contact with the hot wax.

You then mentioned that _plastic_ is _a_ way to go. You did not mention which plastic as this is extremely important in the original application. Polyolefins (polyethylene, polypropylene) are extremely poor in outdoor use; they can fall apart quickly if exposed to bright sunlight. Polyamides (nylons) fare a little better but they too are soon damaged by the ultraviolet in sunlight. They are also damaged by acid rain. Polyoxymethylene (Delrin) is quite sensitive to halogens in acid rain. Polycarbonate and acrylonitrile-butadiene-styrene (ABS) plastics have good ultraviolet resistance only if stabilizers and absorbers are blended in; they have good chemical resistance to aqueous acids and bases, but they are quite prone to solvent attack. Polytetrafluorethylene (PTFE, Teflon) and other fluoropolymers have wonderful electrical properties (superb insulation resistance, low dielectric constant and loss tangent) as well as high ultraviolet and chemical resistance, but most are subject to cold flow and have poor temsile strength. In other posts I discussed acrylic and polyester plastics that are inexpensive, have good UV resistance and good electrical properties. I also discussed polyvinyl chloride and chlorinated polyvinyl chloride plastics. I didn't bother to consider polyimides (Kapton) as the cost would have been prohibitive. Suggesting "plastic" as you did without specifying which particular composition is essentially useless information. I gave my suggestions and the detailed reasons why I would pick certain plastics. I did not specifically mention cost except with the suggestion of plastic coathangers, but as an engineer.cost is an important consideration for virtually all my decisions. It was certainly a consideration for the original poster --why else would he ask about using wood?

Of the three methods of protecting wood in this application. as queried by the original poster, I plainly stated that urethane varnish would be my choice. I also explained why this would be preferred over shellac and paraffin wax. I further suggested which specific plastics would perform the best for the original application of transmission line spreader.

In the future, you should be far more clear in your writing if you really want people to take your suggestions seriously. You also need to be far more specific in your suggestions.

Again I apologize if I offended you, but I still stand by my earlier postings. If it bothers you, you can always filter out my posts. I certainly do this for a few of the people found here who espouse pseudoscience and refuse to defend their claims with either mathematics or experimental evidence.

73, Dr. Barry L. Ornitz WA4VZQ

"ml" <m@di.net> wrote in message
news:m-6C57E7.15221222112008@news.optonline.net...
> Guess no spam didn't read my post fully
>
> I also acknowledged that using oil was bad , thats why i then stated
> that plastic is a way to go
>
> but it can't be poor per say because the original post asked for
> comments on wood, so we gave comments on wood
>
>
> he also asked about plastics he got comments on plastic
>
> also acknowledged was some pro's and cons
>
> only the user and his applications and desires will determine what
> is 'best'

> In article <je4Vk.850$VC6.161@newsfe25.iad>,
> "NoSPAM" <unknown@nospam.org> wrote:
>
>> "ml" <m@di.net> wrote in message
>> news:m-540259.05463919112008@news.optonline.net...
>> > In article <MbMSk.2377$Lv6.1922@bignews8.bellsouth.net>,
>> > "Hal Rosser" <hmrosser@bellsouth.net> wrote:
>> >
>> >> Thanks, Barry on helping to wake up my recollections. I had forgotten
>> >> that
>> >>
>> {snip}
>> >>
>> > find some of that oil they soak telephone poles in then coat it
>> > w/sealer
>> >
>> > ultimately wood prob wont last as long as some good plastic

>> > and
>> > i guess would be heaver stressing the wires more
>> >
>> > it will prob still hold more water than a smooth plastic
>> > dunno
>> >
>> > and prob not have as good insulative prop's but might be moot
>>
>> I consider this a poor suggestion for a number of reasons...
>>
>> Several methods of wood treatment have been used over the years. The
>> three
>> main methods used to be pressure treatment with creosote,
>> pentachlorophenol,
>> or inorganic arsenic salts. These were generally replaced by chromated
>> copper arsenate. Other treatments involved copper napthenate, zinc
>> napthenate, and tributyl tin oxide. All of these methods provide fungus
>> protection and some limited moisture protection.
>>
>> Creosote, as used for treating wood, is generally coal tar creosote.
>> This
>> material is distilled from coke oven tar and it contains polycyclic
>> aromatic
>> hydrocarbons, phenols, and cresols, all of which are quite toxic and most
>> are either proven or suspected carcinogens.
>>
>> Pentachlorophenol is registered by the Environmental Protection Agency as
>> an
>> insecticide (termicide), fungicide, herbicides, molluscide, algaecide,
>> disinfectant, and as an ingredient in antifouling paint. Stated simply.
>> it
>> is toxic to just about all life.
>>
>> Chromated copper arsenate, at one time, was the most widely used wood
>> treatment. Hexavalent chromium and arsenic in any form are both
>> extremely
>> toxic, so newer treatments were developed including ammoniacal copper
>> quaternary. The EPA lists this as a general use pesticide and it is far
>> less toxic than chromated copper arsenate. Other newer wood treatments
>> used
>> today are based on borax and other borate salts. These too are less
>> toxic
>> than the older copper salts.
>>
>> The oil treatment that "ml" refers to is most likely creosote. However
>> creosote or any other of the treatments described above will not make the
>> wood a good electrical insulator for use as spacers in open wire
>> transmission line. Raw wood or wood treated with any of the metal salts
>> shows a high dielectric loss. Even pentachlorophenol is not very
>> suitable

>> as its dielectric constant is around 8 to 10. But then the wood itself
>> usually has a radio frequency dielectric constant around 10 or more too,
>> even if completely dried. Increases are seen at frequencies below the
>> MHz
>> region, and with increasing moisture. The loss tangent of wood also
>> increases rapidly with moisture content.
>>
>> The reason that old timers boiled their wood dowels in paraffin wax was
>> twofold. The first was to completely dry the wood, and the second was to
>> provide moisture protection. The preservation of the wood against fungus
>> or
>> termites was generally inconsequential for use as spacers in transmission
>> lines.
>>
>> Polyvinyl chloride and chlorinated polyvinyl chloride plastics are
>> moderately lossy at radio frequencies but are far better than wood in
>> this
>> respect, and I have seen them used with homebrew transmission lines.
>> However, from the standpoint of RF losses and ultraviolet radiation
>> damage,
>> acrylic plastics are my choice as true ladder line insulators.
>>
>> One suggestion I have is to look at cheap plastic coathangers. These are
>> about 1/4 inch in diameter and are not vinyl coated wire hangers.
>> Several
>> insulators can be cut from a single coathanger. Since you can often buy
>> these hangers for around $1.00 for ten; a few dollars could provide a
>> good
>> number of insulators. If you don't like the color, spray paint them with
>> Krylon or another acrylic paint. White will provide the best ultraviolet
>> resistance. I would limit my wire size to 16 Gauge or smaller as this
>> plastic is quite brittle.
>>
>> 73, Dr. Barry L. Ornitz WA4VZQ

4658. Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 01:40:31 UTC
From: Lee <lo12a4519@blueyonder.co.uk>
Message-ID: <kw2Wk.14685$oK4.11001@newsfe18.ams2>
Source record: 19880

"Steve" <sdaniel13@speakeasy.net> wrote in message
news:f2f87ea7-225f-4076-b065-7d87e13fbab6@s20g2000yqh.googlegroups.com...
On Nov 21, 12:32 am, Richard Clark <kb7...@comcast.net> wrote:
> On Thu, 20 Nov 2008 19:47:24 -0800 (PST), Steve
>
> <sdanie...@speakeasy.net> wrote:
> >However, none of these
> >programs are written to cover the case of a two or more-turn loop.
>
> Hi Steve,
>
> For transmit, there's nothing to "gain" by it.
>
> Success generally floods the marketplace and few complain about not
> finding resources to make a knock-off.
>
> 73's
> Richard Clark, KB7QHC

Yes, I know there's nothing to gain in terms of performance. However,
I have very little space to work with. I have a 1 meter diameter loop
installed in my (tiny) attic that works very respectably on 10-30
meters. It won't get me onto 40 meters, though, and getting onto 40 is
either going to require a much larger diameter single-turn loop, a two-
turn loop, or a much more robust capacitor. Trying out a two-turn loop
seems like it would be the easiest and least expensive alternative,
and I already have the copper tubing I would need.

Two 1m dia turns will cover 40 with the same variable capacitor, I think
that is all you wanted to know!!! Experiment ...

Lee ... G6ZSG ...

4659. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 02:18:39 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <343Wk.311$QX3.169@nwrddc02.gnilink.net>
Source record: 19881
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

"Dave" <dave@dave.dave> wrote in message
news:4926c4f8$0$31141$bd467cd0@news.dslextreme.com...
> Bill Kearney wrote:
>> "DaveC" <me@bogusdomain.net> wrote in message
>> news:0001HW.C54BA58A0075A070B01AD9AF@news.sf.sbcglobal.net...
>>> Looking for outdoor omni "whip" antenna for 2.4 GHz.
>>
>> Whip antenna? What is this, for a vehicle? For a stationary location it
>> seems like it'd be an extremely bad idea to use an antenna that 'whipped'
>> around.
>>
>>> Is there any reason to not go for the greatest gain antenna, given that
>>> cost
>>> is not too important (within reason)?
>>
>> Alligator effect. Wide mouth receiving everything. If you don't need to
>> pickup everything then why bother? It just makes it harder for your WiFi
>> router to cut through all the noise of distant stations it doesn't
>> communicate with. Get the right antenna suited for your installation, no
>> more, no less.
>>
>> Which leads to the constant request, when you ask a question POST WHAT
>> GEAR YOU'RE USING.
>>
>> In your case it would also help to define what sort of connection you're
>> trying to make. Point to point, metropolitan, etc.
>>
>> -Bill Kearney
> Short Pringle's can, 1/4 wave probe, 1/2 wave from closed end, soldered to
> female TNC.
-
I have need of a directional antenna for a 30 foot path within the house.
(the microwave oven wipes out the signal).

Do you have any better details on construction?

4660. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 13:28:24 UTC
From: #!/bin/bash <devnull@example.com>
Message-ID: <ggblpo$jt7$4@aioe.org>
Source record: 19884

Denny wrote:
> I wish them well, but I expect that 3 issues is the lifespan... With
> everything available on the web for free, who is going to pay for a
> rag?

Who knows; perhaps if they demonstrate an appreciation for the spectrum
that exists above 10m, they might set themselves apart.

4661. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 14:05:03 UTC
From: Knight <petelarosa@comcast.net>
Message-ID: <ad1aef1d-2981-48be-bdd9-03ff4c8e51e6@v38g2000yqb.googlegroups.com>
Source record: 19885
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

Guys! I've been selling these Biquads for a long time now and
everyone absolutely
loves them.
Check em out here... http://www.biquadantenna.com
Sold 30 just this month alone, and get emails all the time from
clients
on how good their performance is.
If it doesn't work, you get your money back! (minus shipping of
course)

Thanks for looking!
Pete

On Nov 22, 2:42 pm, highlandham <rfbu...@nospam.sco> wrote:
> > I have need of a directional antenna for a 30 foot path within the house.
> > (the microwave oven wipes out the signal).
>
> > Do you have any better details on construction?
>
> ==========
> If your WiFi device is near the microwave oven , you indeed have a problem.
> In my situation the oven is away (approx 7 - 8 metres) from the Wifi
> system ,both router and laptop ,and I no longer had interference when
> setting the WiFI System to the highest frequency (channel) with the
> microwave oven freq at about 2390MHz.
>
> Frank   KN6WH

4662. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 14:55:56 UTC
From: JB <nospam@goofball.net>
Message-ID: <0aeWk.371$QX3.10@nwrddc02.gnilink.net>
Source record: 19886
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

> -
> I have need of a directional antenna for a 30 foot path within the house.
> (the microwave oven wipes out the signal).
>
Yikes! I have never seen that. I would be concerned about leakage.
Sometimes I have torn into things and found stupid stuff like paint over
grounding surfaces or rust in the compartment. There is a critical ground
around the probe entrance.

My microwave oven is in the far corner of the house and I run 100 watts on
VHF and 600 on HF at times and never had trouble. I never tried the laptop
in the kitchen for fear of spillage. The Linksys is essentially on the
floor to keep people in the park next door from ripping up my bandwidth.
(although sometimes I would prefer geeks hanging out there to chase the rest
out) No coverage problems at all. I do have an HT that gets "some"
interference when I set it on top of the oven.

4663. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 15:18:08 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <LueWk.881$jZ1.14@flpi144.ffdc.sbc.com>
Source record: 19887

Richard Harrison wrote:
> If Cecil were asked where a reflection occurs on an antenna or a
> transmission line, I`d wager he would reply, at the same place the
> impedance discontinuity occurs.

Yep, and if one impedance is infinite (or zero or purely
reactive), the magnitude of the reflection coefficient
is |1.0|, i.e. 100% reflection.
--
73, Cecil http://www.w5dxp.com

4664. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 16:46:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggc1d1hdk2@news.albasani.net>
Source record: 19888

Knight wrote:
> Guys! I've been selling these Biquads for a long time now and
> everyone absolutely
> loves them.
> Check em out here... http://www.biquadantenna.com
> Sold 30 just this month alone, and get emails all the time from
> clients
> on how good their performance is.
> If it doesn't work, you get your money back! (minus shipping of
> course)
>
> Thanks for looking!
> Pete

Which picture depicts the omnidirectional one?

Regards,
JS

4665. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 17:23:50 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c22aad6a-8d54-43ce-b54e-c9ac72eb6b7a@3g2000yqs.googlegroups.com>
Source record: 19889

On Nov 23, 9:18 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Richard Harrison wrote:
> > If Cecil were asked where a reflection occurs on an antenna or a
> > transmission line, I`d wager he would reply, at the same place the
> > impedance discontinuity occurs.
>
> Yep, and if one impedance is infinite (or zero or purely
> reactive), the magnitude of the reflection coefficient
> is |1.0|, i.e. 100% reflection.
> --
> 73, Cecil http://www.w5dxp.com

Ceci
If the surface of a conductor is completely covered by precharged
particles
and is aprouched by a changing electrical field would it not it be
opposed by the
electric field pre placed on the surface? Would the difference between
these two colliiding fields
create its own opposing magnetic field i9n concert with the main
applied electric field?
If we are to account for the electric field applied to the radiator
then we would have to add the energy
lost in the collision! After all the collision forces are no different
to the energy lost if the field produced
by the resting particles was the equivalent to a resister.
When Maxwell uses an "=:" that is an acknoweledgement of a state of
equilibrium such that the energy supplied to the radiator
must remain the same as the energy plus losses entailed in the closed
circuit and the collision created losses that must be accounted for.
Would it not be correct to say the applied energy must be equal toi
the primary electric field created plus the opposing electrical
field.?,
Ampere assumed that the energy applied to the circuit equaled the
energy received not knowing tha tthe energy would split into two
fields and not remain as one. This collision energy must be accounted
for on account of the addition of the "=' ancd the same energy that
Ampere was aware of but did not consider it to be present.(Note for a
discharged particle to have spin on ejection there must be two fields
present)
The bottom line is Ampere was correct with his law because he was
unaware that another field was present and thus did not include it.
Maxwell faced with combining all laws such that equilibrium occures
which allows the use of the "=" was left to account for it and thus

satisfy Newtons law.
Thus the eddy current fits neatly into the law of Maxwell and where the addition he made only became known at a later date by Foucaults discovery.
Thus the Foucault current or eddy current did three t things 1 it satisfied the laws of equilibrium ie "=" addition 2 he added an addition that matched the units and quantity values of the Foucault current in an exact form including the addition of the speed of light unit that reflects an implied speed of the ejected particle and 3 proved Einstein correct in his assumption that the Weak Force was part and parcel of radiation.
Now we see that the "interpretation" of Maxwells addition was in error or an invalid theory which can now be replaced by the eddy current addition
which concurrs with Amperes assertion that there are two ways an electric field can occur.
In summation the addition made by Maxwell was his mathematical intuition by stating that the energy applied equalled TWO electrical fields and not just one which was subsequently proven by Foucault.
Best regards
Art Unwin KB9MZ.......XG (uk)

4666. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 17:41:05 UTC
From: Dave <noone@nowhere.com>
Message-ID: <RAgWk.395$us6.208@nwrddc01.gnilink.net>
Source record: 19890

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c22aad6a-8d54-43ce-b54e-c9ac72eb6b7a@3g2000yqs.googlegroups.com...

<more drivel snipped>

I thought you were going away.

4667. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 18:17:37 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1fdfbdb3-d5fc-45ab-b4cc-a0775d27fa38@s20g2000yqh.googlegroups.com>
Source record: 19891

On Nov 23, 11:41 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:c22aad6a-8d54-43ce-b54e-c9ac72eb6b7a@3g2000yqs.googlegroups.com...
>
> <more drivel snipped>
>
> I thought you were going away.

As I stated, I do not work for you!
I asked you to prove that the addition by Maxwell equaled the energy
lost
in the enablement of particle ejection, if you were capable. Obviously
you are not.
So I tackled it and lo and behold the jigsaw of radiation was
coimplete except for a single opening
and there was only one piece left. There was a drum roll and the place
was filled exactly by the addition oif the remaining piece.
The whole puzzle was turned over and there for all to see was a
complete piucture.
I addressed this to Cecil since he does not fool around and is
proficient in mathematics and stays in touch with his
Alma Mata. After all, if the jigsaw piece fits then you can;'t aquit
Best regards to the groupo
Art Unwin KB9MZ.....xg (uk)

4668. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 19:56:52 UTC
From: Dave <noone@nowhere.com>
Message-ID: <8AiWk.452$QX3.267@nwrddc02.gnilink.net>
Source record: 19892

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:1fdfbdb3-d5fc-45ab-b4cc-a0775d27fa38@s20g2000yqh.googlegroups.com...
>I asked you to prove that the addition by Maxwell equaled the energy
>lost
>in the enablement of particle ejection, if you were capable. Obviously
>you are not.

of course not, since that concept is yours and is bs.

>So I tackled it and lo and behold the jigsaw of radiation was
>coimplete except for a single opening
>and there was only one piece left. There was a drum roll and the place
>was filled exactly by the addition oif the remaining piece.

so, state the new equation.... or forever keep the bs to yourself.

>The whole puzzle was turned over and there for all to see was a
>complete piucture.

so, publish it and claim the nobel prize. don't, and forever be called full
of bs.

4669. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 20:31:36 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <38d0b0b6-4891-467b-bafc-fddbbec00003@w3g2000yqc.googlegroups.com>
Source record: 19893

On Nov 23, 1:56 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:1fdfbdb3-d5fc-45ab-b4cc-a0775d27fa38@s20g2000yqh.googlegroups.com...
>
> >I asked you to prove that the addition by Maxwell equaled the energy
> >lost
> >in the enablement of particle ejection, if you were capable. Obviously
> >you are not.
>
> of course not, since that concept is yours and is bs.
>
> >So I tackled it and lo and behold the jigsaw of radiation was
> >coimplete except for a single opening
> >and there was only one piece left. There was a drum roll and the place
> >was filled exactly by the addition oif the remaining piece.
>
> so, state the new equation.... or forever keep the bs to yourself.
>
> >The whole puzzle was turned over and there for all to see was a
> >complete piucture.
>
> so, publish it and claim the nobel prize. don't, and forever be called full
> of bs.

David and others, ham radio has always stated that we lead the field
in innovation
and public servie. What I have stated is a huge step forward in
science which solidifies our hobby.
Now we are at the point that all hams join the band wagon or place
hurdles to halt the advance
which puts into question the need for their existance. There are
plenty of people in the world that are quite clever
and work in academics. Some people in this world consider ham radio as
just a bunch of CB ers like KB9.......
and others who post on this group. If as I think I am correct in my
analysis you may be still alive to answer for your silliness.
Many others can continue to deny change and they will probably move on
to the next worlkd because of their age before change comes along
and probably "rest in peace". But you and some others could well have
an epitaph on your grave based on the history of this newsgroup
that" here lies an obstructionist to change in life but succumbed to
it in death.":
Art Unwin KB9MZ.......XG....(uk)

4670. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 20:49:19 UTC
From: Dave <noone@nowhere.com>
Message-ID: <jljWk.426$us6.39@nwrddc01.gnilink.net>
Source record: 19894

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:38d0b0b6-4891-467b-bafc-fddbbec00003@w3g2000yqc.googlegroups.com...
On Nov 23, 1:56 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
>Some people in this world consider ham radio as
>just a bunch of CB ers like KB9.......

like kb9mz?

4671. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 21:04:21 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e8d18fae-46f3-4d6c-9905-a1d1cf9b8eb7@w35g2000yqm.googlegroups.com>
Source record: 19895

On Nov 23, 2:49 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:38d0b0b6-4891-467b-bafc-fddbbec00003@w3g2000yqc.googlegroups.com...
> On Nov 23, 1:56 pm, "Dave" <no...@nowhere.com> wrote:
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> >Some people in this world consider ham radio as
> >just a bunch of CB ers like KB9.......
>
> like kb9mz?

David, you represent the teachings of your professor of some 50 years
ago.
He is probably dead now and replaced in academia by people who
represent the best in science of to day
Thus you and many others have a disparity in science knowledge because
you stopped the regimen of continuos study and opted for the
pursuit of money. Naturaly those who maintained their inquisitiveness
and stayed attached to education circles will leave you behind in
education
where you would gain by attaining riches. Eventually you will be
replaced by those who do not dwell in the past that are younger and up
to date.
This is just a fact of life that happens every day in industry as the
recognition that experiences that are repetitive are just that, a
single experience, which is trumped by an open mind withouty
experience that is a fit in the modern world.

4672. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 21:17:03 UTC
From: Dave <noone@nowhere.com>
Message-ID: <jLjWk.470$QX3.93@nwrddc02.gnilink.net>
Source record: 19896

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:e8d18fae-46f3-4d6c-9905-a1d1cf9b8eb7@w35g2000yqm.googlegroups.com...
>David, you represent the teachings of your professor of some 50 years
>ago.

unlike you art, I am not an old codger. keep on with your senile rants and
delusions... they keep me in stitches here!

4673. Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 23:14:00 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ggco3u$3qi$1@aioe.org>
Source record: 19897

The link below leads to a discussion of this subject.

It is a rather long thread, but it might be of interest to members
of this NG.

W8JI's position on this subject was a bit of a surprise to me.

http://www.eham.net/forums/TowerTalk/15930?page=1

RF

4674. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 23:21:47 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <zZednexWDNYMeLTUnZ2dnUVZ8tninZ2d@bt.com>
Source record: 19898

"Richard Fry" <rfry@adams.net> wrote in message
news:ggco3u$3qi$1@aioe.org...
> The link below leads to a discussion of this subject.
>
> It is a rather long thread, but it might be of interest to members
> of this NG.
>
> W8JI's position on this subject was a bit of a surprise to me.
>
> http://www.eham.net/forums/TowerTalk/15930?page=1
>
> RF

I think there's some confusion there about polarisation. VP requires lowest height to achieve a peak at zero degrees elevation; HP requires a frequency-specific height and low height usually results in an elevated beam.

Chris

4675. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-23 23:32:02 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <1lnji49vl1nulfrb9go7ker43dro840p2v@4ax.com>
Source record: 19899
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Sat, 22 Nov 2008 12:08:54 -0800 (PST), JIMMIE
<JIMMIEDEE123@YAHOO.COM> wrote:

>On Nov 21, 8:47ï¿½pm, JIMMIE <jimmi...@gmail.com> wrote:
>> I recently built a Franklin antenna for 2.4Ghz.
>> I highly reccommend it. Google WiFi and franklin antenna.
>> Jimmie

>Also look up AMOS antenna. They are easy to make and work well
>Jimmie

AMOS, Franklin, Sector, et al:
<http://pe2er.nl/wifisector/>
<http://yu1aw.ba-karlsruhe.de/vhf_ant.htm>
<http://www.qsl.net/yu1aw/vhf_ant.htm>
<http://www.brest-wireless.net/gallery/AntenneAmos>
<http://www.brest-wireless.net/wiki/materiel:amos>
<http://www.brest-wireless.net/forum/viewtopic.php?id=75&p=2>

NEC2 model:
<http://802.11junk.com/jeffl/antennas/AMOS-7/>
<http://802.11junk.com/jeffl/antennas/AMOS-5/> (not optimized yet)

AMOS design:
<http://www.qsl.net/yu1aw/amos_article.pdf>

Inverted AMOS:
<http://www.qsl.net/yu1aw/invertamos.pdf>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4676. A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 00:04:48 UTC
From: ve2pid <ve2pid@videotron.ca>
Message-ID: <66e9aa1e-ad1c-4dc8-b324-99f96f4f286c@j39g2000yqn.googlegroups.com>
Source record: 19900

Hi to all

In a document from Roy Lewallen, we read this:

When a balanced antenna is fed with coaxial cable (Fig.1),
the outside of the shield appears as an extra, separate
conductor connected to the right side of the antenna at the
feed point. (page 157. What They Do And How They Do lt)

My question is this: Can we say the same thing for a dummy load (i.e
can we replace the words 'balanced antenna' with 'dummy load'?) so the
dummy load would 'see' three conductors?

We are trying to explain why some dummy load/Tx line systems radiate.
Perhaps, tthe current outside the coax (common mode current) exits,
while being very small, so the radiation could come from a leaking
coax... ?

Thanks de Pierre VE2PID

4677. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 00:06:15 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <ggcr5n$3q1$1@news.motzarella.org>
Source record: 19901
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

"JB" <nospam@goofball.net> wrote in message
news:0aeWk.371$QX3.10@nwrddc02.gnilink.net...
>> -
>> I have need of a directional antenna for a 30 foot path within the house.
>> (the microwave oven wipes out the signal).
>>
> Yikes! I have never seen that. I would be concerned about leakage.
> Sometimes I have torn into things and found stupid stuff like paint over
> grounding surfaces or rust in the compartment. There is a critical ground
> around the probe entrance.
>
>
The laptop computer is downstairs about 10 feet from the microwave, and the
wireless router is upstairs about 30 feet away with a desktop(and the path
goes through three walls and the floor. The microwave doesn't wipe out the
laptop, but slows things down a bit. A directional antenna would solve the
problem. I'm not trying to increase range at all.

4678. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 00:39:57 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <aqtji4dtdh33fj33k0ge2h8lrmsco4e2d6@4ax.com>
Source record: 19902
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Sun, 23 Nov 2008 15:32:02 -0800, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>NEC2 model:
><http://802.11junk.com/jeffl/antennas/AMOS-7/>
><http://802.11junk.com/jeffl/antennas/AMOS-5/> (not optimized yet)

Fixed. I was feeling guilty so I ran it through the optimizer in
4NEC2. I haven't built a 5 dipole AMOS yet using these dimensions.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4679. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 00:41:59 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ggct8t$n25$1@aioe.org>
Source record: 19903

"christofire" wrote:
> I think there's some confusion there about polarisation. VP requires
> lowest height to achieve a peak at zero degrees elevation; HP requires a
> frequency-specific height and low height usually results in an elevated
> beam.

But a v-pol monopole up to 5/8-wavelength in electrical height, and mounted with its base near the earth _always_ launches its maximum relative field at zero degrees elevation (the horizontal plane) -- regardless of the quality of the r-f ground it uses, its operating frequency, or earth conductivity at the antenna site.

Radiation launched at low elevation angles by such a monopole is progressively less than in the horizontal plane. But its h-plane radiation (especially), and its low-angle radiation as launched are nowhere nearly as poor as shown in a NEC-2 analysis for these values over real earth -- which is what leads to the erroneous conclusions of many people.

The reason for this is that a NEC-2 analysis over a "real" earth is based on the field surviving at an infinite distance from the monopole, and over over a flat earth, at that !

But if that was the true radiation envelope of the elevation pattern actually launched by that monopole, then daytime AM broadcasting would be impossible (reality check).

The real-world, h-plane field intensity measurements made in 1937 from such v-pol monopoles at 3/10 of a mile over real earth of poor conductivity by Brown, Lewis & Epstein of RCA showed peak fields that were within a few percent of the theoretical maximum possible for monopole heights of about 45 through 90 degrees.

RF http://rfry.org

4680. Re: teh kosher ham with teh knee high EME anttena

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 01:59:59 UTC
From: UberJacker <nohijack@houston-hunks.com>
Message-ID: <48381ff9-2b00-4677-9daa-494c9b8085be@g38g2000yqn.googlegroups.com>
Source record: 19904
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

On Nov 20, 3:34 pm, "kb9rqz" <kb9...@puncemail.com> wrote:
> "UberJacker" <nohij...@houston-hunks.com> wrote in message
>
> news:7c87670f-841e-4dc3-8f7e-f3647fa0379b@t11g2000yqg.googlegroups.com...> On Nov 19, 3:57 pm, "kb9rqz" <kb9...@puncemail.com> wrote:
> >> it indeed four moon buonce of coarsehttp://www.geocities.com/kb9rqz/
> >
> > > Be careful of tricycle riders who will tie a rope to it and pull it
> > > over with the trike. You need to shoot any toddlers who show up to do
> > > that because the Michigan castle law says it's your right. Right?
> >
> > i shoot frist ask qeustion later

You are a good sociopath. Keep it up.

4681. Lawsuit countdown 8 days to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 02:04:17 UTC
From: kb9rqz@yahoo.com
Message-ID: <mr2ki41kcll70jm9p4rk2lrc2sotou8n8o@4ax.com>
Source record: 19905
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

On Sun, 23 Nov 2008 17:59:59 -0800 (PST), UberJacker
<nohijack@houston-hunks.com> wrote:

>On Nov 20, 3:34 pm, "kb9rqz" <kb9...@puncemail.com> wrote:
>> "UberJacker" <nohij...@houston-hunks.com> wrote in message
>>
>> news:7c87670f-841e-4dc3-8f7e-f3647fa0379b@t11g2000yqg.googlegroups.com...> On Nov 19,
3:57 pm, "kb9rqz" <kb9...@puncemail.com> wrote:
>> >> it indeed four moon buonce of coarsehttp://www.geocities.com/kb9rqz/
>>
>> > Be careful of tricycle riders who will tie a rope to it and pull it
>> > over with the trike. You need to shoot any toddlers who show up to do
>> > that because the Michigan castle law says it's your right. Right?
>>
>> i shoot frist ask qeustion later
>
>You are a good sociopath. Keep it up.
funn unlike I don't go rund pretend to be a dozen different people

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4682. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 02:42:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <gfCdnZf1b4EvibfUnZ2dnUVZ_tbinZ2d@posted.easystreetonline>
Source record: 19906

ve2pid wrote:
> Hi to all
>
> In a document from Roy Lewallen, we read this:
>
> When a balanced antenna is fed with coaxial cable (Fig.1),
> the outside of the shield appears as an extra, separate
> conductor connected to the right side of the antenna at the
> feed point. (page 157. What They Do And How They Do lt)

That's _Baluns: What They Do and How They Do It_, in the _ARRL Antenna Compendium_, Vol. 1, and also at http://eznec.com/Amateur/Articles/Baluns.pdf.

> My question is this: Can we say the same thing for a dummy load (i.e
> can we replace the words 'balanced antenna' with 'dummy load'?) so the
> dummy load would 'see' three conductors?

Not if it's a good dummy load. A good dummy load is shielded so that all the current from the center conductor stays on the inside of the shield. This current then returns on the inside of the coax shield.

> We are trying to explain why some dummy load/Tx line systems radiate.
> Perhaps, tthe current outside the coax (common mode current) exits,
> while being very small, so the radiation could come from a leaking
> coax... ?

Ok, let's look at a poorly designed dummy load, say a 50 ohm resistor connected with pig tails to the coax feedline. Remember that the current on the outside of the inner conductor is *always* equal and opposite in phase to the current on the inside of the outer conductor. Let's call that current I1. So the lead connected from the coax center conductor to the resistor has I1 flowing. If the pigtails are very short with respect to a wavelength, the current in the whole coax - pigtail - resistor - pigtail - coax loop is essentially the same, I1. So where the other pigtail connects to the coax shield, it carries I1 which all has to flow on the inside of the shield (so that the current on the inside of the shield equals the current on the center conductor).

But a dummy load radiating 10 uW, say, would drive a nearby receiver bonkers. If you put 100 watts into the dummy load, that means only 1/10,000,000 of the applied power has to radiate, and this can be hard to prevent. The pigtail - resistor - pigtail loop length isn't exactly zero, so there will be a little difference in the current at one end than the other. And this difference current will end up on the outside of the coax shield. In addition, there's probably some small amount of

coupling from the resistor and pigtails to ground, the feedline, and other conductive objects. This will result in a displacement current that causes current imbalance and consequent current flow on the outside of the feedline. The only way to prevent this is to completely shield the dummy load and transition to the feedline, and have no seams, holes, or cracks which could let any current get from the inside to the outside.

I've had limited experience with leaky coax, but have found a substantial difference between single and double shielded cable in the amount of signal radiated. Connector assembly is also critical -- it has to be done just right, or you'll end up with one of those sneak paths from the inside to the outside, regardless of how good the shield is. You usually won't have to deal with this, though, unless you need a pretty high value of attenuation.

Roy Lewallen, W7EL

4683. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 02:50:10 UTC
From: John Passaneau <w3jxp@arrl.net>
Message-ID: <492A1662.10907@arrl.net>
Source record: 19907

ve2pid wrote:
> Hi to all
>
> In a document from Roy Lewallen, we read this:
>
> When a balanced antenna is fed with coaxial cable (Fig.1),
> the outside of the shield appears as an extra, separate
> conductor connected to the right side of the antenna at the
> feed point. (page 157. What They Do And How They Do lt)
>
> My question is this: Can we say the same thing for a dummy load (i.e
> can we replace the words 'balanced antenna' with 'dummy load'?) so the
> dummy load would 'see' three conductors?
>
> We are trying to explain why some dummy load/Tx line systems radiate.
> Perhaps, tthe current outside the coax (common mode current) exits,
> while being very small, so the radiation could come from a leaking
> coax... ?
>
> Thanks de Pierre VE2PID

Hi Pierre:
There can be several reasons for a dummy load radiating a signal but common mode current is not likely to be one of them. In a good dummy load the load resistor is inside a shielded container. If the container is RF tight the RF current is on the inside of the box and not on the outside, just like a coax transmission line all the signal of interest is on the inside surface of the shield and the surface of the center conductor. Skin effect works on shield boxes too. There should be little to no RF current flowing on the outside of container or the coax shield. One place the radiation could come from is from the coax itself. The shielding on typical coax is 95% coverage. This is a source of leakage. Connectors are a problem too. Pl259's are not a very RF tight connector. Type N's are better but there are some that are even better. Hard line is 100% shielded it would not be likely to radiate but it can be spoiled by sloppy connector installation. The most likely reason for any radiation is poor shielding of the dummy load. Typical ham grade dummy loads are not very well shielded. Often when using a dummy load and one finds that a signal is being radiated it easy to blame the dummy load when in fact it's the transmitter. Transmitters are not often all that RF tight. The only way to tell is to probe around with a field strength meter and find were the signal is coming from. This rambles all over the place, hope it makes some sense to you.

73

John Passanau W3JXP

4684. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 03:26:58 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1ca64c73-7e41-4dd7-9149-f2f433df4422@w35g2000yqm.googlegroups.com>
Source record: 19908
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Nov 23, 7:39 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 23 Nov 2008 15:32:02 -0800, Jeff Liebermann <je...@cruzio.com>
> wrote:
>
> >NEC2 model:
> ><http://802.11junk.com/jeffl/antennas/AMOS-7/>
> ><http://802.11junk.com/jeffl/antennas/AMOS-5/> (not optimized yet)
>
> Fixed. I was feeling guilty so I ran it through the optimizer in
> 4NEC2. I haven't built a 5 dipole AMOS yet using these dimensions.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

I put one up I use with a WiFi repeater and I can see dozens of
wirless routers in my neighborhood. The antena i mounted at about
20ft on my chimney. There are about 8 or 9 with no security. If I so
chose I would never have to pay for internet service. There is another
subdivsion behind my house I havent even looked at that one yet.
Strange thing I know 3 of the people who have the open systems and
they are farly savy about these things. I wonder if they are leaving
them open on purpose.

Jimmie

4685. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 04:52:32 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B60A17DFD337nonenowhere@61.9.191.5>
Source record: 19910

ve2pid <ve2pid@videotron.ca> wrote in news:66e9aa1e-ad1c-4dc8-b324-99f96f4f286c@j39g2000yqn.googlegroups.com:

> Hi to all
>
> In a document from Roy Lewallen, we read this:
>
> When a balanced antenna is fed with coaxial cable (Fig.1),
> the outside of the shield appears as an extra, separate
> conductor connected to the right side of the antenna at the
> feed point. (page 157. What They Do And How They Do lt)
>
> My question is this: Can we say the same thing for a dummy load (i.e
> can we replace the words 'balanced antenna' with 'dummy load'?) so the
> dummy load would 'see' three conductors?

If the dummy load is effectively screened, and to the extent that it is effectively screened, there is very little current coupled to the outside surface of the outer conductor. That is very different to the feedline of an antenna which usually has significant mutual coupling to the nominal radiator.

>
> We are trying to explain why some dummy load/Tx line systems radiate.
> Perhaps, tthe current outside the coax (common mode current) exits,
> while being very small, so the radiation could come from a leaking
> coax... ?

The through braid loss (ie from inside of outer conductor to outside of outer conductor) is not infinite, so there is some leakage and it depends on cable construction and frequency. There is also leakage from the dummy load enclosure, transmitter enclosure, and other interfaces to the transmitter (eg power cable).

Owen
>
> Thanks de Pierre VE2PID
>

4686. Light, waves or particles

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 05:04:24 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e6169735-b8d7-460d-84fd-a699408d7bb5@v15g2000yqn.googlegroups.com>
Source record: 19909

When Maxwell added the displacement addition it was
to place radiation in a system of equilibrium as the formulas did not
prior to the addition meet Newtons law of equilibrium.,
The addition of Maxwell to Amperes law in reality because of the
required units, was seen to be a force or vector that displaced
something
of which they did not know. It was later interpretation that the
displacement referred to the Aether
and from then speculation built up. Einstein saw this addition as a
very weak force and spent his life looking for the
characteristics and action of this force but failed and instead turned
to to relatavistic observations which led to
various important developments. In actuality this displacement vector
was Newtons reaction vector to the applied current which was later
confirmed by the discovery by Foucault and termed eddy current. It was
this applied current and its reaction force that applied a elevation
or anti gravity force and at the same time applied a spin component to
the residing particles on the surface of the radiator. So scientists
were correct in assuming that the weak force was a derivative of the
magnetic force but made an error in referring to this force providing
a
projective wave into the aether. Tho this theory of action has now
lost favor with the scientific community the idea
that light was a function of a wave took place and survived. With the
explanation that displacement current is the eddy current which
provides elevation together with a twisting action of the particle so
a straight line projection is enabled it thus destroys the notion of
light being a series of waves to being a series of particles in motion
with a
revolving movement. The basis of the above was determined initially by
changing Gaussian law of statics to a dynamic field by the addition of
radiators to the static particles while maintaining a state of
equilibrium such that it met the essence of Maxwells law's which then
led to a true desciption of the action of the displacement force
applied to particles plus providing further evidence for the Grand
Uniform Theory
Food for thought
Art Unwin......KB9MZ.......(xg)

4687. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 06:21:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggdh55qfe1@news.albasani.net>
Source record: 19911

Art Unwin wrote:
> On Nov 23, 9:18 am, Cecil Moore <nos...@w5dxp.com> wrote:
>> Richard Harrison wrote:
>>> If Cecil were asked where a reflection occurs on an antenna or a
>>> transmission line, I`d wager he would reply, at the same place the
>>> impedance discontinuity occurs.
>> Yep, and if one impedance is infinite (or zero or purely
>> reactive), the magnitude of the reflection coefficient
>> is |1.0|, i.e. 100% reflection.
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Ceci
> If the surface of a conductor is completely covered by precharged
> particles
> and is aprouched by a changing electrical field would it not it be
> opposed by the
> electric field pre placed on the surface? Would the difference between
> ...
> Best regards
> Art Unwin KB9MZ.......XG (uk)

When we return to college, get a job in the physics lab, become friends
with the head of the department, etc. ... we will pose your question,
and suggest an experiment(s) to explore all this ...

In the meantime, GET REAL!

Regards,
JS

4688. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 06:26:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggdhepqfe2@news.albasani.net>
Source record: 19912

Wayne wrote:

>> ...
> The laptop computer is downstairs about 10 feet from the microwave, and the
> wireless router is upstairs about 30 feet away with a desktop(and the path
> goes through three walls and the floor. The microwave doesn't wipe out the
> laptop, but slows things down a bit. A directional antenna would solve the
> problem. I'm not trying to increase range at all.
>
>

I had a cheap samsung (I think that was it) microwave, it did slow
internet ...

I now have a 1.2 KW GE ... it does not ...

However, a leakage meter did show leakage from the samsung, and barely
reads on GE I have now, and I mean I touch the microwaves case to get
that reading!

So, what is the point? Buyer beware, with lack of consumer protection,
I would check the microwave myself rather than trust others to safeguard
me ...

Regards
JS

4689. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 06:32:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggdhpi$r7u$1@news.albasani.net>
Source record: 19913

ve2pid wrote:
> Hi to all
>
> In a document from Roy Lewallen, we read this:
>
> When a balanced antenna is fed with coaxial cable (Fig.1),
> the outside of the shield appears as an extra, separate
> conductor connected to the right side of the antenna at the
> feed point. (page 157. What They Do And How They Do lt)
>
> My question is this: Can we say the same thing for a dummy load (i.e
> can we replace the words 'balanced antenna' with 'dummy load'?) so the
> dummy load would 'see' three conductors?
>
> We are trying to explain why some dummy load/Tx line systems radiate.
> Perhaps, tthe current outside the coax (common mode current) exits,
> while being very small, so the radiation could come from a leaking
> coax... ?
>
> Thanks de Pierre VE2PID

To cut to the chase, and past the BS ... with the best affordable dummy load and solid coax, I can still chat a block down the street, at least (with decent power.)

Now, how this is occurring? Is it "leakage" from the xmitter onto the ac lines? Coupling to metal objects in the shack? Etc.?

Gawd only knows ... nothing is perfect ... when you find an answer to this mystery, please post back here; I am positive many more than me have wondered the same as you ... :-)

Regards,
JS

4690. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 06:35:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggdhv1$r7u$2@news.albasani.net>
Source record: 19914

JIMMIE wrote:

>> ...
> Strange thing I know 3 of the people who have the open systems and
> they are farly savy about these things. I wonder if they are leaving
> them open on purpose.
>
> Jimmie

I do. "They" call it a "honepot" (google it), fun to mess with 'em ... :-)

Regards,
JS

4691. STOCK TRADE ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 06:59:53 UTC
From: SAMANTHA <samantha400@zapak.com>
Message-ID: <c0383896-09e8-4b76-9cc2-ddbdf851f248@s9g2000prm.googlegroups.com>
Source record: 19915
Cross-posted to:
rec.radio.amateur.antenna,talk.atheism,alt.sports.football.pro.ne-patriots,ibm.software.websphere.application-server,rec.running

STOCK TRADE ONLINE
http://internetstocktradings.blogspot.com

http://creditcarddealsnews.blogspot.com

4692. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 12:36:01 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <0a17554e-e77c-4d6b-8f24-d0e277d04c00@x14g2000yqk.googlegroups.com>
Source record: 19916

Oh gawd, I hate to get into these mud brawls BUT...
The regs were quoted a couple of messages back and it says - exerpted:
1. 50 watts ERP
2. And defines a dipole as shall be considered 0 dBd for the purposes of this regulation in defining ERP (as opposed to the usual 6.14 dBi over average ground)...

Now, typical of anything the feds define, it will be unintelligible... It is clear to me that the intent was to define the dipole as having a power gain of 1 (one) for the purposes of defining what constitutes 50 ERP when driven with 50 watts...

So, one might assume that it means that 50 watts into a dipole is considered 50 ERP - but it does not say that,,, It says for regulatory purposes that the power gain of a dipole is considered to be ZERO...

Which means - as I my math teacher proved - that 50 X 0 = 0 - per the regulation...
Given that the regs define the output of a dipole on 60 meters to be 0 ERP you can run 50 watts into any antenna with a power gain of 50 OVER A DIPOLE to meet the maximum allowed ERP... (which is why lawyers make a living)

denny - k8do

4693. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 13:11:20 UTC
From: Jeff <Jeff@local.host>
Message-ID: <gge94p$1b5$1@aioe.org>
Source record: 19917

> The regs were quoted a couple of messages back and it says - exerpted:
> 1. 50 watts ERP
> 2. And defines a dipole as shall be considered 0 dBd for the purposes
> of this regulation in defining ERP (as opposed to the usual 6.14 dBi
> over average ground)...
>
> Now, typical of anything the feds define, it will be unintelligible...
> It is clear to me that the intent was to define the dipole as having a
> power gain of 1 (one) for the purposes of defining what constitutes 50
> ERP when driven with 50 watts...
>
> So, one might assume that it means that 50 watts into a dipole is
> considered 50 ERP - but it does not say that,,, It says for regulatory
> purposes that the power gain of a dipole is considered to be ZERO...
> Which means - as I my math teacher proved - that 50 X 0 = 0 - per
> the regulation...

No it does not!!!

It says that the gain is zero *dB*, to convert from dB to a linear quantity,
which you can multiply, you must divide by 10 and then take the antilog.

So 0/10 = 0,
and antilog 0 = 1

So your sum is actually 50 X 1 = 50, not 50 X 0 = 0

It is much easier if you work in dB where you just have to add or subtract.
50W = 17dBW
so 17dBW plus a gain of 0dB = 17dBW

73
Jeff

4694. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 15:58:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a50212b6-16f9-4a57-80a3-8128970b3758@k19g2000yqg.googlegroups.com>
Source record: 19918

On Nov 24, 12:21 am, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > On Nov 23, 9:18 am, Cecil Moore <nos...@w5dxp.com> wrote:
> >> Richard Harrison wrote:
> >>> If Cecil were asked where a reflection occurs on an antenna or a
> >>> transmission line, I`d wager he would reply, at the same place the
> >>> impedance discontinuity occurs.
> >> Yep, and if one impedance is infinite (or zero or purely
> >> reactive), the magnitude of the reflection coefficient
> >> is |1.0|, i.e. 100% reflection.
> >> --
> >> 73, Cecil http://www.w5dxp.com
>
> > Ceci
> > If the surface of a conductor is completely covered by precharged
> > particles
> > and is aprouched by a changing electrical field would it not it be
> > opposed by the
> > electric field pre placed on the surface? Would the difference between
> > ...
> > Best regards
> > Art Unwin KB9MZ.......XG (uk)
>
> When we return to college, get a job in the physics lab, become friends
> with the head of the department, etc. ... we will pose your question,
> and suggest an experiment(s) to explore all this ...
>
> In the meantime, GET REAL!
>
> Regards,
> JS

John
Academia does not accept studies from outside the club. The same goes
for the IEE and the IEEE
and ofcourse QST,radcom and the like. The internet is full of stories
where certain institutions have basically censored free speech for
years an action that is now continually exposed because of the
available of the Internet .I know it wears on the nerves on people
when I keep on hammering the point home= but it does find a place in
the record
But a long time ago this group stated that they would put down all old
wives tales. Problem was that many then took on the mantle of a pseudo
experts

which led to strong and petty auguments to real experts who passed by and never stayed for long. So I took them on without backing down when I had control of the facts knowing full well eventually they would be seenj for what they really are by those passing by. I think that now I have beat the naysayers into the ground where the facts provided cannot be defeated unless existing laws were mangled in the effort. Everybody on this group should now have a full understanding of what my investigation provided whether they believe it or not or like it or not. Nobody pointed out any conflict with present day laws which they would have jumped on if they were aware of them so I am now satisfied I have achieved my object of showing to all their true colours so basically I am done.
At the moment I am finishing up a new antenna of some 20 foot long with a dish reflector in the hope of attaining a rifle shot type of directive antenna.
Since my tower at the moment is limited to a 30 foot height I will be looking more at 20 M rather than the top band even tho it will be operable on that band
I am also adding with the hope it will work, an automatic tuning system as part of the antenna which will really push things to the limit. Scaled optimized computor studies show that the antenna has good gain but it is very difficult to narrow the beam width on more than a few frequencies which I am sure the closeness to ground will cloud the issue.
Best regards
Art Unwin...KB9MZ.......xg (uk)

4695. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 16:08:51 UTC
From: JB <nospam@goofball.net>
Message-ID: <nkAWk.557$us6.465@nwrddc01.gnilink.net>
Source record: 19919
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

"Wayne" <mygarbagecan@verizon.net> wrote in message
news:ggcr5n$3q1$1@news.motzarella.org...
>
> "JB" <nospam@goofball.net> wrote in message
> news:0aeWk.371$QX3.10@nwrddc02.gnilink.net...
> >> -
> >> I have need of a directional antenna for a 30 foot path within the
house.
> >> (the microwave oven wipes out the signal).
> >>
> > Yikes! I have never seen that. I would be concerned about leakage.
> > Sometimes I have torn into things and found stupid stuff like paint over
> > grounding surfaces or rust in the compartment. There is a critical
ground
> > around the probe entrance.
> >
> >
> The laptop computer is downstairs about 10 feet from the microwave, and
the
> wireless router is upstairs about 30 feet away with a desktop(and the path
> goes through three walls and the floor. The microwave doesn't wipe out
the
> laptop, but slows things down a bit. A directional antenna would solve
the
> problem. I'm not trying to increase range at all.
>
It would certainly be best to remove the interference. If you have 4 bars
now, 5 bars might not do away with the problem. Moving the microwave just
5' more might be enough. You may have to bite the bullet and put in some
wiring to move the router.

Some of these guys are prone to take a practical problem like yours and turn
it into a full-blown engineering problem or a swap meet for their break
through technology or even an opportunity to throw mud. One engineering
problem we faced was how to contain UHF security and housekeeping repeaters
to a high rise building and it's underground structure. The final result
was 99% coverage in the building and the parking structure, but when
security went off the property, the radios went away. Visits to other
buildings showed no coverage there either. We had to do that for both
security and so we could get co-ordinated for licensing in an urban area.
But it was a multi-million dollar system. This is free.

Placing one of those in an upstairs room is an invitation to the neighbors.
I run a combination of wired and wireless. Wired to the desktop and to a

port replicator for the laptop and wireless to a print server with several printers in a shop area, and the AP is off unless I want to roam around or do print jobs. There are times I have printed from the laptop, wireless in the shop to baby-sit print jobs, but it keeps the office clear and quiet. One of these days I will have to run a cat5 out to the shop. It is simply faster and more secure. The end result is my router, 1 foot off the floor with the power set to 50% to do all I need to do.

4696. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 16:39:41 UTC
From: JB <nospam@goofball.net>
Message-ID: <hNAWk.560$us6.351@nwrddc01.gnilink.net>
Source record: 19920

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ggdhv1$r7u$2@news.albasani.net...
> JIMMIE wrote:
>
> >> ...
> > > Strange thing I know 3 of the people who have the open systems and
> > > they are farly savy about these things. I wonder if they are leaving
> > > them open on purpose.
> > >
> > > Jimmie
>
> I do. "They" call it a "honepot" (google it), fun to mess with 'em ...
:-)
>
> Regards,
> JS

Perhaps they want to take the blame for everyone downloading bootleg porn,
music and movies until their ISP terminates or throttles them for abuse.
Either that or they are trying to log mac addresses of those who do.

4697. Re: STOCK TRADE ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 16:44:30 UTC
From: John Smith <bobsyoungbro@yahoo.com>
Message-ID: <ORAWk.562$us6.553@nwrddc01.gnilink.net>
Source record: 19921
Cross-posted to:
rec.radio.amateur.antenna,talk.atheism,alt.sports.football.pro.ne-patriots,ibm.software.websphere.application-server,rec.running

"SAMANTHA" <samantha400@zapak.com> wrote in message
news:c0383896-09e8-4b76-9cc2-ddbdf851f248@s9g2000prm.googlegroups.com...
> STOCK TRADE ONLINE
> http://internetstocktradings.blogspot.com
>
> http://creditcarddealsnews.blogspot.com

spam, crap, con.

4698. Re: Light, waves or particles

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 17:31:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <26pli4tu4v14mq7532i0c9kth8u5mefusj@4ax.com>
Source record: 19922

On Sun, 23 Nov 2008 21:04:24 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>changing Gaussian law of statics to a dynamic field by the addition of
>radiators to the static particles while maintaining a state of
>equilibrium such that it met the essence of Maxwells law's which then
>led to a true desciption of the action of the displacement force
>applied to particles

Then what happens?

>plus providing further evidence for the Grand
>Uniform Theory

There is no such thing.

73's
Richard Clark, KB7QHC

4699. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 17:46:02 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <rkoli4dv240dua688aajl5eqmf27sdlphj@4ax.com>
Source record: 19923
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Sun, 23 Nov 2008 19:26:58 -0800 (PST), JIMMIE
<JIMMIEDEE123@YAHOO.COM> wrote:

>On Nov 23, 7:39ï¿½pm, Jeff Liebermann <je...@cruzio.com> wrote:
>> On Sun, 23 Nov 2008 15:32:02 -0800, Jeff Liebermann <je...@cruzio.com>
>> wrote:
>>
>> >NEC2 model:
>> ><http://802.11junk.com/jeffl/antennas/AMOS-7/>
>> ><http://802.11junk.com/jeffl/antennas/AMOS-5/> ï¿½(not optimized yet)
>>
>> Fixed. ï¿½I was feeling guilty so I ran it through the optimizer in
>> 4NEC2. ï¿½I haven't built a 5 dipole AMOS yet using these dimensions.

>I put one up I use with a WiFi repeater and I can see dozens of
>wirless routers in my neighborhood. The antena i mounted at about
>20ft on my chimney. There are about 8 or 9 with no security. If I so
>chose I would never have to pay for internet service. There is another
>subdivsion behind my house I havent even looked at that one yet.

If stealing internet service from the neighbors is your intended
purpose, you selected the wrong type of antenna. A sector antenna may
be a great idea for running a WISP or central access point, where
you're never sure of the direction the client radios are coming from.
It's a bad idea for use at the client end. The idea is to pickup as
little interference as possible. You're reception of 9 stations is a
problem as any one of these could provide sufficient interference to
make your pirated internet connection useless. I suggest you look
into a panel or dish antenna, which will provide a much narrower
horizontal beamwidth, with the added bonus of more antenna gain.

>Strange thing I know 3 of the people who have the open systems and
>they are farly savy about these things. I wonder if they are leaving
>them open on purpose.

I was running an open access point at my office for a while. However,
I was also monitoring connection attempts and traffic. I figured that
nobody would bother. Wrong. I had some bum in a pickup truck and
camper, connect regularly to make VoIP phone calls. I had no problem
with him using the system and we eventually came to an arrangement.
However, he stupidly told all his friends, who immediately abused the
system, so I locked it up with a WPA password.

In another incident, one of my customers was in a hotel that wanted
real money to use their Wi-Fi. (This was about 6 years ago, before

the widespread proliferation of free Wi-Fi service). So, he connected to a random open access point. The security on his laptop was more than a little lacking (writable shared folders), resulting in the installation of multiple trojan horses, spam bots, etc. I suspect the open access point was an intentional trap set for hotel visitors.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4700. Re: Light, waves or particles

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 17:52:36 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <272da0ff-65cf-4c66-914e-2b1349c03236@j39g2000yqn.googlegroups.com>
Source record: 19924

On Nov 24, 11:31 am, Richard Clark <kb7...@comcast.net> wrote:
> On Sun, 23 Nov 2008 21:04:24 -0800 (PST), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >changing Gaussian law of statics to a dynamic field by the addition of
> >radiators to the static particles while maintaining a state of
> >equilibrium such that it met the essence of Maxwells law's which then
> >led to a true desciption of the action of the displacement force
> >applied to particles
>
> Then what happens?
>
> >plus providing further evidence for the Grand
> >Uniform Theory
>
> There is no such thing.
>
> 73's
> Richard Clark, KB7QHC

No more Richard, all done
You will never understand what is a given for engineers
Suggest you get a job on the top of a islamic tower
where you can holler several times a day.

4701. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 17:53:49 UTC
From: ve2pid <ve2pid@videotron.ca>
Message-ID: <f36d196e-9cba-4361-9534-13e70c99f569@41g2000yqf.googlegroups.com>
Source record: 19925

On 23 nov, 21:42, Roy Lewallen <w...@eznec.com> wrote:
>
> > When a balanced antenna is fed with coaxial cable (Fig.1),
> > the outside of the shield appears as an extra, separate
> > conductor connected to the right side of the antenna at the
> > feed point. (page 157. Baluns: What They Do and How They Do It_, in the _ARRL Antenna
> Compendium_, Vol. 1, and also athttp://eznec.com/Amateur/Articles/Baluns.pdf.

Fb Roy and thanks (to all) for the explanations.

But... returning to your document, I wonder why a balanced antenna
'see' that third wire, but the dummy load does not recognize that
third conductor. Is it because the common-mode current outside of the
shield has something to do with a kind of RF coupling?

4702. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 17:59:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggeq23$kt8$1@news.albasani.net>
Source record: 19926

JB wrote:

>> ...
>>> Jimmie
>> I do. "They" call it a "honepot" (google it), fun to mess with 'em ...
> :-)
>> Regards,
>> JS
>
> Perhaps they want to take the blame for everyone downloading bootleg porn,
> music and movies until their ISP terminates or throttles them for abuse.
> Either that or they are trying to log mac addresses of those who do.
>

Just noticed I spelled that wrong, "honeypot" ...

Yes, well, I take it for granted, anyone able to set up and run a
honeypot will also have the wits to manage it correctly ... but, ya'
never know, ya' just never know.

Best exercise is to trace-route them and report them to their, proper,
ISPs ...

Regards,
JS

4703. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 18:03:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggeq9llak1@news.albasani.net>
Source record: 19927

Jeff Liebermann wrote:

>
> If stealing internet service from the neighbors is your intended
> purpose, you selected the wrong type of antenna. ...

I'd say stealing is bit strong, I run an open wireless access point
here, its' SSID is "WelcomeAboard!"

I think that "wrong type" (referring to OMNI, apparently) of antenna is
perfect, given there are a few access points within range. You can
"bridge" multiple access points for better throughput ...

Regards,
JS

4704. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 18:38:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <9-udnWJJBeNdabfUnZ2dnUVZ_rHinZ2d@posted.easystreetonline>
Source record: 19928

ve2pid wrote:
>
> Fb Roy and thanks (to all) for the explanations.
>
> But... returning to your document, I wonder why a balanced antenna
> 'see' that third wire, but the dummy load does not recognize that
> third conductor. Is it because the common-mode current outside of the
> shield has something to do with a kind of RF coupling?

Current doesn't flow one way or another because the path is "seen" or "recognized". It has to obey Kirchoff's Current Law, which it might be useful to review. It states that the (vector) sum of currents into or out of any node must equal zero. In this case, the node of interest is the connection of the dummy load to the coax shield, which is effectively the connection of three conductors: the conductor to the dummy load, the inside of the coax shield, and the outside of the coax shield. If the current on the inside of the shield equals the current to the dummy load, the current on the outside shield equals zero per Kerchoff. And this is what happens if the currents in the two dummy load leads are equal and opposite in phase. Similarly, if the current to the two halves of a dipole are equal and opposite in phase, the current on the outside of the coax is zero, and conversely. The whole article is based on that principle, and explains how it can be accomplished.

Please look at Fig. 1, and the currents going to each side of the dipole. If the two coax conductors go to opposite sides of a resistor rather than to two sides of a dipole, those currents have to be equal or nearly equal, as I explained in my last posting. If they are equal, there is no extra current available to go along the outside of the coax.

You asked about RF coupling. I explained in my last posting that coupling to various objects could cause the currents in the two dummy load wires to be unequal, resulting in current on the outside of the coax.

Sorry, I'm running out of ways to explain this. You might try reading the other responses if you still don't understand.

Roy Lewallen, W7EL

4705. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 18:44:27 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <s8sli4hk9nv2elc4e6o8ifka56a5rphsf1@4ax.com>
Source record: 19929
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

rec.radio.amateur.homebrew,alt.internet.wireless added back to the
distribution line.

On Mon, 24 Nov 2008 10:03:32 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>Jeff Liebermann wrote:
>> If stealing internet service from the neighbors is your intended
>> purpose, you selected the wrong type of antenna. ...
>
>I'd say stealing is bit strong, I run an open wireless access point
>here, its' SSID is "WelcomeAboard!"

My home system is "1540 Jackson Ave" which is my address. The
assumption is that someone wanting to use my system can bang on the
door and ask permission. My office SSID uses the company name.

>I think that "wrong type" (referring to OMNI, apparently) of antenna is
>perfect, given there are a few access points within range.

I'll stand by my statement. Unless you're running a mesh network, an
omni at the client end is a bad idea. The client knows the direction
of the desired access point and should use a directional antenna to
minimize interference. In my limited experience (I ran a small WISP
and neighborhood LAN/WLAN for a few years) interference is the most
serious impediment to reliable operation. The more you can do to NOT
hear the undesired stations, the more reliable the connection.

>You can
>"bridge" multiple access points for better throughput ...

Sorta. You can do route switching easily enough, but load balancing
between multiple internet connections can't be done without IP
bonding, which requires everyone's cooperation (including the ISP's).
The problem is that you can't use multiple ISP's to improve the
download speed from a single connection. For example, if you want to
download a large file, it will only go as fast as the speed of the
fastest ISP connection. The other WAN interfaces remain comatose
because there's no way to bond the single destination IP to two
different download streams and routes. You can download something
else using the 2nd WAN interface, but you can't use it to increase the
speed of the first. Uploading has a similar limitation, where you
can't improve the speed to a single connection. Where such routers
work best is if there is a LAN full of users sharing multiple WAN
connections, not for a single user looking for "better throughput..."

I've used a few of these with moderate success:
<http://www.edimax.com/en/produce_list.php?pl1_id=3&pl2_id=>
(See load balancing and multi-homing routers near bottom of page).

Incidentally, multiple cient radios, run to a passive combiner in a single omni antenna is a total loser. The FCC specifically proscribes synchronizing wi-fi radios. Even if the isolation can be increased sufficiently to prevent receiver overload, it's highly probable that a receive packet will arrive exactly when some other client radio goes into transmit. Some relief can be obtained by using different non-overlapping channels (1, 6, 11), but only with expensive bandpass cavity filters. The spread spectrum spreads quite nicely into the spectrum of the adjacent radio.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4706. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 18:50:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <87udnXAr5IIMarfUnZ2dnUVZ_i2dnZ2d@posted.easystreetonline>
Source record: 19930

Gee, Richard, it's only been seven months this time since you last posted essentially the same comments and questions. You were going a year or so between.

Here are a couple of the previous ones, with my responses. Anyone interested in more information can do a google groups search of my postings on this newsgroup containing "surface wave".

4-20-2008:

Richard Fry wrote:
> "Roy Lewallen"
>> However, you can't compensate for this factor when the ground is poor by improving the ground system. The reason is that the reflection takes place much farther from the antenna than nearly any ground system extends. And low angle radiation, where the improvement is most needed, reflects the greatest distance away.
> __________
>
> Roy, didn't the experiments of Brown, Lewis & Epstein of RCA in ~1937 show that the h-plane field measured 3/10 mile from a vertical monopole of about 60 to 88 degrees in height, over a set of 113 buried radials each 0.41 WL, was within several percent of the theoretical maximum for the applied power as radiated by a perfect monopole over a perfect ground plane? And conductivity at the NJ test site was poor -- 4 mS/m or less.
>
> That tends to show that the fields radiated at very low elevation angles also will be close to their theoretical values when measured at this radial distance, even though ground conductivity at the antenna site is poor. The relative field (E/Emax) for radiators of these heights and propagation paths approximately equals the cosine of the elevation angle.

I believe we've discussed this before, so I'll be brief.

Their calculation of the field at the receiving site when the radial system is perfect was adjusted for the effect of ground wave attenuation caused by the imperfect ground conductivity. If the ground between the antenna and receiving site were perfect, the field strength would have been greater.

Also, I'm speaking of sky wave. Ground reflection isn't a factor in determining surface wave, which is what they measured and which isn't of interest to most amateurs.

> The greatest radiated fields always will be directed in or near the horizontal plane when measured/calculated for such conditions. This also will be true for any monopole from infinitesimal to 5/8 wavelength in height, although the elevation pattern of monopoles from /4- to 5/8-WL no longer are described by the cosine function (see http://i62.photobucket.com/albums/h85/rfry-100/MWElPatComparison.jpg).
>
> Elevation patterns show maximum relative field centered at various elevation angles above the horizon, when those fields are measured at progressively longer radial distances from the monopole, due to the propagation loss for the surface wave over other than a perfect, flat, infinite ground for those ranges. Earth curvature and terrain diffraction add to those losses for longer surface wave paths over real earth, and for very great distances the h-plane relative fields falls to ~zero.

As I thought you were aware, the surface wave propagates considerably differently than the sky wave.

> But that pattern shape is not the pattern shape originally radiated by the monopole, it also includes the effects of the propagation environment at the range where it was measured (or calculated).
>
> If this were not true then MW broadcast stations would have essentially zero coverage area for their groundwave signals.

It would be a mistake to design HF antenna systems based on optimizing surface wave propagation as AM broadcasters do, unless you desire communication for distances not exceeding a few miles.

Roy Lewallen, W7EL

4-22-2006:

Richard Fry wrote:
> "Roy Lewallen" wrote:
>> The maximum far field (sky wave) gain of a ground mounted
>> quarter wave vertical over average ground, with a completely lossless ground system, is on the order of 0 dBi, and this occurs at roughly 25 degrees above the horizon (both depending on
>> frequency as well as ground characteristics).
> _____
>
> The above is an understandable conclusion using NEC analysis, however it is not supported empirically. If it was, AM broadcast stations would perform very much differently than they do.

NEC analysis has been supported many times by measurement and observation.

> The measured data in Brown, Lewis & Epstein's 1937 benchmark paper "Ground Systems as a Factor in Antenna Efficiency" proved that the *radiated* groundwave field from a vertical monopole working against 113 buried radials each 0.41 lambda in length was within a few percent of its calculated peak value for a radiation pattern with maximum gain in

the horizontal plane. The path length for the measurement was 0.3 miles, which was in the far field of the vertical monopole configurations measured.

Yes. The question is what is the calculated value. B, L, and E normalized their measurements to the unattenuated field strength at one mile for 1000 watts radiated power. I couldn't find anywhere in their paper where they explained how they determined the ground attenuation between the antenna and their observation point.

> BL&E's measurements, and the results of thousands of measurements made of the groundwave fields of MW broadcast stations using such radial ground systems ever since demonstrate that their peak gain always lies in the horizontal plane.

No, the field strength is strongest at low elevation angles only close to the antenna, as you further explain below.

> It is true that, as a groundwave propagation path becomes longer, the field measured at increasing elevations above the earth at distant ranges might be higher than measured at ground level at those ranges. But that is not because more field was launched by the original radiator toward those higher elevations -- it is because the the groundwave path has higher losses, which accumulate as that path lengthens. Therefore a NEC plot showing the conditions reported in the quote above do not accurately depict the elevation pattern as it is launched from the radiator, and the groundwave field it will generate.

Of course the standard far field analysis doesn't accurately depict the field close to the antenna -- it's a plot of the field at points very distant from the antenna, as clearly explained in the manual. NEC allows you to include the surface wave if you want, and it accurately shows the total field including the surface wave at a distance of your choice. (Accurate, that is, up to a hundred km or so, beyond which the deviation of the flat ground model from the curved Earth begins affecting results.)

Don't feel bad -- Reg has a lot of trouble understanding this, too.

> There are software programs designed for calculating MW groundwave field strength given the FCC "efficiency" of the radiator and the conductivity of the path. The radiator efficiency is the groundwave field developed by the radiator with a given applied power at a given distance (1 kW @ 1 km). These values must meet a certain minimum level for the class of station. I think in all cases, they must be within ~0.5 dB of the theoretical value for a radiation pattern with its peak gain in the horizontal plane. In the case of directional MW antennas, this performance must be proven by field measurements.
>
> Finally, standard equations show a peak field of ~137.6 mV/m at 1 mile from a 1/2-wave dipole radiating 1 kW in free space. The calculated groundwave field at 1 mile radiated by 1 kW from a 1/4-wave vertical MW monopole over a perfect ground plane is ~195 mV/m. This is the same field as generated by the free space 1/2-wave dipole, when all

radiation is confined to one hemisphere (137.6 x 1.414).
>
> The groundwave fields measured from thousands of installed MW broadcast antenna systems confirm that their intrinsic radiation patterns are within a fraction of a decibel of that perfect radiator over a perfect ground plane, no matter what is the conductivity at the antenna site (N.B. Reg).

No, the measured fields from quarter wave broadcast antennas are considerably less than 195 mV/m for 1 kW at one mile, unless perhaps there's only salt water between the antenna and measurement point. As you explained above, the surface wave is attenuated with distance. What you seem to be missing is that the attenuation is strongly dependent on ground conductivity (between antenna and measurement point, not just at the antenna site) and frequency, so the actual field strength at one mile for 1 kW radiated will always be considerably less than the perfect ground case. The 195 mV/m and associated values for various antenna heights is the "unattenuated" or "inverse" field, which doesn't include the surface wave attenuation beyond simple inverse distance field strength reduction. It's the field strength you'd get if the ground between antenna and measurement point were perfect, not what you get over real ground. I'm not very conversant with FCC antenna measurement methodology, but somewhere the measured field strength is normalized to the unattenuated field strength by fitting to a ground attenuation curve, which in turn depends on frequency and ground conductivity. (I've been told that this is the way broadcasters determine ground conductivity -- by seeing how far the measured field strength deviates from the unattenuated value.) I believe that the surface wave attenuation curves used by the FCC are from the 1937 I.R.E. paper by K.A. Norton. That paper is also the basis for NEC's surface wave calculations.

Roy Lewallen, W7EL

4707. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 18:57:46 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ggetf9$f70$1@news.jpl.nasa.gov>
Source record: 19931
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Cecil Moore wrote:
> Roy Lewallen wrote:
>> Sorry, it doesn't. Among the claims, trolls for investors, and
>> testimonials, where is the quantitative data showing that a fractal
>> antenna is in any way better than a bow tie, in what ways, and how
>> much? In other words, exactly where is the evidence on which you based
>> your statement?
>
> http://ieeexplore.ieee.org/Xplore/login.jsp?url=/iel5/10686/33800/01610336.pdf?arnumber=1610336
>
>
> If you are a member of IEEE, you can access this paper:
>
> Multiband behavior of wideband Sierpinski fractal bow-tie antenna
> Yamini, A.H.; Soleimani, M.
> Microwave Conference, 2005 European
> Volume 3, Issue , 4-6 Oct. 2005 Page(s): 4 pp. -
> Digital Object Identifier 10.1109/EUMC.2005.1610336

interesting paper..

The big benefit (from a cursory reading).. is that you have a more consistent antenna pattern over the frequency range, which the vanilla bowtie does not. And a somewhat wider match bandwidth. (mostly extending it to higher frequencies)

Nothing magic, though.

4708. Re: Light, waves or particles

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 19:13:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <27vli41qpfkudbitlh1r54tivdnbd6ooaa@4ax.com>
Source record: 19932

On Sun, 23 Nov 2008 21:04:24 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>changing Gaussian law of statics to a dynamic field by the addition of
>radiators to the static particles while maintaining a state of
>equilibrium such that it met the essence of Maxwells law's which then
>led to a true desciption of the action of the displacement force
>applied to particles

Then what happens?

>plus providing further evidence for the Grand
>Uniform Theory

There is no such thing.

73's
Richard Clark, KB7QHC

73's
Richard Clark, KB7QHC

4709. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 19:40:21 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <zqDWk.9006$YU2.7206@nlpi066.nbdc.sbc.com>
Source record: 19933

> Art Unwin wrote:
>> Ceci
>> If the surface of a conductor is completely covered by precharged
>> particles
>> and is aprouched by a changing electrical field would it not it be
>> opposed by the
>> electric field pre placed on the surface?

The charged particles (electrons) are the carriers of the
RF wave. The negative charge of the electrons seems to matter
little in the generation and sustaining of RF EM photonic waves
since photons are generally assumed to possess neutral charge.
However:

From PhysicsWeb News: "A physicist in the US has analyzed radio waves
from distant galaxies to obtain a new upper bound on the electrical
charge of the photon. Brett Altschul of Indiana University has found
that the charge is no more than 10^-46 times the charge of the electron
ï¿½ assuming the existence of photons with positive and negative charges.
This is 13 orders of magnitude better than the previous direct bound on
the charge of a particle that we normally assume to be neutral".
--
73, Cecil http://www.w5dxp.com

4710. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 19:51:50 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <kBDWk.9008$YU2.8266@nlpi066.nbdc.sbc.com>
Source record: 19934

ve2pid wrote:
> But... returning to your document, I wonder why a balanced antenna
> 'see' that third wire, but the dummy load does not recognize that
> third conductor. Is it because the common-mode current outside of the
> shield has something to do with a kind of RF coupling?

Probably because the dummy load is a resistor not referenced
to ground. The antenna feedpoint impedance is a resistance
referenced to ground, i.e. not a resistor. The "third wire"
is also referenced to ground. You might consider it as a
kind of RF ground loop.
--
73, Cecil http://www.w5dxp.com

4711. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 20:02:10 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <pHDWk.4966$8_3.2486@flpi147.ffdc.sbc.com>
Source record: 19935
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Jim Lux wrote:
> Cecil Moore wrote:
>> http://ieeexplore.ieee.org/Xplore/login.jsp?url=/iel5/10686/33800/01610336.pdf?arnumber=1610336
>> If you are a member of IEEE, you can access this paper:
>> Multiband behavior of wideband Sierpinski fractal bow-tie antenna
>> Yamini, A.H.; Soleimani, M.
>> Microwave Conference, 2005 European
>> Volume 3, Issue , 4-6 Oct. 2005 Page(s): 4 pp. -
>> Digital Object Identifier 10.1109/EUMC.2005.1610336
>
> interesting paper..
>
> The big benefit (from a cursory reading).. is that you have a more
> consistent antenna pattern over the frequency range, which the vanilla
> bowtie does not. And a somewhat wider match bandwidth. (mostly extending
> it to higher frequencies)

There is apparently a "big benefit" for some applications
contrary to the nay-sayers on this newsgroup. Apparently,
the self-symmetry of fractals leads to some predictability
as far as wide-band response goes.

> Nothing magic, though.

Don't remember anyone saying that fractals were magic. They
certainly obey Maxwell's laws. I suspect their advantages,
like their straight-wire cousins, lie in the predictability
of their mathematical models.
--
73, Cecil http://www.w5dxp.com

4712. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 20:56:27 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ggf4dq$js4$1@news.jpl.nasa.gov>
Source record: 19936
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Cecil Moore wrote:
> Jim Lux wrote:
>> Cecil Moore wrote:
>>> http://ieeexplore.ieee.org/Xplore/login.jsp?url=/iel5/10686/33800/01610336.pdf?arnumber=1610336
>>> If you are a member of IEEE, you can access this paper:
>>> Multiband behavior of wideband Sierpinski fractal bow-tie antenna
>>> Yamini, A.H.; Soleimani, M.
>>> Microwave Conference, 2005 European
>>> Volume 3, Issue , 4-6 Oct. 2005 Page(s): 4 pp. -
>>> Digital Object Identifier 10.1109/EUMC.2005.1610336
>>
>> interesting paper..
>>
>> The big benefit (from a cursory reading).. is that you have a more
>> consistent antenna pattern over the frequency range, which the vanilla
>> bowtie does not. And a somewhat wider match bandwidth. (mostly
>> extending it to higher frequencies)
>
> There is apparently a "big benefit" for some applications
> contrary to the nay-sayers on this newsgroup. Apparently,
> the self-symmetry of fractals leads to some predictability
> as far as wide-band response goes.

As opposed to randomly trying other shapes, I guess..

So fractals fit in the "handy design approach" category

4713. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 21:02:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vn3mi4hfklkcfbg8k58ifkmionkrs7465c@4ax.com>
Source record: 19937
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Mon, 24 Nov 2008 14:02:10 -0600, Cecil Moore <nospam@w5dxp.com>
wrote:

>predictability
>predictability

I dare say the Yea-sayers cannot predict any specific, practical,
fractal characteristic when given fractal
>mathematical models.

For the inverse (starting with the practical instead of the
mathematical model) one very simple test:
give the mathematical model for a single fractal
antenna specifically resonant on each frequency:
1.85MHz;
3.8MHz;
7.15MHz;
10.13MHz;
14.15MHz;
18.11MHz;
21.2MHz;
24.93MHz;
28.5MHz,
to within the margins of any Ham band represented by the single
frequency offered.

Solution:
Biconical;
LPDA
(barring, of course, no one can give the fractal mathematical models).
Of course, the joke here is that these are neither very gainful, nor
small - the presumed boon of fractal invention. Yet no other
"fractal" can describe this antenna above. Those "fractals" that come
close (maybe covering 3 of the 9 bands) aren't small or gainful
either. Sometimes you just can't win for trying either.

Going to specifics, what is the mathematical model (not just a word
salad description) for a Sierpinksi Gasket? Using that mathematical
model (what students call plug-n-chug for solving an equation), show
the free space best gain at its sixth iteration, fourth resonance (the
30M band of the description above).

What is the greatest physical dimension of this 9 band antenna? What
would be its greatest physical dimension if implemented in a fourth
iteration Triadic Cantor (if, in fact, one were possible to support

these resonances)?

So, a specific fractal antenna, a specific implementation, a specific characteristic - and years before anyone here will offer a demonstration of -dare I say it?- predictability. Hasn't happened from any other correspondents here to this board in the entire history of the topic. In that same history, not one other scribbler has offered a link to someone who can do their work for them.

Fractals, always amusing.

4714. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 21:54:16 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <6aa3392e-958b-48b2-afca-a388b47779d0@j35g2000yqh.googlegroups.com>
Source record: 19938
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Nov 24, 4:02 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Mon, 24 Nov 2008 14:02:10 -0600, Cecil Moore <nos...@w5dxp.com>
> wrote:
>
> >predictability
> >predictability
>
> I dare say the Yea-sayers cannot predict any specific, practical,
> fractal characteristic when given fractal
>
> >mathematical models.
>
> For the inverse (starting with the practical instead of the
> mathematical model) one very simple test:
>   give the mathematical model for a single fractal
>   antenna specifically resonant on each frequency:
>   1.85MHz;
>   3.8MHz;
>   7.15MHz;
>   10.13MHz;
>   14.15MHz;
>   18.11MHz;
>   21.2MHz;
>   24.93MHz;
>   28.5MHz,
> to within the margins of any Ham band represented by the single
> frequency offered.
>
> Solution:
>   Biconical;
>   LPDA
> (barring, of course, no one can give the fractal mathematical models).
> Of course, the joke here is that these are neither very gainful, nor
> small - the presumed boon of fractal invention. Yet no other
> "fractal" can describe this antenna above. Those "fractals" that come
> close (maybe covering 3 of the 9 bands) aren't small or gainful
> either. Sometimes you just can't win for trying either.
>
> Going to specifics, what is the mathematical model (not just a word
> salad description) for a Sierpinksi Gasket? Using that mathematical
> model (what students call plug-n-chug for solving an equation), show
> the free space best gain at its sixth iteration, fourth resonance (the
> 30M band of the description above).

>
> What is the greatest physical dimension of this 9 band antenna? What
> would be its greatest physical dimension if implemented in a fourth
> iteration Triadic Cantor (if, in fact, one were possible to support
> these resonances)?
>
> So, a specific fractal antenna, a specific implementation, a specific
> characteristic - and years before anyone here will offer a
> demonstration of -dare I say it?- predictability. Hasn't happened
> from any other correspondents here to this board in the entire history
> of the topic. In that same history, not one other scribbler has
> offered a link to someone who can do their work for them.
>
> Fractals, always amusing.

Fractal design may prove as good of a way of shrinking an antenna as
any other. Its just pure BS to think it is going to let you make a
smaller antenna with the same gain as the full size antenna it was
derived from. It is Mega BS to think that you are going to shrink the
antenna and achive gain because of anything the fractals will
contribute.

Jimmie

4715. Loop efficiency, was Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 21:56:45 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ggf7ut$1l7q$1@f04n12.cac.psu.edu>
Source record: 19939

Steve wrote:

> Yes, I know there's nothing to gain in terms of performance. However,
> I have very little space to work with. I have a 1 meter diameter loop
> installed in my (tiny) attic that works very respectably on 10-30
> meters. It won't get me onto 40 meters, though, and getting onto 40 is
> either going to require a much larger diameter single-turn loop, a two-
> turn loop, or a much more robust capacitor. Trying out a two-turn loop
> seems like it would be the easiest and least expensive alternative,
> and I already have the copper tubing I would need.
>

I separated this out from the noise floor......

When I was dealing with a loop, I wanted to extend the frequency downwards - it's a pretty big loop, but trying to hit 75 meters was a goal, I had some exchanges with Reg, and he pretty much told me to put a extra capacitor across the terminals so I could tune it to the lower frequency. That was a smack the forehead moment for me.

And Oh yes, tuning will be soooooooo tight. But the cap will probably be better than an extra loop. You'll just have to figure out how to switch it in and out of the circuit.

- 73 de Mike N3LI -

4716. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 22:10:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d0c9d851-2d46-4678-9355-49b23ce88be1@c1g2000yqg.googlegroups.com>
Source record: 19940

On Nov 24, 1:40 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> > Art Unwin wrote:
> >> Ceci
> >> If the surface of a conductor is completely covered by precharged
> >> particles
> >> and is aprouched by a changing electrical field would it not it be
> >> opposed by the
> >> electric field pre placed on the surface?
>
> The charged particles (electrons) are the carriers of the
> RF wave. The negative charge of the electrons seems to matter
> little in the generation and sustaining of RF EM photonic waves
> since photons are generally assumed to possess neutral charge.
> However:
>
> From PhysicsWeb News: "A physicist in the US has analyzed radio waves
> from distant galaxies to obtain a new upper bound on the electrical
> charge of the photon. Brett Altschul of Indiana University has found
> that the charge is no more than 10^-46 times the charge of the electron
> – assuming the existence of photons with positive and negative charges.
> This is 13 orders of magnitude better than the previous direct bound on
> the charge of a particle that we normally assume to be neutral".
> --
> 73, Cecil http://www.w5dxp.com

Cecil, we badly need a definition for a wave. I see a wave as a series
of a bound electron structure versus the unbound
particle but then everybody has different ideas such that bound
particles or electron move within the surface of matter.
You could even see water as a bevy of particles impinging on the
miniscus such that separate impacts oprovides an occillatory movement
onel It would Also appear that some see linear movent occures in
matter and it is this carries a wave. Until the definitions are made
clear
hams will be in their element as the arguements will have no end in
sight. What is certain because of disagreement where the displacement
vector is and what i8t acts upon some have to rethink their stance on
radiation for the next generation who are susceptable to change. As
for the others they can move on to the next life comfortable in their
long held positions will prevail for ever. Seems like we have
offricers that are screaming at the troops that their hats
or berets are not straight while ignoring the bedlum created as the
enemy passes thu the lines!
Thanks for responding

Best regards
Art

4717. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 22:31:16 UTC
From: Bill Kearney <wkearney99@hotmail.com>
Message-ID: <vo2dnUEGm7DNtrbUnZ2dnUVZ_qrinZ2d@speakeasy.net>
Source record: 19941
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

> I suspect the open access point was an intentional trap set for hotel
> visitors.

Great way to collect accounts and passwords, sit outside a coffee shop with some gear and you're set.

4718. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 22:32:40 UTC
From: Bill Kearney <wkearney99@hotmail.com>
Message-ID: <-bOdncgMCo4WtrbUnZ2dnUVZ_sWdnZ2d@speakeasy.net>
Source record: 19942
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

> My home system is "1540 Jackson Ave" which is my address. The
> assumption is that someone wanting to use my system can bang on the
> door and ask permission. My office SSID uses the company name.

Which raises the question, if someone uses your access point without permission are you within your rights to do whatever you please with the packets (and their contents) you detect?

Seems fair, steal my airwaves and I'll steal your data in return.

4719. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 22:45:25 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ggfaq4lac1@news.jpl.nasa.gov>
Source record: 19944

Bill Kearney wrote:
>> My home system is "1540 Jackson Ave" which is my address. The
>> assumption is that someone wanting to use my system can bang on the
>> door and ask permission. My office SSID uses the company name.
>
> Which raises the question, if someone uses your access point without
> permission are you within your rights to do whatever you please with the
> packets (and their contents) you detect?

Is a unsecured wifi AP more like putting some benches on the sidewalk in
front of your house or a house with an unlocked front door?

This would a good example where the "law" isn't settled.

Unlike the door example, where there is millenia of houses and doorways
to establish a fairly common understanding of boundaries and permissions
required (and even then, it varies among places, right?)

To a first order, if you own one endpoint of the link (i.e the AP), then
you get to look at what its carrying. Unless you're a "common carrier"
or "utility" sort of organization.

And how far does YOUR liability extend, if, say, that miscreant out
front is using your AP to organize a terrorist plot? ISPs have a "safe
harbor": if they don't look at the content, they're not responsible.

Or, does having that open AP give you plausible deniability, and the
SODDI (Some other dude did it) defense... Hey man, it wasn't me
downloading copyrighted music to that IP, it must have been some other
dude with a laptop in a car out front. Bummer that I don't have any
traffic logs.

>
> Seems fair, steal my airwaves and I'll steal your data in return.

4720. Re: Loop efficiency, was Re: multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 22:58:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s9cmi4puvdsaj757vsf87dmkb51k8c36f8@4ax.com>
Source record: 19943

On Mon, 24 Nov 2008 16:56:45 -0500, Michael Coslo <mjc5@psu.edu>
wrote:

>But the cap will probably be
>better than an extra loop. You'll just have to figure out how to switch
>it in and out of the circuit.

Hi Mike,

More the achievement would be finding the capacitor that could carry
the current.

Did you follow through with this frequency extension of your loop?

73's
Richard Clark, KB7QHC

4721. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 23:10:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <5vGWk.7832$x%.2972@nlpi070.nbdc.sbc.com>
Source record: 19945
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
> For the inverse (starting with the practical instead of the
> mathematical model) one very simple test:
> give the mathematical model for a single fractal
> antenna specifically resonant on each frequency:
> 1.85MHz;
> 3.8MHz;
> 7.15MHz;
> 10.13MHz;
> 14.15MHz;
> 18.11MHz;
> 21.2MHz;
> 24.93MHz;
> 28.5MHz,
> to within the margins of any Ham band represented by the single
> frequency offered.

Since fractal antennas are finding practical applications
when etched on a PC board, your discussion is about as
moot at a 160m rotatable Yagi proving that rotatable Yagis
are not feasible.
--
73, Cecil http://www.w5dxp.com

4722. Re: Displacement current

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 23:15:26 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <bAGWk.7833$x%.349@nlpi070.nbdc.sbc.com>
Source record: 19946

Art Unwin wrote:
> Cecil, we badly need a definition for a wave.

From "The IEEE Dictionary":

"wave (1) (data transmission) a disturbance that is a
function of time or space or both."
--
73, Cecil http://www.w5dxp.com

4723. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 23:47:04 UTC
From: dplatt@radagast.org
Message-ID: <o0rrv5-4lp.ln1@radagast.org>
Source record: 19950
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

In article <-bOdncgMCo4WtrbUnZ2dnUVZ_sWdnZ2d@speakeasy.net>,
Bill Kearney <wkearney99@hotmail.com> wrote:

>> My home system is "1540 Jackson Ave" which is my address. The
>> assumption is that someone wanting to use my system can bang on the
>> door and ask permission. My office SSID uses the company name.
>
>Which raises the question, if someone uses your access point without
>permission are you within your rights to do whatever you please with the
>packets (and their contents) you detect?
>
>Seems fair, steal my airwaves and I'll steal your data in return.

As far as the FCC is concerned, I suspect that the usual "third party reception" rules would apply. If the communication is transmitted over the airwaves but is not intended for you, you're permitted to intercept the communication but *not* to make gainful personal use of what you overhear.

There was one company which tried to prosecute some local "wardrivers" who had publicized the fact that the company was running an open wireless network. The FCC not only refused to pursue their complaint (pointing out that the company had created the problem and failed to mitigate it by turning on WEP), but cited the company for running an illegal Part 15 network (they were using external high-power amplifiers on their APs).

I'm reasonably sure that any criminal actions you implement with the use of such data (e.g. making any unauthorized access to a protected computer system, etc.) would *NOT* seen as legitimate by The Powers That Be, even if you gained knowledge of that data by scarfing it off of your own access point during an unauthorized use thereof.

As I understand it, there isn't any standard interpretation (even in under U.S. laws) as to what rights-of-usage apply to an open access point, in the absence of a statement by the AP's owner as to what the rules are. The FCC doesn't appear to consider this aspect of the wireless problem to be part of their jurisdiction.

I believe that in some areas, using such an AP without having received some explicit form of permission is considered to be a tort (a civil wrong) and the owner could file suit against you. Using the AP to break into a computer network (e.g. accessing files, etc.) could easily qualify as a prosecutable "computer crime".

I've read that some municipalities have passed a rule which says that the act of setting up an insecure access point, and broadcasting beacons "to the wind", counts as something akin to an open invitation... enough so that the use of the AP without explicit permission isn't considered a crime, or (I think) even a tort. This might especially be true in the case of those APs/routers which come with a WEP password pre-installed (the 2Wire models are one example) and in which the owner must explicitly disable the security feature if s/he decides that this is appropriate.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

4724. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-24 23:48:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j3fmi4pin2crm5mp4uc0qon6b89v3cj617@4ax.com>
Source record: 19947
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Mon, 24 Nov 2008 17:10:00 -0600, Cecil Moore <nospam@w5dxp.com>
wrote:

>Since fractal antennas are finding practical applications
>when etched on a PC board

Like I said - nothing predictable, no math model, etc. etc. etc.

Imagine, an antenna on a PC board - the miracle of the 3rd Millennium!

4725. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 00:02:51 UTC
From: JB <nospam@goofball.net>
Message-ID: <LgHWk.705$QX3.9@nwrddc02.gnilink.net>
Source record: 19948
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

> >I'd say stealing is bit strong, I run an open wireless access point
> >here, its' SSID is "WelcomeAboard!"
>
> My home system is "1540 Jackson Ave" which is my address. The
> assumption is that someone wanting to use my system can bang on the
> door and ask permission. My office SSID uses the company name.

LMAO! My SSID is the same as my front gate Password. That way I never have to worry about opening it when I get home from work and the party is always in full swing when I get there! It's a little bit bothersome when dead bodies turn up in the moat though!

4726. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 00:07:35 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <ggffkevpn1@news.motzarella.org>
Source record: 19949
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Rich Grise" <rich@example.net> wrote in message
news:pan.2008.11.19.22.45.03.655469@example.net...
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Thanks,
> Rich
>
Lo and behold, here is one http://tinyurl.com/665r5a but it's a throw-back to a simpler time when the HP42S calculator was an engineer's prized tool. If you have a 42S, punch it in and use it. Otherwise, this is mainly a learning tool to show how simple the calculations are. I think this design could be put onto a Lotus123 calculating spread sheet where all the output data windows would suddenly by filled up upon entering the needed input data.

4727. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 00:13:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <zdqdnb0QXM2I3rbUnZ2dnUVZ_tXinZ2d@posted.easystreetonline>
Source record: 19801
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Jim Lux wrote:
>>. . .
>> http://ieeexplore.ieee.org/Xplore/login.jsp?url=/iel5/10686/33800/01610336.pdf?arnumber=1610336
>>
>>
>> If you are a member of IEEE, you can access this paper:
>>
>> Multiband behavior of wideband Sierpinski fractal bow-tie antenna
>> Yamini, A.H.; Soleimani, M.
>> Microwave Conference, 2005 European
>> Volume 3, Issue , 4-6 Oct. 2005 Page(s): 4 pp. -
>> Digital Object Identifier 10.1109/EUMC.2005.1610336
>
> interesting paper..
> . . .

I think you have to be a member of the Microwave Theory & Techniques Society to it. I'm a member of the IEEE and several of its Societies, but not that one, and I'm denied access to the paper. Too bad it wasn't published in Ant & Prop.

Roy Lewallen, W7EL

4728. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 00:22:14 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <ggfgft$80q$1@news.motzarella.org>
Source record: 19802
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Chuck Olson" <chuckolson01@REMOVETHIScomcast.net> wrote in message
news:ggffkevpn1@news.motzarella.org...
>
> "Rich Grise" <rich@example.net> wrote in message
> news:pan.2008.11.19.22.45.03.655469@example.net...
>> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>>
>> Thanks,
>> Rich
>>
> Lo and behold, here is one http://tinyurl.com/665r5a but it's a throw-back
> to a simpler time when the HP42S calculator was an engineer's prized tool.
> If you have a 42S, punch it in and use it. Otherwise, this is mainly a
> learning tool to show how simple the calculations are. I think this design
> could be put onto a Lotus123 calculating spread sheet where all the output
> data windows would suddenly by filled up upon entering the needed input
> data.
>
Sorry I didn't fully describe how to get the file. It's a Word document, so
the URL above takes you to a page where you can choose "download", and then
you can open it with Microsoft Word.

Chuck W6PKP

4729. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 01:40:10 UTC
From: kb9rqz@yahoo.com
Message-ID: <crlmi4t3n1q7onmgl5hbriba2bf3de3678@4ax.com>
Source record: 19803
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4730. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 06:03:28 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <mj4ni4la1f6bljnn1tkgi8okah20g75dp7@4ax.com>
Source record: 19804
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Mon, 24 Nov 2008 17:32:40 -0500, "Bill Kearney"
<wkearney99@hotmail.com> wrote:

>> My home system is "1540 Jackson Ave" which is my address. The
>> assumption is that someone wanting to use my system can bang on the
>> door and ask permission. My office SSID uses the company name.

>Which raises the question, if someone uses your access point without
>permission are you within your rights to do whatever you please with the
>packets (and their contents) you detect?
>
>Seems fair, steal my airwaves and I'll steal your data in return.

Nope. Two wrongs don't make a right. You'll also find that "an eye
for an eye" and retailiation are not actionable in the USA legal
system. Simply having your rights violated, does not magically make
it open season on the perpetrator. The courts are expected to deal
out the necessary justice, not you. For example, catching a burglar
in the act does not give you the right to pound him into the ground.
You can and probably will be charged with battery for doing that.

I have some experience and opinions with Wi-Fi related crimes and
enforcement, but I don't wanna start yet another political discussion.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4731. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 08:24:45 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <gggcoi$q5p$1@news.motzarella.org>
Source record: 19805
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Chuck Olson" <chuckolson01@REMOVETHIScomcast.net> wrote in message
news:ggffkevpn1@news.motzarella.org...
>
> "Rich Grise" <rich@example.net> wrote in message
> news:pan.2008.11.19.22.45.03.655469@example.net...
>> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>>
>> Thanks,
>> Rich
>>
> Lo and behold, here is one http://tinyurl.com/665r5a but it's a throw-back
> to a simpler time when the HP42S calculator was an engineer's prized tool.
> If you have a 42S, punch it in and use it. Otherwise, this is mainly a
> learning tool to show how simple the calculations are. I think this design
> could be put onto a Lotus123 calculating spread sheet where all the output
> data windows would suddenly by filled up upon entering the needed input
> data.
>
>
I'm really disappointed in the comcast customer's website - - I tried to access the program later in the evening and found it required I sign in - - even though I specified the file to be "public". Let me know if you have trouble getting the file. I would appreciate any recommendation for a better way to access the Word document than the use of this comcast facility.

4732. Re: coils?multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 10:16:08 UTC
From: ml <m@di.net>
Message-ID: <m-65F4F6.05160825112008@news.optonline.net>
Source record: 19806

In article <m_6dnfDA7-bK8LrUnZ2dnUVZ_judnZ2d@posted.easystreetonline>,
Roy Lewallen <w7el@eznec.com> wrote:

> Wimpie wrote:
> > . . .
> > There is an "however". When you make a single turn loop from flat
> > strip that has the same width as the length of your two-turn loop, you
> > will notice: 1. reduced AC resistance (because of the significantly
> > larger circumference of the flat strip with respect to a thin round
> > tube, 2. inductance will decrease (H field lines have to take a longer
> > path around the wide strip), 3. radiation resistance will not change
> > with respect to a single turn loop from wire/tube.
> > This results in higher efficiency and increased bandwidth. The
> > overall result will be better then for your two-turn loop. I think
> > that is the reason why most programs are for single turn loops.
> >
> > So for the transmit case, given fixed diameter of your loop, the
> > larger the copper surface (=length*circumference), the better the
> > efficiency. Best thing to enhance conductor surface is to use very
> > wide flat strip (high wind load), or multiple wires (with some spacing
> > in between) in parallel (limited wind load).
> > . . .
>
> Flat conductors aren't as attractive as they look at first glance. The
> problem is the same proximity effect mentioned earlier in the posting.
> Current is distributed evenly around a round conductor (assuming the
> perimeter is a very small fraction of a wavelength), but not along a
> flat strip. Because of proximity effect, the current is much more
> concentrated near the edges than at the middle. The result is that the
> resistance is considerably higher than for a wire with the same surface
> area. In figuring an "equivalent diameter" of a thin flat strip in order
> to get the same L and C properties, the rule is that a strip is
> equivalent to a wire whose diameter is half the strip width. This means
> that a strip of width w or total "circumference" 2 * w is equivalent to
> a wire with a circumference of pi * w / 2 ~ 1.6 w, in so far as L and C
> go. Since the same phenomenon affects the inductance and resistance,
> this would also be a good working rule for estimating the relative R of
> a strip or wire.
>
> Roy Lewallen, W7EL

>>does this rule also hold true for example i've opened some tuners
and linear amps, often, i see straps instead of wire going to the
larger coils and switches, even some switch box's have straps from
relays to connectors etc would wire have been 'better' and or

avoid the proximity effect??

4733. Re: new ham magazine

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 10:21:02 UTC
From: ml <m@di.net>
Message-ID: <m-F19427.05210225112008@news.optonline.net>
Source record: 19807

In article
<5663a554-4004-437a-98dc-02695f93ffb3@o4g2000pra.googlegroups.com>,
nm5k@wt.net wrote:

> On Nov 20, 2:15 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
>
> > >
> > > Ed, N2ECW
>
> Hummm. New call I see...
> I liked the old one better, but of course, I'm biased.. :/

surprized no one mentioned maybe i over looked, thought the new
magazine was 'free' and either way i welcome new activity
hobby needs it

maybe they will be great if so i'll support them even at cost

4734. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 10:23:33 UTC
From: ml <m@di.net>
Message-ID: <m-F25A89.05233325112008@news.optonline.net>
Source record: 19808
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <c7ednY3qFIw0Z7jUnZ2dnUVZ_g-dnZ2d@earthlink.com>,
"Ralph Mowery" <rmowery28146@earthlink.net> wrote:

> "Rich Grise" <rich@example.net> wrote in message
> news:pan.2008.11.19.22.45.03.655469@example.net...
> > My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> > center of my coax to the venetian blind. I have to hand-adjust it
> > for the channel, weather conditions, phase of the moon, etc. I can
> > do this because I can _see_ an indication of signal strength.
> >
> > Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> > a real UHF antenna. My budget is exceedingly limited, but I have
> > a supply of materials (GTAW filler rod, with some coppery-colored
> > coating, so it solders like a dream, and is as stiff as piano wire)
> > to build an antenna with.
> >
> It may not take too much antenna. I picked up one of the converter boxes
> and hooked it to a 432 mhz beam at 70 feet and got 21 stations on the auto
> tune. Then to a 9 element M2 2 meter bem and it picked up 29 stations.
> This was at the end of about 130 feet of low loss rg-8 size coax and then 25
> feet of rg-6.
> Several of the stations were the same transmitter,but differant chanels on
> the TV.

no more free tv?? where do you live?

here in the usa over the air tv is , was and shall remain free

in feb it will switch to digital however shall still be free

4735. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 12:32:00 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <v8SWk.69060$De7.37534@bignews7.bellsouth.net>
Source record: 19809
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:mj4ni4la1f6bljnn1tkgi8okah20g75dp7@4ax.com...
> On Mon, 24 Nov 2008 17:32:40 -0500, "Bill Kearney"
> <wkearney99@hotmail.com> wrote:
>
>>> My home system is "1540 Jackson Ave" which is my address. The
>>> assumption is that someone wanting to use my system can bang on the
>>> door and ask permission. My office SSID uses the company name.
>
>>Which raises the question, if someone uses your access point without
>>permission are you within your rights to do whatever you please with the
>>packets (and their contents) you detect?
>>
>>Seems fair, steal my airwaves and I'll steal your data in return.
>
> Nope. Two wrongs don't make a right. You'll also find that "an eye
> for an eye" and retailiation are not actionable in the USA legal
> system. Simply having your rights violated, does not magically make
> it open season on the perpetrator. The courts are expected to deal
> out the necessary justice, not you. For example, catching a burglar
> in the act does not give you the right to pound him into the ground.
> You can and probably will be charged with battery for doing that.
>
> I have some experience and opinions with Wi-Fi related crimes and
> enforcement, but I don't wanna start yet another political discussion.

Just like feces and politicians, politics is a fact of life.

Where's my coffee...? <G>

Ed, N2ECW

4736. Re: coils?multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 12:41:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <F_idnVA-QJgLb7bUnZ2dnUVZ_hednZ2d@posted.easystreetonline>
Source record: 19810

ml wrote:
>>> does this rule also hold true for example i've opened some tuners
> and linear amps, often, i see straps instead of wire going to the
> larger coils and switches, even some switch box's have straps from
> relays to connectors etc would wire have been 'better' and or
> avoid the proximity effect??

Proximity effect isn't a factor unless conductors are very close together -- I suggest you review the previous postings which explain it. As far as "better", the answer is that it probably doesn't matter, since either a wire or strap can usually be pretty easily made large enough to make loss negligible in those applications.

Roy Lewallen, W7EL

4737. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 13:51:24 UTC
From: Dave <dave@dave.dave>
Message-ID: <492c02dc$0$31156$bd467cd0@news.dslextreme.com>
Source record: 19811
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

ml wrote:
> In article <c7ednY3qFIw0Z7jUnZ2dnUVZ_g-dnZ2d@earthlink.com>,
> "Ralph Mowery" <rmowery28146@earthlink.net> wrote:
>
>> "Rich Grise" <rich@example.net> wrote in message
>> news:pan.2008.11.19.22.45.03.655469@example.net...
>>> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
>>> center of my coax to the venetian blind. I have to hand-adjust it
>>> for the channel, weather conditions, phase of the moon, etc. I can
>>> do this because I can _see_ an indication of signal strength.
>>>
>>> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
>>> a real UHF antenna. My budget is exceedingly limited, but I have
>>> a supply of materials (GTAW filler rod, with some coppery-colored
>>> coating, so it solders like a dream, and is as stiff as piano wire)
>>> to build an antenna with.
>>>
>> It may not take too much antenna. I picked up one of the converter boxes
>> and hooked it to a 432 mhz beam at 70 feet and got 21 stations on the auto
>> tune. Then to a 9 element M2 2 meter bem and it picked up 29 stations.
>> This was at the end of about 130 feet of low loss rg-8 size coax and then 25
>> feet of rg-6.
>> Several of the stations were the same transmitter,but differant chanels on
>> the TV.
>
> no more free tv?? where do you live?
>
> here in the usa over the air tv is , was and shall remain free
>
> in feb it will switch to digital however shall still be free

Digital is a major step toward "conditional access".

4738. Re: coils?multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 13:53:13 UTC
From: Dave <dave@dave.dave>
Message-ID: <492c034a$0$31156$bd467cd0@news.dslextreme.com>
Source record: 19812

Roy Lewallen wrote:
> ml wrote:
>>>> does this rule also hold true for example i've opened some tuners
>> and linear amps, often, i see straps instead of wire going to the
>> larger coils and switches, even some switch box's have straps
>> from relays to connectors etc would wire have been 'better'
>> and or avoid the proximity effect??
>
> Proximity effect isn't a factor unless conductors are very close
> together -- I suggest you review the previous postings which explain it.
> As far as "better", the answer is that it probably doesn't matter, since
> either a wire or strap can usually be pretty easily made large enough to
> make loss negligible in those applications.
>
> Roy Lewallen, W7EL

Proximity effect is when you are too close to a directional microphone
and the bass is accentuated. I think you mean mutual coupling.

4739. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 15:26:28 UTC
From: CW <cmagers@earthl.net>
Message-ID: <ZMadnTW9DYa-hLHUnZ2dnUVZ_qninZ2d@earthlink.com>
Source record: 19813
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Dave" <dave@dave.dave> wrote in message
news:492c02dc$0$31156$bd467cd0@news.dslextreme.com...
>
> Digital is a major step toward "conditional access".

So is analog. If you don't have the proper reciever, you can't pick it up.
Just a different format.

4740. Re: coils?multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 16:24:22 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <6c8a760e-c85e-4d6f-b561-278802819256@r10g2000prf.googlegroups.com>
Source record: 19814

On Nov 25, 5:53 am, Dave <d...@dave.dave> wrote:
> Roy Lewallen wrote:
> > ml wrote:
> >>>> does this rule also hold true   for example i've opened some tuners
> >> and linear amps, often, i see straps instead of wire going to the
> >> larger coils and switches, even some switch box's   have straps
> >> from relays to connectors etc   would wire have been 'better'
> >> and or avoid   the proximity effect??
>
> > Proximity effect isn't a factor unless conductors are very close
> > together -- I suggest you review the previous postings which explain it.
> > As far as "better", the answer is that it probably doesn't matter, since
> > either a wire or strap can usually be pretty easily made large enough to
> > make loss negligible in those applications.
>
> > Roy Lewallen, W7EL
>
> Proximity effect is when you are too close to a directional microphone
> and the bass is accentuated. I think you mean mutual coupling.

Wrong one of the several meanings, Dave. See fourth entry under
http://en.wikipedia.org/wiki/Proximity_effect.

;-)

4741. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 16:44:13 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <DXVWk.8569$be.4345@nlpi061.nbdc.sbc.com>
Source record: 19815

Roy Lewallen wrote:
> The only way to prevent this is to completely shield
> the dummy load and transition to the feedline, and have no seams, holes,
> or cracks which could let any current get from the inside to the outside.

A good example of such a dummy load is the Bird Termaline
Coaxial Resistor. I've got model 8020.
--
73, Cecil http://www.w5dxp.com

4742. information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 16:51:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <5528ba94-66ff-4cb5-baff-a06e77cc4400@v42g2000yqv.googlegroups.com>
Source record: 19816

Many of us have checked the net for the latest advances in antennas.
Advances are usually arrived at public university research units some
of which are partially funded by outside sources Most, if not all,
the results are presented to the IEEE as a way of getting recognision.
But this information such as advancement in science is not provided to
the public even tho they came from a public institution. Thus you
cannot access it on the net as a member of the public as access is
with held UNLESS
you hand over some money to the IEEE. Why are the universites not
sharing their work with the public?
Is it because academics feel they are part of a special club divorced
from the public? Ofcourse I may be wrong
in taking that view in light of the fact that these study results are
available in libraries but why are they not put on the web for the
good of science and the general public at large?
Art

4743. G5RV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 16:56:36 UTC
From: k6kwq <k6kwq@msn.com>
Message-ID: <5eba065d-32d3-4d1f-aafd-97522122864a@t26g2000prh.googlegroups.com>
Source record: 19817

I just put up a 160 G5RV antenna. Is 140 foot of 50 0hm coax required
to make yhis antenna work?

4744. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 17:08:49 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <bcf8391a-d084-42b1-9169-bfdf1ea7a167@k36g2000yqe.googlegroups.com>
Source record: 19818
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Nov 24, 12:46 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 23 Nov 2008 19:26:58 -0800 (PST), JIMMIE
>
>
>
>
>
> <JIMMIEDEE...@YAHOO.COM> wrote:
> >On Nov 23, 7:39 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> >> On Sun, 23 Nov 2008 15:32:02 -0800, Jeff Liebermann <je...@cruzio.com>
> >> wrote:
>
> >> >NEC2 model:
> >> ><http://802.11junk.com/jeffl/antennas/AMOS-7/>
> >> ><http://802.11junk.com/jeffl/antennas/AMOS-5/> (not optimized yet)
>
> >> Fixed. I was feeling guilty so I ran it through the optimizer in
> >> 4NEC2. I haven't built a 5 dipole AMOS yet using these dimensions.
> >I put one up I use with a WiFi repeater and I can see dozens of
> >wirless routers in my neighborhood. The antena i mounted at about
> >20ft on my chimney. There are about 8 or 9 with no security. If I so
> >chose I would never have to pay for internet service. There is another
> >subdivsion behind my house I havent even looked at that one yet.
>
> If stealing internet service from the neighbors is your intended
> purpose, you selected the wrong type of antenna. A sector antenna may
> be a great idea for running a WISP or central access point, where
> you're never sure of the direction the client radios are coming from.
> It's a bad idea for use at the client end. The idea is to pickup as
> little interference as possible. You're reception of 9 stations is a
> problem as any one of these could provide sufficient interference to
> make your pirated internet connection useless.   I suggest you look
> into a panel or dish antenna, which will provide a much narrower
> horizontal beamwidth, with the added bonus of more antenna gain.
>
> >Strange thing I know 3 of the people who have the open systems and
> >they are farly savy about these things. I wonder if they are leaving
> >them open on purpose.
>
> I was running an open access point at my office for a while. However,
> I was also monitoring connection attempts and traffic. I figured that
> nobody would bother. Wrong. I had some bum in a pickup truck and
> camper, connect regularly to make VoIP phone calls. I had no problem

> with him using the system and we eventually came to an arrangement.
> However, he stupidly told all his friends, who immediately abused the
> system, so I locked it up with a WPA password.
>
> In another incident, one of my customers was in a hotel that wanted
> real money to use their Wi-Fi. (This was about 6 years ago, before
> the widespread proliferation of free Wi-Fi service). So, he connected
> to a random open access point. The security on his laptop was more
> than a little lacking (writable shared folders), resulting in the
> installation of multiple trojan horses, spam bots, etc. I suspect the
> open access point was an intentional trap set for hotel visitors.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558- Hide quoted text -
>
> - Show quoted text -

I dont steal internet service but I do have an arrangement with a
couple of my neighbors so we can use each other service.
This has come in handy a couple of time now in just the last few
months when my cable went out and another neighbors cable modem went
out.
Its also a ton of fun just to build the antennas and be able to do it.

I must confess I have tapped in to a few unsecure home APs to check my
email while traveling. These are often easier to find than a hotspot.

Jimmie

4745. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 17:11:27 UTC
From: JB <nospam@goofball.net>
Message-ID: <3lWWk.849$us6.756@nwrddc01.gnilink.net>
Source record: 19819

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:DXVWk.8569$be.4345@nlpi061.nbdc.sbc.com...
> Roy Lewallen wrote:
> > The only way to prevent this is to completely shield
> > the dummy load and transition to the feedline, and have no seams, holes,
> > or cracks which could let any current get from the inside to the
outside.
>
> A good example of such a dummy load is the Bird Termaline
> Coaxial Resistor. I've got model 8020.
> --
All the above, N connectors and double shield coax. RG8X types seem to be the worst for radiation, although it does have other redeeming features. I take it you have RF in the shack even on the dummy? Don't forget about other RF paths like the audio shields and data lines. Regular 95% shielded coax is said to have isolation of about 60 dB (RG8, 58c) maybe as much as 90 dB for double shielded. Unless there is some bump in the line that causes the shield to radiate. There will be resonances in the entire line that cause points of high voltage and high current.

4746. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 17:26:10 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gghcfg$87q$1@news.jpl.nasa.gov>
Source record: 19821

Art Unwin wrote:
> Many of us have checked the net for the latest advances in antennas.
> Advances are usually arrived at public university research units some
> of which are partially funded by outside sources Most, if not all,
> the results are presented to the IEEE as a way of getting recognision.
> But this information such as advancement in science is not provided to
> the public even tho they came from a public institution. Thus you
> cannot access it on the net as a member of the public as access is
> with held UNLESS
> you hand over some money to the IEEE. Why are the universites not
> sharing their work with the public?
> Is it because academics feel they are part of a special club divorced
> from the public? Ofcourse I may be wrong
> in taking that view in light of the fact that these study results are
> available in libraries but why are they not put on the web for the
> good of science and the general public at large?
> Art

This is a complex issue and one of considerable debate within those universities AND the publishers of the journals.

1) The journals have operating costs (someone has to edit them and do the typesetting and production).. these must be paid by subscription fees and page charges from the author. Giving it away for free means that other means must be developed for funding.

2) Not all the funding for research comes with a "must release to public" clause. For instance, you might get a grant to defray part of the cost of some research, and fund the remaining part out of your own assets. The granting agency gets the data they want (at a lower cost than paying for all of it), but you retain the rights.

3) Putting stuff on the web isn't free.

However, a LOT of newer research IS being published for free on the web. PLOS (Public Library of Science), PubMed, arxiv, etc. are all examples.

Remember, too, that this is academia, and they tend to be conservative and change slowly. To a certain extent, it IS an exclusive club, because publication leads to promotion, and the publication process is full of gates and wickets. The term "publish or perish" did not arise out of thin air.

4747. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 17:43:48 UTC
From: JB <nospam@goofball.net>
Message-ID: <oPWWk.858$us6.78@nwrddc01.gnilink.net>
Source record: 19820

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:5528ba94-66ff-4cb5-baff-a06e77cc4400@v42g2000yqv.googlegroups.com...
> Many of us have checked the net for the latest advances in antennas.
> Advances are usually arrived at public university research units some
> of which are partially funded by outside sources Most, if not all,
> the results are presented to the IEEE as a way of getting recognision.
> But this information such as advancement in science is not provided to
> the public even tho they came from a public institution. Thus you
> cannot access it on the net as a member of the public as access is
> with held UNLESS
> you hand over some money to the IEEE. Why are the universites not
> sharing their work with the public?
> Is it because academics feel they are part of a special club divorced
> from the public? Ofcourse I may be wrong
> in taking that view in light of the fact that these study results are
> available in libraries but why are they not put on the web for the
> good of science and the general public at large?
> Art

Why is it that the general public rejects anything beyond sound bites and
clever slogans?
Why is it that some experts completely reject mainstream thought and even go
so far as to present their own paradigm complete with their own private
semantics and definitions. Not many actually learned the Klingon language,
although many were accustomed to hearing it on TV. Like Psychology and
Philosophy where every major school of thought had it's own paradigm,
language, definitions and required intimate study as if it were a cult unto
itself. The end result was many led astray by loony professors who had
dreamed everything up in their heads and sought to prove it by changing all
the rules. Even Charley Manson still has his followers. Oh to be sure
there had to be some element that rang true - some brain prick of insight to
trigger the euphoria to forge ahead. But nearly all found their theories
held true only for a few specimens they held under their own microscope.

What's your point, Art? Are you looking for a grant to start your own
school of Philosophy?

Why don't you get a web presence where you can put your lab notes, math and
drawings. You can copyright them unless they belong to someone else.

4748. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 18:11:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dlfoi4lmp1mcibrv6ivgl82b4s41acu788@4ax.com>
Source record: 19822

On Tue, 25 Nov 2008 08:51:05 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>Thus you
>cannot access it on the net as a member of the public as access is
>with held UNLESS
>you hand over some money to the IEEE.

Who needs the IEEE? I've found every new design offered - FOR FREE
from the universities! And every one of those "new designs" mentioned
here were worth every penny I spent.

73's
Richard Clark, KB7QHC

4749. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 18:17:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e2goi41g7enge4o1vbqpugstgtm3h8iqe1@4ax.com>
Source record: 19823
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Tue, 25 Nov 2008 13:51:24 +0000, Dave <dave@dave.dave> wrote:

>
>Digital is a major step toward "conditional access".

And the 80 year old method of modulation, a combination of pulse, FM,
and analog was just as much a restriction to specialized equipment. If
you tried to get TV on your XTAL radio, it would be like listening to
an encrypted secure network.

If you stood out in a field and tried to listen to AM radio waves
(without even the boon of that XTAL radio), you would still suffer
"conditional access."

So, what is the big deal?

73's
Richard Clark, KB7QHC

4750. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 18:46:40 UTC
From: Richard The Dreaded Libertarian <null@example.net>
Message-ID: <pan.2008.11.25.18.46.06.479103@example.net>
Source record: 19824
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Tue, 25 Nov 2008 05:23:33 -0500, ml wrote:
>
> in feb it will switch to digital however shall still be free

Until you get to the requirement to line the pockets of the converter
hawkers.

Thanks,
Rich

4751. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 18:47:34 UTC
From: Richard The Dreaded Libertarian <null@example.net>
Message-ID: <pan.2008.11.25.18.47.00.310913@example.net>
Source record: 19825
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Tue, 25 Nov 2008 07:26:28 -0800, CW wrote:
> "Dave" <dave@dave.dave> wrote in message
>>
>> Digital is a major step toward "conditional access".
>
> So is analog. If you don't have the proper reciever, you can't pick it up.
> Just a different format.

Even they used to be free, if you knew where to dumpster-dive. ;-)

Cheers!
Rich

4752. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 18:49:26 UTC
From: Richard The Dreaded Libertarian <null@example.net>
Message-ID: <pan.2008.11.25.18.48.52.585685@example.net>
Source record: 19826
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Tue, 25 Nov 2008 10:17:44 -0800, Richard Clark wrote:
>
> So, what is the big deal?

Being required to turn over my hard-earned cash to further enrich the
rich fat white executives.

Thanks,
Rich

4753. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 18:51:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d474352f-85a2-4a58-aa06-f97a1d0ee057@v38g2000yqb.googlegroups.com>
Source record: 19827

On Nov 25, 11:26 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Art Unwin wrote:
> > Many of us have checked the net for the latest advances in antennas.
> > Advances are usually arrived at public university research units some
> > of which are partially funded by outside sources Most, if not all,
> > the results are presented to the IEEE as a way of getting recognision.
> > But this information such as advancement in science is not provided to
> > the public even tho they came from a public institution. Thus you
> > cannot access it on the net as a member of the public as access is
> > with held UNLESS
> > you hand over some money to the IEEE. Why are the universites not
> > sharing their work with the public?
> > Is it because academics feel they are part of a special club divorced
> > from the public? Ofcourse I may be wrong
> > in taking that view in light of the fact that these study results are
> > available in libraries but why are they not put on the web for the
> > good of science and the general public at large?
> > Art
>
> This is a complex issue and one of considerable debate within those
> universities AND the publishers of the journals.
>
> 1) The journals have operating costs (someone has to edit them and do
> the typesetting and production).. these must be paid by subscription
> fees and page charges from the author. Giving it away for free means
> that other means must be developed for funding.
>
> 2) Not all the funding for research comes with a "must release to
> public" clause. For instance, you might get a grant to defray part of
> the cost of some research, and fund the remaining part out of your own
> assets. The granting agency gets the data they want (at a lower cost
> than paying for all of it), but you retain the rights.
>
> 3) Putting stuff on the web isn't free.
>
> However, a LOT of newer research IS being published for free on the web.
> PLOS (Public Library of Science), PubMed, arxiv, etc. are all examples.
>
> Remember, too, that this is academia, and they tend to be conservative
> and change slowly. To a certain extent, it IS an exclusive club,
> because publication leads to promotion, and the publication process is
> full of gates and wickets. The term "publish or perish" did not arise
> out of thin air.

Well said !
It pleases me that it is a subject of debate. If the publishing is
part of the business
then ofcourse the market decides whether it is read or not. One would
have thought that public universities would
also publish the benefits of their work for all and thus advertise the
high standards of the university.
From a ham radio point of view we have the ARRL organization but the
do not seem interested in advances in the science
even tho they have the vehicle (QST) to keep its members up to date.
But it is not the private institutions that I point the finger at but
the public institutions
who now take on a mantle of private business by forcing students to
buy high price text books where their is a feed back to them or
increasing tuition costs that doesn';t seem to marry with the present
market but yet are paid for by public funds. I suppose that the
present state of affairs will continue if academia doesn't peruse the
web or publish their thesis even tho they actually belong to the
institution. In the mean time I am happy to make a over 100 mile round
trip to a suitable library to spend a day reading on the premises as I
am not allowed to visit Roswell.
Thanks for your input
Regards
Art

4754. FS Brand New Hy-Gain Tailtwister Rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 18:52:21 UTC
From: Charlie Hugg <k5mbx@sbcglobal.net>
Message-ID: <GPXWk.6896$as4.4409@nlpi069.nbdc.sbc.com>
Source record: 19828

I have for sale a brand new Telex Hy-Gain T-2X (Tailtwister) rotor. It comes complete in the original box and has never been used. The rotator has never been out of the box except when I took it out to test it. It is the older version without the plugs for the control cable. It has the original manual and accessory packet and it comes with approximately 50 feet of new rotor cable. It lists new for $799.95, and I'll take $575 for it and the cable. See more specs at the Hy-Gain website at: http://www.hy-gain.com/Catergories.php?sec=8 Thanks, Charlie Hugg, K5MBX

4755. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 18:55:30 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.25.18.54.55.374158@example.net>
Source record: 19829
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Mon, 24 Nov 2008 16:07:35 -0800, Chuck Olson wrote:
> "Rich Grise" <rich@example.net> wrote in message
>
>> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>>
> Lo and behold, here is one http://tinyurl.com/665r5a but it's a throw-back
> to a simpler time when the HP42S calculator was an engineer's prized tool.
> If you have a 42S, punch it in and use it. Otherwise, this is mainly a
> learning tool to show how simple the calculations are. I think this design
> could be put onto a Lotus123 calculating spread sheet where all the output
> data windows would suddenly by filled up upon entering the needed input
> data.

Too late! I've already built the 4-bay bowtie:
http://www.youtube.com/watch?v=EWQhlmJTMzw

But I used ER70S-2 1/16 weld filler rod (stiffer than a coathanger, and
copper-plated; solders like a dream):
http://mysite.verizon.net/richgrise/images/QuadBowTie.jpg

And it works just spiffy! I had to go to Whittier Electronics to get
the balun, since RS seems to have dropped them from their line-up:
http://www.whittierelectronics.com/

It was $2.99; the rest of the antenna was free. :-)
(yes, I'm really that broke.)-;)

Thanks,
Rich

4756. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:27:41 UTC
From: dplatt@radagast.org
Message-ID: <d60uv5-u88.ln1@radagast.org>
Source record: 19841
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <m-F25A89.05233325112008@news.optonline.net>, ml <m@di.net> wrote:

>no more free tv?? where do you live?
>
>here in the usa over the air tv is , was and shall remain free
>
>in feb it will switch to digital however shall still be free

The current situation is somewhat analogous to what happened, decades ago, when television in the U.S. moved from VHF-only to VHF-plus-UHF.

Everybody who wanted to receive the full set of channels, had to either buy a new TV, or buy a UHF block converter so that they could downshift the UHF frequencies to a VHF frequency that their existing TV set could receive.

The television signal is, and will remain, free to receive (or, rather, its transmission is funded by advertising). There is no fee on the user to receive the TV signal.

The equipment needed to receive TV signals in the U.S. is not, and never has been free.

This is a somewhat bigger switch-over, technology-wise, than the expansion to UHF some years ago. Whether it's a Good Thing or a Bad Thing is, I think, much more of a personal conclusion than anything that can be decided objectively.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

4757. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:28:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <TIYWk.7933$x%.562@nlpi070.nbdc.sbc.com>
Source record: 19830

Art Unwin wrote:
> Why are the universites not
> sharing their work with the public?

Because socialism has not completely taken over?
--
73, Cecil http://www.w5dxp.com

4758. Re: G5RV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:30:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <tnYWk.7934$x%.4171@nlpi070.nbdc.sbc.com>
Source record: 19831

k6kwq wrote:
> I just put up a 160 G5RV antenna. Is 140 foot of 50 0hm coax required
> to make yhis antenna work?

The length of coax doesn't matter. What matters is that
the antenna is 1.5WL on 40m and the series matching
section is 0.5WL on 40m. After that, what you get is
what you get.
--
73, Cecil http://www.w5dxp.com

4759. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:35:00 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <t80uv5-4be.ln1@mail.specsol.com>
Source record: 19832
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In rec.radio.amateur.antenna Richard The Dreaded Libertarian <null@example.net> wrote:
> On Tue, 25 Nov 2008 10:17:44 -0800, Richard Clark wrote:
>>
>> So, what is the big deal?
>
> Being required to turn over my hard-earned cash to further enrich the
> rich fat white executives.
>

A converter box can be had for about the same amount of cash as a cup
of coffee after using the coupon, so that arguement is moot.

What "rich fat white executives" do you think are getting enriched by
the switch since almost all the converter boxes are made in China?

--
Jim Pennino

Remove .spam.sux to reply.

4760. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:35:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <2b0uv5-4be.ln1@mail.specsol.com>
Source record: 19833
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In rec.radio.amateur.antenna Richard The Dreaded Libertarian <null@example.net> wrote:
> On Tue, 25 Nov 2008 05:23:33 -0500, ml wrote:
>>
>> in feb it will switch to digital however shall still be free
>
> Until you get to the requirement to line the pockets of the converter
> hawkers.
>
> Thanks,
> Rich

The converter boxes are essentially free with the coupon and you get two
of them.

--
Jim Pennino

Remove .spam.sux to reply.

4761. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:35:20 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <eoYWk.5041$8_3.4675@flpi147.ffdc.sbc.com>
Source record: 19834

JB wrote:
> There will be resonances in the entire line that
> cause points of high voltage and high current.

Ideally, not if the SWR is 1:1 on the 50 ohm coax
in which case, the RMS voltage and current is constant.
Such a line is known as a "flat" line. At any point up
and down the line the ratio of voltage to current
is 50 ohms.
--
73, Cecil http://www.w5dxp.com

4762. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:42:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <JyYWk.7935$x%.2743@nlpi070.nbdc.sbc.com>
Source record: 19835
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard The Dreaded Libertarian wrote:
> On Tue, 25 Nov 2008 10:17:44 -0800, Richard Clark wrote:
>> So, what is the big deal?
>
> Being required to turn over my hard-earned cash to further enrich the
> rich fat white executives.

After the $40 free coupon, the DTV converter box costs
$10. If you skip three Whoppers, you've got the money
and are a healthier human being to boot. :-)
--
73, Cecil http://www.w5dxp.com

4763. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:51:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <n9-dnWoph7nGyrHUnZ2dnUVZ_sjinZ2d@posted.easystreetonline>
Source record: 19836

It sure hasn't taken long for the ability of some people to find information to contract to the single source of the Internet.

But other sources still exist as they have for a very long time. And IEEE publications are and always have been available to the public.

A lot of university libraries have IEEE publications which are available for free viewing. And I have yet to see a library that lacks a way of copying an article.

Even my humble local library, which lacks even a single decent EE text, is happy to get any article I specify via an "interlibrary loan". Not only can I get anything the IEEE has published, but papers from the most obscure journals as well.

Roy Lewallen, W7EL

4764. Re: FCC TV Band Devices

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:53:25 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <XIYWk.292323$6p1.136180@en-nntp-07.dc1.easynews.com>
Source record: 19838
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Dave" <dave@dave.dave> wrote in message
news:4927fede$0$31150$bd467cd0@news.dslextreme.com...
> The FCC and the TV broadcasters looked the other way because there is no
> evidence that such activity has ever caused any interference. I can get 6
> microphones to work in an occupied analog TV channel and neither notices the
> other.

OK. I don't have a big problem with folks using frequencies they're not assigned when there isn't an interference issue, although I also don't have a whole lot of sympathy for those same folks if one day they *are* interfered with by assigned users.

> The TV Band Devices the FCC has recently begun the process of authorizing
> are way more damaging than a 50 mW 65 kHz deviation FM signal.

What are the power levels? Presumably the occupied spectrum is potentially many tens of MHz?

> Luckily, these devices will not be allowed anywhere near where I work. The
> FCC has banned them from the 13 biggest cities, and from within a kilometer
> of a venue or stadium using wireless microphones. The proposed rules do not
> require a Part 74 license for these protections.

If these are consumer-type devices, realistically how will the FCC stop their use in those 13 cities? It'll be like GMRS where technically everyone's supposed to be licensed yet, in actuality, I imagine that well under 1% of the actual users are: If the consumer can buy a radio off-the-shop at Wal*Mart, there'll use it wherever they want, regardless of what FCC rules say.

---Joel

4765. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 19:53:58 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <6ekoi4921elnifmt7mobm05ctfeuufhmuv@4ax.com>
Source record: 19837

On Tue, 25 Nov 2008 10:51:06 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>From a ham radio point of view we have the ARRL organization but the
>do not seem interested in advances in the science
>even tho they have the vehicle (QST) to keep its members up to date.

You might want to look at QEX magazine. It's the ARRL technical
publication for experimenters:
<http://www.arrl.org/qex/>

Also, publication, free or otherwise, constitutes disclosure, which
has signifigant effects on the patent process. Premature public
disclosure can easily invalidate a patent. It must be done carefully,
with due consideration for the implications of publication. Here's a
short summary of the situation:
<http://uwadmnweb.uwyo.edu/rpc/InventionDisclosure.asp>

The ARRL's interest in advances in the sciences is intentionally
limited to their applications to amateur radio. While hams may have a
good general interest in scientific advances, the number that apply to
amateur radio is rather limited. I have specific opinions about some
of these advances, such as the ARRL's discovery of Wi-Fi:
<http://en.wikipedia.org/wiki/High_speed_multimedia>
but I don't have the time or strength for yet another endless debate.

In my never humble opinion, the ARRL's support and publication of ham
inspired new technology has been usually late, limited, and sometimes
wrong. (NBFM using commercial radios, FM repeaters, packet radio,
packet networks, computahs, etc)[1]. Fortunately, this has not always
been the case, as PSK31, bizarre antennas, satellite, and SDR have
been well supported and published. Personally, I would be quite happy
if the ARRL concentrates on what nobody else is doing, which is acting
as a lobbyist for amateur radio with the FCC and the government.

[1] I still recall articles in QST in the late 1960's and early 1970's
on how to convert commercial FM radios into AM radios. I often
wondered what the ARRL was thinking.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4766. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 20:01:35 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ivloi41sccq2tjk5b6asvde4a508k06ver@4ax.com>
Source record: 19839

On Tue, 25 Nov 2008 10:11:38 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 25 Nov 2008 08:51:05 -0800 (PST), Art Unwin
><ArthurUnwin@gmail.com> wrote:
>
>>Thus you
>>cannot access it on the net as a member of the public as access is
>>with held UNLESS
>>you hand over some money to the IEEE.

>Who needs the IEEE? I've found every new design offered - FOR FREE
>from the universities! And every one of those "new designs" mentioned
>here were worth every penny I spent.

Out of curiosity, does that include the IEEE Transactions on Antennas
and Propagation and the IEEE Antenna and Propagation Magazine? I'm
currently debating the merits of re-joining the IEEE mostly to obtain
these publications. In the past, they were literally gold mines of
interesting ideas on antennas. However, like all gold mines, I had to
dig through a considerable amound of rubble and useless garbage to
find the gold. I've seen little of this stuff on university web
piles, except after publication by the IEEE. I drag myself up to UCSC
and borrow a few issues, but I prefer to have them online
(downloadable and searchable) which costs money.

Do I spend the money, or do I seach for your secret horde of free
university publications on antenna design?

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4767. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 20:06:45 UTC
From: CW <cmagers@earthl.net>
Message-ID: <cfOdnaRd661Ox7HUnZ2dnUVZ_tLinZ2d@earthlink.com>
Source record: 19840
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Is someone holding a gun on you? It's no different than "being forced" to buy a TV. You can always do what I do and don't watch. TV is the greatest time waster invented by man.

"Richard The Dreaded Libertarian" <null@example.net> wrote in message news:pan.2008.11.25.18.48.52.585685@example.net...
> On Tue, 25 Nov 2008 10:17:44 -0800, Richard Clark wrote:
> >
> > So, what is the big deal?
>
> Being required to turn over my hard-earned cash to further enrich the
> rich fat white executives.
>
> Thanks,
> Rich
>

4768. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 20:10:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <463149f7-00d8-4748-abb5-ce66a54a18de@v42g2000yqv.googlegroups.com>
Source record: 19842

On Nov 25, 1:53 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Tue, 25 Nov 2008 10:51:06 -0800 (PST), Art Unwin
>
> <ArthurUn...@gmail.com> wrote:
> >From a ham radio point of view we have the ARRL organization but the
> >do not seem interested in advances in the science
> >even tho they have the vehicle (QST) to keep its members up to date.
>
> You might want to look at QEX magazine. It's the ARRL technical
> publication for experimenters:
> <http://www.arrl.org/qex/>
>
> Also, publication, free or otherwise, constitutes disclosure, which
> has signifigant effects on the patent process. Premature public
> disclosure can easily invalidate a patent. It must be done carefully,
> with due consideration for the implications of publication. Here's a
> short summary of the situation:
> <http://uwadmnweb.uwyo.edu/rpc/InventionDisclosure.asp>
>
> The ARRL's interest in advances in the sciences is intentionally
> limited to their applications to amateur radio. While hams may have a
> good general interest in scientific advances, the number that apply to
> amateur radio is rather limited. I have specific opinions about some
> of these advances, such as the ARRL's discovery of Wi-Fi:
> <http://en.wikipedia.org/wiki/High_speed_multimedia>
> but I don't have the time or strength for yet another endless debate.
>
> In my never humble opinion, the ARRL's support and publication of ham
> inspired new technology has been usually late, limited, and sometimes
> wrong. (NBFM using commercial radios, FM repeaters, packet radio,
> packet networks, computahs, etc)[1]. Fortunately, this has not always
> been the case, as PSK31, bizarre antennas, satellite, and SDR have
> been well supported and published. Personally, I would be quite happy
> if the ARRL concentrates on what nobody else is doing, which is acting
> as a lobbyist for amateur radio with the FCC and the government.
>
> [1] I still recall articles in QST in the late 1960's and early 1970's
> on how to convert commercial FM radios into AM radios. I often
> wondered what the ARRL was thinking.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com

> Skype: JeffLiebermann AE6KS 831-336-2558

Hmm that is interesting. Seems like the popular thinking is to resist change as everything is O.K.
EXCEPT fior the ARRL and CQ magazine. Can't really fault that tho I suspect that many would be better of saving their money
and use it to set up a personal business instead of spending it at university. Seems like the financial advantages of old with respect to return
has floated away in the wind. Why go to university if the older books like Termans and Jackson has everything that anybody wants to know and at a reasonable price compared to the price of books that Universities foist on their students?. Does the world really need advances in science and for whome?
Regards
Art

4769. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 20:15:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <fh2uv5-jme.ln1@mail.specsol.com>
Source record: 19843
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In rec.radio.amateur.antenna Cecil Moore <nospam@w5dxp.com> wrote:
> Richard The Dreaded Libertarian wrote:
>> On Tue, 25 Nov 2008 10:17:44 -0800, Richard Clark wrote:
>>> So, what is the big deal?
>>
>> Being required to turn over my hard-earned cash to further enrich the
>> rich fat white executives.
>
> After the $40 free coupon, the DTV converter box costs
> $10. If you skip three Whoppers, you've got the money
> and are a healthier human being to boot. :-)

There are several outfits with converter boxes for $40.01, which makes
your cost 1 cent.

--
Jim Pennino

Remove .spam.sux to reply.

4770. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 20:22:41 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <gghmqo$8e0$1@news.motzarella.org>
Source record: 19844
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Rich Grise" <rich@example.net> wrote in message
news:pan.2008.11.25.18.54.55.374158@example.net...
> On Mon, 24 Nov 2008 16:07:35 -0800, Chuck Olson wrote:
>> "Rich Grise" <rich@example.net> wrote in message
>>
>>> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>>>
>> Lo and behold, here is one http://tinyurl.com/665r5a but it's a
>> throw-back
>> to a simpler time when the HP42S calculator was an engineer's prized
>> tool.
>> If you have a 42S, punch it in and use it. Otherwise, this is mainly a
>> learning tool to show how simple the calculations are. I think this
>> design
>> could be put onto a Lotus123 calculating spread sheet where all the
>> output
>> data windows would suddenly by filled up upon entering the needed input
>> data.
>
> Too late! I've already built the 4-bay bowtie:
> http://www.youtube.com/watch?v=EWQhlmJTMzw
>
> But I used ER70S-2 1/16 weld filler rod (stiffer than a coathanger, and
> copper-plated; solders like a dream):
> http://mysite.verizon.net/richgrise/images/QuadBowTie.jpg
>
> And it works just spiffy! I had to go to Whittier Electronics to get
> the balun, since RS seems to have dropped them from their line-up:
> http://www.whittierelectronics.com/
>
> It was $2.99; the rest of the antenna was free. :-)
> (yes, I'm really that broke.)-;)
>
> Thanks,
> Rich
>
Thanks, Rich - - it looks great. I'm going to try putting one together,
too - - the phased quad bow-tie is very popular so it must be a good
performer. And the price is right.

Chuck

4771. Re: G5RV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 20:39:03 UTC
From: Ian Wade <g3nrw@yahoo.co.uk>
Message-ID: <9LRgwANnJGLJFwBZ@ntlworld.com>
Source record: 19846

From: k6kwq <k6kwq@msn.com>
Date: Tue, 25 Nov 2008 Time: 08:56:36

>I just put up a 160 G5RV antenna. Is 140 foot of 50 0hm coax required
>to make yhis antenna work?

I'm not sure what a "160 G5RV" is. This tells you all about the real
G5RV, written by the inventor himself:

http://www.gw0rtp.co.uk/antenna/g5rv/g5rv.php

And this shows how it performs:

http://antennagraphs.com/ne8r_G5RV.htm

You can use a G5RV on 160 by strapping the feeders to give you a Marconi
T-style antenna, but it's a pretty poor compromise.

--
73
Ian, G3NRW

4772. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 20:41:46 UTC
From: seaweedsl <seaweedsteve@gmail.com>
Message-ID: <f18ee327-fbd3-4e0b-9810-c36001b94a3a@e1g2000pra.googlegroups.com>
Source record: 19845
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Nov 21, 1:38 am, DaveC <m...@bogusdomain.net> wrote:
> Looking for outdoor omni "whip" antenna for 2.4 GHz.
>
> Is there any reason to not go for the greatest gain antenna, given that cost
> is not too important (within reason)?
>
> There are scads of these on the 'net. I'm looking for someone who has
> experience with one or more of them and can make a recommendation for one.

Higher gain omni has flatter /narrower beam. So it has to be pointed
more accurately, tilting as needed to connect with desired AP.

As Jeff says, there's no reason to use an omni for a client. Get a
much cheaper directional antenna and you will get more gain with less
interference. Pointing will be easier too.

Take a look at the pattern for this one:
http://pnt.zoovy.com/product/MD24-12/12dBi_24GHz_Mini_Directional_Antenna.html

Or consider a combination weatherproof box with built in panel antenna
like this: http://tinyurl.com/5kfd42
(Choose the version that has the pigtail you need)

That's the first thing you want to determine, by the way, how much
gain is needed? Another thread....

Steve

4773. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 20:42:03 UTC
From: exray <radioexray@geeemail.com>
Message-ID: <gghnuv018i9@news3.newsguy.com>
Source record: 19847
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

JIMMIE wrote:

> I dont steal internet service but I do have an arrangement with a
> couple of my neighbors so we can use each other service.
> This has come in handy a couple of time now in just the last few
> months when my cable went out and another neighbors cable modem went
> out.
> Its also a ton of fun just to build the antennas and be able to do it.
>
> I must confess I have tapped in to a few unsecure home APs to check my
> email while traveling. These are often easier to find than a hotspot.
>
> Jimmie

Funny story... I work as a contractor and was in an office in Louisiana that supposedly had an internal wi-fi setup. Signal sure did seem weak for an internal connection. All the guys there said they didn't know what happened to it. "It used to work good".

Mr. Boss, the guy who installed it originally, was in town and said "hey, whats wrong with the wifi?". Turns out the little wireless router had fallen behind some other gear and become unplugged. All during this time the office traffic had been going thru the network of a nearby residence.

4774. Re: G5RV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 21:19:43 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <RZZWk.12417$Ws1.6356@nlpi064.nbdc.sbc.com>
Source record: 19848

Ian Wade wrote:
> I'm not sure what a "160 G5RV" is.

I assumed it was a double-sized G5RV whose design
frequency is 40m - hope I was right.
--
73, Cecil http://www.w5dxp.com

4775. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 22:23:00 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.25.22.22.23.563163@example.net>
Source record: 19849
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Tue, 25 Nov 2008 20:15:01 +0000, jimp wrote:
>
> There are several outfits with converter boxes for $40.01, which makes
> your cost 1 cent.

WHERE???????????!!!

Thanks,
Rich

4776. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 22:24:40 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.11.25.22.24.03.938959@example.net>
Source record: 19850
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Tue, 25 Nov 2008 12:06:45 -0800, CW wrote:

> Is someone holding a gun on you? It's no different than "being forced" to
> buy a TV.

You don't have to if you know where to dumpster-dive.

> You can always do what I do and don't watch.

I hate self-righteous peopoe almost as much as I hate rap.

Thanks,
Rich

4777. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 22:47:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <B-mdnURXWrgEHbHUnZ2dnUVZ_judnZ2d@posted.easystreetonline>
Source record: 19751

Jeff Liebermann wrote:
>
> Out of curiosity, does that include the IEEE Transactions on Antennas
> and Propagation and the IEEE Antenna and Propagation Magazine? I'm
> currently debating the merits of re-joining the IEEE mostly to obtain
> these publications. In the past, they were literally gold mines of
> interesting ideas on antennas. However, like all gold mines, I had to
> dig through a considerable amound of rubble and useless garbage to
> find the gold. I've seen little of this stuff on university web
> piles, except after publication by the IEEE. I drag myself up to UCSC
> and borrow a few issues, but I prefer to have them online
> (downloadable and searchable) which costs money.
>
> Do I spend the money, or do I seach for your secret horde of free
> university publications on antenna design?

A lot of universities have Transactions for most of the societies like A & P as well as the Proceedings. IEEE members get free access to online Proceedings and all past issues of Transactions for all societies they belong to. For example, if you're a member of Antennas and Propagation, you can access online any paper in any issue of the Transactions on Antennas & Propagation. The incremental cost for joining a society is modest -- A & P is $36.00 per year once you're an IEEE member. (I think you can get Trans. on A & P or others without joining, but at a much higher price.) I just renewed my membership and joined the Microwave Theory & Techniques Society for only an additional $14.00. Now I'll have online access to all the past Transactions for that group.

Incidentally, anyone can purchase and download any individual IEEE paper online for around $20. A lot of other organizations like the IEE (U.K.), physics societies, etc. have a similar offer. I've gone this route a number of times when it was worth it to me to avoid the hassle of going downtown to the university library or waiting for an interlibrary transfer.

If you're used to looking at A & P transactions from the '40s through the '60s, you'll probably be disappointed with current issues. Research has always concentrated on where the money is, and now it's coming from much different industries than it was a few decades ago. Samplings from the current issue: "Synthesized-Reference-Wave Holography for Determining Antenna Radiation Characteristics" and "Parallel In-Core and Out-of-Core Solution of Electrically Large Problems Using the RWG Basis Functions". No Brown, Lewis, and Epstein papers, those! But there was an interesting paper on putting RFID tags on explosive ordnance as a possible way to locate it when unexploded and buried, and a short paper on coax loss.

Roy Lewallen, W7EL

4778. A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 22:55:52 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <_n%Wk.13$zQ3.3@newsfe12.iad>
Source record: 19756

Hello,

I am about to attempt to build a UHF collinear coaxial antenna and am trying to finalize a design. I have done a lot of reading and am a little confused on a few things. First off I have read contradicting statements whether to use odd or even number of 1/2 wave elements. 1, 3, 5... or 1,2,4... Also I don't understand what the 1/4 wave whip is doing on the top without a ground plane (found in most designs), is this necessary for a receive antenna?.

Instead of using coaxial cable, I will be building the 1/2 wave and 1/4 wave transmission lines out of ridged copper pipe with air as it's dielectric in order to maximize the velocity of propagation and therefore making true 1/2 wave elements. Does anyone see anything wrong with this approach?

Thomas

4779. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 22:58:57 UTC
From: kb9rqz@yahoo.com
Message-ID: <fp0pi41t5goe6pduhlg46lghflm6nsemib@4ax.com>
Source record: 19752
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4780. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 22:59:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <llvoi4pf387h4lqbnoq5u16ugr2jki8ce9@4ax.com>
Source record: 19753

On Tue, 25 Nov 2008 12:01:35 -0800, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>Do I spend the money, or do I seach for your secret horde of free
>university publications on antenna design?

Hi Jeff,

Surely you must realize that this is not about money (a convenient
foil in this troll topic), but about skill (what the troll lacks).

The cheesy inventions that we have been breathlessly advised of have
the commensurate value of the bandwidth they return in a simple Google
search. It takes very little effort to recognize the moldy
fluorescence surrounding those meager offerings.

If you want the exact article specified, yes you can shell out money.
If you want the research behind it, and probably more data than you
would care to wade through, you simply investigate the investigator.

Myself, if I don't want to spend any more than the cost of bus fare, I
go to the engineering library, check it out, bring it home, scan it,
and its done. As I am on campus twice a week anyway (and the cost of
bus fare is already covered for my other activities), it is hardly an
imposition and the university certainly isn't suppressing me as they
give alumni library privileges.

Even public libraries have online access to special topic databases
(subscriptions) - unless you live in Bumf**k, Illinois.

Now, if you happen to be a troll who visits a campus infrequently only
to spit on their library shelves, I can well imagine the ego-bruised
outrage that is visited upon us here after they give you the bum's
rush.

73's
Richard Clark, KB7QHC

4781. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 23:06:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ur0pi4p0t2maopvnkdpeu1bshvffad2qj7@4ax.com>
Source record: 19754
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Tue, 25 Nov 2008 18:49:26 GMT, Richard The Dreaded Libertarian
<null@example.net> wrote:

>On Tue, 25 Nov 2008 10:17:44 -0800, Richard Clark wrote:
>>
>> So, what is the big deal?
>
>Being required to turn over my hard-earned cash to further enrich the
>rich fat white executives.

Required? You've been lined up against the wall for a shakedown so
you can watch TV? With porn free on the Internet, the only successful
economic model is they pay you to watch Digital TV for FREE! And they
DO!

I think Madison avenue would have those rich fat white executives
gutted (too slow to move anyway - are you talking about AIG or the
Paleolithic RNC?) before their hooves clattered halfway down the alley
you've been suckered into.

73's
Richard Clark, KB7QHC

4782. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 23:15:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <1vcuv5-cch.ln1@mail.specsol.com>
Source record: 19755
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In rec.radio.amateur.antenna Rich Grise <rich@example.net> wrote:
> On Tue, 25 Nov 2008 20:15:01 +0000, jimp wrote:
>>
>> There are several outfits with converter boxes for $40.01, which makes
>> your cost 1 cent.
>
> WHERE???????????!!!
>
> Thanks,
> Rich

Google search for HDTV converter leads to sites with price comparisons.

My coupons are due any day and I was price shopping.

--
Jim Pennino

Remove .spam.sux to reply.

4783. Re: G5RV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 23:16:27 UTC
From: ltdoc@yahoo.com
Message-ID: <174d5fa2-ee4c-449d-a327-0875165efd6e@41g2000yqf.googlegroups.com>
Source record: 19757

Only if that's the length required to get it into the house to your
radio.
- 'Doc

4784. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-25 23:22:52 UTC
From: Eeyore <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <492C88CC.F61C1AB0@hotmail.com>
Source record: 19758
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard The Dreaded Libertarian wrote:

> On Tue, 25 Nov 2008 10:17:44 -0800, Richard Clark wrote:
> >
> > So, what is the big deal?
>
> Being required to turn over my hard-earned cash to further enrich the
> rich fat white executives.

There are no rich fat black executives ?

Graham

4785. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 00:24:24 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <YG0Xk.1082$QX3.1048@nwrddc02.gnilink.net>
Source record: 19759

"Thomas Magma" <somewhere@overtherainbow.com> wrote in message
news:_n%Wk.13$zQ3.3@newsfe12.iad...
> Hello,
>
> I am about to attempt to build a UHF collinear coaxial antenna and am
> trying to finalize a design. I have done a lot of reading and am a little
> confused on a few things. First off I have read contradicting statements
> whether to use odd or even number of 1/2 wave elements. 1, 3, 5... or
> 1,2,4... Also I don't understand what the 1/4 wave whip is doing on the
> top without a ground plane (found in most designs), is this necessary for
> a receive antenna?.
>
> Instead of using coaxial cable, I will be building the 1/2 wave and 1/4
> wave transmission lines out of ridged copper pipe with air as it's
> dielectric in order to maximize the velocity of propagation and therefore
> making true 1/2 wave elements. Does anyone see anything wrong with this
> approach?
>
> Thomas

Hi Thomas

I think you can design and develop a very good colinear coaxial array at UHF using copper pipe. Do you have any requirement for VSWR? Do you have need for operating the antenna at other than one frequency? It isnt easy to develop a good UHF colinear without good test equipment. How will you measure input impedance? Do you care about the angle of the radiation pattern maximum? End fed colinears will have beam squint with frequency change.

Jerry KD6JDJ

4786. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 01:04:23 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <xg1Xk.24$jb1.7@newsfe05.iad>
Source record: 19760

"Jerry" <jerrymartes@verizon.net> wrote in message
news:YG0Xk.1082$QX3.1048@nwrddc02.gnilink.net...
>
> "Thomas Magma" <somewhere@overtherainbow.com> wrote in message
> news:_n%Wk.13$zQ3.3@newsfe12.iad...
>> Hello,
>>
>> I am about to attempt to build a UHF collinear coaxial antenna and am
>> trying to finalize a design. I have done a lot of reading and am a little
>> confused on a few things. First off I have read contradicting statements
>> whether to use odd or even number of 1/2 wave elements. 1, 3, 5... or
>> 1,2,4... Also I don't understand what the 1/4 wave whip is doing on the
>> top without a ground plane (found in most designs), is this necessary for
>> a receive antenna?.
>>
>> Instead of using coaxial cable, I will be building the 1/2 wave and 1/4
>> wave transmission lines out of ridged copper pipe with air as it's
>> dielectric in order to maximize the velocity of propagation and therefore
>> making true 1/2 wave elements. Does anyone see anything wrong with this
>> approach?
>>
>> Thomas
>
> Hi Thomas
>
> I think you can design and develop a very good colinear coaxial array at
> UHF using copper pipe. Do you have any requirement for VSWR? Do you
> have need for operating the antenna at other than one frequency? It isnt
> easy to develop a good UHF colinear without good test equipment. How
> will you measure input impedance? Do you care about the angle of the
> radiation pattern maximum? End fed colinears will have beam squint with
> frequency change.
>
> Jerry KD6JDJ
>

Hi Jerry,

My application is at only one frequency so I intend to centre it on that frequency and the VSWR I get is the VSWR I get. I would hope to be > 25 dB return loss anyways. I do have a HP8714C network analyzer in the lab I will be using so that is no problem. Due to the centre frequency (lower 400 MHz) I figure I can only realistically have about 4 of the half wave elements because of height, weight and wind loading. Oh wait was that 3 or 4 or 5 elements. I still haven't solved that fundamental issue yet. I don't suppose

the radiation pattern is too much of a concern at this point, as long as it is omnidirectional.

Thomas

4787. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 01:12:06 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <b76d134e-9374-4fe9-8f0c-af271a7435b3@h5g2000yqh.googlegroups.com>
Source record: 19761
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
>Where I'm sitting here in Whittier, KABC 7 is so strong
>I can get it without even a cable plugged in!
>
>It's 50, 56, and 58 I worry about; 2-13 and 28 are covered;
>I'm looking forward to seeing if my new bowtie
>(from that youtube video, but with ER708-2 x 1/16 filler rod)
>will pick up PAX on 30.
>They have some nice oldies sometimes.

Frequency re-allocations were mentioned up the thread in
news:icqev5-8mc.ln1@radagast.org

I'm surprized no one has mentioned http://www.tvfool.com

Here's what you can expect to get in one part of Whittier
with a 20' mast:
http://www.tvfool.com/?option=com_wrapper&Itemid=29&q=id%3dea7348065e
(The results are a graphical representation of the data
so it's not searchable with a text search utility.) 8-(

Here's the version that isn't scrunched into the middle of the screen:
(Right-click; Show only this frame)
http://www.tvfool.com/modeling/?id=ea7348065e
(Your exact zip code and elevation may give different results.)

The lowest commercial channel you will get is the
faith-healer/preachy-movie channel reallocated from 40 to 23.

The *all will move below 52* statement in Platt's wasn't accurate.
While KDOC56 will move to 32, KLCS58 will move to 41,
and KOCE50 will move to 48,
KCOP13 will move to 66 and KCET28 will move to 59.

4788. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 05:02:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggil87$80u$1@news.albasani.net>
Source record: 19762

Jeff Liebermann wrote:

>
> My home system is "1540 Jackson Ave" which is my address. The
> assumption is that someone wanting to use my system can bang on the
> door and ask permission. My office SSID uses the company name.
> ...

Yes, well, my time is too valuable to me ... this is the territory of control freaks and game players. I am working to provide free, high speed, internet to all ... yes, I envision homeless people with laptops on the internet, OF COURSE!

>
> I'll stand by my statement. Unless you're running a mesh network, an
> omni at the client end is a bad idea. The client knows the direction
> of the desired access point and should use a directional antenna to
> minimize interference. In my limited experience (I ran a small WISP
> and neighborhood LAN/WLAN for a few years) interference is the most
> serious impediment to reliable operation. The more you can do to NOT
> hear the undesired stations, the more reliable the connection.
>

Standby and wait for the world to begin ... you won't be alone.

>
> Sorta. You can do route switching easily enough, but load balancing
> between multiple internet connections can't be done without IP
> bonding, which requires everyone's cooperation (including the ISP's).
> The problem is that you can't use multiple ISP's to improve the
> download speed from a single connection. For example, if you want to
> download a large file, it will only go as fast as the speed of the
> fastest ISP connection. The other WAN interfaces remain comatose
> because there's no way to bond the single destination IP to two
> different download streams and routes. You can download something
> else using the 2nd WAN interface, but you can't use it to increase the
> speed of the first. Uploading has a similar limitation, where you
> can't improve the speed to a single connection. Where such routers
> work best is if there is a LAN full of users sharing multiple WAN
> connections, not for a single user looking for "better throughput..."
>
> I've used a few of these with moderate success:
> <http://www.edimax.com/en/produce_list.php?pl1_id=3&pl2_id=>
> (See load balancing and multi-homing routers near bottom of page).
>

See, that is the thing with programmers, imagine it and we make it happen ... if someone tells you "impossible" they are LYING! BIGTIME!

> Incidentally, multiple cient radios, run to a passive combiner in a
> single omni antenna is a total loser. The FCC specifically proscribes
> synchronizing wi-fi radios. Even if the isolation can be increased
> sufficiently to prevent receiver overload, it's highly probable that a
> receive packet will arrive exactly when some other client radio goes
> into transmit. Some relief can be obtained by using different
> non-overlapping channels (1, 6, 11), but only with expensive bandpass
> cavity filters. The spread spectrum spreads quite nicely into the
> spectrum of the adjacent radio.
>

If you look for why something cannot be done, I believe it, you will find it ... if you look how to make something happen, you will, most likely succeed--given the time and investment of energy ...

Naysayers abound, this group is an excellent place to find them, I don't consider these people "assets." Frankly, I just ignore them and go on--you will choose what you wish ... all you have to do is decide on the path ... but then, something tells me you already have been told this, and not just once.

Regards,
JS

4789. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 05:04:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggild1$80u$2@news.albasani.net>
Source record: 19763

Dave Platt wrote:

...

It has been my experience, 1 in 10,000 know what they are doing ...
basically, it is a moot point.

Regards,
JS

4790. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 05:06:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggilg3$80u$3@news.albasani.net>
Source record: 19764

Ed Cregger wrote:

> ...
> Just like feces and politicians, politics is a fact of life.
>
> Where's my coffee...? <G>
>
>
> Ed, N2ECW

LOL!

Best post I ever seen you do! <GRIN>

Warm regards,
JS

4791. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 05:11:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggilqb$8j5$1@news.albasani.net>
Source record: 19765

JIMMIE wrote:

> ...
> I dont steal internet service but I do have an arrangement with a
> couple of my neighbors so we can use each other service.
> This has come in handy a couple of time now in just the last few
> months when my cable went out and another neighbors cable modem went
> out.
> Its also a ton of fun just to build the antennas and be able to do it.
>
> I must confess I have tapped in to a few unsecure home APs to check my
> email while traveling. These are often easier to find than a hotspot.
>
> Jimmie

I have a clearwire modem (it is great, inverter in the car, take it any
place with access), cable modem, and one company I contract with has
provided me with a T1 line ... the T1 is what I leave open.

Regards,
JS

4792. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 05:18:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggim7c$8j5$2@news.albasani.net>
Source record: 19766

Art Unwin wrote:
> Many of us have checked the net for the latest advances in antennas.
> Advances are usually arrived at public university research units some
> of which are partially funded by outside sources Most, if not all,
> the results are presented to the IEEE as a way of getting recognision.
> But this information such as advancement in science is not provided to
> the public even tho they came from a public institution. Thus you
> cannot access it on the net as a member of the public as access is
> with held UNLESS
> you hand over some money to the IEEE. Why are the universites not
> sharing their work with the public?
> Is it because academics feel they are part of a special club divorced
> from the public? Ofcourse I may be wrong
> in taking that view in light of the fact that these study results are
> available in libraries but why are they not put on the web for the
> good of science and the general public at large?
> Art

Absolutely, with public colleges and universities ... if they use public
funds, the knowledge is public. Perhaps, someday, a decent attorney
will take them to task. The college I hold a position with knows all of
this, we make as much as humanly possible available--we are educators
and we take our responsibility SERIOUSLY!!!

But, somehow the trash has gotten into the system ... :-(

Regards,
JS

4793. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 05:32:59 UTC
From: JB <nospam@goofball.net>
Message-ID: <fc5Xk.1034$us6.455@nwrddc01.gnilink.net>
Source record: 19767
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

> Just like feces and politicians, politics is a fact of life.
>
> Where's my coffee...? <G>
>
>
> Ed, N2ECW
>

Here's my favorite political tirade. It seems the russkis underestimated
the destructive power of the propaganda and now we are all screwed.
http://www.dailymotion.com/video/x32cxf_yuri-bezmenov

4794. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 05:52:43 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Uu5Xk.1156$1s7.426@newsfe02.iad>
Source record: 19768
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"JeffM" <jeffm_@email.com> wrote in message
news:b76d134e-9374-4fe9-8f0c-af271a7435b3@h5g2000yqh.googlegroups.com...

< snip >

> The *all will move below 52* statement in Platt's wasn't accurate.
> While KDOC56 will move to 32, KLCS58 will move to 41,
> and KOCE50 will move to 48,
> **KCOP13 will move to 66 and KCET28 will move to 59**.

Careful. The channels you mention as "will move" are already operating
digital
on the "will move to" channels. Some will stay where they are.

At Transition, the four LA stations on analog VHF-HI channels, 7, 9, 11 and
13, will secure their digital UHF transmitters and initiate digital
transmissions on their historic (analog) channels.

After Transition, no so-called "regular TV" will be on channels 52 and
above. Other services have won bids for those channels. Qualcomm has
channel 55 for MediFLO mobile TV, etc.

Pls see http://www.rabbitears.info/dtr.php and scroll downpage past New York
to Los Angeles (they're in market-size order). See the fourth, fifth and
sixth columns for each station's FCC assignments: analog, interim digital
and final digital. It's all there.

I hope this helps.

4795. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 06:46:32 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <445ba8eb-aae3-4cb5-85a7-d7de0ef29017@o4g2000pra.googlegroups.com>
Source record: 19769

On Nov 25, 2:55 pm, "Thomas Magma" <somewh...@overtherainbow.com>
wrote:
> Hello,
>
> I am about to attempt to build a UHF collinear coaxial antenna and am trying
> to finalize a design. I have done a lot of reading and am a little confused
> on a few things. First off I have read contradicting statements whether to
> use odd or even number of 1/2 wave elements. 1, 3, 5... or 1,2,4... Also I
> don't understand what the 1/4 wave whip is doing on the top without a ground
> plane (found in most designs), is this necessary for a receive antenna?.
>
> Instead of using coaxial cable, I will be building the 1/2 wave and 1/4 wave
> transmission lines out of ridged copper pipe with air as it's dielectric in
> order to maximize the velocity of propagation and therefore making true 1/2
> wave elements. Does anyone see anything wrong with this approach?
>
> Thomas

From modeling I did a long time ago: there is a slight advantage to
using high velocity factor line, but it's very marginal. Just as a
dipole doesn't need to be resonant to do a good job radiating (and
receiving), so the elements in the coaxial collinear don't need to be
resonant. The phasing among the elements is dictated by the coax
between the feedpoints. Each gap between two elements is a feedpoint;
across it is impressed the line voltage. Since each line segment is a
half wave long and the conductors are reversed at each junction, the
voltage across each feedpoint is the same and in phase, less a small
amount for line loss. The element currents depend on mutual coupling
among the elements, but my simulations for VF=0.66 to VF=1.00
indicated that the current phases were always very nearly the same.

Generally, you'll want all the elements to look the same from the
outside. The top element should be the same length as the rest. It's
common to short the coax an electrical quarter wave up from the
highest gap between elements; that reflects back an open circuit to
the bottom of the top element, so really you could just as well make
the top element a tube the same OD as the rest of the elements,
connected to the inner conductor of the next lower section. The
feedpoint impedance at the bottom of the antenna is just the parallel
combination of all the feedpoints, which are generally each fairly
high (since each one is feeding a full-wave doublet, essentially), but
with ten or so sections, the net is modest, generally around 100 ohms.

Whatever the feedpoint impedance is, you need to match to it properly--
to whatever degree of matching is "proper" in your book. I generally

use a simple "L" network: a variable C across the feedpoint, and an inductor to the feed line center conductor. It matches the impedance and can tune out some reactance. Then you need to decouple the antenna from the feedline, and from other metal in the area where it's mounted. I generally use self-resonant coils in the small feedline, one immediately below the antenna and one another quarter wave lower. You could also try sleeves or radials...

Summary: the coax provides proper feedpoint phasing (even if the elements are shorter than 1/2 wave because of the VF of the line used); a matching network lets you match to 50 ohms (or other impedance if you want); decoupling keeps "antenna" current off the feedline.

Cheers,
Tom

4796. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 07:34:31 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <b_6Xk.1212$QX3.274@nwrddc02.gnilink.net>
Source record: 19770

"Thomas Magma" <somewhere@overtherainbow.com> wrote in message
news:xg1Xk.24$jb1.7@newsfe05.iad...
>
> "Jerry" <jerrymartes@verizon.net> wrote in message
> news:YG0Xk.1082$QX3.1048@nwrddc02.gnilink.net...
>>
>> "Thomas Magma" <somewhere@overtherainbow.com> wrote in message
>> news:_n%Wk.13$zQ3.3@newsfe12.iad...
>>> Hello,
>>>
>>> I am about to attempt to build a UHF collinear coaxial antenna and am
>>> trying to finalize a design. I have done a lot of reading and am a
>>> little confused on a few things. First off I have read contradicting
>>> statements whether to use odd or even number of 1/2 wave elements. 1, 3,
>>> 5... or 1,2,4... Also I don't understand what the 1/4 wave whip is doing
>>> on the top without a ground plane (found in most designs), is this
>>> necessary for a receive antenna?.
>>>
>>> Instead of using coaxial cable, I will be building the 1/2 wave and 1/4
>>> wave transmission lines out of ridged copper pipe with air as it's
>>> dielectric in order to maximize the velocity of propagation and
>>> therefore making true 1/2 wave elements. Does anyone see anything wrong
>>> with this approach?
>>>
>>> Thomas
>>
>> Hi Thomas
>>
>> I think you can design and develop a very good colinear coaxial array
>> at UHF using copper pipe. Do you have any requirement for VSWR? Do
>> you have need for operating the antenna at other than one frequency? It
>> isnt easy to develop a good UHF colinear without good test equipment.
>> How will you measure input impedance? Do you care about the angle of the
>> radiation pattern maximum? End fed colinears will have beam squint
>> with frequency change.
>>
>> Jerry KD6JDJ
>>
>
> Hi Jerry,
>
> My application is at only one frequency so I intend to centre it on that
> frequency and the VSWR I get is the VSWR I get. I would hope to be > 25 dB
> return loss anyways. I do have a HP8714C network analyzer in the lab I

> will be using so that is no problem. Due to the centre frequency (lower
> 400 MHz) I figure I can only realistically have about 4 of the half wave
> elements because of height, weight and wind loading. Oh wait was that 3 or
> 4 or 5 elements. I still haven't solved that fundamental issue yet. I
> don't suppose the radiation pattern is too much of a concern at this
> point, as long as it is omnidirectional.
>
> Thomas

Hi Thomas

If you can use whatever frequency the antenna works best at, it may be practical to build one then use the frequency of best performance with that antenna. But, if you have some predetermined frequency that the antenna must perform well at, there is a problem building prototypes. It can get rather time consuming to build prototypes when using copper pipe. Aparently you are confident that you can evaluate the antenna's input impedance. I had figured that would be a fairly difficult task.

I'll be very interested in this project. Please keep the group informed of your progress.

Jerry KD6JDJ (who has designed similar antennas for commercial use)

4797. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 11:39:41 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <54a7c36b-0912-4e93-accb-20b39d210c81@y18g2000yqn.googlegroups.com>
Source record: 19771

"Roy Lewallen" wrote
> Of course the standard far field analysis doesn't accurately depict the
> field close to the antenna -- it's a plot of the field at points very
> distant from the antenna, as clearly explained in the manual. NEC allows
> you to include the surface wave if you want, and it accurately shows the
> total field including the surface wave at a distance of your choice.

Not the versions of NEC used by most amateurs.

Those versions show zero or very low gain in/near the horizontal plane
for a
vertical monopole over real earth. This leads to the common (mis)
belief
that those are the gains of the radiation pattern _originally
generated_
by the monopole.

But that belief is untrue.

RF

4798. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 13:48:27 UTC
From: Dave <dave@dave.dave>
Message-ID: <492d53ab$0$31205$bd467cd0@news.dslextreme.com>
Source record: 19772
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

CW wrote:
> "Dave" <dave@dave.dave> wrote in message
> news:492c02dc$0$31156$bd467cd0@news.dslextreme.com...
>> Digital is a major step toward "conditional access".
>
> So is analog. If you don't have the proper reciever, you can't pick it up.
> Just a different format.
>
>
That's not what conditional access means.

4799. Re: coils?multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 13:52:08 UTC
From: Dave <dave@dave.dave>
Message-ID: <492d5488$0$31205$bd467cd0@news.dslextreme.com>
Source record: 19773

K7ITM wrote:
> On Nov 25, 5:53 am, Dave <d...@dave.dave> wrote:
>> Roy Lewallen wrote:
>>> ml wrote:
>>>>> does this rule also hold true for example i've opened some tuners
>>>> and linear amps, often, i see straps instead of wire going to the
>>>> larger coils and switches, even some switch box's have straps
>>>> from relays to connectors etc would wire have been 'better'
>>>> and or avoid the proximity effect??
>>> Proximity effect isn't a factor unless conductors are very close
>>> together -- I suggest you review the previous postings which explain it.
>>> As far as "better", the answer is that it probably doesn't matter, since
>>> either a wire or strap can usually be pretty easily made large enough to
>>> make loss negligible in those applications.
>>> Roy Lewallen, W7EL
>> Proximity effect is when you are too close to a directional microphone
>> and the bass is accentuated. I think you mean mutual coupling.
>
> Wrong one of the several meanings, Dave. See fourth entry under
> http://en.wikipedia.org/wiki/Proximity_effect.
>
> ;-)

Thanks. Seems to be the realm of the esoteric however.

4800. Re: FCC TV Band Devices

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 13:57:29 UTC
From: Dave <dave@dave.dave>
Message-ID: <492d55ca$0$31202$bd467cd0@news.dslextreme.com>
Source record: 19774
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Joel Koltner wrote:
> "Dave" <dave@dave.dave> wrote in message
> news:4927fede$0$31150$bd467cd0@news.dslextreme.com...
>> The FCC and the TV broadcasters looked the other way because there is no
>> evidence that such activity has ever caused any interference. I can get 6
>> microphones to work in an occupied analog TV channel and neither notices the
>> other.
>
> OK. I don't have a big problem with folks using frequencies they're not
> assigned when there isn't an interference issue, although I also don't have a
> whole lot of sympathy for those same folks if one day they *are* interfered
> with by assigned users.
>
>> The TV Band Devices the FCC has recently begun the process of authorizing
>> are way more damaging than a 50 mW 65 kHz deviation FM signal.
>
> What are the power levels? Presumably the occupied spectrum is potentially
> many tens of MHz?
>
>> Luckily, these devices will not be allowed anywhere near where I work. The
>> FCC has banned them from the 13 biggest cities, and from within a kilometer
>> of a venue or stadium using wireless microphones. The proposed rules do not
>> require a Part 74 license for these protections.
>
> If these are consumer-type devices, realistically how will the FCC stop their
> use in those 13 cities? It'll be like GMRS where technically everyone's
> supposed to be licensed yet, in actuality, I imagine that well under 1% of the
> actual users are: If the consumer can buy a radio off-the-shop at Wal*Mart,
> there'll use it wherever they want, regardless of what FCC rules say.
>
> ---Joel
>
>
Each TVBD will be addressable and can be shut off when it consults the
database. The top 13 cities thing is probably an oversight, but it's in
the proposed law.

The proposed power for a portable device is 100 mW, except on a
first-adjacent to a DTV station, which is 40 mW. This makes no sense
because the 2nd adjacent channel is more likely to interfere.

4801. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 15:48:50 UTC
From: JB <nospam@goofball.net>
Message-ID: <CdeXk.1178$us6.251@nwrddc01.gnilink.net>
Source record: 19775

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:6ekoi4921elnifmt7mobm05ctfeuufhmuv@4ax.com...
> On Tue, 25 Nov 2008 10:51:06 -0800 (PST), Art Unwin
> <ArthurUnwin@gmail.com> wrote:
>
> >From a ham radio point of view we have the ARRL organization but the
> >do not seem interested in advances in the science
> >even tho they have the vehicle (QST) to keep its members up to date.
>
> You might want to look at QEX magazine. It's the ARRL technical
> publication for experimenters:
> <http://www.arrl.org/qex/>
>
> Also, publication, free or otherwise, constitutes disclosure, which
> has signifigant effects on the patent process. Premature public
> disclosure can easily invalidate a patent. It must be done carefully,
> with due consideration for the implications of publication. Here's a
> short summary of the situation:
> <http://uwadmnweb.uwyo.edu/rpc/InventionDisclosure.asp>
>
> The ARRL's interest in advances in the sciences is intentionally
> limited to their applications to amateur radio. While hams may have a
> good general interest in scientific advances, the number that apply to
> amateur radio is rather limited. I have specific opinions about some
> of these advances, such as the ARRL's discovery of Wi-Fi:
> <http://en.wikipedia.org/wiki/High_speed_multimedia>
> but I don't have the time or strength for yet another endless debate.
>
> In my never humble opinion, the ARRL's support and publication of ham
> inspired new technology has been usually late, limited, and sometimes
> wrong. (NBFM using commercial radios, FM repeaters, packet radio,
> packet networks, computahs, etc)[1]. Fortunately, this has not always
> been the case, as PSK31, bizarre antennas, satellite, and SDR have
> been well supported and published. Personally, I would be quite happy
> if the ARRL concentrates on what nobody else is doing, which is acting
> as a lobbyist for amateur radio with the FCC and the government.
>
>
> [1] I still recall articles in QST in the late 1960's and early 1970's
> on how to convert commercial FM radios into AM radios. I often
> wondered what the ARRL was thinking.
>
> --
> Jeff Liebermann jeffl@cruzio.com

> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

Excellent post. The problem with QEX is not enough submissions. As for the QST AM mods, I was thinking that was ATV, but maybe you were talking about something else. The same applies to QST. If there aren't enough submissions, the only recourse is to hire writers to do columns or fill the empiness with drivel and ads like 73. The best things to come out of 73 was the Star Trek communicator clone and Byte magazine. I hate how Ham Radio magazine died out. I was President of the local ham club for a while, and wound up doing the newletter too. For the three or four years of that, I only got 3 submissions from the membership. All the rest I had to either pull out of my A** every month or go around like a reporter and interrogate people.

On the other hand - What neat inventions can we come up with to share with the World, so it can be exploited and give reason to take more of our spectrum? Interesting to note how public safety volunteers showed Los Angeles Sheriff how neat ATV was and they turned around and petitioned the FCC for those frequencies.

Oh well, we will probably all be shot in head by the next regime because we are an irritation.

4802. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 15:52:14 UTC
From: JB <nospam@goofball.net>
Message-ID: <OgeXk.1180$us6.277@nwrddc01.gnilink.net>
Source record: 19776

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:TlYWk.7933$x%.562@nlpi070.nbdc.sbc.com...
> Art Unwin wrote:
> > Why are the universites not
> > sharing their work with the public?
>
> Because socialism has not completely taken over?
> --
> 73, Cecil http://www.w5dxp.com

When socialism has completely taken over, they will be shot in the head
because nothing they know will be useful for picking rice.

4803. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 16:20:01 UTC
From: kb9rqz <kb9rqz@puncemail.com>
Message-ID: <ggjsvpnqs1@aioe.org>
Source record: 19777
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

>K4YZ wrote:
> Sounds like Lennie, to me....
>
> Steve, K4YZ
>
>
i supossed to buy him some viagra

4804. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 16:55:15 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <qgsqi457vroi545cjgjh28ekco11ld8au4@4ax.com>
Source record: 19778

On Tue, 25 Nov 2008 14:47:48 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Jeff Liebermann wrote:
>>
>> Out of curiosity, does that include the IEEE Transactions on Antennas
>> and Propagation and the IEEE Antenna and Propagation Magazine? I'm
>> currently debating the merits of re-joining the IEEE mostly to obtain
>> these publications. In the past, they were literally gold mines of
>> interesting ideas on antennas. However, like all gold mines, I had to
>> dig through a considerable amound of rubble and useless garbage to
>> find the gold. I've seen little of this stuff on university web
>> piles, except after publication by the IEEE. I drag myself up to UCSC
>> and borrow a few issues, but I prefer to have them online
>> (downloadable and searchable) which costs money.
>>
>> Do I spend the money, or do I seach for your secret horde of free
>> university publications on antenna design?

>A lot of universities have Transactions for most of the societies like A
>& P as well as the Proceedings. IEEE members get free access to online
>Proceedings and all past issues of Transactions for all societies they
>belong to.

It's the ability to search and download proceedings, reports, and
articles that interest me. I do that now at the local multiversity
(UCSC) but there are problems. However, there are problems. Since
I'm not an alumnus, teacher, or employee, the annual cost is about 1/3
of an IEEE membership plus 2 IEEE society memberships. In addition,
some items of interest are not available off campus. The local
library has access, but that requires a pilgrimage to the library
every time I want something. As long as my reading requirements were
minimal, a few trips to the library or paying for individual papers
was cheaper than IEEE membership.

The current economics are:
IEEE membership: $169/yr
A & P membership: $24/yr
I couldn't find the current costs of the various printed transactions
and magazines. My guess is at least $40/yr.
With only downloaded issues, that's about $200/yr or $17/month. I
value my working time at about $75/hr. If joining saves me 3 hours of
time, it's break even. That's about how much time I waste on just one
trip to the local university, so I guess membership is justified.
<http://www.ieee.org/web/membership/Cost/dues.html>

<http://www.ict.csiro.au/aps/>
<http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=8>

What go my attention and inspired my questions was the alleged free availability of antenna design articles from various secret university archives. I've found a few, but nothing compared to the online IEEE A&P collection.

>For example, if you're a member of Antennas and Propagation,
>you can access online any paper in any issue of the Transactions on
>Antennas & Propagation. The incremental cost for joining a society is
>modest -- A & P is $36.00 per year once you're an IEEE member. (I think
>you can get Trans. on A & P or others without joining, but at a much
>higher price.)

I haven't checked the current numbers but last time I checked, the annual subscription price was exactly the same as joining the IEEE. I'm sure that was planned.

>I just renewed my membership and joined the Microwave
>Theory & Techniques Society for only an additional $14.00. Now I'll have
>online access to all the past Transactions for that group.

Hmmm.... I hadn't heard of that group. So many groups, no little time.

>Incidentally, anyone can purchase and download any individual IEEE paper
>online for around $20. A lot of other organizations like the IEE (U.K.),
>physics societies, etc. have a similar offer. I've gone this route a
>number of times when it was worth it to me to avoid the hassle of going
>downtown to the university library or waiting for an interlibrary transfer.

I'd forgotten about the wait, which requires two trips to the library. I ordered several articles from the local library. Apparently, it's a common thing, costs nothing, and is fairly simple. All the articles and abstracts are easily searchable on the IEEE web pile, so obtaining the necessary identification was trivial. What I didn't expect was that to save the library some money, they only ordered such transfers on Tuesdays and only delivered perhaps a week later. There was no charge for hard copy, but an extra charge for having it delivered on a CDROM, which methinks seems backwards. This was about 2 years ago, and I haven't done it since.

>If you're used to looking at A & P transactions from the '40s through
>the '60s, you'll probably be disappointed with current issues. Research
>has always concentrated on where the money is, and now it's coming from
>much different industries than it was a few decades ago. Samplings from
>the current issue: "Synthesized-Reference-Wave Holography for
>Determining Antenna Radiation Characteristics" and "Parallel In-Core and
>Out-of-Core Solution of Electrically Large Problems Using the RWG Basis
>Functions". No Brown, Lewis, and Epstein papers, those! But there was an
>interesting paper on putting RFID tags on explosive ordnance as a
>possible way to locate it when unexploded and buried, and a short paper

>on coax loss.

Sigh. Such esoteric and obscure research pays the bills and feeds the
academics, but also adds considerable clutter. My areas of interest
is probably considered equally narrow and arcane. With a suitable
search engine and filter, I can live with it.

Actually, the current issue doesn't look that horrible:
<http://ieeexplore.ieee.org/xpl/tocresult.jsp?isYear=2008&isnumber=4685873&Submit32=Go+To+
Issue>
For example "Internal Coupled-Fed Shorted Monopole Antenna for
GSM850/900/1800/1900/UMTS Operation in the Laptop Computer" appears to
genuinely useful.

Incidentally, there are "delayed" RFID tags of sorts, that use long
term chemical action on the chip or PCB, to activate its operation
after a pre-determined interval. Basically, the chip arrives shorted,
and the short disappears over time. The logic is that RFID can be
used to locate unexploded mines and ordinance after the battle or war
is finished, but not during the action.

Thanks much...

>Roy Lewallen, W7EL
--
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4805. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 17:14:18 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <trvqi4tg8vp09n2ni60cvguubgrtkb655s@4ax.com>
Source record: 19779

On Tue, 25 Nov 2008 14:59:01 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 25 Nov 2008 12:01:35 -0800, Jeff Liebermann <jeffl@cruzio.com>
>wrote:
>
>>Do I spend the money, or do I seach for your secret horde of free
>>university publications on antenna design?

>Surely you must realize that this is not about money (a convenient
>foil in this troll topic), but about skill (what the troll lacks).

If I had money and the necessary skills, I wouldn't be asking dumb
questions in this newsgroup.

>The cheesy inventions that we have been breathlessly advised of have
>the commensurate value of the bandwidth they return in a simple Google
>search. It takes very little effort to recognize the moldy
>fluorescence surrounding those meager offerings.

Wrong. Techno-hype became somewhat of a hobby of mine. During the
dot.com boom of the late 1990's, I was deriving considerable income
from doing technical sanity checks on business plans and projects.
During this time, I accumulated a fair collection of patents and ideas
that are pure bogus, yet were successfully promoted at least to the
point of being funded by technically clueless investors. Many are
still around today. Considering extent of the problem, and the fair
number of bogus patents, I would suggest that it is NOT easy to
recognize technical quackery.

>If you want the exact article specified, yes you can shell out money.
>If you want the research behind it, and probably more data than you
>would care to wade through, you simply investigate the investigator.

I've been shelling out the money. I just want to shell out less
money. Your suggestion that there was some secret horde of free
research articles on antenna research at universities caught my
attention. I guess not.

>Myself, if I don't want to spend any more than the cost of bus fare, I
>go to the engineering library, check it out, bring it home, scan it,
>and its done. As I am on campus twice a week anyway (and the cost of
>bus fare is already covered for my other activities), it is hardly an
>imposition and the university certainly isn't suppressing me as they
>give alumni library privileges.

I haven't been on a bus in perhaps 25 years. The local multiversity
(UCSC) is on top of a mountain. I like to bicycle but at my age, the
hill is a challenge. Parking is impossible, expensive, or both. I'm
not an alumni, but am tempted to take exactly one class just to become
one. I've been "borrowing" accounts, but that has it's limitations.

>Even public libraries have online access to special topic databases
>(subscriptions) - unless you live in Bumf**k, Illinois.

Thanks, but I've tried that. See my other rant in this thread.

>Now, if you happen to be a troll who visits a campus infrequently only
>to spit on their library shelves, I can well imagine the ego-bruised
>outrage that is visited upon us here after they give you the bum's
>rush.

Punch my name into the Google Groups search page and read some of my
past postings. Then decide for yourself if I'm a troll or not. This
might help:
<http://groups.google.com/groups/profile?hl=en&enc_user=tWGMphwAAAAGTj9X4k0U7wKkGyU8QhaBha
xMG2M1PWkMtCZAt5tdxQ>

>73's
>Richard Clark, KB7QHC

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4806. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 17:32:26 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <OKfXk.1642$1s7.767@newsfe02.iad>
Source record: 19780

>From modeling I did a long time ago: there is a slight advantage to
>using high velocity factor line, but it's very marginal. Just as a
>dipole doesn't need to be resonant to do a good job radiating (and
>receiving), so the elements in the coaxial collinear don't need to be
>resonant. The phasing among the elements is dictated by the coax
>between the feedpoints. Each gap between two elements is a feedpoint;
>across it is impressed the line voltage. Since each line segment is a
>half wave long and the conductors are reversed at each junction, the
>voltage across each feedpoint is the same and in phase, less a small
>amount for line loss. The element currents depend on mutual coupling
>among the elements, but my simulations for VF=0.66 to VF=1.00
>indicated that the current phases were always very nearly the same.
>
>Generally, you'll want all the elements to look the same from the
>outside. The top element should be the same length as the rest. It's
>common to short the coax an electrical quarter wave up from the
>highest gap between elements; that reflects back an open circuit to
>the bottom of the top element, so really you could just as well make
>the top element a tube the same OD as the rest of the elements,
>connected to the inner conductor of the next lower section. The
>feedpoint impedance at the bottom of the antenna is just the parallel
>combination of all the feedpoints, which are generally each fairly
>high (since each one is feeding a full-wave doublet, essentially), but
>with ten or so sections, the net is modest, generally around 100 ohms.
>
>Whatever the feedpoint impedance is, you need to match to it properly--
>to whatever degree of matching is "proper" in your book. I generally
>use a simple "L" network: a variable C across the feedpoint, and an
>inductor to the feed line center conductor. It matches the impedance
>and can tune out some reactance. Then you need to decouple the
>antenna from the feedline, and from other metal in the area where it's
>mounted. I generally use self-resonant coils in the small feedline,
>one immediately below the antenna and one another quarter wave lower.
>You could also try sleeves or radials...
>
>Summary: the coax provides proper feedpoint phasing (even if the
>elements are shorter than 1/2 wave because of the VF of the line
>used); a matching network lets you match to 50 ohms (or other
>impedance if you want); decoupling keeps "antenna" current off the
>feedline.
>
>Cheers,
>Tom

Thanks Tom for the detailed explanation. My current sketch of my antenna design uses a quarter wave sleeve on the lower end of the antenna to stub the current off the feedline ground. I am hoping to see the antenna having a (somewhat) characteristic impedance of 50 ohms since the transmission elements although made out of copper pipe and copper rod are designed to be 50 ohm and the antenna is single end fed (unlike a dipole). I will make some provisions for a small tuning structure. If I do have to tune, the nice thing is that it will be a receive only antenna and I can get away with small RF components.

Tom, since you seem to know quite a bit about collinear coaxial antenna design, do you know if I should be using an even or odd amount of half wave elements? I planned on four, do you see a problem with this.

Thanks again,
Thomas

4807. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 17:38:07 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <601ri4t9ni1fkga11bjv69efres6kecna7@4ax.com>
Source record: 19781

On Tue, 25 Nov 2008 14:55:52 -0800, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

>I am about to attempt to build a UHF collinear coaxial antenna and am trying
>to finalize a design.

What design? Drawing? Description? NEC model? Numbers?
UHF is about 300 to 1000MHz. Any particular frequency?

Incidentally, it's not a "coaxial antenna". It's an end fed vertical
colinear using coaxial cable elements.

>First off I have read contradicting statements whether to
>use odd or even number of 1/2 wave elements. 1, 3, 5... or 1,2,4... Also I
>don't understand what the 1/4 wave whip is doing on the top without a ground
>plane (found in most designs), is this necessary for a receive antenna?.
>
>Instead of using coaxial cable, I will be building the 1/2 wave and 1/4 wave
>transmission lines out of ridged copper pipe with air as it's dielectric in
>order to maximize the velocity of propagation and therefore making true 1/2
>wave elements. Does anyone see anything wrong with this approach?

Yep, lots wrong. End fed colinear antennas are convenient but far
from ideal. They're also deceptively simple where the problems only
show up after the antenna is built.

1. Most of the RF comes out the bottom of the antenna. Very roughly,
the first dipole belches 1/2 the RF, the next dipole belches 1/4 the
RF, then 1/8th, and so on. This is NOT exact, but close enough to
illustrate the problem. You can make it as long as you want, but if
somehow manage to cover up the lower part of the antenna (a common
problem on a rooftop or side mounted on a tower), most of the signal
is history.

2. The alternating 1/2 wave coax cable type antenna is twice as long
as necessary. Every other 1/2 wave coax section is essentially a
non-radiationg phasing section. That's convenient for construction,
but not very compact. A similar antenna, using a simple 1/2 wave
hairping stub, with be half the length, with the same gain.

3. Coax is lossy. Coax phasing sections add un-necessary loss that
is not present in an antenna that uses (for example) a hairpin stub or
coil instead. Your copper pipe and air dielectric idea eliminates
this problem, but I thought I would throw this in for those building
them from coax cable scraps.

4. End fed antennas tend to have pattern uptilt. That may or may not be a problem depending on your unspecified application. The uptilt doesn't show up on free space models, but is certainly there if you include the effects of a rooftop, ground, or mast arm. If this is going on a mountain top, you might consider mounting it upside down.

You can reduce the uptilt problem somewhat by cutting the antenna in half and feeding it in the middle (forming a dipole), rather than end feeding it. Several commercial antennas work this way. That also eliminates the need for ground plane radials at the base.

5. The effects of the radome can be critical. I built such a UHF antenna for 463MHz long ago. It worked well enough with exposed sections. However, when I potted it with urathane fence post foam in a PVC pipe enclosure, the center frequency drifted downward sufficiently to render the antenna useless.

6. Cutting the coax sections accurately is difficult. If you're not using a fixture for cutting, forget it.

7. Making it out of copper pipe is rather expensive but certainly possible. Making the insulators will be somewhat of a challenge. There's no velocity factor involved (Air=1) so the measurements will be simple. However, since there's an overlap between sections, I'm wondering from where to where you should measure. If you cut the outer copper tubing to exactly 1/2 wave, then you need a very thin insulator between sections to prevent shorts. Methinks there will need to be some cut-n-try along with some careful measurments (swept VSWR) along the way.

Good luck.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4808. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 17:45:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qk2ri4lj1lt4u5gga30quqs7lvo9ki5vbv@4ax.com>
Source record: 19782

On Wed, 26 Nov 2008 09:14:18 -0800, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>>Surely you must realize that this is not about money (a convenient
>>foil in this troll topic), but about skill (what the troll lacks).
...
>Punch my name into the Google Groups search page and read some of my
>past postings. Then decide for yourself if I'm a troll or not.

You didn't originate this decrepit topic did you? Connect the dots.

73's
Richard Clark, KB7QHC

4809. Re: FCC TV Band Devices

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 17:54:10 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <h3gXk.364272$vK2.287452@en-nntp-03.dc1.easynews.com>
Source record: 19783
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Thanks for the information, Dave.

"Dave" <dave@dave.dave> wrote in message
news:492d55ca$0$31202$bd467cd0@news.dslextreme.com...
> Each TVBD will be addressable and can be shut off when it consults the
> database.

The database is internal to the TVBD and indexed by a built-in GPS receiver
telling the TVBD where it is?

---Joel

4810. Re: coils?multi-turn magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 17:56:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <193ri4hm9vubjog9l84c9de00spo4qft1v@4ax.com>
Source record: 19784

On Wed, 26 Nov 2008 13:52:08 +0000, Dave <dave@dave.dave> wrote:

>>>> Proximity effect isn't a factor unless conductors are very close

>Thanks. Seems to be the realm of the esoteric however.

Esoteric? As an issue of loss, it is probably more common than
conductor shape, and is (unlike most of the scribblings here to this
group) decidedly on-topic and focused.

73's
Richard Clark, KB7QHC

4811. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 17:58:56 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <D7gXk.726$no6.654@newsfe04.iad>
Source record: 19785

>> Hi Jerry,
>>
>> My application is at only one frequency so I intend to centre it on that
>> frequency and the VSWR I get is the VSWR I get. I would hope to be > 25
>> dB return loss anyways. I do have a HP8714C network analyzer in the lab I
>> will be using so that is no problem. Due to the centre frequency (lower
>> 400 MHz) I figure I can only realistically have about 4 of the half wave
>> elements because of height, weight and wind loading. Oh wait was that 3
>> or 4 or 5 elements. I still haven't solved that fundamental issue yet. I
>> don't suppose the radiation pattern is too much of a concern at this
>> point, as long as it is omnidirectional.
>>
>> Thomas
>
> Hi Thomas
>
> If you can use whatever frequency the antenna works best at, it may be
> practical to build one then use the frequency of best performance with
> that antenna. But, if you have some predetermined frequency that the
> antenna must perform well at, there is a problem building prototypes. It
> can get rather time consuming to build prototypes when using copper pipe.
> Aparently you are confident that you can evaluate the antenna's input
> impedance. I had figured that would be a fairly difficult task.
>
> I'll be very interested in this project. Please keep the group informed
> of your progress.
>
> Jerry KD6JDJ (who has designed similar antennas for
> commercial use)
>
>

Hi Jerry,

It is a predetermined frequency that I am building the antenna for. It is not determined if it will become a commercial product yet but I am trying to design it as such. I can see that it might be a little time consuming working with copper pipe, but once I get the formula right I should be good to go. I'll start buy calculating the half wave elements based on theory knowing my dielectric constant will be dry air or Argon.

The design I have sketch is pretty neat and clean (on paper anyways). It has all the elements stacked directly on top of each other, unlike the traditional staggered approach you see in other designs. Also the dielectric chamber of the transmission elements are sealed and can be filled with a

noble gas such as Argon to prevent corrosion and detuning from humidity.

My background is in receiver and transmitter design, so I'm quite familiar with impedance matching and I understand how a Smith chart works on a network analyzer.

I'm looking forward to working with copper pipe instead of 0201 capacitors and a microscope!

Thomas

4812. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 18:00:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <of3ri4djuhrlb7fdgdmgks30d5v3vl4g7e@4ax.com>
Source record: 19786

On Wed, 26 Nov 2008 03:39:41 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>"Roy Lewallen" wrote
>> Of course the standard far field analysis doesn't accurately depict the
>> field close to the antenna -- it's a plot of the field at points very
>> distant from the antenna, as clearly explained in the manual. NEC allows
>> you to include the surface wave if you want, and it accurately shows the
>> total field including the surface wave at a distance of your choice.
>_________
>
>Not the versions of NEC used by most amateurs.
>
>Those versions show zero or very low gain in/near the horizontal plane
>for a
>vertical monopole over real earth. This leads to the common (mis)
>belief
>that those are the gains of the radiation pattern _originally
>generated_
>by the monopole.
>
>But that belief is untrue.
>
>RF

Roy and others have answered this one in the past too. You employ the
near field table to observe the ground wave. It works approximately
well, even out to the edge of the implicit flat universe. If you
object to flat universes, you are no longer in the realm of ground
wave. If anything, modelers give MORE response in comparison to the
BL&T data.

73's
Richard Clark, KB7QHC

4813. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 18:19:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <nc6dnQViA_fUDrDUnZ2dnUVZ_tzinZ2d@posted.easystreetonline>
Source record: 19787

Richard Fry wrote:
> "Roy Lewallen" wrote
>> Of course the standard far field analysis doesn't accurately depict the
>> field close to the antenna -- it's a plot of the field at points very
>> distant from the antenna, as clearly explained in the manual. NEC allows
>> you to include the surface wave if you want, and it accurately shows the
>> total field including the surface wave at a distance of your choice.
> _________
>
> Not the versions of NEC used by most amateurs.
>
> Those versions show zero or very low gain in/near the horizontal plane
> for a
> vertical monopole over real earth. This leads to the common (mis)
> belief
> that those are the gains of the radiation pattern _originally
> generated_
> by the monopole.
>
> But that belief is untrue.
>
> RF

I'm not aware of such a widely held misconception, but it is indeed untrue.

You must have conducted some sort of survey to find out what "version" of NEC-2 is used by most amateurs, you know more than I do about it. Although there are a few minor variations of NEC-2, there's not enough difference to justify characterizing them as different "versions". And every one I've seen has the capability of producing data which include the surface wave. It's done with a simple entry on the RP "card".

A number of different compilations of NEC-2, every one of which as far as I know which includes ground wave analysis, can be had at http://www.si-list.net/swindex.html. You can also get the manual there, where you can learn about how to get the ground wave data from it. You're obviously much more interested in ground wave field strengths than most amateurs, so I suggest that you download one of the free NEC-2 compilations, and the manual, and them for your investigations. Remember, it's done with the RP "card".

Roy Lewallen, W7EL

4814. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 18:26:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <5PKdnUPtl7pJCbDUnZ2dnUVZ_uOdnZ2d@posted.easystreetonline>
Source record: 19788

Richard Clark wrote:
>
> Roy and others have answered this one in the past too. You employ the
> near field table to observe the ground wave. It works approximately
> well, even out to the edge of the implicit flat universe. If you
> object to flat universes, you are no longer in the realm of ground
> wave. If anything, modelers give MORE response in comparison to the
> BL&T data.

With EZNEC, you have to use the near field analysis to include the ground wave; direct ground wave analysis isn't included in EZNEC because it's of very limited use to most amateurs. In fact, it's really of interest only to AM broadcasters and a very few other very small and specialized users, who just about universally use EZNEC Pro which does include direct ground wave analysis.

But anybody who's interested in direct ground wave analysis can also use one of the other modeling programs which includes it, or use NEC-2 itself, available free from http://www.si-list.net/swindex.html. The manual is available there also. NEC-2 produces field strength data including the ground wave if requested with the proper entry on the RP "card".

Roy Lewallen, W7EL

4815. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 18:29:20 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ggk4i0$19ti$1@f04n12.cac.psu.edu>
Source record: 19789

Jeff Liebermann wrote:
> On Tue, 25 Nov 2008 14:59:01 -0800, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
>> On Tue, 25 Nov 2008 12:01:35 -0800, Jeff Liebermann <jeffl@cruzio.com>
>> wrote:
>>
>>> Do I spend the money, or do I seach for your secret horde of free
>>> university publications on antenna design?
>
>> Surely you must realize that this is not about money (a convenient
>> foil in this troll topic), but about skill (what the troll lacks).
>
> If I had money and the necessary skills, I wouldn't be asking dumb
> questions in this newsgroup.
>
>> The cheesy inventions that we have been breathlessly advised of have
>> the commensurate value of the bandwidth they return in a simple Google
>> search. It takes very little effort to recognize the moldy
>> fluorescence surrounding those meager offerings.
>
> Wrong. Techno-hype became somewhat of a hobby of mine. During the
> dot.com boom of the late 1990's, I was deriving considerable income
> from doing technical sanity checks on business plans and projects.
> During this time, I accumulated a fair collection of patents and ideas
> that are pure bogus, yet were successfully promoted at least to the
> point of being funded by technically clueless investors. Many are
> still around today. Considering extent of the problem, and the fair
> number of bogus patents, I would suggest that it is NOT easy to
> recognize technical quackery.

Sure it IS easy. Unfortunately, there are plenty enough people who have
Mad Skillz in the suspension of disbelief.

Looking at technical guano and judging it as such is not difficult.
There are ways that dilettantes or the intelligent uninformed can detect
the aroma of hi-tech manure.

In a field where I am mostly ignorant - finance -I called shenanigans
when I first heard of heard of the new breed of ATM's. I yelled fraud
when I heard of the sub prime loans, and shook my head in disbelief as
80 year old people took out 50 year mortgages that folded interest and
principle back into the loan. And yet while I knew the present economic
crisis was coming back around 2003, it seems a whole lot of people
couldn't see that. And I was told by enough of them that my "old school"

view of economics was surely evidence of my stupidity.

In science, economics and technology, the evidence is all there, the fundamentals are still quite serviceable, and analysis is not difficult. The problem is that people start out with a basic premise such as "Owning a house is the American Dream", or "The old guard is saying that all is already known about antennas", and then trying to fit everything into *that* philosophical Iron Maiden.

So I can take a look at say Art's antenna, and draw the conclusion that it is very likely an inductor on the end of a pole, and it will tend to perform like an EH antenna, with the coax serving as the major radiator. Contacts can certainly be made. I don't even condemn it out of hand, I don't think it is anything new, and after looking at it, it just seemed to be a lot more effort to build than I wanted to trouble myself with.

Yet I'm an uneducated dilettante dummy - most people out there are a lot smarter than me, so how come they can't figure this out when I can?

`- 73 de Mike N3LI -

4816. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 18:32:46 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <iDgXk.1296$QX3.365@nwrddc02.gnilink.net>
Source record: 19790

"Thomas Magma" <somewhere@overtherainbow.com> wrote in message
news:D7gXk.726$no6.654@newsfe04.iad...
>
>>> Hi Jerry,
>>>
>>> My application is at only one frequency so I intend to centre it on that
>>> frequency and the VSWR I get is the VSWR I get. I would hope to be > 25
>>> dB return loss anyways. I do have a HP8714C network analyzer in the lab
>>> I will be using so that is no problem. Due to the centre frequency
>>> (lower 400 MHz) I figure I can only realistically have about 4 of the
>>> half wave elements because of height, weight and wind loading. Oh wait
>>> was that 3 or 4 or 5 elements. I still haven't solved that fundamental
>>> issue yet. I don't suppose the radiation pattern is too much of a
>>> concern at this point, as long as it is omnidirectional.
>>>
>>> Thomas
>>
>> Hi Thomas
>>
>> If you can use whatever frequency the antenna works best at, it may be
>> practical to build one then use the frequency of best performance with
>> that antenna. But, if you have some predetermined frequency that the
>> antenna must perform well at, there is a problem building prototypes.
>> It can get rather time consuming to build prototypes when using copper
>> pipe.
>> Aparently you are confident that you can evaluate the antenna's input
>> impedance. I had figured that would be a fairly difficult task.
>>
>> I'll be very interested in this project. Please keep the group
>> informed of your progress.
>>
>> Jerry KD6JDJ (who has designed similar antennas
>> for commercial use)
>>
>>
>
> Hi Jerry,
>
> It is a predetermined frequency that I am building the antenna for. It is
> not determined if it will become a commercial product yet but I am trying
> to design it as such. I can see that it might be a little time consuming
> working with copper pipe, but once I get the formula right I should be
> good to go. I'll start buy calculating the half wave elements based on
> theory knowing my dielectric constant will be dry air or Argon.

>
> The design I have sketch is pretty neat and clean (on paper anyways). It
> has all the elements stacked directly on top of each other, unlike the
> traditional staggered approach you see in other designs. Also the
> dielectric chamber of the transmission elements are sealed and can be
> filled with a noble gas such as Argon to prevent corrosion and detuning
> from humidity.
>
> My background is in receiver and transmitter design, so I'm quite familiar
> with impedance matching and I understand how a Smith chart works on a
> network analyzer.
>
> I'm looking forward to working with copper pipe instead of 0201 capacitors
> and a microscope!
>
> Thomas

Hi Thomas

Your plan for this colinear antenna appears to be identical to the one I designed for ACI in Van Nuys Calif.. It was stack of lingths of copper tubes with no stagger. I dont remember what I finally did nor how it was assembled. I do remember that it worked and that my supervisor was impressed. Also, I remember that alot of impedance measurements were performed.
I am sure you will get your antenna to work. I suspect you will get more familiar with that Smith Chart in the process.

Jerry KD6JDJ

4817. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 18:38:16 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-D4F3C4.09381826112008@netnews.worldnet.att.net>
Source record: 19791
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

In article
<f18ee327-fbd3-4e0b-9810-c36001b94a3a@e1g2000pra.googlegroups.com>,
seaweedsl <seaweedsteve@gmail.com> wrote:

> On Nov 21, 1:38 am, DaveC <m...@bogusdomain.net> wrote:
> > Looking for outdoor omni "whip" antenna for 2.4 GHz.
> >
> > Is there any reason to not go for the greatest gain antenna, given that cost
> > is not too important (within reason)?
> >
> > There are scads of these on the 'net. I'm looking for someone who has
> > experience with one or more of them and can make a recommendation for one.
>
> Higher gain omni has flatter /narrower beam. So it has to be pointed
> more accurately, tilting as needed to connect with desired AP.
>
> As Jeff says, there's no reason to use an omni for a client. Get a
> much cheaper directional antenna and you will get more gain with less
> interference. Pointing will be easier too.
>
> Take a look at the pattern for this one:
> http://pnt.zoovy.com/product/MD24-12/12dBi_24GHz_Mini_Directional_Antenna.html
>
> Or consider a combination weatherproof box with built in panel antenna
> like this: http://tinyurl.com/5kfd42
> (Choose the version that has the pigtail you need)
>
> That's the first thing you want to determine, by the way, how much
> gain is needed? Another thread....
>
>
> Steve

There are outfits that make Omni Antennas for the 2.4 Ghz Band, that
have Down-tilt designed into them. This helps deal with the flattening
of the Vertical Polarization for local connections. I have one located
on a 60ft Tower that has multiple AP's at various Azimuths, with ranges
out to 2 miles. Works well for a Central Distribution.

--
Bruce in alaska
add <path> after <fast> to reply

4818. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 18:50:37 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <5UgXk.1130$ED.247@newsfe22.iad>
Source record: 19792

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:601ri4t9ni1fkga11bjv69efres6kecna7@4ax.com...
> On Tue, 25 Nov 2008 14:55:52 -0800, "Thomas Magma"
> <somewhere@overtherainbow.com> wrote:
>
>>I am about to attempt to build a UHF collinear coaxial antenna and am
>>trying
>>to finalize a design.
>
> What design? Drawing? Description? NEC model? Numbers?
> UHF is about 300 to 1000MHz. Any particular frequency?
>
> Incidentally, it's not a "coaxial antenna". It's an end fed vertical
> colinear using coaxial cable elements.
>
>>First off I have read contradicting statements whether to
>>use odd or even number of 1/2 wave elements. 1, 3, 5... or 1,2,4... Also I
>>don't understand what the 1/4 wave whip is doing on the top without a
>>ground
>>plane (found in most designs), is this necessary for a receive antenna?.
>>
>>Instead of using coaxial cable, I will be building the 1/2 wave and 1/4
>>wave
>>transmission lines out of ridged copper pipe with air as it's dielectric
>>in
>>order to maximize the velocity of propagation and therefore making true
>>1/2
>>wave elements. Does anyone see anything wrong with this approach?
>
> Yep, lots wrong. End fed colinear antennas are convenient but far
> from ideal. They're also deceptively simple where the problems only
> show up after the antenna is built.
>
> 1. Most of the RF comes out the bottom of the antenna. Very roughly,
> the first dipole belches 1/2 the RF, the next dipole belches 1/4 the
> RF, then 1/8th, and so on. This is NOT exact, but close enough to
> illustrate the problem. You can make it as long as you want, but if
> somehow manage to cover up the lower part of the antenna (a common
> problem on a rooftop or side mounted on a tower), most of the signal
> is history.
>
> 2. The alternating 1/2 wave coax cable type antenna is twice as long
> as necessary. Every other 1/2 wave coax section is essentially a
> non-radiationg phasing section. That's convenient for construction,

> but not very compact. A similar antenna, using a simple 1/2 wave
> hairping stub, with be half the length, with the same gain.
>
> 3. Coax is lossy. Coax phasing sections add un-necessary loss that
> is not present in an antenna that uses (for example) a hairpin stub or
> coil instead. Your copper pipe and air dielectric idea eliminates
> this problem, but I thought I would throw this in for those building
> them from coax cable scraps.
>
> 4. End fed antennas tend to have pattern uptilt. That may or may not
> be a problem depending on your unspecified application. The uptilt
> doesn't show up on free space models, but is certainly there if you
> include the effects of a rooftop, ground, or mast arm. If this is
> going on a mountain top, you might consider mounting it upside down.
>
> You can reduce the uptilt problem somewhat by cutting the antenna in
> half and feeding it in the middle (forming a dipole), rather than end
> feeding it. Several commercial antennas work this way. That also
> eliminates the need for ground plane radials at the base.
>
> 5. The effects of the radome can be critical. I built such a UHF
> antenna for 463MHz long ago. It worked well enough with exposed
> sections. However, when I potted it with urathane fence post foam in
> a PVC pipe enclosure, the center frequency drifted downward
> sufficiently to render the antenna useless.
>
> 6. Cutting the coax sections accurately is difficult. If you're not
> using a fixture for cutting, forget it.
>
> 7. Making it out of copper pipe is rather expensive but certainly
> possible. Making the insulators will be somewhat of a challenge.
> There's no velocity factor involved (Air=1) so the measurements will
> be simple. However, since there's an overlap between sections, I'm
> wondering from where to where you should measure. If you cut the
> outer copper tubing to exactly 1/2 wave, then you need a very thin
> insulator between sections to prevent shorts. Methinks there will
> need to be some cut-n-try along with some careful measurments (swept
> VSWR) along the way.
>
> Good luck.
>
> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

Hi Jeff,

Thanks for all the good points, but you haven't scared me away yet:) My
target frequency is around lets say 418MHz (that's not really it, I like to

remain anonymous). It was interesting what you said about the radome and how it detuned the antenna. Do you think it was mainly the PVC or the urethane foam that caused the issue. I plan to use a fibreglass tubing and spacers so hopefully I don't see as much near field effects as you did. I have learned that some PVC pipes have certain conductive additives and are not so good for antenna use, plus it might be tough trying to sell a 'poop pipe' antenna commercially if it ever became a product of ours.

Do you happen to know if I should be using a odd or even number of half wave elements in my design? I'm beginning to think it doesn't really matter.

Thomas

4819. FS: WORKMAN VHF/UHF 144/400 dual-band collinear base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 18:51:36 UTC
From: DC <nobody@pseudo.borked.net>
Message-ID: <3479f0d66454189d1bfff8911498a2e8@pseudo.borked.net>
Source record: 19793

http://snipr.com/CollinearBase

4820. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 18:54:07 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <c5f21c94-fd52-40c9-9d29-080bce667b6b@c36g2000prc.googlegroups.com>
Source record: 19794

On Nov 26, 9:32 am, "Thomas Magma" <somewh...@overtherainbow.com>
wrote:
> >From modeling I did a long time ago: there is a slight advantage to
> >using high velocity factor line, but it's very marginal. Just as a
> >dipole doesn't need to be resonant to do a good job radiating (and
> >receiving), so the elements in the coaxial collinear don't need to be
> >resonant. The phasing among the elements is dictated by the coax
> >between the feedpoints. Each gap between two elements is a feedpoint;
> >across it is impressed the line voltage. Since each line segment is a
> >half wave long and the conductors are reversed at each junction, the
> >voltage across each feedpoint is the same and in phase, less a small
> >amount for line loss. The element currents depend on mutual coupling
> >among the elements, but my simulations for VF=0.66 to VF=1.00
> >indicated that the current phases were always very nearly the same.
>
> >Generally, you'll want all the elements to look the same from the
> >outside. The top element should be the same length as the rest. It's
> >common to short the coax an electrical quarter wave up from the
> >highest gap between elements; that reflects back an open circuit to
> >the bottom of the top element, so really you could just as well make
> >the top element a tube the same OD as the rest of the elements,
> >connected to the inner conductor of the next lower section. The
> >feedpoint impedance at the bottom of the antenna is just the parallel
> >combination of all the feedpoints, which are generally each fairly
> >high (since each one is feeding a full-wave doublet, essentially), but
> >with ten or so sections, the net is modest, generally around 100 ohms.
>
> >Whatever the feedpoint impedance is, you need to match to it properly--
> >to whatever degree of matching is "proper" in your book. I generally
> >use a simple "L" network: a variable C across the feedpoint, and an
> >inductor to the feed line center conductor. It matches the impedance
> >and can tune out some reactance. Then you need to decouple the
> >antenna from the feedline, and from other metal in the area where it's
> >mounted. I generally use self-resonant coils in the small feedline,
> >one immediately below the antenna and one another quarter wave lower.
> >You could also try sleeves or radials...
>
> >Summary: the coax provides proper feedpoint phasing (even if the
> >elements are shorter than 1/2 wave because of the VF of the line
> >used); a matching network lets you match to 50 ohms (or other
> >impedance if you want); decoupling keeps "antenna" current off the
> >feedline.
>
> >Cheers,

> >Tom
>
> Thanks Tom for the detailed explanation. My current sketch of my antenna
> design uses a quarter wave sleeve on the lower end of the antenna to stub
> the current off the feedline ground. I am hoping to see the antenna having a
> (somewhat) characteristic impedance of 50 ohms since the transmission
> elements although made out of copper pipe and copper rod are designed to be
> 50 ohm and the antenna is single end fed (unlike a dipole). I will make some
> provisions for a small tuning structure. If I do have to tune, the nice
> thing is that it will be a receive only antenna and I can get away with
> small RF components.
>
> Tom, since you seem to know quite a bit about collinear coaxial antenna
> design, do you know if I should be using an even or odd amount of half wave
> elements? I planned on four, do you see a problem with this.
>
> Thanks again,
> Thomas

A couple comments:

First, about the feedpoint impedance. With four elements (a rather short antenna at UHF), there are three gaps between elements, that represent three feedpoints. Each feedpoint directly couples to the two attached elements, and through mutual coupling to the other elements. Consider driving just two such elements: it's just a (nominally) full wave doublet, and the feedpoint impedance is pretty high. Large diameter elements drop the feedpoint impedance, but even with large (not "huge") elements, the impedance of such a doublet will be several hundred ohms. To a rough approximation, in the coaxial collinear, you are simply putting three of those in parallel, since you're connecting them through 1/2 wave (electrical length) coax. If the feedpoint is just a half wave (electrical length) of coax away from the bottom gap between elements, you'll see the same impedance echoed there. In ten element designs, I typically see around 100 ohms at that bottom antenna feed spot. I fully expect to see quite a bit higher than that with only four elements. You can simulate this pretty easily with a program like EZNEC: just make a structure with four elements, with equal voltage sources between each pair of elements; figure the parallel combination of the reported impedances at each feedpoint, and that will be a good estimate of the impedance you'll see any even number of half-waves of feedline removed from the antenna, assuming negligible loss in the feedline.

Second, about number of elements: it really doesn't matter a whole lot. It will affect the impedance you see at the feedpoint, but the antenna gain should go up monotonically with the number of elements, if you get the phasing right and decouple the antenna from its surroundings appropriately.

(Beware sleeve decoupling: it may not be as effective as you think...)

I learned about these antennas when I got pissed that I could never seem to make one work right when I followed the instructions given in the old ARRL pubs. I finally sat down with pen and paper and EZNEC and worked out what was really going on. One thing I learned was that the "magic" of the wax fill in the Stationmaster commercial antennas wasn't really magic; neither the line velocity factor nor the dielectric environment just outside the radiating elements is super-critical. It IS important to get the element lengths right so the phasing of the feedpoints is right.

Once I understood, building one that worked right became pretty easy. Three steps: (1) use the coax VF and length to get the phasing right. Accept whatever feedpoint impedance that gives you. (2) Use a matching network (lumped or distributed, your choice) to match to that impedance. (3) Decouple the antenna from its surroundings (including but not limited to the feedline), so it can do its work properly. And I suppose (4) mount it up high and in the clear for best coverage. The rest is things like proper choices for good mechanical strength and reliability.

Cheers,
Tom

4821. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 19:15:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q18ri45hbv1h5kjar6ochf6jgg4doeclej@4ax.com>
Source record: 19795

On Wed, 26 Nov 2008 13:29:20 -0500, Michael Coslo <mjc5@psu.edu>
wrote:

>Yet I'm an uneducated dilettante dummy - most people out there are a lot
>smarter than me, so how come they can't figure this out when I can?

Hi Mike,

As a girlfriend of mine once offered:
"They've had the common sense educated out of them."

73's
Richard Clark, KB7QHC

4822. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 19:41:04 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <3c30abf3-e8f5-4338-9441-dc6b9f2b57ad@13g2000yql.googlegroups.com>
Source record: 19796

"Roy Lewallen" wrote
> With EZNEC, you have to use the near field analysis to include
> the ground wave; direct ground wave analysis isn't included in
> EZNEC because (etc).

After the comments of Richard Clark and you, Roy, I attempted to use EZNEC to determine the ground wave (see link below).

The near-field analysis of EZNEC for radiation in the horizontal plane at a point 1 km from a 1/4-wave monopole having two ohms in series with a Mininec r-f ground, while radiating 1 kW over an earth conductivity of 8 mS/m is shown as 72 mV/m.

The same setup when analyzed using the FCC's radiation efficiency for this monopole height, and their propagation charts for these conditions shows about 295 mV/m as the result, which value is supported by the measured performance of real-world AM broadcast stations, and is also a value in a range that could be expected from the BL&E data.

Hopefully you or Richard Clark can tell me the reason(s) for this difference, which could easily be my own setup of the NEC model.

Roy, would you mind posting the ground wave value EZNEC Pro reports for these conditions?

http://i62.photobucket.com/albums/h85/rfry-100/EZNECNearFldExample.gif

RF

4823. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 20:00:06 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <dg8ri4t7ol00bceu57g0r2vsa4knsat75o@4ax.com>
Source record: 19797

On Wed, 26 Nov 2008 15:48:50 GMT, "JB" <nospam@goofball.net> wrote:

>Excellent post.

Thanks. I'll add one more notch on my LCD frame.

>The problem with QEX is not enough submissions.

Well, they rejected one of mine many years ago. The problem was they never really said why. When I pressed the editor, he replied that he had enough submissions of sufficient quality. I tried again later and had it rejected because I wasn't an ARRL member at the time (because I was broke). I don't know what was going on, but I wasn't thrilled and never bothered again.

>As for the
>QST AM mods, I was thinking that was ATV, but maybe you were talking about
>something else.

Something else was converting commercial land mobile FM radios from WBFM or later NBFM to AM (A3A) modulation. Mostly, it was adding a low level modulation circuit, and converting the power stages from Class C to Class A or AB. To me, it was a little like publishing an article today on converting a Prius Hybrid automobile to only run on gasoline.

>The same applies to QST. If there aren't enough
>submissions, the only recourse is to hire writers to do columns or fill the
>empiness with drivel and ads like 73.

Probably true. I submitted an article in about 2002 on using the audio time delay through a repeater to do hyperbolic (Loran A style) vehicle location. I forgot why it was rejected because I ended up in the hospital and my memory from that period is rather muddled. When I inquired about the submission a year later, they said that they couldn't find it or that it was lost. Then, I mentioned that I still wasn't an ARRL member and all communications ceased.

>The best things to come out of 73 was
>the Star Trek communicator clone and Byte magazine. I hate how Ham Radio
>magazine died out.

73 published Joe Moell's column on amateur radio direction finding. To me, it was worth the price of a subscription. Before I tossed my archives, I ripped out and saved most of these issues. Wanna build a rotating antenna direction finder? The only references in ham radio land you'll find are in these 73 magazine issues. Same with various

microwave columns. I could have done without Wayne Green's endless
editorials.

>I was President of the local ham club for a while, and
>wound up doing the newletter too. For the three or four years of that, I
>only got 3 submissions from the membership. All the rest I had to either
>pull out of my A** every month or go around like a reporter and interrogate
>people.

Our current newsletter editor complains about the same thing.
<http://www.k6bj.org>
Still, he manages to produce a superior ham radio newsletter. I used
to submit irregular technical articles and obnoxious opinionated radio
politix articles. However, one article that I spend considerable time
writing was butchered beyond recognition. When I asked for an
explanation, I got nothing. So, no more articles from me.

>On the other hand - What neat inventions can we come up with to share with
>the World, so it can be exploited and give reason to take more of our
>spectrum?

It probably shouldn't be an invention. More likely, an unusual or
interesting application of some existing technology. Your ATV camera
for disaster services is a good example. Direction finding is still a
common problem (i.e. stuck public safety transmitters). Perhaps
demonstrating how some of the dumb|great ideas originating out FCC can
be made to work (i.e. white space, ultra narrow band FM, on the fly
TDMA, etc). I could think of lots of useful things to build, design,
buy, or analyze.

>Interesting to note how public safety volunteers showed Los
>Angeles Sheriff how neat ATV was and they turned around and petitioned the
>FCC for those frequencies.

We had some floods a few years ago. The levee broke along the Pajaro
river. One of our members has a helicopter and volunteered to fly an
ATV camera over the area for the sheriff. On screen was GPS position
in APRS format. Everything worked and everyone was suitably
impressed. Then, nothing. No clue exactly why, but my guess is that
homebrew is not funded by Homeland Security.

>Oh well, we will probably all be shot in head by the next regime because we
>are an irritation.

Nope. We will all be promoted to a position of responsibility, where
we will be setup to fail, thus demonstrating that technologists are no
better at running the country than politicians, crooks, bureaucrats,
and thugs.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com

Skype: JeffLiebermann AE6KS 831-336-2558

4824. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 20:10:51 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <toari4t52fa4v3rrbhmrbol112kukpvu76@4ax.com>
Source record: 19798

On Wed, 26 Nov 2008 09:45:05 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Wed, 26 Nov 2008 09:14:18 -0800, Jeff Liebermann <jeffl@cruzio.com>
>wrote:
>
>>>Surely you must realize that this is not about money (a convenient
>>>foil in this troll topic), but about skill (what the troll lacks).
>...
>>Punch my name into the Google Groups search page and read some of my
>>past postings. Then decide for yourself if I'm a troll or not.

>You didn't originate this decrepit topic did you? Connect the dots.
>73's
>Richard Clark, KB7QHC

Nope. Art started it. You might want to enable threading on your
newsreader so it's easier to assign the blame.

While not guilty of the original sin, I am guilty of the lesser crime
of engaging in topic drift. I attempted to answer Art's accusations
against the ARRL and the universities. You then mentioned free
antenna articles hidden in secret university archives, and I expanded
on this distraction. It was of interest to me because it might
eliminate the necessity of shelling out $200 to the IEEE for
convenient access.

You also suggested that I might be a usenet troll. I've been accussed
of many things, but not of trolling. If I wanted to play troll, it
would be obvious and fairly evident.

So, back to my original diversion and topic drift:
1. Where this horde of university antenna design articles?
2. Do you think I should keep looking for this horde, or should I
give up now and shell out the $200.
3. After reading some of my 19,000 assorted postings, do you still
think I'm a troll?

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4825. : Lawsuit countdown 5 days to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 20:18:39 UTC
From: kb9rqz@yahoo.com
Message-ID: <lobri4dgomu9274um2fmtt6qql4memeq62@4ax.com>
Source record: 19799
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Wed, 26 Nov 2008 11:20:01 -0500, "kb9rqz" <kb9rqz@puncemail.com>
wrote:

>
fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4826. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 20:38:54 UTC
From: kb9rqz@yahoo.com
Message-ID: <sucri4tkta6nqca96j3vt3t7fvrv4tho5o@4ax.com>
Source record: 19800
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4827. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 21:32:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fieri49t9qgr3epvb2q3mshd3hs03otov1@4ax.com>
Source record: 19701

On Wed, 26 Nov 2008 11:41:04 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>Hopefully you or Richard Clark can tell me the reason(s) for this
>difference, which could easily be my own setup of the NEC model.

I modeled their structures as they built them explicitly (they had
many variations), at the frequency they used, took readings at the
distance they reported. For your 1 kilometer distance (not one they
used), I get 303 mV/m at 3 MHz for their 70 foot radiator over a field
of 113 x 135 foot radials with an average ground conductivity. When I
use their distance of a mile, I get 188 mV/m, all else identical.
Their paper reports by formula that I should see 194.5 mV/m.

It would appear that with the average of the two distances, my model
accords quite closely to BL&E. That average would suggest results are
within an unreasonable accuracy given my experience with making RF
power determinations at the bench. However, my model is repeatable,
the paper is chiseled into the granite of history and your original
complaint seems to be moot.

73's
Richard Clark, KB7QHC

4828. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 22:49:06 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <81d4a667-5c55-4ed7-a649-8b6e77d6f481@f3g2000yqf.googlegroups.com>
Source record: 19702

Earlier posts in this thread:

From: "Richard Clark"<kb7qhc@xxx.net>
Date: Wednesday, November 26, 2008 12:00 PM

>Roy and others have answered this one in the past too. You employ the
>near field table to observe the ground wave. It works approximately
>well, even out to the edge of the implicit flat universe. If you
>object to flat universes, you are no longer in the realm of ground
>wave. If anything, modelers give MORE response in comparison to the
>BL&T data.

Then I posted my result of using the near-field analysis of EZNEC showing a value much LESS than the "modeler" value for those conditions when using the BL&E data and the FCC curves.

Following that is posted:

From: "Richard Clark" <kb7qhc@xxx.net>
Date: Wednesday, November 26, 2008 3:32 PM

>I modeled their structures as they built them explicitly (they had
>many variations), at the frequency they used, took readings at the
>distance they reported. For your 1 kilometer distance (not one they
>used), I get 303 mV/m at 3 MHz for their 70 foot radiator over a field
>of 113 x 135 foot radials with an average ground conductivity. When I
>use their distance of a mile, I get 188 mV/m, all else identical.
>Their paper reports by formula that I should see 194.5 mV/m. ...

No, the BL&E paper (accurately) stated that 194.5 mV/m is the theoretical maximum field possible at 1 mile for 1 kW radiated by a perfect 1/4-wave monopole over a perfect ground plane. The peak values they measured came very close, but never quite achieved that value.

>It would appear that with the average of the two distances, my model
>accords quite closely to BL&E.

Mr. Clark - kindly note that in your first quote above you say that, if anything, "modelers" show MORE response than BL&E Then when pressed a bit you say that your model "accords quite closely" with BL&E.

Yet the results of my EZNEC near-field model showed considerably LESS ground wave field at 1 km than either the FCC approach or the BL&E data.

Clarifications, please?

RF

4829. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-26 23:56:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <5u6dnYlBz668f7DUnZ2dnUVZ_uGdnZ2d@posted.easystreetonline>
Source record: 19703

Richard Clark wrote:
>
> As a girlfriend of mine once offered:
> "They've had the common sense educated out of them."
>

That's a quintessentially American point of view. I highly recommend _Anti-Intellectualism in American Life_ by Richard Hostadter. It helps explain why ignorance is such an asset to American politicians (and schoolchildren, for that matter), while intellectual accomplishments and ability generally have to be hidden. It won a Pulitzer prize, which of course proves that the author can't possibly have any common sense.

Roy Lewallen, W7EL

4830. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 00:04:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <CY-dnWr0MqyyebDUnZ2dnUVZ_uWdnZ2d@posted.easystreetonline>
Source record: 19704

Richard Fry wrote:
> . . .
> No, the BL&E paper (accurately) stated that 194.5 mV/m is the
> theoretical maximum field possible at 1 mile for 1 kW radiated by a
> perfect 1/4-wave monopole over a perfect ground plane. The peak
> values they measured came very close, but never quite achieved that
> value.

Can you explain why they very nearly accomplished this perfect ground value even though the ground wave signal had to propagate one mile over ground of finite conductivity? What do you think would have happened to the signal strength if the mile of intervening ground had been replaced by a perfect ground?

>> It would appear that with the average of the two distances, my model
>> accords quite closely to BL&E.
>
> Mr. Clark - kindly note that in your first quote above you say that,
> if anything, "modelers" show MORE response than BL&E Then when
> pressed a bit you say that your model "accords quite closely" with
> BL&E.
>
> Yet the results of my EZNEC near-field model showed considerably LESS
> ground wave field at 1 km than either the FCC approach or the BL&E
> data.

If you can answer the questions I asked above, you should understand why EZNEC doesn't predict the same value as the obviously (to me) normalized BL&E values. I'll look into the correspondence between EZNEC and FCC predictions.

Roy Lewallen, W7EL

4831. Re: FCC TV Band Devices

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 00:16:39 UTC
From: Dave <dave@dave.dave>
Message-ID: <492de6e7$0$31182$bd467cd0@news.dslextreme.com>
Source record: 19705
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Joel Koltner wrote:
> Thanks for the information, Dave.
>
> "Dave" <dave@dave.dave> wrote in message
> news:492d55ca$0$31202$bd467cd0@news.dslextreme.com...
>> Each TVBD will be addressable and can be shut off when it consults the
>> database.
>
> The database is internal to the TVBD and indexed by a built-in GPS receiver
> telling the TVBD where it is?
>
> ---Joel
>
>
The database will be on the internet. How the device will connect to
the internet is not stated in the ruling, but if the device cannot
transmit until it has consulted the database it won't be by talking to
another TVBD.

4832. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 00:45:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c6mri4lp3ejd5jp6up0d32r4oo21dnrqam@4ax.com>
Source record: 19706

On Wed, 26 Nov 2008 14:49:06 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>>When I
>>use their distance of a mile, I get 188 mV/m, all else identical.
>>Their paper reports by formula that I should see 194.5 mV/m. ...
>
>No, the BL&E paper (accurately) stated that 194.5 mV/m is the
>theoretical maximum field possible at 1 mile for 1 kW radiated by a
>perfect 1/4-wave monopole over a perfect ground plane. The peak
>values they measured came very close, but never quite achieved that
>value.

No? No what? Is your rejection rhetorical? a dramatic conceit? Is
there some cognitive gap between "by formula" and "theoretical" you
are trying to mine? To what purpose?

Are you demanding an exact accounting between measured vs. modeled? If
so, my model comes within 2mV/m of their graphed data (which, in its
own right, does not mean they actually measured that particular
cardinal point but as it encompasses their explicitly stated variables
is tantalizingly close enough). Expectations of accuracy performed in
the field for a continuum of points (verging on 1%) for a fabricated
argument of more/less is seeking advantage where there is no salvation
to be found.

>>It would appear that with the average of the two distances, my model
>>accords quite closely to BL&E.
>
>Mr. Clark - kindly note that in your first quote above you say that,
>if anything, "modelers" show MORE response than BL&E Then when
>pressed a bit you say that your model "accords quite closely" with
>BL&E.

There is more than one model involved as described by BL&E. I
explicitly selected from one of several available - all of which I
have modeled. The model I describe conforms to far more of their
variables available than those expressed by you. It also exhibited
more response than your 1kM touchstone. Is this touchstone derived
from BL&E or some other source unknown to all here, but you? It seems
when I followed your offering, you want to challenge its authority.

Those two data points I offer exhibit variations of barely a quarter
dB about the touchstones you supply (one available from BL&E), and
which you fall considerably short of in your own effort. Their
average around these touchstones average is an amazingly small

difference. The difference between the model I selected, and the one they report (one in the same) is on order of 0.1dB. If this does not constitute an accord, then I would suggest you have more water to carry than myself to turn modeling results into congruency. I am not particularly motivated to improve things when my experience suggests that it is a fool's mission given it implies accuracies that were beyond what was achievable in that cold winter field, 70 odd years ago.

>Yet the results of my EZNEC near-field model showed considerably LESS
>ground wave field at 1 km than either the FCC approach or the BL&E
>data.
>
>Clarifications, please?

You don't provide enough detail of your model to be able to point to anything in error, but by the multitude of your statements, it doesn't sound like you have spent enough time in the practice of modeling. The rest of my discussion below hardly reveals anything beyond the obvious - for one versed in the craft.

My models were arrived at through the simple, but tedious craft of close reading and conforming to expressed facts in the literature. Some art was involved in the selection from a choice of grounds, for which such choice drives a wide variation of results. Does this sound familiar? Even there, calling it art denies the information supplied by photographs revealing a very commonplace description: Pastoral. My choice of ground characteristics, if anything, hardly exhibits a radical departure. In fact I choose no other ground than average for the vast majority of my modeling. Within the confines of the abilities of the model to support buried wire, that was performed by suggestions offered in the help manual (clarity is achieved in reading that too and is generally obtained in the course of considerable exposure to the toolset). Here, the radials hovered less than half an inch above ground instead of buried six inches beneath. Perhaps this explains the remaining 0.1dB variation, but I doubt it. To infer such tight coupling between model and measure is a fantasy only Art would embrace to prove we can't trust established theory.

73's
Richard Clark, KB7QHC

4833. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 01:31:33 UTC
From: JB <nospam@goofball.net>
Message-ID: <VLmXk.1383$QX3.1018@nwrddc02.gnilink.net>
Source record: 19707

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:5u6dnYlBz668f7DUnZ2dnUVZ_uGdnZ2d@posted.easystreetonline...
> Richard Clark wrote:
> >
> > As a girlfriend of mine once offered:
> > "They've had the common sense educated out of them."
> >
>
> That's a quintessentially American point of view. I highly recommend
> _Anti-Intellectualism in American Life_ by Richard Hostadter. It helps
> explain why ignorance is such an asset to American politicians (and
> schoolchildren, for that matter), while intellectual accomplishments and
> ability generally have to be hidden. It won a Pulitzer prize, which of
> course proves that the author can't possibly have any common sense.
>
> Roy Lewallen, W7EL

Yes, KGB likes intellectuals because they are so easily manipulated by their
own self-importance.

4834. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 01:39:03 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <ffuri45gkpsli7tur0i4ot1u4r3nel0ad7@4ax.com>
Source record: 19708

On Sun, 16 Nov 2008 23:30:08 GMT, "Dave" <noone@nowhere.com> wrote:

>
>"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
>news:b87adb61-fce2-4e08-a503-e1ed22c3afd5@d36g2000prf.googlegroups.com...
>>Isnt this all a little bit like acknowleging someone who is causing
>>intentional interference on the bands?
>
>yeah, but not like someone who is nasty, more like someone who is funny and
>keeps blabbering on saying more and more ridiculous things.
>

Still QRN is QRN. I just do not enjoy noise as well as i enjoy the
desired signals.

4835. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 01:43:47 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <tjuri4pr78h11dh50s2lluul2f8f8ppd1s@4ax.com>
Source record: 19709

On Sun, 16 Nov 2008 21:44:07 +0000, Dave <dave@dave.dave> wrote:

>Richard Harrison wrote:
>> Dave wrote:
>> "High power coaxial transmission lines have hollow center conductors."
>>
>> Yes, and the metal which could have filled the hollow space would add no
>> conductivity at HF.
>>
>> Best regards, Richard Harrison, KB5WZI
>>
>
>Power handling and efficiency increase as the frequency decreases; a
>solid center conductor doesn't help at LF either.
>
>http://www.myat.com/index.html
>

As a matter of fact skin depth tends to keep power conductors (50/60
Hz) below 1 inch (25 mm) diameter. It becomes easier and cheaper to
"quad them up" (four conductors a couple of hand spans apart).

4836. Re: A few questions about collinear coaxial antennas [radomes and dielectrics]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 01:44:22 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <XXmXk.125$jb1.58@newsfe05.iad>
Source record: 19710

"Thomas Magma" <somewhere@overtherainbow.com> wrote in message
news:5UgXk.1130$ED.247@newsfe22.iad...
>
> remain anonymous). It was interesting what you said about the radome and
> how it detuned the antenna. Do you think it was mainly the PVC or the
> urethane foam that caused the issue. I plan to use a fibreglass tubing and
> spacers so hopefully I don't see as much near field effects as you did. I
> have learned that some PVC pipes have certain conductive additives and are
> not so good
^^^^^^^^^^
> for antenna use, plus it might be tough trying to sell a 'poop pipe'
> antenna commercially if it ever became a product of ours.

There is a correction that should be made here. Polyvinyl chloride has high radio frequency losses, and the addition of plasticizers usually increases these losses. But these dielectric losses are NOT due to conduction. Rather, they are the result of hindered rotational movement in the chemical dipoles within the polymer structure itself. In an insulator, when an AC voltage is applied, most of the current through the capacitor formed by the insulator leads the applied voltage. In a perfect capacitor, the current leads the voltage by 90 degrees. But in a real capacitor, the insulator has dielectric losses which means that the current leads the applied voltage by less than 90 degrees; i.e. a portion of the current is now in phase with the applied voltage. This current produces heating of the insulator. AT A GIVEN FREQUENCY, the capacitor acts as if is a pure capacitance in series with a resistance (or in parallel with a conductance). This model of a real capacitor is only valid at that ONE frequency. At DC, for example, most capacitors show extremely little conduction. Their insulation resistance can be over 10^10 ohm-cm. At high RF frequencies, the dielectric loss increases.

In the case of polyvinyl chloride, which is a hard, very brittle material, additives known as plasticizers are compounded into the PVC to produce the desired mechanical properties. A little plasticizer makes PVC tougher and easier to process. A lot of plasticizer makes PVC soft and pliable. Clear vinyl tubing can be as much as 40% plasticizer. Plasticizers are not chemically attached to the PVC polymer. This means that over time, the plasticizer can leach out or evaporate from the soft vinyl, leaving it hard and brittle again. Everyone is probably familiar with vinyl automobile seat covers. When your car is parked in the hot sun, a portion of the plasticizer evaporates out. Eventually the vinyl cracks and tears, and you wind up with a greasy, difficult to remove, oily film on the inside glass of the car. The plasticizer has left the vinyl, causing the cracking, and

condensed on the glass making a greasy mess. The sticky, gooey mess seen on old vinyl power cords is also due to the plasticizer leaving the PVC and accumulating on the surface.

Did you ever wonder what was meant when coaxial cable was described as having a non-contaminating vinyl jacket? This means that the plasticizer in the cable jacket leaches out, but very slowly compared to the service life of the cable. In older, and cheaper coax cable, conventional plasticizers are used which leach out or evaporate fairly quickly. This makes the cable stiffer and more prone to cracking. But long before this happens, the plasticizer has migrated into the polyethylene insulation surrounding the inner conductor, greatly increasing its RF losses. This can take just a few years. In some of the newer cables, a foil or metalized polyester layer surrounds the polyethylene under the shield. This effectively prevents the migration of the plasticizer.

To go back to the antenna issue, polyurethane foams of low density (lots of void space) have a low dielectric constant and small loss tangent (small dissipation factor). "The Handbook of Antenna Design" By A. W. Rudge, K. Milne, A. David Oliver, and P. Knight, has a discussion of high strength polyurethane foams as radome materials. However these foams are different from the "Great Stuff" foams in a can that you buy at the local hardware store. These foams are moisture cured so their dielectric losses will be somewhat higher. Do not confuse these with latex foams which have much greater dielectric losses. Also remember that these uncured urethane foams have 4,4-methylene bisphenyl isocyanate as one component. This is a nasty material from a safety viewpoint (a skin and lung allergic sensitizer), so follow the instructions carefully about gloves and eye protection.

To conclude, I would avoid the PVC material as a protective cover. Most common fiberglass tubes are either fiberglass/polyester or fiberglass/epoxy composites. Both materials have some dielectric loss but far less than PVC. Urethane foam will be a fairly good material to hold the antenna rigid within the tube. However the tube and the foam WILL detune the antenna meaning you will need to do some experimentation before you can produce the desired results.

73, Dr. Barry L. Ornitz WA4VZQ

4837. Re: "Unwashed" hams and "washed" hams

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 01:59:35 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <vjvri4hqnabjov97bjfaci08ncic12b0lf@4ax.com>
Source record: 19711

On Sun, 16 Nov 2008 15:14:23 -0600, richardharrison@webtv.net (Richard Harrison) wrote:

>Art wrote:
>"Einstein may well have been correct even tho not aware of discovries
>found after his death."
>
>Wouldn`t anyone like to be aware of all the discoveries made before his
>death?
>
>Einstein said something like: "Keep it simple, but not too simple!"
>
>Scientists have in many instances followed Einstein`s advice and reduced
>things to simplest terms. Maxwell`s equations as simplified and
>explained by Heaviside have been used to successfully predict EM
>behavior for a century.

Just to be picky, Heaviside predates Einstein:

http://en.wikipedia.org/wiki/Oliver_Heaviside

>They give the answers needed so there has been
>no great search for a replacement.
>
>The research at CERN on colliding beams is more likely of interest to
>those working with ionizing radiation than to those working with the
>nonionizing type we use in radio telecommunications.
>
>There is and was agreement among many with Kraus when he wrote on page
>37 of the 3rd edition of "Antennas":
>"Although a charge moving with uniform velocity along a straight
>conductor does not radiate, a charge moving back and forth in simple
>harmonic motion along the conductor is subject to acceleration (and
>deceleration) and radiates."
>
>An interesting view of the mechanism of radiation is given by B.
>Whitfield Griffith, Jr. on page 315 of "Radio-Electronic Transmission
>Fundamentals".
>
>Best regards, Richard Harrison, KB5WZI

4838. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 03:12:07 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <st3si45ioofe481jebmnuakp5uhcdni3qn@4ax.com>
Source record: 19712

On Sun, 16 Nov 2008 19:20:11 +0000, Dave <dave@dave.dave> wrote:

>Richard Harrison wrote:
>> Dave wrote:
>> "Continuous Tone Coded Subaudible Squelch"
>>
>> I like that better than "Continuous Tone Coded Squelch System" as
>> "System" is nondescriptive.
>>
>> Best regards, Richard Harrison, KB5WZI
>>
>
>I think it's from the MOCOM 70 Service Manual. Motorola called it
>"Private Line".

Since it appears that you do not want a telephone DTMF decoder what is
it that you want to decode?

4839. Re: Life For Your Xtra Digital Clock

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 03:15:30 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <u54si492t59hlthl3g7co6k0u0tja76bmm@4ax.com>
Source record: 19713

On Wed, 12 Nov 2008 19:43:03 -0600, "Howard Kowall" <hkowall@shaw.ca>
wrote:

>This is not Antenna related,but it applies to Amateur Radio
>I had a couple of extra digital clocks at home and I needed two or the ham
>shack (Local,UTC)
>I wanted both clocks in 24hr mode,so I goggled the clock IC used in the
>digital clock,and found most of the using a very general purpose clock IC
>and all capable of doing 24hrs format buy a small modification,usually this
>mod is just a matter of shorting a couple of pins on the IC
>My ic was a LM8560 so all I had to do was jump pins 15 to 28 to make the
>clock work in 24hr mode
>works great,now all I have to do is glance at the clocks and with an
>instance of have both times .I know its an easy conversion to do in you head
>but this makes it much more convenient and its a way of using some of the
>old stuff around the house and utilizing it rather then throwing it away or
>even better having to buy two clocks for the ham shack
>Just my contribution to the group
>Howard
>VE4ISP
>

I like your attitude.

4840. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 05:07:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <JsydnTVLU_qOtrPUnZ2dnUVZ_qfinZ2d@posted.easystreetonline>
Source record: 19714

JB wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:5u6dnYlBz668f7DUnZ2dnUVZ_uGdnZ2d@posted.easystreetonline...
>> Richard Clark wrote:
>>> As a girlfriend of mine once offered:
>>> "They've had the common sense educated out of them."
>>>
>> That's a quintessentially American point of view. I highly recommend
>> _Anti-Intellectualism in American Life_ by Richard Hostadter. It helps
>> explain why ignorance is such an asset to American politicians (and
>> schoolchildren, for that matter), while intellectual accomplishments and
>> ability generally have to be hidden. It won a Pulitzer prize, which of
>> course proves that the author can't possibly have any common sense.
>>
>> Roy Lewallen, W7EL
>
> Yes, KGB likes intellectuals because they are so easily manipulated by their
> own self-importance.

Damn, there goes my cover!

Roy Lewallen, W7EL

4841. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 05:17:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gglags$7v8$1@news.albasani.net>
Source record: 19715

Roy Lewallen wrote:
> Richard Clark wrote:
>>
>> As a girlfriend of mine once offered:
>> "They've had the common sense educated out of them."
>>
>
> That's a quintessentially American point of view. I highly recommend
> _Anti-Intellectualism in American Life_ by Richard Hostadter. It helps
> explain why ignorance is such an asset to American politicians (and
> schoolchildren, for that matter), while intellectual accomplishments and
> ability generally have to be hidden. It won a Pulitzer prize, which of
> course proves that the author can't possibly have any common sense.
>
> Roy Lewallen, W7EL

When I returned to college, they started talking "remedial" classes, to
"bring me up to speed." I laughed, they insisted, I took their tests,
they relented ... the "dumbing down" is REAL! I have seen it, first
hand ... :-(

I am glad I went when you got a REAL education ...

Regards,
JS

4842. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 05:21:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gglap5$7v8$2@news.albasani.net>
Source record: 19716

JB wrote:

> ...
> Yes, KGB likes intellectuals because they are so easily manipulated by their
> own self-importance.
>

WOW!

I like idiots, but for the same reason ... seems to me, someone is
mistaken ...

Regards,
JS

4843. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 05:38:17 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <jnqXk.975$v37.461@newsfe01.iad>
Source record: 19717
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Dave" <dave@dave.dave> wrote in message
news:492d53ab$0$31205$bd467cd0@news.dslextreme.com...
> CW wrote:
> > "Dave" <dave@dave.dave> wrote in message
> > news:492c02dc$0$31156$bd467cd0@news.dslextreme.com...
> >> Digital is a major step toward "conditional access".
> >
> > So is analog. If you don't have the proper reciever, you can't pick it
up.
> > Just a different format.
> >
> >
> That's not what conditional access means.

Conditional access has been done with analog -- but not well. I sucessfully
defeated analog scrambling with two different home-brew devices but I never
tried digital. Too hard.

It's much easier to hard-code C/A with digital.

Just my two cents.

4844. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 06:01:42 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <dJqXk.978$v37.939@newsfe01.iad>
Source record: 19718

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:dg8ri4t7ol00bceu57g0r2vsa4knsat75o@4ax.com...

< snip .

> We had some floods a few years ago. The levee broke along the Pajaro
> river. One of our members has a helicopter and volunteered to fly an
> ATV camera over the area for the sheriff. On screen was GPS position
> in APRS format. Everything worked and everyone was suitably
> impressed. Then, nothing. No clue exactly why, but my guess is that
> homebrew is not funded by Homeland Security.

Homeland Security is among the worst things that ever happened to this country. Just their role in interfering with airline travel (TSA) should be enough to put them out of business -- but no.

Feel free to dismiss me as being hopelessly shallow, but ... On my way home from work one day, I shared the train with a young babe in a form-fitting uniform. When I got around to identifying the patches on the uniform, I realized she worked for the TSA. I immediately stopped looking at her. No longer ogle-worthy.

4845. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 07:00:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gglghu$f0d$1@news.albasani.net>
Source record: 19719

Sal M. Onella wrote:

> ...
> Homeland Security is among the worst things that ever happened to this
> country. Just their role in interfering with airline travel (TSA) should be
> enough to put them out of business -- but no.
>
> Feel free to dismiss me as being hopelessly shallow, but ... On my way home
> from work one day, I shared the train with a young babe in a form-fitting
> uniform. When I got around to identifying the patches on the uniform, I
> realized she worked for the TSA. I immediately stopped looking at her. No
> longer ogle-worthy.
>
>

You just raised yourself on my "smarts scale" about 100 points. This gov't has told us, "Be afraid, be very, very afraid." But then, it has left the borders open so any idiot with a stick of dynamite, a sack of drugs, or a suitcase nuke can enter with little problem ...

Now something is wrong. I am beginning to believe I live in a country of idiots and you and I are the only ones suspecting something is wrong ... :-(

Or, what smells like Bleucheese?

Regards,
JS

4846. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 08:02:32 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <r0jsi4pkdecbf3craqs1i5mjch9f0a3ld4@4ax.com>
Source record: 19720

On Wed, 26 Nov 2008 10:50:37 -0800, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

>Thanks for all the good points, but you haven't scared me away yet:)

Good. I don't mind spending the time if you're willing to build it.
None of my objections are particularly fatal. However, I would
suggest you at least investigate alternatives, which in my opinion,
work better (and are easier to build). For example, the 4 bay stacked
vertical folded dipoles, with coaxial power dividers, is far less
complexicated, and methinks works better. I was building these for
463/468MHz in about 1968(?) out of strips of 1/2" wide aluminum and
pop rivets. If you're interested, I'll see if I can find some photos
or scribblings. There are a few in this photo:
<http://802.11junk.com/jeffl/pics/Old%20Repeaters/slides/LoopMtn02.html>
but I can't distinguish mine from the stock dB Products antennas.
Incidentally, that's a great example of how *NOT* to install antennas.
Those are all transmit antennas with no ferrite isolators. The
intermod generated was monumental.

Some more examples of commercial versions:
<http://www.radiowrench.com/sonic/so02202.html>
<http://www.radiowrench.com/sonic/> (look for dB Products PDF's)

>My
>target frequency is around lets say 418MHz (that's not really it, I like to
>remain anonymous).

Y'er no fun.

>It was interesting what you said about the radome and how
>it detuned the antenna. Do you think it was mainly the PVC or the urethane
>foam that caused the issue.

Both. I suspect you have a sweeper and some means of measuing
reflection coefficient or VSWR in real time (on a scope). If not, the
reflection coefficient bridge is easy to build. Take any antenna you
look at the VSWR curve on the scope. Then, shove the pipe over the
antenna and watch what happens. If the tubing were fiberglass, some
thin plastics, or glass, nothing will change on the scope. PVC and
ABC will detune the antenna. So will common fence post compound
(urathane foam) but to a lesser degree. Packing the empty space with
styrofoam or styroam peanuts seems to work well enough and result in a
repairable antenna. Real fiberglass tubing (masts or marine hardware)
is easy enough to obtain, that I wouldn't bother with PVC. Besides,
fiberglass is nice and stiff, while PVC flops around in the wind.

>I plan to use a fibreglass tubing and spacers so
>hopefully I don't see as much near field effects as you did.

Yep. There's always hope.

>I have learned
>that some PVC pipes have certain conductive additives and are not so good
>for antenna use, plus it might be tough trying to sell a 'poop pipe' antenna
>commercially if it ever became a product of ours.

If you want to try a real disaster, try black drainage PVC pipe.
Carbon filled. For a good acid test, try putting a pipe section in a
microwave oven. If it stays cold, you win. If it gets hot, thing
again. If it melts and catches fire, forget it. It's also fun to
take an ordinary 440 yackie talkie or scanner, shove a piece of PVC
pipe over the antenna, and listen to the signal change. I like to do
this demo at radio club meetings. The best of the bunch is
fiberglass. A close 2nd is white ABS (acrylo-nitrile butadene
styrene) which is a bit difficult to find. It's commonly used in
vacuum forming and commonly found on GPS antennas and such.

>Do you happen to know if I should be using a odd or even number of half wave
>elements in my design? I'm beginning to think it doesn't really matter.

It matters quite a bit. However, I can't offer an answer. Some
designes use the bottom section as a matching transformer or
counterpoise. That mangles the count. I would have to see what
you're doing to make the determination.

Also, I could probably figure it out, but it's midnight and I'm beat.
I spent 5 days last week fighting a kidney stone and am still kinda
wiped from that. If you can't figure it it, bug me and I'll do the
dirty work. A good clue is that the center conductor of the input
coax connector must connect to the center wire which goes to the 1/4
vertical whip section at the top.

Also, there are patents worth reading:
<http://www.google.com/patents?id=JMweAAAAEBAJ&dq=6947006>
<http://www.google.com/patents?id=qDYWAAAAEBAJ&dq=6947006>
<http://www.google.com/patents?id=XpgfAAAAEBAJ&dq=6947006>
etc. The accompanying explanations are usually sufficient to figure
out how it works. You might notice that one of the construction
methods is applicable to your copper tubing idea.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4847. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 08:22:35 UTC
From: LIBERATOR <nogeekluv@linuxmail.org>
Message-ID: <57cdb50f-0dc2-4050-b926-219299a8da71@33g2000yqm.googlegroups.com>
Source record: 19721
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design,alt.music.rush

On Nov 19, 3:45 pm, Rich Grise <r...@example.net> wrote:
> My current UHF antenna is a 14" Radio Shack clip lead clipped from the
> center of my coax to the venetian blind. I have to hand-adjust it
> for the channel, weather conditions, phase of the moon, etc. I can
> do this because I can _see_ an indication of signal strength.
>
> Well, with this new Fascist "No More Free TV" crap, I'm gonna need
> a real UHF antenna. My budget is exceedingly limited, but I have
> a supply of materials (GTAW filler rod, with some coppery-colored
> coating, so it solders like a dream, and is as stiff as piano wire)
> to build an antenna with.
>
> But I've been searching the web for some weeks now, and I can't
> seem to find any kind of formula, except there was this program
> I downloaded - LPDA.EXE, which runs on DOS. Unfortunately, it's
> in Russian or Polish or Uzbekistani - one of those East Yurp
> languages. Here's a screen
snap:http://mysite.verizon.net/richgrise/images/LP-Prog-Output.gif
>
> Which I went through pretty much by-guess-and-by-gosh - can
> anybody read that stuff?
>
> There are a lot of factors I don't know about, like "Tau", and
> all of the specific designs on the web are flat - something is
> telling me I want one of those pyramid-shaped ones, but I really
> don't know the difference (between that and flat) - it's probably
> something to do with bandwidth or F/B ratio or whatever.
>
> My local library has no ARRL Antenna Book (!), and did I mention
> I have a seriously limited budget?
>
> So, how do I pursue this? It'd be nice to have a program that will
> calculate the whole thing for me, but am I dreaming? If I want to
> send myself to Log-Periodic School, where should I start?
>
> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>
> Thanks,
> Rich

I suspect Rich is Virginia Newbon, she's using at least 40 male
aliases in most newsgroups existant. Literally, that's hundreds if not
a thousand.

4848. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 12:36:10 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <50809006-32aa-4374-a9df-8f7994b33692@j38g2000yqa.googlegroups.com>
Source record: 19722

"Roy Lewallen" wrote
> Richard Fry wrote:
>> . . .
>> No, the BL&E paper (accurately) stated that 194.5 mV/m is the
>> theoretical maximum field possible at 1 mile for 1 kW radiated by a
>> perfect 1/4-wave monopole over a perfect ground plane. The peak
>> values they measured came very close, but never quite achieved that
>> value.
>
> Can you explain why they very nearly accomplished this perfect ground
> value even though the ground wave signal had to propagate one mile over
> ground of finite conductivity?

BL&E made their surface-wave measurements 3/10 of a mile from their 3 MHz monopole transmit site.

MW ground loss for the surface wave across a path that short is low, regardless of ground conductivity. This may be seen in the scan linked below, which was taken from Terman's Radio Engineers Handbook, 1st Edition, page 681.

The scan doesn't show distances less than 1 mile, and the curves are based on higher ground conductivity than BL&E had to work with -- but an extrapolation of those curves to the BL&E conditions should convince most reasonable readers of the conclusion in my paragraph above.

The BL&E paper published in the Proceedings of the IRE states (page 771) "For each antenna height, 0.2 watt of power was fed into this antenna, and the field intensity was measured at 0.3 of a mile. This figure was then converted to a basis of a power of 1000 watts and a distance of one mile."

So BL&E did not normalize their readings to account for ground loss either at 3/10ths of a mile or one mile, but apparently they did assume that the effect of the ground loss was the same at those two distances. That error would not be large, however.

>What do you think would have happened to the signal strength
>if the mile of intervening ground had been replaced by a perfect
>ground?

They would have measured 194.5 mV/m, referenced to 1 kW of radiated power. As it was, they reported about 191 mV/m (max).

> I'll look into the correspondence between EZNEC and FCC
> predictions.

Thanks. That will be interesting.

http://i62.photobucket.com/albums/h85/rfry-100/TermanGroundWaveVsFrequency.jpg

RF

4849. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 12:57:42 UTC
From: Dave <dave@dave.dave>
Message-ID: <492e9947$0$31178$bd467cd0@news.dslextreme.com>
Source record: 19723

JosephKK wrote:
> On Sun, 16 Nov 2008 19:20:11 +0000, Dave <dave@dave.dave> wrote:
>
>> Richard Harrison wrote:
>>> Dave wrote:
>>> "Continuous Tone Coded Subaudible Squelch"
>>>
>>> I like that better than "Continuous Tone Coded Squelch System" as
>>> "System" is nondescriptive.
>>>
>>> Best regards, Richard Harrison, KB5WZI
>>>
>> I think it's from the MOCOM 70 Service Manual. Motorola called it
>> "Private Line".
>
> Since it appears that you do not want a telephone DTMF decoder what is
> it that you want to decode?
>
No decoding involved. It's a tone that unsquelches an FM radio.

4850. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 13:34:56 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <e1f3bf32-0bae-45f6-a8e1-0d7eec9bb96b@d23g2000yqc.googlegroups.com>
Source record: 19724

RC: >>Their paper reports by formula that I should see 194.5 mV/m. ...

RC: >No? No what?

RF: >No, the BL&E paper (accurately) stated that 194.5 mV/m is the
>theoretical maximum field possible at 1 mile for 1 kW radiated by a
>perfect 1/4-wave monopole over a perfect ground plane. The peak
>values they measured came very close, but never quite achieved
>that value.

RC: >Are you demanding an exact accounting between measured vs.
>modeled? If so, my model comes within 2mV/m of their graphed
>data (which, in its own right, does not mean they actually measured
>that particular cardinal point but as it encompasses their explicitly
>stated variables is tantalizingly close enough).

If you are happy with the results of your modeling, then well and good
for you.

But the near-field value calculated by EZNEC and as shown in my URL is
far short of the result of the BL&E study, and also of the FCC's
propagation curve value for those conditions.

So far neither you nor Roy has suggested that the near-field analysis
I posted was based on an incorrect model, and there was enough
information about it in my clip to determine that.

BTW, a distance of 1 km from a 1 MHz, 1/4-wave monopole is no longer
in its near field, the boundary of which in this case is less than 150
feet from the monopole.

RF

4851. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 14:52:34 UTC
From: Dave <noone@nowhere.com>
Message-ID: <SuyXk.1461$QX3.351@nwrddc02.gnilink.net>
Source record: 19725
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

TV has never been 'free'. you pay for it with every product you purchase that is advertised on tv. and of course you pay for it in taxes, and also in product purchases from sponsors, for 'public' tv channels. tanstaafl!

4852. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 16:37:04 UTC
From: JB <nospam@goofball.net>
Message-ID: <Q0AXk.1428$us6.238@nwrddc01.gnilink.net>
Source record: 19726

> > Yes, KGB likes intellectuals because they are so easily manipulated by
their
> > own self-importance.
> >
>
> WOW!
>
> I like idiots, but for the same reason ... seems to me, someone is
> mistaken ...

No, KGB don't HAVE to manipulate idiots. They manipulate the intellectuals, who in turn lead the idiots until they all wind up in a ditch. They only serve purpose to destabilize and demoralize. There is no place for them in normalization phase because they find they have been duped and become bitter enemies. It is better they be liquidated first in the normalization phase.

4853. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 16:52:56 UTC
From: seaweedsl <seaweedsteve@gmail.com>
Message-ID: <249c95e5-13df-4b5d-85e5-78378261b1ab@q30g2000prq.googlegroups.com>
Source record: 19727
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Nov 26, 12:38 pm, Bruce in alaska <f...@btpost.net> wrote:

> There are outfits that make Omni Antennas for the 2.4 Ghz Band, that
> have Down-tilt designed into them.......Works well for a Central Distribution.
>
> --

Agreed, for an AP, if 360 coverage is needed, an omni with downtilt
is an appropriate option.

Not for clients.

4854. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 17:05:48 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <ggmk1d$9cp$1@news.motzarella.org>
Source record: 19728
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Dave" <noone@nowhere.com> wrote in message
news:SuyXk.1461$QX3.351@nwrddc02.gnilink.net...
> TV has never been 'free'. you pay for it with every product you purchase
> that is advertised on tv. and of course you pay for it in taxes, and also
> in product purchases from sponsors, for 'public' tv channels. tanstaafl!
>
My squawk with "pay" TV is that you pay to get it, and then have to
additionally watch commercials.

4855. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 17:59:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <venti45fo2attp50jim4jvk49mtia77vnd@4ax.com>
Source record: 19730

On Thu, 27 Nov 2008 05:34:56 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>So far neither you nor Roy has suggested that the near-field analysis
>I posted was based on an incorrect model, and there was enough
>information about it in my clip to determine that.

Ah, we are working from a script. I am suggesting that your model is
incorrect. You asked what to do, I would suggest fixing it. You have
been provided with the necessary references. Let us know when you
succeed, but skip reports of failure. As you say, you have already
provided enough information.

73's
Richard Clark, KB7QHC

4856. Finally ABSOLUTE PROOF: moparholic is a kweenie!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 18:01:42 UTC
From: mopeyzakween@yahoo.com
Message-ID: <5fbc7e93-53b9-4d41-b706-b3b75d29a8f4@v13g2000yqm.googlegroups.com>
Source record: 19729
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.policy

http://nimbusters.org/forum/read.php?board=8&id=645428

4857. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 18:10:25 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <noBXk.2047$zQ3.1200@newsfe12.iad>
Source record: 19731

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:r0jsi4pkdecbf3craqs1i5mjch9f0a3ld4@4ax.com...
> On Wed, 26 Nov 2008 10:50:37 -0800, "Thomas Magma"
> <somewhere@overtherainbow.com> wrote:
>
>>Thanks for all the good points, but you haven't scared me away yet:)
>
> Good. I don't mind spending the time if you're willing to build it.
> None of my objections are particularly fatal. However, I would
> suggest you at least investigate alternatives, which in my opinion,
> work better (and are easier to build). For example, the 4 bay stacked
> vertical folded dipoles, with coaxial power dividers, is far less
> complexicated, and methinks works better. I was building these for
> 463/468MHz in about 1968(?) out of strips of 1/2" wide aluminum and
> pop rivets. If you're interested, I'll see if I can find some photos
> or scribblings. There are a few in this photo:
> <http://802.11junk.com/jeffl/pics/Old%20Repeaters/slides/LoopMtn02.html>
> but I can't distinguish mine from the stock dB Products antennas.
> Incidentally, that's a great example of how *NOT* to install antennas.
> Those are all transmit antennas with no ferrite isolators. The
> intermod generated was monumental.
>
> Some more examples of commercial versions:
> <http://www.radiowrench.com/sonic/so02202.html>
> <http://www.radiowrench.com/sonic/> (look for dB Products PDF's)
>
>>My
>>target frequency is around lets say 418MHz (that's not really it, I like
>>to
>>remain anonymous).
>
> Y'er no fun.
>
>>It was interesting what you said about the radome and how
>>it detuned the antenna. Do you think it was mainly the PVC or the urethane
>>foam that caused the issue.
>
> Both. I suspect you have a sweeper and some means of measuing
> reflection coefficient or VSWR in real time (on a scope). If not, the
> reflection coefficient bridge is easy to build. Take any antenna you
> look at the VSWR curve on the scope. Then, shove the pipe over the
> antenna and watch what happens. If the tubing were fiberglass, some
> thin plastics, or glass, nothing will change on the scope. PVC and
> ABC will detune the antenna. So will common fence post compound

> (urathane foam) but to a lesser degree. Packing the empty space with
> styrofoam or styroam peanuts seems to work well enough and result in a
> repairable antenna. Real fiberglass tubing (masts or marine hardware)
> is easy enough to obtain, that I wouldn't bother with PVC. Besides,
> fiberglass is nice and stiff, while PVC flops around in the wind.
>
>>I plan to use a fibreglass tubing and spacers so
>>hopefully I don't see as much near field effects as you did.
>
> Yep. There's always hope.
>
>>I have learned
>>that some PVC pipes have certain conductive additives and are not so good
>>for antenna use, plus it might be tough trying to sell a 'poop pipe'
>>antenna
>>commercially if it ever became a product of ours.
>
> If you want to try a real disaster, try black drainage PVC pipe.
> Carbon filled. For a good acid test, try putting a pipe section in a
> microwave oven. If it stays cold, you win. If it gets hot, thing
> again. If it melts and catches fire, forget it. It's also fun to
> take an ordinary 440 yackie talkie or scanner, shove a piece of PVC
> pipe over the antenna, and listen to the signal change. I like to do
> this demo at radio club meetings. The best of the bunch is
> fiberglass. A close 2nd is white ABS (acrylo-nitrile butadene
> styrene) which is a bit difficult to find. It's commonly used in
> vacuum forming and commonly found on GPS antennas and such.
>
>>Do you happen to know if I should be using a odd or even number of half
>>wave
>>elements in my design? I'm beginning to think it doesn't really matter.
>
> It matters quite a bit. However, I can't offer an answer. Some
> designes use the bottom section as a matching transformer or
> counterpoise. That mangles the count. I would have to see what
> you're doing to make the determination.
>
> Also, I could probably figure it out, but it's midnight and I'm beat.
> I spent 5 days last week fighting a kidney stone and am still kinda
> wiped from that. If you can't figure it it, bug me and I'll do the
> dirty work. A good clue is that the center conductor of the input
> coax connector must connect to the center wire which goes to the 1/4
> vertical whip section at the top.
>
> Also, there are patents worth reading:
> <http://www.google.com/patents?id=JMweAAAAEBAJ&dq=6947006>
> <http://www.google.com/patents?id=qDYWAAAAEBAJ&dq=6947006>
> <http://www.google.com/patents?id=XpgfAAAAEBAJ&dq=6947006>
> etc. The accompanying explanations are usually sufficient to figure
> out how it works. You might notice that one of the construction

> methods is applicable to your copper tubing idea.
>
>
> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

I'm anxious to get started so I've put my copper pipe design on hold well I wait for parts and decided to start with a coax approach. So I hit the hardware store and got some PVC pipe and mounting bits. I understand that the PVC is not as good as fiberglass because of it's near field effects, BTW if you can tune those effects out, what is the end result in loss? I plan on using LMR-200 because of it's slight rigidity and it's high velocity factor (83%). I bought 1-1/2 inch rubber washers with a 3/16 hole in the center that will slide over the coax and then be pulled into the 1-1/4 inch PVC this will center and support the coax up the length of the pipe. I will try using some clamp-on ferrites that we have laying around to stub the currents on the feed line and slide them around and see if I can tune the antenna using the network analyzer. I still don't understand what that quarter wave whip is suppose to do that sits on top of the array and I think I will try to omit that in my first design (unless someone convinces me otherwise).

Anyways, time to get my hands dirty and build me an antenna!

Thomas Magma

4858. Re: A few questions about collinear coaxial antennas [radomes and dielectrics]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 18:15:01 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <IsBXk.2048$zQ3.1475@newsfe12.iad>
Source record: 19732

"NoSPAM" <unknown@nospam.org> wrote in message
news:XXmXk.125$jb1.58@newsfe05.iad...
> "Thomas Magma" <somewhere@overtherainbow.com> wrote in message
> news:5UgXk.1130$ED.247@newsfe22.iad...
>>
>> remain anonymous). It was interesting what you said about the radome and
>> how it detuned the antenna. Do you think it was mainly the PVC or the
>> urethane foam that caused the issue. I plan to use a fibreglass tubing
>> and spacers so hopefully I don't see as much near field effects as you
>> did. I have learned that some PVC pipes have certain conductive additives
>> and are not so good
> ^^^^^^^^^^
>> for antenna use, plus it might be tough trying to sell a 'poop pipe'
>> antenna commercially if it ever became a product of ours.
>
> There is a correction that should be made here. Polyvinyl chloride has
> high radio frequency losses, and the addition of plasticizers usually
> increases these losses. But these dielectric losses are NOT due to
> conduction. Rather, they are the result of hindered rotational movement in
> the chemical dipoles within the polymer structure itself. In an
> insulator, when an AC voltage is applied, most of the current through the
> capacitor formed by the insulator leads the applied voltage. In a perfect
> capacitor, the current leads the voltage by 90 degrees. But in a real
> capacitor, the insulator has dielectric losses which means that the
> current leads the applied voltage by less than 90 degrees; i.e. a portion
> of the current is now in phase with the applied voltage. This current
> produces heating of the insulator. AT A GIVEN FREQUENCY, the capacitor
> acts as if is a pure capacitance in series with a resistance (or in
> parallel with a conductance). This model of a real capacitor is only
> valid at that ONE frequency. At DC, for example, most capacitors show
> extremely little conduction. Their insulation resistance can be over
> 10^10 ohm-cm. At high RF frequencies, the dielectric loss increases.
>
> In the case of polyvinyl chloride, which is a hard, very brittle material,
> additives known as plasticizers are compounded into the PVC to produce the
> desired mechanical properties. A little plasticizer makes PVC tougher and
> easier to process. A lot of plasticizer makes PVC soft and pliable.
> Clear vinyl tubing can be as much as 40% plasticizer. Plasticizers are
> not chemically attached to the PVC polymer. This means that over time,
> the plasticizer can leach out or evaporate from the soft vinyl, leaving it
> hard and brittle again. Everyone is probably familiar with vinyl
> automobile seat covers. When your car is parked in the hot sun, a portion
> of the plasticizer evaporates out. Eventually the vinyl cracks and tears,

> and you wind up with a greasy, difficult to remove, oily film on the
> inside glass of the car. The plasticizer has left the vinyl, causing the
> cracking, and condensed on the glass making a greasy mess. The sticky,
> gooey mess seen on old vinyl power cords is also due to the plasticizer
> leaving the PVC and accumulating on the surface.
>
> Did you ever wonder what was meant when coaxial cable was described as
> having a non-contaminating vinyl jacket? This means that the plasticizer
> in the cable jacket leaches out, but very slowly compared to the service
> life of the cable. In older, and cheaper coax cable, conventional
> plasticizers are used which leach out or evaporate fairly quickly. This
> makes the cable stiffer and more prone to cracking. But long before this
> happens, the plasticizer has migrated into the polyethylene insulation
> surrounding the inner conductor, greatly increasing its RF losses. This
> can take just a few years. In some of the newer cables, a foil or
> metalized polyester layer surrounds the polyethylene under the shield.
> This effectively prevents the migration of the plasticizer.
>
> To go back to the antenna issue, polyurethane foams of low density (lots
> of void space) have a low dielectric constant and small loss tangent
> (small dissipation factor). "The Handbook of Antenna Design" By A. W.
> Rudge, K. Milne, A. David Oliver, and P. Knight, has a discussion of high
> strength polyurethane foams as radome materials. However these foams are
> different from the "Great Stuff" foams in a can that you buy at the local
> hardware store. These foams are moisture cured so their dielectric losses
> will be somewhat higher. Do not confuse these with latex foams which have
> much greater dielectric losses. Also remember that these uncured urethane
> foams have 4,4-methylene bisphenyl isocyanate as one component. This is a
> nasty material from a safety viewpoint (a skin and lung allergic
> sensitizer), so follow the instructions carefully about gloves and eye
> protection.
>
> To conclude, I would avoid the PVC material as a protective cover. Most
> common fiberglass tubes are either fiberglass/polyester or
> fiberglass/epoxy composites. Both materials have some dielectric loss but
> far less than PVC. Urethane foam will be a fairly good material to hold
> the antenna rigid within the tube. However the tube and the foam WILL
> detune the antenna meaning you will need to do some experimentation before
> you can produce the desired results.
>
> 73, Dr. Barry L. Ornitz WA4VZQ
>

Thanks Barry for the in-depth enlightenment of radome material :) Do you happen to know the answer to this question: When you tune the near field effects of PVC out, what is the end result in loss? and how is this compared to fiberglass?

Thomas

4859. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 19:10:55 UTC
From: Bruce in alaska <fast@btpost.net>
Message-ID: <fast-6A54B4.10105927112008@netnews.worldnet.att.net>
Source record: 19733
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

In article
<249c95e5-13df-4b5d-85e5-78378261b1ab@q30g2000prq.googlegroups.com>,
seaweedsl <seaweedsteve@gmail.com> wrote:

> On Nov 26, 12:38 pm, Bruce in alaska <f...@btpost.net> wrote:
>
> > There are outfits that make Omni Antennas for the 2.4 Ghz Band, that
> > have Down-tilt designed into them.....Works well for a Central
> > Distribution.
> >
> > --
>
>
> Agreed, for an AP, if 360 coverage is needed, an omni with downtilt
> is an appropriate option.
>
> Not for clients.

Yep, for Clients, I use 12dbi Panel Antennas, which are very compact and
provide the required F/B Ratio and gain, for each link.

--
Bruce in alaska
add <path> after <fast> to reply

4860. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 19:39:07 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <51bdb3ce-2d31-4c41-bf19-8845b9b5af50@q9g2000yqc.googlegroups.com>
Source record: 19734

> Richard Clark wrote:
>I am suggesting that your model is incorrect.

And I am suggesting that your model is incorrect.

Please show your work to the same extent that I showed mine (or more,
if you believe that to be necessary).

Otherwise all we have from you about this is undocumented.

RF

4861. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 19:50:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggmtlm$2bm$1@news.albasani.net>
Source record: 19735

JB wrote:

>> WOW!
>>
>> I like idiots, but for the same reason ... seems to me, someone is
>> mistaken ...
>
> No, KGB don't HAVE to manipulate idiots. They manipulate the intellectuals,
> who in turn lead the idiots until they all wind up in a ditch. They only
> serve purpose to destabilize and demoralize. There is no place for them in
> normalization phase because they find they have been duped and become bitter
> enemies. It is better they be liquidated first in the normalization phase.
>

Yeah, I guess ... whatever he said ...

Regards,
JS

4862. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 19:55:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggmtv7$2bm$2@news.albasani.net>
Source record: 19736
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Wayne wrote:

> My squawk with "pay" TV is that you pay to get it, and then have to
> additionally watch commercials.
>
>

The wife and I, with being able, for example, to go out to Fox tvs' webpage and view prisonbreak, have, pretty much, given up watching tv ... we have been talking about discontinuing cable and dumping satellite ... the loud commercials and VERY STUPID commercials have pushed it to the point where it is no longer worth it ... we end our services the end of this month.

Regards,
JS

4863. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 20:31:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dl0ui49pcttvn4q2nrm3f63l4fj5ajtiej@4ax.com>
Source record: 19737

On Thu, 27 Nov 2008 11:39:07 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>And I am suggesting that your model is incorrect.

You have the cogent characteristics of my model, now demonstrate your
suggestion by showing its incorrect feature(s). It may even reveal
how you failed to obtain better results for your own model.

73's
Richard Clark, KB7QHC

4864. Lawsuit countdown 4 days to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 20:41:03 UTC
From: kb9rqz@yahoo.com
Message-ID: <ge1ui4pt6g0p98eibuqegdieh9p34vjfrn@4ax.com>
Source record: 19738
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.policy

On Thu, 27 Nov 2008 10:01:42 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>h
fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4865. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 20:58:50 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <6732f690-a6a6-4a81-8d8b-1387d517044c@v42g2000yqv.googlegroups.com>
Source record: 19739

On Nov 25, 11:26 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Art Unwin wrote:
> > Many of us have checked the net for the latest advances in antennas.
> > Advances are usually arrived at public university research units some
> > of which are partially funded by outside sources Most, if not all,
> > the results are presented to the IEEE as a way of getting recognision.
> > But this information such as advancement in science is not provided to
> > the public even tho they came from a public institution. Thus you
> > cannot access it on the net as a member of the public as access is
> > with held UNLESS
> > you hand over some money to the IEEE. Why are the universites not
> > sharing their work with the public?
> > Is it because academics feel they are part of a special club divorced
> > from the public? Ofcourse I may be wrong
> > in taking that view in light of the fact that these study results are
> > available in libraries but why are they not put on the web for the
> > good of science and the general public at large?
> > Art
>
> This is a complex issue and one of considerable debate within those
> universities AND the publishers of the journals.
>
> 1) The journals have operating costs (someone has to edit them and do
> the typesetting and production).. these must be paid by subscription
> fees and page charges from the author. Giving it away for free means
> that other means must be developed for funding.
>
> 2) Not all the funding for research comes with a "must release to
> public" clause. For instance, you might get a grant to defray part of
> the cost of some research, and fund the remaining part out of your own
> assets. The granting agency gets the data they want (at a lower cost
> than paying for all of it), but you retain the rights.
>
> 3) Putting stuff on the web isn't free.
>
> However, a LOT of newer research IS being published for free on the web.
> PLOS (Public Library of Science), PubMed, arxiv, etc. are all examples.
>
> Remember, too, that this is academia, and they tend to be conservative
> and change slowly. To a certain extent, it IS an exclusive club,
> because publication leads to promotion, and the publication process is
> full of gates and wickets. The term "publish or perish" did not arise
> out of thin air.

Jim
IEEE state that if papers were open source it would threaten the
presence of the IEEE?
This statement was in regard to the high costs of obtaining copies
from the IEEE without
having to pay the high costs of belonging . I understand the need for
peer review by academics but not necessarily a private entity
and the IEEE rights to publish such so, are the IEEE demanding SOLE
ownership of presented papers?
I am assuming that all papers presented by the Universities as well as
thesis papers belong to the parent university
based on a recent antenna patent awarded to a University derived from
a student dissertation. This leaves
an outstanding question !. If the university a public entity,
reserves the rights of all papers arrived at the university
then what rights do they hold that allows transference from the public
domain of those rights to a private institution to the detriment of
the public
that finance them?
Regards
Art Unwin

4866. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 21:39:46 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <8462cd8c-e031-48a6-bc1b-70c233113b80@k19g2000yqg.googlegroups.com>
Source record: 19740

Richard Clark wrote:
> You have the cogent characteristics of my model, now demonstrate your
> suggestion by showing its incorrect feature(s).

You gave no characteristics of the NEC construction and settings for your model (cogent or otherwise), as I did for mine. You only stated the results you say you got.

Even Roy Lewallen wrote that he will look into the correspondence of my EZNEC solution with the FCC value for those conditions -- which Roy probably wouldn't choose to do if there was good agreement between them, or my "near field" model was obviously incorrect to him.

RF

4867. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 21:59:49 UTC
From: kb9rqz@yahoo.com
Message-ID: <j26ui4pkc6lj7lq49lgmrvg1q8tqji3ifn@4ax.com>
Source record: 19741
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4868. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-27 22:46:10 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <cv6ui45m6m78jqpp7al82ii7kttem3uju3@4ax.com>
Source record: 19742

On Thu, 27 Nov 2008 10:10:25 -0800, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

>I'm anxious to get started so I've put my copper pipe design on hold well I
>wait for parts and decided to start with a coax approach.

Sigh.

>So I hit the
>hardware store and got some PVC pipe and mounting bits.

Schedule 40, schedule 80, water, or electrical? They're all
different. Did you at least do the microwave oven test on a small
piece to see if you're headed for a problem? I've had a few surprises
with different vendors and styles.

>I understand that
>the PVC is not as good as fiberglass because of it's near field effects, BTW
>if you can tune those effects out, what is the end result in loss?

No. You can't make the radome (pipe) big enough to get out of the
near field. Minimum is a few wavelengths.

Try a chunk of PVC over your 440 HT or scanner whip antenna and see if
you want to continue blundering along this path.

>I plan
>on using LMR-200 because of it's slight rigidity and it's high velocity
>factor (83%).

The added rigidity doesn't buy you much if you're going to shove it
down a pipe.

>I bought 1-1/2 inch rubber washers with a 3/16 hole in the
>center that will slide over the coax and then be pulled into the 1-1/4 inch
>PVC this will center and support the coax up the length of the pipe.

Why such a large diameter pipe? There's no difference in loss.

>I will
>try using some clamp-on ferrites that we have laying around to stub the
>currents on the feed line and slide them around and see if I can tune the
>antenna using the network analyzer.

Got a ferrite that works at 418MHz? Even if the ferrite does work,
the RF its blocking is converted to heat. Wouldn't it be better if
you built a proper matching contrivance to that RF is radiated instead
of absorbed? I suggest you lose the ferrites and band-aids as they

tend to hide design errors and inefficiencies.

>I still don't understand what that
>quarter wave whip is suppose to do that sits on top of the array

I hate easy questions. If you look at the construction of the alternating coax sections, the top section will be one with the hot RF lead eventually connected to the outside of the top coax section. In other words, the outside of the coax is the radiating element.
<http://www.rason.org/Projects/collant/collant.htm>
Why bother using another coax section when it would be easier to just use a piece of wire? Look at the Fig 3 drawing and just follow the RF path from the coax entry at the left to the 1/4 wave element on the right. That might also answer your question about odd/even sections.

>and I think
>I will try to omit that in my first design (unless someone convinces me
>otherwise).

Not recommended, but you have the test equipment to determine if it's a good or bad idea. Ummm... you were planning on testing this thing?

>Anyways, time to get my hands dirty and build me an antenna!

Good luck, but first a little math. What manner of tolerance do you thing you need to cut your coax pieces? Let's pretend you wanted to get the center frequency accurate to 1Mhz. At 418MHz, one wavelength is:
wavelength(mm) = 300,000 / freq(mhz) * VF
wavelength = 3*10^5 / 418 * 0.83 = 596 mm
That works out to:
596 / 418 = 1.4 mm/MHz
So, if you want the center frequency accurate to within +/- 1MHz, you gotta cut it to within +/- 1.4 mm. Good luck. Like I previously ranted, you'll need a cutting fixture. A steady hand, good eye, quality coax, and plenty of patience are also helpful.

Incidentally, since the top 1/4 wave element represents something close to perhaps 50 ohms, it would be interesting to measure the amount of RF that isn't radiated and actually gets to the top section of the antenna. If my analysis of the antenna is correct, the first section (near the coax connector) radiates 1/2 the power. The next section 1/4th. After that 1/8th, etc. By the time it gets to the top of the antenna, there won't be much left. However, that's theory, which often fails to resemble reality. It would interesting if you stuck a coax connector on the top, and measured what comes out.

Happy Day of the Turkeys.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com

Skype: JeffLiebermann AE6KS 831-336-2558

4869. Re: A few questions about collinear coaxial antennas [radomes and dielectrics]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 01:01:53 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <6qHXk.3551$1s7.157@newsfe02.iad>
Source record: 19743

"Thomas Magma" <somewhere@overtherainbow.com> wrote in message
news:IsBXk.2048$zQ3.1475@newsfe12.iad...
>
> Thanks Barry for the in-depth enlightenment of radome material :) Do you
> happen to know the answer to this question: When you tune the near field
> effects of PVC out, what is the end result in loss? and how is this
> compared to fiberglass?

When you tune the antenna to compensate for its surroundings, usually by shortening the elements since the real portion of the permittivity of the close surroundings is capacitive, you just have to accept the added loss due to the imaginary portion of the permittivity, the dielectric dissipation.

When designing a radome, look for a material with the lowest dissipation factor (or loss tangent which is another way of describing the dissipation losses). The added capacitive reactance can be tuned out, but it is still best to use a material with a low dielectric constant. This does not say that the antenna pattern will not be affected, however, as the antenna lengths and spacings are changed.

A good analogy to illustrate this is the fact that an aircraft cannot be perfectly stealthy. If the aircraft is made entirely from microwave transparent material, the difference between that material's dielectric constant and that of the surrounding air will still generate reflections that will show up on radar. In fact, if you make the aircraft out of completely absorbing material, the bow wave compression of the air will create a slight dielectric discontinuity which still reflects microwaves. Of course, the radar cross section will be far smaller. The idea is to make the radar target appear so small that it is ignored.

While the dielectric constant of PVC is slightly lower than fiberglass reinforced polyester or fiberglass reinforced epoxy, its lost tangent is higher. Also, the mechanical strength of PVC is less than the fiberglass reinforced plastics, so you can make the radome thinner with the FRP materials. This benefits the detuning as well as the losses.

Before closing, I would like to comment on an additional related issue brought up by my friend AE6KS...

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:r0jsi4pkdecbf3craqs1i5mjch9f0a3ld4@4ax.com...
>
> If you want to try a real disaster, try black drainage PVC pipe.
> Carbon filled. For a good acid test, try putting a pipe section in a
> microwave oven.

I would be willing to bet that the carbon black had little to do with the losses. It only takes a tiny amount of carbon black to make the plastic quite black looking and to provide good ultraviolet light protection - just a few percent at most. I once needed a good microwave absorber for an instrument I was building. Not wanting to wait on Emerson & Cuming to sell me some of their ECCOSORB &#65533; material, I decided to make my own. Just down the hall was our polymer testing lab where they could blend polymer chips with various additives and mold me some 4" x 4" blocks from the blend. I decided to have them make a polyethylene blend with 30% carbon black added. The finished material was a dull black, and it would even leave nice black marks when rubbed across paper. I was confident when I placed a 1/2" thick block of the material between two WR-90 10 GHz flanges that it would not let much signal through. Boy was I surprised when it offered very little attenuation! It took a while to think about what was happening. The polyethylene was a low loss dielectric material at these frequencies, and the carbon black particles were extremely small. The result was a plastic that contained conductive particles that were insulated from each other. The particles were so small that even at 10 GHz, they were far too small to couple much microwave energy into them. What I really needed was long carbon fibers that made electrical contact with each other in the plastic. I didn't have time to study this as the Eccosorb arrived and I used it in my instrument. But it taught me a valuable lesson about absorbers.

By the way, http://www.eccosorb.com has a number of good technical tutorials on absorbers and dielectrics.

73, Barry WA4VZQ

4870. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 03:36:14 UTC
From: T <kd1s.nospam@cox.nospam.net>
Message-ID: <MPG.2399313ef39330fc9897e3@reader.motzarella.org>
Source record: 19744
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <ggmk1d$9cp$1@news.motzarella.org>, mygarbagecan@verizon.net
says...
>
> "Dave" <noone@nowhere.com> wrote in message
> news:SuyXk.1461$QX3.351@nwrddc02.gnilink.net...
> > TV has never been 'free'. you pay for it with every product you purchase
> > that is advertised on tv. and of course you pay for it in taxes, and also
> > in product purchases from sponsors, for 'public' tv channels. tanstaafl!
> >
> My squawk with "pay" TV is that you pay to get it, and then have to
> additionally watch commercials.
>
>
>

I have exactly the same argument against "pay" TV. So what are we paying
for?

4871. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 03:37:58 UTC
From: T <kd1s.nospam@cox.nospam.net>
Message-ID: <MPG.2399319fbe52842a9897e4@reader.motzarella.org>
Source record: 19745
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <ggmtv7$2bm$2@news.albasani.net>, assemblywizard@gmail.com
says...
> Wayne wrote:
>
> > My squawk with "pay" TV is that you pay to get it, and then have to
> > additionally watch commercials.
> >
> >
>
> The wife and I, with being able, for example, to go out to Fox tvs'
> webpage and view prisonbreak, have, pretty much, given up watching tv
> ... we have been talking about discontinuing cable and dumping satellite
> ... the loud commercials and VERY STUPID commercials have pushed it to
> the point where it is no longer worth it ... we end our services the end
> of this month.
>
> Regards,
> JS
>

I was once spending $140 a month for digital cable and net service. I
dropped all the cable tv services, bumped the net service up to the 25/7
service and now watch via hulu.com, surfthechannel.com, youtube, and
network TV sites.

Cable television is pretty much dead now.

4872. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 04:46:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tvpui4h2tjdaj6vm9184o4u7olkmtc2nuj@4ax.com>
Source record: 19746

On Thu, 27 Nov 2008 13:39:46 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>You gave no characteristics of the NEC construction and settings for
>your model (cogent or otherwise), as I did for mine.

>>On Wed, 26 Nov 2008 11:41:04 -0800 (PST), Richard Fry <rfry@adams.net> wrote:
>>
>>>The near-field analysis of EZNEC for radiation in the horizontal plane
>>>at a point 1 km from a 1/4-wave monopole having two ohms in series
>>>with a Mininec r-f ground, while radiating 1 kW over an earth
>>>conductivity of 8 mS/m is shown as 72 mV/m.

When I observe the operational characteristics of EZNEC (you report
you use it above) AND I observe that it does not offer a Near Field
analysis for Mininec r-f ground (as you report you use above) THEN I
have to wonder how you arrive at a figure of 72 mV/m (as you report
you obtained above). Other than version differences or updates in the
program that supercede mine, I rely on the advice found in the Help
manual provided:
>>Near field analysis is disabled when MININEC-type ground is selected.
>>...Use some other ground type for near field analysis.

Your failure to heed this advice seems consistent with your repeated
ignorance of EZNEC's capacity to perform Near Field Analysis. Also
consistent is the complete absence of radials in your model - the
hallmark (cogent) research of BL&E's "Ground Systems as a Factor in
Antenna Efficiency." This consistency propagates into your near field
report - where did you get
>>>is shown as 72 mV/m.
from?

Did you achieve this valuation through a novel upgrade feature found
in EZNEC 5? If so, I bet the help entry still suggests that mininec
type ground is not preferred (and that you ignored that commentary
too). The differences in models to replicate BL&E results well
illustrates this for any version issue you may reveal.

73's
Richard Clark, KB7QHC

4873. Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 08:53:12 UTC
From: "-.-. --.-" <a@a.com>
Message-ID: <ggobhpskb1@aioe.org>
Source record: 19747

Greets OMs,

yesterday i had a QSO with K2US - impressive antenna, by the way i'm using the station of a local OM near my QTH with a 4 elements 5 band Quad.

The beautiful thing is the 9-9+20 signal around 20.45 UTC, far away in magnitude from the others stateside signals, around S5-7. So i remember my father that tell me one day in his opinion the circular polarization in the better choice... lose no matter about 6 dB, with any kind of polarization used at the other side except circular - and faraday torsion due to ionosphere - and in my mind comes 2 questions...

- we take some advantage from the fact that both are using quad antenna ??
- in my non-knowledge of the facts, i have in the past believed that the quad antenna is near a circular-polarized antenna. Reading books and hearing some QSO in the air i learn that quad can be horizontal or vertical polarized, regard the feed point of the quad.. so - the circular polarization need some kind of "special" feed point or is merely a "circle" antenna ??

Apologize for the english and for the questions, maybe trivials and stupids, but i believe one esxperienced OM can say far better than 100 books.

73,
CQ -.-. --.-

4874. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 09:18:09 UTC
From: "-.-. --.-" <a@a.com>
Message-ID: <ggod0j$35j$1@aioe.org>
Source record: 19748

"-.-. --.-" <a@a.com> ha scritto nel messaggio news:ggobhpskb1@aioe.org...

Yep, and not obviously information, because i'm used to write on the it.*
usenet ierarchy, the contact was made from central Italy :)

-.-. --.-

4875. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 11:53:00 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <cc235a59-1389-483b-9209-ce7de04ec9f1@k36g2000yqe.googlegroups.com>
Source record: 19749

On Nov 27, 10:46 pm, Richard Clark wrote:
>
> When I observe the operational characteristics of EZNEC (you report
> you use it above) AND I observe that it does not offer a Near Field
> analysis for Mininec r-f ground (as you report you use above) THEN I
> have to wonder how you arrive at a figure of 72 mV/m (as you report
> you obtained above). Other than version differences or updates in the
>program that supercede mine, I rely on the advice found in the Help
>manual provided:
>
>>Near field analysis is disabled when MININEC-type ground is selected.
>>...Use some other ground type for near field analysis.

Obviously, near-field analysis was not disabled by/in EZNEC for my model definition. The surface-wave value of 72 mV/m at 1 km for 1 kW of radiated power is shown in the screen clip I linked to in my first post about this.

>Also consistent is the complete absence of radials in your model - the
> hallmark (cogent) research of BL&E's "Ground Systems as a Factor in
> Antenna Efficiency."

The r-f loss of the radial system is accounted for in my model by the two ohms of resistance inserted between the base of the monopole and ground, as shown in my screen clip. This two ohms is approximately the r-f loss of a set of 120 buried radials, each 1/4-wave in physical length.

The peak gain of the elevation pattern in my model (see my screen clip) is consistent with such a ground loss and the selected ground conductivity, so this approach appears to be valid.

Hopefully Roy Lewallen will weigh in, as he has time, to comment on the methods and results of our two analyses -- although probably Roy will need more details about your model construction than you have so far been willing to provide.

I will be content to let the chips fall where they may.

RF

4876. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 13:05:26 UTC
From: Dave <dave@dave.dave>
Message-ID: <492fec96$0$31170$bd467cd0@news.dslextreme.com>
Source record: 19750

-.-. --.- wrote:
> Greets OMs,
>
> yesterday i had a QSO with K2US - impressive antenna, by the way i'm using
> the station of a local OM near my QTH with a 4 elements 5 band Quad.
>
> The beautiful thing is the 9-9+20 signal around 20.45 UTC, far away in
> magnitude from the others stateside signals, around S5-7. So i remember my
> father that tell me one day in his opinion the circular polarization in the
> better choice... lose no matter about 6 dB, with any kind of polarization
> used at the other side except circular - and faraday torsion due to
> ionosphere - and in my mind comes 2 questions...
>
> - we take some advantage from the fact that both are using quad antenna ??
> - in my non-knowledge of the facts, i have in the past believed that the
> quad antenna is near a circular-polarized antenna. Reading books and hearing
> some QSO in the air i learn that quad can be horizontal or vertical
> polarized, regard the feed point of the quad.. so - the circular
> polarization need some kind of "special" feed point or is merely a "circle"
> antenna ??
>
> Apologize for the english and for the questions, maybe trivials and stupids,
> but i believe one esxperienced OM can say far better than 100 books.
>
> 73,
> CQ -.-. --.-
>
>

Circular polarization means you have equal H-Pol and V-Pol radiation,
with one polarization 90 degrees ahead (or behind) of the other.

A quad antenna is a folded dipole.

4877. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 14:07:22 UTC
From: Dave <noone@nowhere.com>
Message-ID: <uWSXk.1595$QX3.908@nwrddc02.gnilink.net>
Source record: 19651

"-.-. --.-" <a@a.com> wrote in message news:ggobhpskb1@aioe.org...
> Greets OMs,
>
> yesterday i had a QSO with K2US - impressive antenna, by the way i'm using
> the station of a local OM near my QTH with a 4 elements 5 band Quad.
>
> The beautiful thing is the 9-9+20 signal around 20.45 UTC, far away in
> magnitude from the others stateside signals, around S5-7. So i remember my
> father that tell me one day in his opinion the circular polarization in
> the better choice... lose no matter about 6 dB, with any kind of
> polarization used at the other side except circular - and faraday torsion
> due to ionosphere - and in my mind comes 2 questions...
>
> - we take some advantage from the fact that both are using quad antenna ??
> - in my non-knowledge of the facts, i have in the past believed that the
> quad antenna is near a circular-polarized antenna. Reading books and
> hearing some QSO in the air i learn that quad can be horizontal or
> vertical polarized, regard the feed point of the quad.. so - the circular
> polarization need some kind of "special" feed point or is merely a
> "circle" antenna ??
>
> Apologize for the english and for the questions, maybe trivials and
> stupids, but i believe one esxperienced OM can say far better than 100
> books.
>
> 73,
> CQ -.-. --.-
>

a quad is generally linearly polarized, either vertical or horizontal. to
get circular polarization you need dual driven elements with the proper
phasing.

4878. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 14:45:45 UTC
From: "-.-. --.-" <a@a.com>
Message-ID: <ggp06q$j9j$1@aioe.org>
Source record: 19652

"Dave" <noone@nowhere.com> ha scritto nel messaggio
news:uWSXk.1595$QX3.908@nwrddc02.gnilink.net...

> a quad is generally linearly polarized, either vertical or horizontal. to
> get circular polarization you need dual driven elements with the proper
> phasing.

Like a calculated piece of coax used to drive the 2nd element 90 electrical
degrees after the first ??

-.-. --.-

4879. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 15:05:44 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9B64482879C85doldridgsprintca@69.16.185.250>
Source record: 19653

Dave <dave@dave.dave> wrote in
news:492fec96$0$31170$bd467cd0@news.dslextreme.com:

>-.-. --.- wrote:
>> Greets OMs,
>>
>> yesterday i had a QSO with K2US - impressive antenna, by the way i'm
>> using the station of a local OM near my QTH with a 4 elements 5 band
>> Quad.
>>
>> The beautiful thing is the 9-9+20 signal around 20.45 UTC, far away
>> in magnitude from the others stateside signals, around S5-7. So i
>> remember my father that tell me one day in his opinion the circular
>> polarization in the better choice... lose no matter about 6 dB, with
>> any kind of polarization used at the other side except circular - and
>> faraday torsion due to ionosphere - and in my mind comes 2
>> questions...
>>
>> - we take some advantage from the fact that both are using quad
>> antenna ?? - in my non-knowledge of the facts, i have in the past
>> believed that the quad antenna is near a circular-polarized antenna.
>> Reading books and hearing some QSO in the air i learn that quad can
>> be horizontal or vertical polarized, regard the feed point of the
>> quad.. so - the circular polarization need some kind of "special"
>> feed point or is merely a "circle" antenna ??
>>
>> Apologize for the english and for the questions, maybe trivials and
>> stupids, but i believe one esxperienced OM can say far better than
>> 100 books.
>>
>> 73,
>> CQ -.-. --.-
>>
>>
>
>Circular polarization means you have equal H-Pol and V-Pol radiation,
>with one polarization 90 degrees ahead (or behind) of the other.
>
>A quad antenna is a folded dipole.

Except the top and bottom arms of a horizontally polarized quad element
are far enough apart to provide some gain and to slightly lower the
pattern from that of a dipole at the quad's central height. In a four or
five element design this can be quite effective. I was on the far end of
the QSO (at VE8ML) back in 1965 when OH8OS tested some very large quads

on 15m. They were impressive.

--
Dave Oldridge+
ICQ 454777283

4880. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 15:43:59 UTC
From: JB <nospam@goofball.net>
Message-ID: <3lUXk.1558$us6.110@nwrddc01.gnilink.net>
Source record: 19654
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ggmtv7$2bm$2@news.albasani.net...
> Wayne wrote:
>
> > My squawk with "pay" TV is that you pay to get it, and then have to
> > additionally watch commercials.
> >
> >
>
> The wife and I, with being able, for example, to go out to Fox tvs'
> webpage and view prisonbreak, have, pretty much, given up watching tv
> ... we have been talking about discontinuing cable and dumping satellite
> ... the loud commercials and VERY STUPID commercials have pushed it to
> the point where it is no longer worth it ... we end our services the end
> of this month.
>
> Regards,
> JS

Ya but they're putting commercials on the web episodes too! You cant get away from whatever they want to jam into the stream!

I still have my VCR. I don't mind FFwd every few minutes. After all, if you have seen the commercial once, you have been "informed". I caught a couple of episodes of Sarah Connor Chronicles on the web and quality was pretty good but they played the same ad over and over until I found myself singing to it, so that I had to smack myself in the head with the phonebook to reboot myself.

4881. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 16:06:27 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <7GUXk.1603$QX3.520@nwrddc02.gnilink.net>
Source record: 19655

"-.-. --.-" <a@a.com> wrote in message news:ggp06q$j9j$1@aioe.org...
>
> "Dave" <noone@nowhere.com> ha scritto nel messaggio
> news:uWSXk.1595$QX3.908@nwrddc02.gnilink.net...
>
>> a quad is generally linearly polarized, either vertical or horizontal.
>> to get circular polarization you need dual driven elements with the
>> proper phasing.
>
> Like a calculated piece of coax used to drive the 2nd element 90
> electrical degrees after the first ??
>
> -.-. --.-

Hi MG

It isnt at all so simple as feeding one radiator 90 degrees later than another to get "circular" polarization. For instance two linear radiators can be fed in phase to get "CP". And two linear radiators can be fed with one 90 defrees earlier (or later) than the other.
Look at wikipedia http://en.wikipedia.org/wiki/Circular_polarization

I'd expect that you can feed two Quads in phase to get CP along the axis of their mounting boom. You'd space them appropriately and conect their fed points appropriately.

Jerry KD6JDJ

4882. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 16:20:17 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <5TUXk.1605$QX3.1353@nwrddc02.gnilink.net>
Source record: 19656

"Jerry" <jerrymartes@verizon.net> wrote in message
news:7GUXk.1603$QX3.520@nwrddc02.gnilink.net...
>
> "-.-. --.-" <a@a.com> wrote in message news:ggp06q$j9j$1@aioe.org...
>>
>> "Dave" <noone@nowhere.com> ha scritto nel messaggio
>> news:uWSXk.1595$QX3.908@nwrddc02.gnilink.net...
>>
>>> a quad is generally linearly polarized, either vertical or horizontal.
>>> to get circular polarization you need dual driven elements with the
>>> proper phasing.
>>
>> Like a calculated piece of coax used to drive the 2nd element 90
>> electrical degrees after the first ??
>>
>> -.-. --.-
>
> Hi MG
>
> It isnt at all so simple as feeding one radiator 90 degrees later than
> another to get "circular" polarization. For instance two linear
> radiators can be fed in phase to get "CP". And two linear radiators can
> be fed with one 90 defrees earlier (or later) than the other.
> Look at wikipedia http://en.wikipedia.org/wiki/Circular_polarization
>
> I'd expect that you can feed two Quads in phase to get CP along the axis
> of their mounting boom. You'd space them appropriately and conect their
> fed points appropriately.
>
> Jerry KD6JDJ

Jerry has both bad eyes and bad code. I now see CQ and not MG. Sorry!

Jerry KD6JDJ

4883. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 16:38:26 UTC
From: JB <nospam@goofball.net>
Message-ID: <68VXk.1566$us6.1476@nwrddc01.gnilink.net>
Source record: 19657

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ggmtlm$2bm$1@news.albasani.net...
> JB wrote:
>
> >> WOW!
> >>
> >> I like idiots, but for the same reason ... seems to me, someone is
> >> mistaken ...
> >
> > No, KGB don't HAVE to manipulate idiots. They manipulate the
intellectuals,
> > who in turn lead the idiots until they all wind up in a ditch. They
only
> > serve purpose to destabilize and demoralize. There is no place for them
in
> > normalization phase because they find they have been duped and become
bitter
> > enemies. It is better they be liquidated first in the normalization
phase.
> >
>
> Yeah, I guess ... whatever he said ...
>
> Regards,
> JS

Here is full explanation from 1985 interview of KGB defector. If accent is
difficult, subtitles are in French.

Although plans may have changed since then, it appears that once plan is put
into motion, it is self-perpetuating since brainwashed idiots become too
deeply ingrained in thinking and entrenched in their positions, continually
indoctrinating others..

http://www.dailymotion.com/video/x32cxf_yuri-bezmenov

4884. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 18:40:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggpduq$vn0$1@news.albasani.net>
Source record: 19658

JB wrote:

> ...
> Here is full explanation from 1985 interview of KGB defector. If accent is
> difficult, subtitles are in French.
>
> Although plans may have changed since then, it appears that once plan is put
> into motion, it is self-perpetuating since brainwashed idiots become too
> deeply ingrained in thinking and entrenched in their positions, continually
> indoctrinating others..
>
> http://www.dailymotion.com/video/x32cxf_yuri-bezmenov

Your first problem, which seems to negate your entire statement(s), is
the obvious error in your definition of "intellectual." Anyone make
those error in reasoning/thinking is far from an "intellectual",
although very young ones might make those errors.

An exact example of what the error(s) you are making was given with John
Mccain--the IDIOT "intellectuals" called him a war hero!

Now, someone who was ONLY able to become a pilot because his father was
an admiral and exerted his influence, smashed up five planes
(http://www.vietnamveteransagainstjohnmccain.com/cin_mccain_lost_five_u.htm)
and was captured by the enemy and held for five years is NOT a true "war
hero" in the true meaning to the term ...

... idiots abound, you can know them by the errors in the reasoning,
text and thinking ... idiots can't ... :-(

Regards,
JS

4885. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 18:43:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggpe4a$vn0$2@news.albasani.net>
Source record: 19659

JB wrote:

> ...
> Here is full explanation from 1985 interview of KGB defector. If accent is
> difficult, subtitles are in French.
>
> Although plans may have changed since then, it appears that once plan is put
> into motion, it is self-perpetuating since brainwashed idiots become too
> deeply ingrained in thinking and entrenched in their positions, continually
> indoctrinating others..
>
> http://www.dailymotion.com/video/x32cxf_yuri-bezmenov

Your first problem, which seems to negate your entire statement(s), is
the obvious error in your definition of "intellectual." Anyone making
those errors in reasoning/thinking is far from an "intellectual",
although very young ones might make those errors.

An exact example of what the error(s) you are making was given with John
Mccain--the IDIOT "intellectuals" called him a war hero!

Now, someone who was ONLY able to become a pilot because his father was
an admiral and exerted his influence, smashed up five planes
(http://www.vietnamveteransagainstjohnmccain.com/cin_mccain_lost_five_u.htm)

and was captured by the enemy and held for five years is NOT a true "war
hero" in the true meaning to the term ...

... idiots abound, you can know them by the errors in the reasoning,
text and speech ... idiots can't ... :-(

Regards,
JS

4886. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 18:51:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qnb0j4t75b836jforvaf4ubqvnifvimir2@4ax.com>
Source record: 19660

On Fri, 28 Nov 2008 03:53:00 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>>>Near field analysis is disabled when MININEC-type ground is selected.
>>>...Use some other ground type for near field analysis.
>
>Obviously, near-field analysis was not disabled by/in EZNEC for my
>model definition.

How very odd, when this comes as a distinct contradiction with your
explicit:
>>>>The near-field analysis of EZNEC for radiation in the horizontal plane
>>>>at a point 1 km from a 1/4-wave monopole having two ohms in series
>>>>with a Mininec r-f ground, while radiating 1 kW over an earth
>>>>conductivity of 8 mS/m is shown as 72 mV/m.
where the question remains at:
>> where did you get
>>>>>is shown as 72 mV/m.
>>from?
It is evident your field quote is NOT from this specific Mininec r-f
ground model of yours above.

As you admit you had near-field analysis available above (you still do
not explain how in the context of a mini-nec ground per your stated
model's characteristics), and you do not describe any radial treatment
(cogent elements of the BL&E paper "Ground Systems as a Factor in
Antenna Efficiency"), and you do describe a 1/4 radiator (not found in
BL&E experimental data), then your call for suggestions on how to fix
your model's failure in the context of BL&E becomes an obscure moving
target. My "suggestion" alters slightly with do it right or discard
it as trash. There aren't really many other alternatives.

>Hopefully Roy Lewallen will weigh in, as he has time, to comment on
>the methods and results of our two analyses -- although probably Roy
>will need more details about your model construction than you have so
>far been willing to provide.

More interesting would be his enquiry or explanation into how you
defeated the lock-out for a feature that is a poor method for near
field analysis. I find it more intriguing in how you embrace it in
spite of stated cautions to employ other methods. Yes, this novel
adaptation of Mininec r-f ground to near field solutions bears more
explanation from some source. I cannot imagine that explanation will
improve your model's performance to equal mine however. That is
already well evident.

As for more details, the BL&E paper "Ground Systems as a Factor in Antenna Efficiency" is the totality of my sources. Those practiced in the craft of modeling and proficient with its tools will find it sufficiently informing if they hadn't already proceeded to a successful implementation from my descriptions in this thread.

73's
Richard Clark, KB7QHC

4887. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 20:05:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggpiu3$5m3$1@news.albasani.net>
Source record: 19661
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

JB wrote:

> ...
> Ya but they're putting commercials on the web episodes too! You cant get
> away from whatever they want to jam into the stream!
>
> I still have my VCR. I don't mind FFwd every few minutes. After all, if
> you have seen the commercial once, you have been "informed". I caught a
> couple of episodes of Sarah Connor Chronicles on the web and quality was
> pretty good but they played the same ad over and over until I found myself
> singing to it, so that I had to smack myself in the head with the phonebook
> to reboot myself.
>

Yes, there is much I have experienced there ...

We have dishtv, you can record shows/movies to the DVRs' recorder and
then click a few times to go through 3-5-7-or more minutes of
commercials ...

Still, just the "feel" and the "stress" of all this leaves me with a bad
taste in my mouth; when I mentioned that to the wife, she carried on
for a good fifteen minutes+ on her own "emotional distress."

This is just all about what a person is able to accept, or not, some
might not even notice any "discomfort."

AT&T is the first "BIG one we took on", we dropped them and went to
Vonage--that was unacceptable at $29.?? a month, for the service we
received--in short, and my humble opinion, they are a ripoff. We now
use magicjack (http://www.magicjack.com) as $20 bucks for the little USB
dongle, then $20 bucks a year, thereafter, to call all the US and Canada
for free--we found our phone service!

Regards,
JS

4888. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 20:07:05 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bae5cf7f-6f7f-4c63-9c11-d26975245849@z1g2000yqn.googlegroups.com>
Source record: 19662

On Nov 28, 12:51 pm, Richard Clark

> where the question remains at:>> where did you get
> >>>>>...72 mV/m from?
>
> It is evident your field quote is NOT from this specific Mininec r-f
> ground model of yours above.

Can you not view the screen clip at the link I posted showing this?
Why do you keep asking?

All of the windows shown in my screen clip resulted from the NEC model data appearing in the upper left window of that clip, and all windows in the clip appeared on the screen at same time and were driven by that data. Note the selection of a Real/MININEC ground in the EZNEC window in the upper left corner, and the further selection of a "medium ground" on the line below. One of the other windows there shows the "near-field" value of 72 mV/m at 1 km for 1 kW of radiated power for this model. Are you comprehending all that is shown in that clip?

> More interesting would be his enquiry or explanation into how you
> defeated the lock-out for a feature that is a poor method for near
> field analysis.

No defeat of such was necessary. EZNEC produced the data results for my model exactly as shown in my screen clip, with no complaints or subterfuge on my part.

RF

4889. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 21:24:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2ck0j41r0lsu1h99nbbnp7d5kebul8t20e@4ax.com>
Source record: 19663

On Fri, 28 Nov 2008 12:07:05 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>On Nov 28, 12:51ï¿½pm, Richard Clark
>
>> where the question remains at:>> where did you get
>> >>>>>...72 mV/m from?
>>
>> It is evident your field quote is NOT from this specific Mininec r-f
>> ground model of yours above.
>
>Can you not view the screen clip at the link I posted showing this?
>Why do you keep asking?

Because in a commercial release, suitable to professional and
scholarly reporting, it is obviously locked out as an available option
- by design and documented as so. A screen shot does not describe
your actions. You need only explicitly state that when you selected
the mini-nec ground model, that you had the NF button available and
you selected it. If such is the case, it is a bug in Roy's demo -
caveat emptor. I don't do research with demo applications.

The long and short of it is that what your poor model reveals is a
departure from the data found in the BL&E paper "Ground Systems as a
Factor in Antenna Efficiency." You
1. do not have a construction of radials of any type;
2. do not have a radiator sized to their specification;
3. employ an engine (mini-nec) which is poorly suited to the task;
4. excite the model at a frequency not supported in data in BL&E;
5. fail to note the documented advisories about near field operation
below 3MHz when such analysis is available.

There is no point in asking for how to "fix it" when your model is
irreconcilably crippled. Using a demo version of EZNEC is not suited
to the task. You couldn't even use my model as it is constructed with
fine granularity that exceeds the capacity of EZNEC, and supported
only with EZNEC+. There are alternatives that are free, and unlimited
in their segment counts available which is necessary for a proper
analysis. Caveat emptor still prevails, and you get the quality of
support you pay for.

I would "suggest" given all the cautions, contrarian advisories
offered, and warnings direct from the tool's author, that their
cumulative effect would seem to doom you to disappointment if you
demand something better than several percent concurrence to the data
supplied in the BL&E paper "Ground Systems as a Factor in Antenna

Efficiency" when abstracted to other applications.

73's
Richard Clark, KB7QHC

4890. Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 21:28:42 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <37dd19d3-a2a1-4c63-b99a-709e5d66f044@j11g2000yqg.googlegroups.com>
Source record: 19664
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

Hello,

I made an excel sheet to simulate Fresnel diffraction patterns. I used a 2 way data table to generate the "infinitesimal" contributions from the EM field. After summation of the contributions in the 2D tables, a have one result cell (that holds |E|) and three input cells (variables) for x-, y-, and z- coordinate for the observation point. When I change the coordinates manually, the results seem OK.

The idea was to use another table (one way table) to plot |E| versus one of the input cells. However, I cannot get the table working. I tried "scenarios" (filling in each scenario by hand), but Excel stores the individual worksheets, so I ran out of the EXCEL 2000 internal memory limit (I think of about 60MB). I also tried the offset function, in combination with a one-way table. This also didn't work.

It seems that once you use a data table that uses one (or two) of your variables, you cannot use another table to manipulate a third variable (parameter).

Does somebody know a solution for this (I do not prefer a VB one)?

Best regards,

Wim
PA3DJS
www.tetech.nl
The PM is valid when you don't forget to take out abc.

4891. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 22:52:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0ft0j4hq4fh9top3n3kpitija6h065v4qb@4ax.com>
Source record: 19665
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

On Fri, 28 Nov 2008 13:28:42 -0800 (PST), Wimpie <wimabctel@tetech.nl>
wrote:

>Does somebody know a solution for this (I do not prefer a VB one)?
>

Hi Wim,

You might try OpenOffice Calc (part of the entire OpenOffice suite). I
have no direct experience in the matters you are having difficulty
with, however.

73's
Richard Clark, KB7QHC

4892. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-28 23:39:35 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <717902c3-a309-4bb2-88dd-cdcee9656465@33g2000yqm.googlegroups.com>
Source record: 19666

On Nov 28, 3:24 pm, Richard Clark posted:

> >Can you not view the screen clip at the link I posted showing this?
> >Why do you keep asking?
>
> Because in a commercial release, suitable to professional and
> scholarly reporting, it is obviously locked out as an available option
> - by design and documented as so.

> A screen shot does not describe your actions. You need only
> explicitly state that when you selected the mini-nec ground model,
> that you had the NF button available and you selected it.

To humor you, then... I explicitly state that when I selected the Real/ MININEC ground model, I had the NF button available and that I selected it. The result of that analysis is included in the screen clip at the link I posted, and which you seem unable to comprehend.

Also please note that I have already described and documented my EZNEC model and actions in far more detail than you have done for yours, so far.

Note further that the Demo versions of EZNEC operate exactly the same as the paid versions, except for the number of segments permitted in the model -- which was not a factor in the model I constructed. I'm sure that Roy or someone else will correct me if that statement is provably wrong.

> The long and short of it is that what your poor model reveals is a
> departure from the data found in the BL&E paper "Ground Systems as a
> Factor in Antenna Efficiency." You

>1. do not have a construction of radials of any type;

Their effect was included as I described in an earlier post. I will understand if this concept evades you.

> 2. do not have a radiator sized to their specification;

A 1/4-wave monopole is a 1/4-wave monopole, regardless of the operating frequency. The intrinsic radiation envelope for a given radiated power actually launched by such a monopole (e.g., apart from the effects of the propagation environment) is the same at all those frequencies.

If not, the FCC would/could not have adopted the results of the BL&E experiments at 3 MHz as applicable to the entire MW AM broadcast band (which they did).

> 3. employ an engine (mini-nec) which is poorly suited to the task;

A MININEC ground itself is not an engine. It is a only a condition used by the NEC engine.

> 4. excite the model at a frequency not supported in data in BL&E;

See my response to your 2 above. In reality, surface-wave ground losses in the MW BC band are less than at the 3 MHz freq used in the BL&E studies, so the applicability of their findings is even more relevant to BC operations.

> 5. fail to note the documented advisories about near field operation
> below 3MHz when such analysis is available.

No such advisory was presented by/in EZNEC during the process of generating and analyzing my model.

I suggest you cool it for a while, and wait to see what Roy Lewallen might post about all of this.

RF

4893. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 01:08:06 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <22c276ec-6393-4815-a047-7be3577794b2@v39g2000pro.googlegroups.com>
Source record: 19667

On Nov 27, 2:46 pm, Jeff Liebermann <je...@cruzio.com> wrote:
...
> Good luck, but first a little math. What manner of tolerance do you
> thing you need to cut your coax pieces? Let's pretend you wanted to
> get the center frequency accurate to 1Mhz. At 418MHz, one wavelength
> is:
>   wavelength(mm) = 300,000 / freq(mhz) * VF
>   wavelength = 3*10^5 / 418 * 0.83 = 596 mm
> That works out to:
>   596 / 418 = 1.4 mm/MHz
> So, if you want the center frequency accurate to within +/- 1MHz, you
> gotta cut it to within +/- 1.4 mm. Good luck. Like I previously
> ranted, you'll need a cutting fixture. A steady hand, good eye,
> quality coax, and plenty of patience are also helpful.

But why would you care to try to get it within 1MHz? With only four
radiating elements, the beam 3dB width will be roughly 8 degrees if
the bottom of the antenna is a wavelength above ground (30 degrees in
freespace...). There's not much point in putting a lot of effort into
get closer than perhaps 4 electrical degrees along the line, and I
don't believe even that is necessary to get good performance. That's
several mm, and should be easy with such short lengths. Using foam-
Teflon coax makes it easy to do: the insulation doesn't melt when you
solder things together. I cut the sections to matched lengths, use a
little jig to trim the layers to the same lengths on each, and then
put a wrapping of 30AWG or so silver plated wire (wire-wrap wire)
around each joint to hold it while soldering. That makes it easy to
adjust before soldering, and solid after.
>
> Incidentally, since the top 1/4 wave element represents something
> close to perhaps 50 ohms, it would be interesting to measure the
> amount of RF that isn't radiated and actually gets to the top section
> of the antenna. If my analysis of the antenna is correct, the first
> section (near the coax connector) radiates 1/2 the power. The next
> section 1/4th. After that 1/8th, etc. By the time it gets to the top
> of the antenna, there won't be much left. However, that's theory,
> which often fails to resemble reality. It would interesting if you
> stuck a coax connector on the top, and measured what comes out.

There's very little loss in a half wave of decent coax at 450MHz.
That means that the voltage across the lowest junction between
sections is echoed up the antenna at each other junction. In
freespace, by symmetry, the currents will be very nearly the same
going down from the top as going up from the bottom. My model over
typical ground (bottom a wavelength above the ground) shows current

symmetry within a percent or so, assuming equal voltages driving each of the three junctions. If you wish, you can use the parameters of the line you're actually using to figure the differences among the feedpoint voltages, based on the loads at each junction. When I've done that in the past, the differences are practically negligible. You can iterate, feeding those voltages back into the model to find new load impedances, etc., repeating till you're happy that the models have converged. Recent versions of EZNEC even let you put the transmission line into the model, along with its loss.

The supporting tube certainly will affect the feedpoint impedance, but in my experience, it does not materially affect the pattern. I deal with the impedance through a matching network; it's no trouble to adjust for a low enough reflection that I don't worry about it. Decoupling is the more interesting problem, to me.

Cheers,
Tom

4894. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 01:11:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <ssGdnWbP0e9QC63UnZ2dnUVZ_hadnZ2d@posted.easystreetonline>
Source record: 19668

It's possible to run a near field analysis using MININEC type ground with some v. 4.0 and all v. 3.0 and earlier versions of EZNEC. However, the results will be wrong. The problem with using near field analysis and MININEC type ground was discovered while v. 4.0.27 was current, and the restriction preventing that combination was introduced at v. 4.0.28 in August 2006. So only v. 4.0.28 and later programs have this restriction. Please see the last paragraph of this posting for remedies.

In EZNEC v. 4.0.28 and later, the NF Tab button is greyed out whenever a MININEC-type ground is specified. If it's clicked, you'll see a message that near field analysis is disabled when MININEC-type ground is specified. If you click Help in the message window, it'll open the manual topic which discusses real ground types. There, you'll find:

Near field analysis is disabled when MININEC-type ground is selected.

Tests have shown that, because of the fundamental way NEC does calculations, near field analysis with MININEC-type ground can produce significantly erroneous results, particularly in the vicinity of a wire which is connected to ground. This is really a contrived situation anyway, because the only way to achieve a ground connection for a real antenna comparable to the MININEC-type ground model is to install a radial system. This will alter the ground conductivity and local fields, so the MININEC-type ground model isn't really representative of conditions near a grounded wire in any case. Use some other ground type for near field analysis.

If the conclusion that EZNEC near field results differ from the FCC ground wave predictions is based on a near field analysis with MININEC-type ground, I'm not surprised at the disagreement. The analysis should be redone with a large number of radials just above the ground, and High Accuracy ground used instead of MININEC-type ground.

Two reminders:

1. As explained in the EZNEC manual, "near field" analysis isn't restricted to the near field. It's actually "total field" -- including ground wave -- and is accurate at any reasonable distance. The "near field" nomenclature is carried over from NEC.
2. The EZNEC ground model is flat and infinite in extent. So the predicted direct line field begins deviating from actual field values where the curvature of the Earth becomes a significant factor.

Anyone using EZNEC v. 3.0 and earlier should avoid using the combination of near field analysis and MININEC-type ground. Anyone using v. 4.0 should update his program to the last revision of that version, 4.0.39. You can find instructions on updating in the manual, Support/Updates (Maintenance Releases). To determine which revision you have, click Help in the main program window, then About EZNEC. I strongly recommend that v. 5.0 users periodically check for updates.

Roy Lewallen, W7EL

4895. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 01:21:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nv41j41ishciaa8u7j9f0tl6oq4v0710la@4ax.com>
Source record: 19669

On Fri, 28 Nov 2008 15:39:35 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>wait to see what Roy Lewallen might post about all of this.

Are you going to ask for a refund?

73's
Richard Clark, KB7QHC

4896. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 01:24:34 UTC
From: JB <nospam@goofball.net>
Message-ID: <mR0Yk.1656$us6.512@nwrddc01.gnilink.net>
Source record: 19670

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ggpe4a$vn0$2@news.albasani.net...
> JB wrote:
>
> > ...
> > Here is full explanation from 1985 interview of KGB defector. If accent
is
> > difficult, subtitles are in French.
> >
> > Although plans may have changed since then, it appears that once plan is
put
> > into motion, it is self-perpetuating since brainwashed idiots become too
> > deeply ingrained in thinking and entrenched in their positions,
continually
> > indoctrinating others..
> >
> > http://www.dailymotion.com/video/x32cxf_yuri-bezmenov
>
> Your first problem, which seems to negate your entire statement(s), is
> the obvious error in your definition of "intellectual." Anyone making
> those errors in reasoning/thinking is far from an "intellectual",
> although very young ones might make those errors.
>
> An exact example of what the error(s) you are making was given with John
> Mccain--the IDIOT "intellectuals" called him a war hero!
>
> Now, someone who was ONLY able to become a pilot because his father was
> an admiral and exerted his influence, smashed up five planes
>
(http://www.vietnamveteransagainstjohnmccain.com/cin_mccain_lost_five_u.htm)
>
> and was captured by the enemy and held for five years is NOT a true "war
> hero" in the true meaning to the term ...
>
> ... idiots abound, you can know them by the errors in the reasoning,
> text and speech ... idiots can't ... :-(
>
> Regards,
> JS

You must be an intellectual. Help me to reason this then.
http://www.onenewsnow.com/Headlines/Default.aspx?id=336456

4897. Re: WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 02:04:55 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <br1Yk.1781$Et1.853@news-server.bigpond.net.au>
Source record: 19671
Cross-posted to: rec.radio.amateur.antenna,misc.transport.road

"Mark" <makolber@yahoo.com> wrote in message
news:0815f4c7-4dd0-404f-88d6-41b0bc3870a3@b2g2000prf.googlegroups.com...
> WHEEL STATIC ONLY ON SOME PATCHES OF PAVEMENT? WHY?
> With the financial mess, I have started to listen to AM radio in the
> car on the way to and from work for the past few weeks and I've
> noticed some random static at certain locations. At first I
> attributed this to some power line noise. Bit it didn't really sound
> like 60 Hz buzz hash, it was more random popcorn like but I know power
> lines can blow around in the wind and have strange discharges so I
> didn't think too much of it for a while. But after a few days I
> noticed that the static is there only when the car is moving. OK, so
> its wheel static. Static electricity from the wheels or brakes or
> something. OK that's not unusual either. But it is the combination
> that has me curious. This static only occurs when the car is moving
> and it only occurs at certain repeatable locations on my drive.
> Everyday when I turn the corner from X to Y, I get the static as the
> car is moving, but not when stopped at the same corner. And I never
> get the static when turning the corner from A to B. If it was power
> line, stopping the car wouldn't stop the static. If it is wheel
> static, why does it not happen all the time and happen only at certain
> locations. It seems as if these certain locations have something
> special about the pavement or the water content of the soil or
> something. None of that seems likely to me though, I see nothing
> changing in the pavement as I drive from an area of static to an area
> of non-static. It is not related to stepping on the brake or gas or
> shifting gears or going over bumps or any other aspect of the car that
> I can tell other than it's speed down the road.
> As an experiment, I attached a drag wire under the car. The wire
> drags on the ground to discharge any static build up the car. This
> made no difference. Another clue, we've had no rain here in a
> while. The static all stops during wet weather. Also I am in the
> Philadelphia area and the AM station is in the New York area so it is
> on the weak side.
> I've been a ham for over 30 years and I have a lot of experience with
> EMI, but this one has me scratching my head. The wheel static
> changes repeatably in different locations for no apparent reason.
> It's got to be something to do with the pavement. Anybody have any
> experience with this?
>
> Mark
>
Mark, I came across this article, it may help you.
http://www.k0bg.com/static.html

73
HarryH

4898. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 02:17:15 UTC
From: JB <nospam@goofball.net>
Message-ID: <LC1Yk.1695$QX3.1409@nwrddc02.gnilink.net>
Source record: 19672

> Now, someone who was ONLY able to become a pilot because his father was
> an admiral and exerted his influence, smashed up five planes
>
(http://www.vietnamveteransagainstjohnmccain.com/cin_mccain_lost_five_u.htm)
> and was captured by the enemy and held for five years is NOT a true "war
> hero" in the true meaning to the term ...
>
> ... idiots abound, you can know them by the errors in the reasoning,
> text and thinking ... idiots can't ... :-(

The Forrestal disaster was attributed to druggies. The enemy was no doubt there on board. Many people have yet to figure out about the mechanics of such disasters. I submit that there will be 2 sides to every story to come out of the Vietnam war, and that sufficient truth is often left out to allow that.

I wrecked a few cars before I learned how to drive. Have you ever been tortured for information? or just for the hell of it? People who sit around and talk about it over tea aren't fit to judge who a hero is but they are often left to talk about it. Let's just call him "experienced". I really don't consider Obama to be the "Black Messiah" either.

I feel that both candidates were potential disasters, showing the idiots had prevailed before the election. The vote only served as an international "poll" on how best to proceed to our doom. It seems the election has tried to set the clock back to what it was before 9/11. Let's see what develops this time around.

4899. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 02:19:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggq8r0$t3p$1@news.albasani.net>
Source record: 19673

JB wrote:

> ...
> You must be an intellectual. Help me to reason this then.
> http://www.onenewsnow.com/Headlines/Default.aspx?id=336456
>

I am intellectual enough to recognize something I have never taken an interest in. I am intellectual enough to recognize something I have never read on, engaged in discussion upon, and things which invoke and evoke emotions to cloud the participants into a "religious fervor", willing to guard and defend their own political beliefs.

And, finally, I am intellectual to recognize something which I have no intellectual interest in ...

Now, all that said, it would surprise me if one had ALL the facts, data and knowledge of the evil done, that the KGB should appear any more evil than the CIA or other related and/or secret arms of their and/or our governments ... my blind belief that men in power would honor their duties and responsibilities to the American people has been destroyed.

The time when our nation stood on infallible principals, morals, ethics, honors and commitments has slowly disappeared until such territories are loath to intellectuals--other than to demand a return to sanity, truth in government and the publics right to know, and a fair and just system.

Idiots will see little problem jumping into this quagmire.

P.S. Any of the following, and all, definitions of quagmire will do:

1. an area of miry or boggy ground whose surface yields under the tread; a bog.
2. a situation from which extrication is very difficult: a quagmire of financial indebtedness.
3. anything soft or flabby.

Or, intellectuals can tell when an argument or discussion is worth having; for the rest, there is always Rush Limbaugh.

Regards,
JS

4900. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 02:33:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <kuedndFdv8h-NK3UnZ2dnUVZ_uSdnZ2d@posted.easystreetonline>
Source record: 19674

Richard Fry wrote:
> . . .
> Note further that the Demo versions of EZNEC operate exactly the same
> as the paid versions, except for the number of segments permitted in
> the model -- which was not a factor in the model I constructed. I'm
> sure that Roy or someone else will correct me if that statement is
> provably wrong.
> . . .

You are correct. The demo is exactly the same as the standard EZNEC program except for the segment limitation. But I recommend using the current demo program rather than an older version or revision. Demo programs can be updated at any time by downloading and installing the current demo from http://eznec.com/demoinfo.htm. The old program can be uninstalled first if desired; otherwise the new one will overwrite the old one. This process won't harm any saved description files.

Roy Lewallen, W7EL

4901. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 02:44:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <KIudnRgm9PMXMa3UnZ2dnUVZ_sLinZ2d@posted.easystreetonline>
Source record: 19675

Dave wrote:
>
> Circular polarization means you have equal H-Pol and V-Pol radiation,
> with one polarization 90 degrees ahead (or behind) of the other.

That's not a very good description, although it's correct. You can separate a circularly polarized field into vertically and horizontally polarized components, the sum of which is the circularly polarized field. And if you do that, you'll find that the two components are 90 degrees out of phase with each other.

But here's a little more complete description: The electric (E) field of a horizontally polarized wave is horizontal, and the E field of a vertically polarized wave is vertical. But the E field of a circularly polarized wave rotates at the transmission frequency, one revolution per cycle. The instantaneous amplitude of a vertically or horizontally polarized field is sinusoidal, varying at the transmission frequency. The amplitude of a circularly polarized wave is constant.

> A quad antenna is a folded dipole.

No, it's not.

Roy Lewallen, W7EL

4902. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 02:51:59 UTC
From: JB <nospam@goofball.net>
Message-ID: <j72Yk.1667$us6.978@nwrddc01.gnilink.net>
Source record: 19676

... my blind belief that men in power would honor their
> duties and responsibilities to the American people has been destroyed.
>
> The time when our nation stood on infallible principals, morals, ethics,
> honors and commitments has slowly disappeared until such territories are
> loath to intellectuals--other than to demand a return to sanity, truth
> in government and the publics right to know, and a fair and just system.
>

This is actually where I have stood since the first grade. Except that the public seems to have abdicated it's right to know by entrusting that to advertisers and spokesman.

1. Vote no when there is too much verbiage in legislation
2. Vote such that politicians will tend wear themselves out (on each other) before doing harm which often results from an unchallenged decision. This also gives the public more of a swing vote in their decisions.

The only infallible is God. Our country takes a tumble every time we lose our moral compass. Aside from that, NO country or system has ever been infallible. We could be disappointed under any system that we entrust all power to men (or women). Be very afraid when they are all in complete agreement, because they won't need us for anything anymore.

4903. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 02:54:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggqasm$u15$1@news.albasani.net>
Source record: 19677

JB wrote:

> ...
> The Forrestal disaster was attributed to druggies. The enemy was no doubt
> there on board. Many people have yet to figure out about the mechanics of
> such disasters. I submit that there will be 2 sides to every story to come
> out of the Vietnam war, and that sufficient truth is often left out to allow
> that.
>
> I wrecked a few cars before I learned how to drive. Have you ever been
> tortured for information? or just for the hell of it? People who sit around
> and talk about it over tea aren't fit to judge who a hero is but they are
> often left to talk about it. Let's just call him "experienced". I really
> don't consider Obama to be the "Black Messiah" either.
>
> I feel that both candidates were potential disasters, showing the idiots had
> prevailed before the election. The vote only served as an international
> "poll" on how best to proceed to our doom. It seems the election has tried
> to set the clock back to what it was before 9/11. Let's see what develops
> this time around.

Along the way, though college, it is pointed out to you that any great story (or, at least a believable one) has a protagonist and an antagonist (sometimes more of them, sometimes less of them); i.e. a "good guy" and a "bad guy." It is based on a storyline where great adversity is found, great sacrifice and energy extended and exerted, and finally the defeat of the enemy is had ... funny, but we will fall for this same line though uncounted books by uncounted authors. Read any great Greek tragedies/novels/plays, Shakespeare knew this and you find it in his offerings. (Or, turn on Rush, "... bad democrats, good republicans ...", this is simply recited over-and-over again to keep idiots in line and massage the weak minds into the hypnotic/religious lies which got us here ... some still have futures which hinge on keeping the insanity alive. Indeed, real change will bring collapse ...)

Such is also how our political system is arranged, good guy vs. bad guy (and, you just pick who is good and who is bad, or toss a coin. Or have you allegiances bought and paid for ...) And, so is our foreign policy applied, we are the good guy, they are the bad guy and these are our friends who help us in our great adventure ... fear gets the whole ball rolling, even unjustified fear(s) will work ...

Someday, all will see the truth, become ashamed of living such a shallow "truth(s)", and be shamed into higher standards and goals ... until that time, a few can control the minds of many ... and ultimately the world.

Regards,
JS

4904. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 02:55:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <coKdna_dkJy5Mq3UnZ2dnUVZ_uCdnZ2d@posted.easystreetonline>
Source record: 19678

Jeff Liebermann wrote:
> . . .
> Incidentally, since the top 1/4 wave element represents something
> close to perhaps 50 ohms, it would be interesting to measure the
> amount of RF that isn't radiated and actually gets to the top section
> of the antenna. If my analysis of the antenna is correct, the first
> section (near the coax connector) radiates 1/2 the power. The next
> section 1/4th. After that 1/8th, etc. By the time it gets to the top
> of the antenna, there won't be much left. However, that's theory,
> which often fails to resemble reality. It would interesting if you
> stuck a coax connector on the top, and measured what comes out.

I'm intrigued by this, and would like to know what "theory" it's based on.

The field radiated from a conductor is proportional to the current on it. You'll see from either modeling or measurement that the currents on all sections of a collinear array, or a long wire antenna for that matter, are nearly the same. So in those directions in which the fields reinforce, each section is contributing about the same amount to the total field as any other.

Although the logic is sound for this particular situation, it can't be used in general to assign particular amounts of radiated power to particular parts of an antenna. The fields from two parts of the antenna might partially or fully cancel in some directions, even though both are producing large fields. Any part of the antenna which is carrying current is involved in the radiation process, and the total field is the vector, not algebraic, sum of those fields.

So if you have a valid method of determining how much of the total radiated power comes from each part of an antenna, I'd be very interested in learning more about it. References would be welcome.

Roy Lewallen, W7EL

4905. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 03:47:46 UTC
From: JB <nospam@goofball.net>
Message-ID: <CX2Yk.1668$us6.261@nwrddc01.gnilink.net>
Source record: 19679

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ggqasm$u15$1@news.albasani.net...
> JB wrote:
>
> > ...
> > The Forrestal disaster was attributed to druggies. The enemy was no
doubt
> > there on board. Many people have yet to figure out about the mechanics
of
> > such disasters. I submit that there will be 2 sides to every story to
come
> > out of the Vietnam war, and that sufficient truth is often left out to
allow
> > that.
> >
> > I wrecked a few cars before I learned how to drive. Have you ever been
> > tortured for information? or just for the hell of it? People who sit
around
> > and talk about it over tea aren't fit to judge who a hero is but they
are
> > often left to talk about it. Let's just call him "experienced". I
really
> > don't consider Obama to be the "Black Messiah" either.
> >
> > I feel that both candidates were potential disasters, showing the idiots
had
> > prevailed before the election. The vote only served as an international
> > "poll" on how best to proceed to our doom. It seems the election has
tried
> > to set the clock back to what it was before 9/11. Let's see what
develops
> > this time around.
>
> Along the way, though college, it is pointed out to you that any great
> story (or, at least a believable one) has a protagonist and an
> antagonist (sometimes more of them, sometimes less of them); i.e. a
> "good guy" and a "bad guy." It is based on a storyline where great
> adversity is found, great sacrifice and energy extended and exerted, and
> finally the defeat of the enemy is had ... funny, but we will fall for
> this same line though uncounted books by uncounted authors. Read any
> great Greek tragedies/novels/plays, Shakespeare knew this and you find
> it in his offerings. (Or, turn on Rush, "... bad democrats, good
> republicans ...", this is simply recited over-and-over again to keep
> idiots in line and massage the weak minds into the hypnotic/religious

> lies which got us here ... some still have futures which hinge on
> keeping the insanity alive. Indeed, real change will bring collapse ...)
>
> Such is also how our political system is arranged, good guy vs. bad guy
> (and, you just pick who is good and who is bad, or toss a coin. Or have
> you allegiances bought and paid for ...) And, so is our foreign policy
> applied, we are the good guy, they are the bad guy and these are our
> friends who help us in our great adventure ... fear gets the whole ball
> rolling, even unjustified fear(s) will work ...
>
> Someday, all will see the truth, become ashamed of living such a shallow
> "truth(s)", and be shamed into higher standards and goals ... until that
> time, a few can control the minds of many ... and ultimately the world.
>
> Regards,
> JS
>

I had considered the "good cop", "bad cop" routine, but I really think it goes back to the "demoralization" and "destabilization" process that you yourself (and myself) admit to in lost faith, but healthy distrust along with a sense of reality is vital, but not to the point of being crippled.

Rush noticed that what's "good" for the Country is "bad" for the democrats and what's "bad" for the Country is "good" for the democrats. It isn't lost on me that "when it bleeds it leads". Who for example is responsible for those who apply psychological pressure to "known" gun owners to induce them to random mass murder? Who would that benefit? There are many cynical people out there with a sick sense of humor. Your assertion that real change would bring collapse is too cynical and I wouldn't set myself up to be wrong unless there is a complete failure. That just gives us the wrong goal. Seek God. I know you hate "religion" but rather than seeking as a blind follower, seek as a researcher. Set those things aside that you don't immediately understand but don't entirely dismiss them. That is simply arrogance. The intellectual is a fathead who completely dismisses that which he doesn't understand or what is related to him by the unschooled. Those who do that operate contrary to the scientific method. Even a failed experiment shouldn't be thrown out, but learned from. Or saved until the failure is understood.

In light of that, "The Interview" link I posted earlier, the true threat is the cynicism that developed that whole school of thought. It is a process of destruction. Not only that, but of unchecked destruction.

4906. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 04:10:17 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <61e1j4dpnk1tk7ts51u2l0cbgel9ebqr7s@4ax.com>
Source record: 19680

On Fri, 28 Nov 2008 18:55:26 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Jeff Liebermann wrote:
>> . . .
>> Incidentally, since the top 1/4 wave element represents something
>> close to perhaps 50 ohms, it would be interesting to measure the
>> amount of RF that isn't radiated and actually gets to the top section
>> of the antenna. If my analysis of the antenna is correct, the first
>> section (near the coax connector) radiates 1/2 the power. The next
>> section 1/4th. After that 1/8th, etc. By the time it gets to the top
>> of the antenna, there won't be much left. However, that's theory,
>> which often fails to resemble reality. It would interesting if you
>> stuck a coax connector on the top, and measured what comes out.
>
>I'm intrigued by this, and would like to know what "theory" it's based on.

I just knew this would create a problem. I'm open to corrections and
explanations. I'm still learning and tend to make some rather
disgusting fundamental errors.

It's an observation based upon my measurements with a field strength
meter on similar UHF colinear antennas (using 1/2 wave stubs for
phasing). Also on a center fed 2.4GHz Franklin sector antenna of
similar construction. Most of the voltage peaks were at the base of
the antenna, tapering off as the field strength meter was dragged to
the top of the antenna. Since the current through the antenna is
constant, I assumed that the bulk of the power came from the lower
elements of the antenna. My explanation was a geometric decrease in
radiatated power starting at the feed point.

I've also seen a similar effect with relatively high gain (>10dbi)
2.4GHz omni antennas in WISP applications. Any blockage of the lower
sections of the antenna, had a much bigger effect on the range and
measure signal strength than covering roughly an equal amount near the
top of the antenna.

>The field radiated from a conductor is proportional to the current on
>it. You'll see from either modeling or measurement that the currents on
>all sections of a collinear array, or a long wire antenna for that
>matter, are nearly the same. So in those directions in which the fields
>reinforce, each section is contributing about the same amount to the
>total field as any other.

I can see that on some models. I never could successfully model an
antenna using coax cable sections as elements. Using a wire model,

the current distribution is constant along the length as you describe. However, my field strength measurements show more RF towards the feed point. It's difficult for me to tell exactly how much more RF because my home made meter is not calibrated. I don't recall the exact numbers but I can dig out the FSM and make some measurements on some of the antennas I have hanging around on the roof this weekend.

>Although the logic is sound for this particular situation, it can't be
>used in general to assign particular amounts of radiated power to
>particular parts of an antenna. The fields from two parts of the antenna
>might partially or fully cancel in some directions, even though both are
>producing large fields. Any part of the antenna which is carrying
>current is involved in the radiation process, and the total field is the
>vector, not algebraic, sum of those fields.

The models all show the total pattern produced by all the elements combined. I haven't found a way to show the contributions by individual elements, thus making it difficult to model my observation.

>So if you have a valid method of determining how much of the total
>radiated power comes from each part of an antenna, I'd be very
>interested in learning more about it. References would be welcome.

Nope. I'll give in easily on this one as it's highly likely I'm wrong. However, I will double check my measurements on the roof tomorrow and see if they're reproducible. I may have simply goofed and/or drawn the wrong conclusion.

Incidentally, I've been offering this observation for several years and you are the first to question it.

>Roy Lewallen, W7EL

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4907. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 04:20:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggqfu9$2io$1@news.albasani.net>
Source record: 19681

JB wrote:

> ...
> I had considered the "good cop", "bad cop" routine, but I really think it
> goes back to the "demoralization" and "destabilization" process that you
> yourself (and myself) admit to in lost faith, but healthy distrust along
> with a sense of reality is vital, but not to the point of being crippled.
>
> Rush noticed that what's "good" for the Country is "bad" for the democrats
> and what's "bad" for the Country is "good" for the democrats. It isn't lost
> on me that "when it bleeds it leads". Who for example is responsible for
> those who apply psychological pressure to "known" gun owners to induce them
> to random mass murder? Who would that benefit? There are many cynical
> people out there with a sick sense of humor. Your assertion that real
> change would bring collapse is too cynical and I wouldn't set myself up to
> be wrong unless there is a complete failure. That just gives us the wrong
> goal. Seek God. I know you hate "religion" but rather than seeking as a
> blind follower, seek as a researcher. Set those things aside that you don't
> immediately understand but don't entirely dismiss them. That is simply
> arrogance. The intellectual is a fathead who completely dismisses that
> which he doesn't understand or what is related to him by the unschooled.
> Those who do that operate contrary to the scientific method. Even a failed
> experiment shouldn't be thrown out, but learned from. Or saved until the
> failure is understood.
>
> In light of that, "The Interview" link I posted earlier, the true threat is
> the cynicism that developed that whole school of thought. It is a process
> of destruction. Not only that, but of unchecked destruction.

"What is good for the country" is a religious term, the way it is being
used lacks any real meaning ...

"The country" is its' citizens. It is not the buildings, it is not the
wealth, it is not plots of dirt ... when our public servants carry out
the majority of the people wills, while preventing great harm to
minorities, it is doing its' job. Government was created to serve the
people. It was never created to be an institution of "leaders" who set
policy, define monetary systems, influence the people, etc. It was
created to provide what the people requested, it is ONLY a tool which is
only valid when it is suffer-able to the people.

Government does a good job when it provides public transportation
systems, public roads, public sewer system, public water supplies,
public electric/gas/heating/etc. Public schools with high standards,
and those standards controlled by the people, is a good thing. Public

health is another good example, it protects us from ill individuals who are threats to innocents lives. You get the point--only involved in things which provide equal services/protections to EACH-AND-EVERY-SINGLE citizen.

Government does NOT do its' job when it takes religions marriage and redefines it for a minority which break the very meaning of the word (indeed, it breaks the separation of church and states powers from the get-go ...)

What is "good for the country" is good for ALL peoples (poor, rich, educated, uneducated, white, black, young, old, etc.), what is good for a minority is NOT good for the country.

Government should be like toilet paper, it is appreciated by all and servers all equally well ... <grin>

Regards,
JS

4908. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 04:55:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <FtWdnc6a89HUVq3UnZ2dnUVZ_vCdnZ2d@posted.easystreetonline>
Source record: 19682

Jeff Liebermann wrote:
> . . .
> It's an observation based upon my measurements with a field strength
> meter on similar UHF colinear antennas (using 1/2 wave stubs for
> phasing). Also on a center fed 2.4GHz Franklin sector antenna of
> similar construction. Most of the voltage peaks were at the base of
> the antenna, tapering off as the field strength meter was dragged to
> the top of the antenna. Since the current through the antenna is
> constant, I assumed that the bulk of the power came from the lower
> elements of the antenna. My explanation was a geometric decrease in
> radiatated power starting at the feed point.

There's quite a handful of potential problems with this:

1. You might have been in the near field. The relationship between field strength in the near field and the radiated far field is very complex. You can't determine the field in one based on measurements in the other.
2. If you're in the near field, the field strength you measure at a given point depends on the type of antenna used. In the far field, the field impedance (E/H) is a constant value, but not so in the near field. In various places in the near field, an antenna which responds more strongly to the E field (a "high impedance" antenna) will show higher readings where the field impedance is high, and lower where it's lower. In any case, the relationship between radiated field and local near field strength isn't simple.
3. The power applied to the antenna is radiated in all directions, although of course unequally. As I explained in my last posting, the total field is the vector sum of the fields from the individual parts of the antenna. Sampling near the antenna gives you no idea of how the fields sum at a distant point.
4. It's very difficult to make even roughly accurate measurements even at HF, let alone UHF or higher. One of several problems is that it's extremely difficult to decouple the feedline when an electrically small probe is used, so you end up not measuring what you think you are.

> I've also seen a similar effect with relatively high gain (>10dbi)
> 2.4GHz omni antennas in WISP applications. Any blockage of the lower
> sections of the antenna, had a much bigger effect on the range and
> measure signal strength than covering roughly an equal amount near the
> top of the antenna.

That's interesting, and I'd like to get some more information about it. Perhaps blocking the bottom had a greater effect on the pattern, moving the maximum away from the direction of the other end of the path?
>

> I can see that on some models. I never could successfully model an
> antenna using coax cable sections as elements. Using a wire model,
> the current distribution is constant along the length as you describe.
> However, my field strength measurements show more RF towards the feed
> point. It's difficult for me to tell exactly how much more RF because
> my home made meter is not calibrated. I don't recall the exact
> numbers but I can dig out the FSM and make some measurements on some
> of the antennas I have hanging around on the roof this weekend.

Here's a model of a coax collinear, but using coax with unity velocity factor. This "Franklin" array model was created by Linley Gumm, K7HFD. Coaxial cable is modeled as a combination of transmission line model, to represent the inside of the coax, and a wire to represent the outside. The technique is described in the EZNEC manual. See "Coaxial Cable, Modeling" in the index. I've posted the EZNEC equivalent to http://eznec.com/misc/rraa/ as COAXVERT.EZ. The accompanying Antenna Notes file is also there as COAXVERT.txt.

```
CM Coaxial Vertical Antenna
CM
CM ! Wire # 16 for I srcs, shorted/open TL, and/or loads.
CE
GW 1,1,0.,0.,6.76615,.02081892,0.,6.76615,.000127
GW 2,1,0.,0.,5.766841,.02081892,0.,5.725204,.000127
GW 3,1,0.,0.,4.684258,.02081892,0.,4.725896,.000127
GW 4,1,0.,0.,3.684949,.02081892,0.,3.643311,.000127
GW 5,1,0.,0.,2.602366,.02081892,0.,2.644002,.000127
GW 6,1,0.,0.,1.603057,.02081892,0.,1.561419,.000127
GW 7,1,0.,0.,.5204737,.02081892,0.,.5621104,.000127
GW 8,11,0.,0.,6.76615,0.,0.,5.766841,.00635
GW 9,11,.02081892,0.,5.725204,.02081892,0.,4.725896,.00635
GW 10,11,0.,0.,4.684258,0.,0.,3.684949,.00635
GW 11,11,.02081892,0.,3.643311,.02081892,0.,2.644002,.00635
GW 12,11,0.,0.,2.602366,0.,0.,1.603057,.00635
GW 13,11,.02081892,0.,1.561419,.02081892,0.,.5621104,.00635
GW 14,6,0.,0.,.5204737,0.,0.,0.,.00635
GW 15,1,0.,0.,0.,.02081892,0.,.02081892,.000127
GW 16,1,208.1892,208.1892,208.1892,208.1913,208.1913,208.1913,2.0819E-4
GE 1
FR 0,1,0,0,144.
GN 1
EX 0,16,1,0,0.,1.414214
NT 16,1,15,1,0.,0.,0.,1.,0.,0.
TL 1,1,2,1,50.,1.040946,0.,0.,0.,0.
TL 2,1,3,1,50.,1.040946,0.,0.,0.,0.
TL 3,1,4,1,50.,1.040946,0.,0.,0.,0.
TL 4,1,5,1,50.,1.040946,0.,0.,0.,0.
TL 5,1,6,1,50.,1.040946,0.,0.,0.,0.
TL 6,1,7,1,50.,1.040946,0.,0.,0.,0.
TL 7,1,15,1,-50.,1.040946,0.,0.,0.,0.
RP 0,181,1,1000,90.,0.,-1.,0.,0.
```

EN

I've seen models using coax with VF = 0.82 having a good pattern.
>
> Nope. I'll give in easily on this one as it's highly likely I'm
> wrong. However, I will double check my measurements on the roof
> tomorrow and see if they're reproducible. I may have simply goofed
> and/or drawn the wrong conclusion.
>
> Incidentally, I've been offering this observation for several years
> and you are the first to question it.

This isn't the first time that's happened.

Roy Lewallen, W7EL

4909. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 04:59:35 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <u6g1j412et971vfinl2pmpqiv06te5vmkl@4ax.com>
Source record: 19683

On Fri, 28 Nov 2008 17:08:06 -0800 (PST), K7ITM <k7itm@msn.com> wrote:

>On Nov 27, 2:46ï¿½pm, Jeff Liebermann <je...@cruzio.com> wrote:
>...
>> Good luck, but first a little math. ï¿½What manner of tolerance do you
>> thing you need to cut your coax pieces? ï¿½Let's pretend you wanted to
>> get the center frequency accurate to 1Mhz. ï¿½At 418MHz, one wavelength
>> is:
>> ï¿½ ï¿½wavelength(mm) = 300,000 / freq(mhz) * VF
>> ï¿½ ï¿½wavelength = 3*10^5 / 418 * 0.83 = 596 mm
>> That works out to:
>> ï¿½ ï¿½596 / 418 = 1.4 mm/MHz
>> So, if you want the center frequency accurate to within +/- 1MHz, you
>> gotta cut it to within +/- 1.4 mm. ï¿½Good luck. ï¿½Like I previously
>> ranted, you'll need a cutting fixture. ï¿½A steady hand, good eye,
>> quality coax, and plenty of patience are also helpful.
>
>But why would you care to try to get it within 1MHz?

I don't. I wanted a number to show how accurate the cut would need to
be if he wanted the minimum VSWR point to be accurate to within 1MHz.
I picked 1MHz because the tolerance is easily scaled to other
bandwidth and accuracy numbers. My main point was that a fixture of
some sort was necessary to obtain that level of accuracy.

>With only four
>radiating elements, the beam 3dB width will be roughly 8 degrees if
>the bottom of the antenna is a wavelength above ground (30 degrees in
>freespace...). There's not much point in putting a lot of effort into
>get closer than perhaps 4 electrical degrees along the line, and I
>don't believe even that is necessary to get good performance. That's
>several mm, and should be easy with such short lengths.

Well, at 418MHz, one wavelength (electrical) is about 600 mm.
4 degrees is:
600 mm * 4/360 = 6.7 mm
Yeah, that's fairly loose and could be done with diagonal cutters and
a tape measure. Normally, I would punch the numbers into an NEC
model, but I couldn't figure out how to model a radiating coax cable
section as an antenna element (using 4NEC2). I sorta faked it with
wire segments, but got stumped on what to do with the dielectric and
it's velocity factor.

Here's one way to build a coax cable colinear (for 2.4GHz):
<http://www.nodomainname.co.uk/Omnicolinear/2-4collinear.htm>
Note the measurements in Fig 1 for where to measure the half

wavelength sections. I'm suspicious. Of course, at 418MHz, it's less
critical.

>Using foam-
>Teflon coax makes it easy to do: the insulation doesn't melt when you
>solder things together.

I've only played with the RG6/u CATV flavor, where everything is
crimped. I never have tried to solder the stuff.

RG8/u with foam teflon dielectric:
<http://www.westpenn-cdt.com/pdfs/coaxial_spec_pdfs/50%20ohm%20cables/25810.pdf>
Looks nice.

>I cut the sections to matched lengths, use a
>little jig to trim the layers to the same lengths on each, and then
>put a wrapping of 30AWG or so silver plated wire (wire-wrap wire)
>around each joint to hold it while soldering. That makes it easy to
>adjust before soldering, and solid after.

See photos of the jig at bottom of:
<http://www.nodomainname.co.uk/Omnicolinear/2-4collinear.htm>

>> Incidentally, since the top 1/4 wave element represents something
>> close to perhaps 50 ohms, it would be interesting to measure the
>> amount of RF that isn't radiated and actually gets to the top section
>> of the antenna. ï¿½If my analysis of the antenna is correct, the first
>> section (near the coax connector) radiates 1/2 the power. ï¿½The next
>> section 1/4th. ï¿½After that 1/8th, etc. ï¿½By the time it gets to the top
>> of the antenna, there won't be much left. ï¿½However, that's theory,
>> which often fails to resemble reality. ï¿½It would interesting if you
>> stuck a coax connector on the top, and measured what comes out.

>There's very little loss in a half wave of decent coax at 450MHz.
>That means that the voltage across the lowest junction between
>sections is echoed up the antenna at each other junction. In
>freespace, by symmetry, the currents will be very nearly the same
>going down from the top as going up from the bottom. My model over
>typical ground (bottom a wavelength above the ground) shows current
>symmetry within a percent or so, assuming equal voltages driving each
>of the three junctions. If you wish, you can use the parameters of
>the line you're actually using to figure the differences among the
>feedpoint voltages, based on the loads at each junction. When I've
>done that in the past, the differences are practically negligible.
>You can iterate, feeding those voltages back into the model to find
>new load impedances, etc., repeating till you're happy that the models
>have converged. Recent versions of EZNEC even let you put the
>transmission line into the model, along with its loss.

I hate to admit that I made a mistake, but as you and Roy Lewallen
point out, my explanation of how this antenna operates is almost
certainly wrong. I'll do a fast measurement tomorrow to satisfy my
curiousity, but from your explanation and Roy's, I've erred big time.

With a constant current distribution along the length of the antenna,
and a constant voltage at the various feed points, it's a fair
conclusion that the power radiatated around each of these feed points
are equal. I goofed(tm).

>The supporting tube certainly will affect the feedpoint impedance, but
>in my experience, it does not materially affect the pattern. I deal
>with the impedance through a matching network; it's no trouble to
>adjust for a low enough reflection that I don't worry about it.
>Decoupling is the more interesting problem, to me.
>
>Cheers,
>Tom

Gone sulking...

--
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4910. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 07:17:00 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <mro1j415qpvl3gdh7dpnvi73epmmfvvfpp@4ax.com>
Source record: 19684

On Fri, 28 Nov 2008 20:55:31 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>1. You might have been in the near field. The relationship between field
>strength in the near field and the radiated far field is very complex.
>You can't determine the field in one based on measurements in the other.

That probably a good start. My testing was a 2.4GHz. My field
strength meter was just a shottky diode, balun, ferrite/choke
isolation, DC amp, and battery. Not very fancy and also not very
sensitive. I tried to calibrate it against a microwave oven leakage
meter, but go nowhere.

My guess is that I was about 20cm away from an 8dBi vertical in one
test. The antenna was a Tecom colinear. See omnis at:
<http://11junk.com/jeffl/antennas/tecom/>
I still have some of these antennas and plan to repeat my testing. At
2.4GHz, one wavelength is about 12.5 cm, so 20cm is well within the
near field. There was also a bunch of other antennas nearby, which
certainly contributed some reflections.

>2. If you're in the near field, the field strength you measure at a
>given point depends on the type of antenna used. In the far field, the
>field impedance (E/H) is a constant value, but not so in the near field.
>In various places in the near field, an antenna which responds more
>strongly to the E field (a "high impedance" antenna) will show higher
>readings where the field impedance is high, and lower where it's lower.
>In any case, the relationship between radiated field and local near
>field strength isn't simple.

Umm... you lost me, but I'm not at my best right now. I'm in the last
2 weeks of radiation oncology. No problems but I currently fade
fairly fast in the late evening. I'll decode it all tomorrow.

>3. The power applied to the antenna is radiated in all directions,
>although of course unequally. As I explained in my last posting, the
>total field is the vector sum of the fields from the individual parts of
>the antenna. Sampling near the antenna gives you no idea of how the
>fields sum at a distant point.

Agreed, but I was trying to sample what was being radiated from a
single element (or antenna section). I could see some peaks and nulls
as I moved along the length of the antenna, so I assumed that I was
seeing the contributions of each section (at the peaks).

>4. It's very difficult to make even roughly accurate measurements even
>at HF, let alone UHF or higher. One of several problems is that it's

>extremely difficult to decouple the feedline when an electrically small
>probe is used, so you end up not measuring what you think you are.

I know. My meter is battery operated and made to be viewed with
binoculars. I've used it to measure the total pattern on several
antennas by hoisting it up and down a fiberglass pole (or wood barn)
without any connecting wires. The problems are that it takes 2 people
to operate (the 2nd to watch the meter in the binoculars). The
contraption is also slightly directional, adding some additional
errors. However, the big problem is that its sensitivity absolutely
sucks. I need something better. I've tried to modify a Wi-Fi finder
to act as a signal strength meter. That's more sensitive and works
better but has a miserable 30dB(?) dynamic range. This is on the
things to do list (after 100 other unfinished projects).

>> I've also seen a similar effect with relatively high gain (>10dbi)
>> 2.4GHz omni antennas in WISP applications. Any blockage of the lower
>> sections of the antenna, had a much bigger effect on the range and
>> measure signal strength than covering roughly an equal amount near the
>> top of the antenna.
>
>That's interesting, and I'd like to get some more information about it.
>Perhaps blocking the bottom had a greater effect on the pattern, moving
>the maximum away from the direction of the other end of the path?

Ummm... I wasn't really able to move the tower on which the antenna
was mounted. The problem was that I was stuck on the lower part of a
rooftop tower. On the roof was also a parapet and HVAC box that
blocked the downward view. The antenna was an overkill 12dBi
something (forgot model numbers) omni. The antenna was about 3 meters
from the parapet. We have a customer that was in the shadow area.
From his window, we could see the top half of the antenna, but not the
bottom. We installed an indoor dish antenna, but the office
aesthetics committee vetoed the installation. So, I raise the base of
the antenna, so that more of the bottom of the antenna was visible.
The problem with this was that the top part of the antenna was in the
middle of a latticework tower section used as a horizontal antenna
mounting arm. The upper 25 cm of the antenna was fairly well covered.
Yet, the improvement at the customers was both dramatic and adequate.
I left it that way for about 2 months. When the weather improved, I
replaced the antenna with a lower gain 8dBi omni, which improved the
signal even more. A month later, I installed two 120 degree Superpass
sector antennas (forgot exact model number), with some downtilt, and
the single increased yet again. My guess(tm) was that the effects of
covering the lower part of the original antenna was greater than
covering approximately the same amount at the top of the same antenna.
Maybe not.

>Here's a model of a coax collinear, but using coax with unity velocity
>factor. This "Franklin" array model was created by Linley Gumm, K7HFD.
>Coaxial cable is modeled as a combination of transmission line model, to

>represent the inside of the coax, and a wire to represent the outside.
>The technique is described in the EZNEC manual. See "Coaxial Cable,
>Modeling" in the index. I've posted the EZNEC equivalent to
>http://eznec.com/misc/rraa/ as COAXVERT.EZ. The accompanying Antenna
>Notes file is also there as COAXVERT.txt.

Nice and thanks. Forgive my use of a different modeling program but
it's one I know well, while EZNEC 5.1 is still somewhat of a mystery
to me. I converted the EZ file to NEC and ran the model without
modification. See:
<http://11junk.com/jeffl/antennas/CoaxVert/>
The geometry JPG shows the current distribution, which is as you
indicated, uniform. So much for my geometric decrease theory.

I'll play with it some more later. I don't really understand the TL
card, but will do some RTFM to see what I missed. 4NEC2 complained
about wire radius ratios, but I'll fix that tomorrow. I also want to
add a frequency sweep and move the design to UHF.

>I've seen models using coax with VF = 0.82 having a good pattern.

Well, if the OP builds it with copper tubing, PTFE insulators, and air
dielectric, he can use a velocity factor = 1.0.

--
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4911. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 11:24:28 UTC
From: "-.-. --.-" <a@a.com>
Message-ID: <ggr8pevdt1@aioe.org>
Source record: 19685

So thanks all for replies. Wikipedia at this page
http://en.wikipedia.org/wiki/Circular_polarization show more, and now i have
also clear in mind the fact that circular polarization is first made by a
physical, circular design of dhe radiant element and i can also have
clockwise or counterclockwise sense of the polarization.

By the way, due to wavelenght we are playing in the HF, i doubt that can be
realized a true circular polarization antenna for HF spectrum. Maybe
something can be realized on VHF and up.
Merely theory dreams in my mind, as in the real life i'm working HF with a
couple of butterfly dipoles covering from 80 to 10 m... :)

Thanks anyway to pay me attention.

73 folks,

-.-. --.-

4912. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 14:29:25 UTC
From: Dave <dave@dave.dave>
Message-ID: <493151c5$0$31211$bd467cd0@news.dslextreme.com>
Source record: 19686

-.-. --.- wrote:
> So thanks all for replies. Wikipedia at this page
> http://en.wikipedia.org/wiki/Circular_polarization show more, and now i have
> also clear in mind the fact that circular polarization is first made by a
> physical, circular design of dhe radiant element and i can also have
> clockwise or counterclockwise sense of the polarization.
>
> By the way, due to wavelenght we are playing in the HF, i doubt that can be
> realized a true circular polarization antenna for HF spectrum. Maybe
> something can be realized on VHF and up.
> Merely theory dreams in my mind, as in the real life i'm working HF with a
> couple of butterfly dipoles covering from 80 to 10 m... :)
>
> Thanks anyway to pay me attention.
>
> 73 folks,
>
> -.-. --.-
>

"A circularly polarized wave may be resolved into two linearly polarized
waves, of equal amplitude, in phase quadrature (90 degrees apart) and
with their planes of polarization at right angles to each other."
-(from your wikipedia link)

4913. SteppIR support question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 14:44:59 UTC
From: Bill Ogden <billogden@optonline.net>
Message-ID: <49315526$0$20307$607ed4bc@cv.net>
Source record: 19687

I have the 30/40 add-on for a 3-element SteppIR. Seems to work well. However, the middle element (a double element with a "U" fitting at each end) droops more that the two simple elements. This probably does not affect the operation of the antenna, but it looks odd.

I have been thinking about extending the mast a few feet (probably with PVC) and using dacron rope from the mast to the ends of the middle element, to give a little more vertical support. However, unless the mast extension is rather long, there would be a substantial horizontal force pulling the ends of the element toward the center.

Has anyone done something about the drooping center element?

Bill - W2WO

4914. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 18:10:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <WoGdnUQHuvYoGKzUnZ2dnUVZ_sTinZ2d@posted.easystreetonline>
Source record: 19688

-.-. --.- wrote:
> . . .
> By the way, due to wavelenght we are playing in the HF, i doubt that can be
> realized a true circular polarization antenna for HF spectrum. Maybe
> something can be realized on VHF and up. . .

I agree. My experience is that:

1. It's difficult to generate circular polarization in more than two opposite directions at HF. With something like crossed dipoles fed in quadrature (sometimes called a turnstile), the polarization is circular only at right angles to the plane of the dipoles. It's linear to the sides and elliptical elsewhere.
2. Even after you generate a circularly polarized signal, ground reflection tends to make it linear. It's difficult or impossible to avoid ground reflection over an HF path.

Roy Lewallen, W7EL

4915. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 19:07:48 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <8qgYk.1762$us6.917@nwrddc01.gnilink.net>
Source record: 19689

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:WoGdnUQHuvYoGKzUnZ2dnUVZ_sTinZ2d@posted.easystreetonline...
> -.-. --.- wrote:
>> . . .
>> By the way, due to wavelenght we are playing in the HF, i doubt that can
>> be realized a true circular polarization antenna for HF spectrum. Maybe
>> something can be realized on VHF and up. . .
>
> I agree. My experience is that:
>
> 1. It's difficult to generate circular polarization in more than two
> opposite directions at HF. With something like crossed dipoles fed in
> quadrature (sometimes called a turnstile), the polarization is circular
> only at right angles to the plane of the dipoles. It's linear to the sides
> and elliptical elsewhere.
> 2. Even after you generate a circularly polarized signal, ground
> reflection tends to make it linear. It's difficult or impossible to avoid
> ground reflection over an HF path.
>
> Roy Lewallen, W7EL

Hi Roy

Just for conversation, I submit that an antenna with good hemispheric CP
coverage could be made with 4 dipoles.

Jerry KD6JDJ

4916. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 19:10:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <domdndvc58AwDqzUnZ2dnUVZ_sDinZ2d@posted.easystreetonline>
Source record: 19690

Richard Fry wrote:
> "Roy Lewallen" wrote
>> With EZNEC, you have to use the near field analysis to include
>> the ground wave; direct ground wave analysis isn't included in
>> EZNEC because (etc).
> _________
>
> After the comments of Richard Clark and you, Roy, I attempted to use
> EZNEC to determine the ground wave (see link below).
>
> The near-field analysis of EZNEC for radiation in the horizontal plane
> at a point 1 km from a 1/4-wave monopole having two ohms in series
> with a Mininec r-f ground, while radiating 1 kW over an earth
> conductivity of 8 mS/m is shown as 72 mV/m.
>
> The same setup when analyzed using the FCC's radiation efficiency for
> this monopole height, and their propagation charts for these
> conditions shows about 295 mV/m as the result, which value is
> supported by the measured performance of real-world AM broadcast
> stations, and is also a value in a range that could be expected from
> the BL&E data.
>
> Hopefully you or Richard Clark can tell me the reason(s) for this
> difference, which could easily be my own setup of the NEC model.
>
> Roy, would you mind posting the ground wave value EZNEC Pro reports
> for these conditions?
>
> http://i62.photobucket.com/albums/h85/rfry-100/EZNECNearFldExample.gif
>
> RF

My model has 120 0.5 wavelength radials buried 1.2 feet deep (the unusual depth due to rescaling another model). Ground conductivity 8 mS/m, dielectric constant 13. The antenna is 0.25 wavelength high. The whole structure is made from #12 wire to eliminate any problems due to dissimilar diameters. Field strength is Ez at 1000 meters with 1000 watts applied.

Using the NEC-4D calculating engine, EZNEC Pro/4 shows (NF = near field analysis, GW = far field analysis with ground wave):

Z = 40.08 + j27.91
GW = 297.7 mV/m
NF = 297.7 mV/m

Same, but with 0.25 wavelength radials:

Z = 39.56 + j26.55
GW = 292.7 mV/m
NF = 292.7 mV/m

Note that the feedpoint R and field strength don't exactly correlate if you make the assumption that the resistance difference is due to loss. This would be due to a slightly different current distribution on the radiator due to interaction with the different ground fields. Other experiments have shown that the impedance will also vary some with radial burial depth.

Following are the results using the NEC-2D engine with a 0.25 wavelength vertical and 120 0.5 wavelength radials one foot above the ground, all other conditions otherwise the same. This analysis can be run with EZNEC+, but only the NF results will be available:

Z = 66.83 + j1.894
GW = 230.0
NF = 229.7

As above, but 0.25 wavelength radials:

Z = 32.42 + j18.87
GW = 311.4
NF = 311.4

Elevated radials, even when elevated only this amount, show distinct resonance effects, and making them longer than about 0.25 wavelength often results in reduced efficiency which I think is due to movement of the radial current maxima away from the center. The above results illustrate these phenomena. While slightly elevated radials can be used to approximate buried ones, as you can see the substitution isn't perfect.

The same 0.25 wavelength vertical over perfectly conducting (or MININEC) ground showed a Z of 37.95 + j21.49 ohms. However, the resistances of the various examples above aren't just this resistance plus loss resistance, since the current distribution isn't quite the same when radials are present.

The results you got weren't valid due to use of MININEC ground with near field analysis, as I explained in another posting. As you can see, you can get reasonably good results using EZNEC+ and near field analysis, although the vast majority of people this intensely interested in the mechanisms of AM broadcasting aren't hobbyists but rather professional engineers who are using EZNEC Pro/4.

Roy Lewallen, W7EL

4917. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 20:18:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <iYudnbXlC48fPqzUnZ2dnUVZ_i2dnZ2d@posted.easystreetonline>
Source record: 19691

Jerry wrote:
>
> Hi Roy
>
> Just for conversation, I submit that an antenna with good hemispheric CP
> coverage could be made with 4 dipoles.
>
> Jerry KD6JDJ

Yes, there's the quadrifilar helix which I believe fits that description. Another, which I built decades ago at 450 MHz, is the "skew planar" antenna which resembles a cloverleaf but with the "leaves" rotated 45 degrees. Although I haven't seen either one constructed at HF, on reflection I don't see any reason you couldn't.

There's still the problem of ground reflection, though. I didn't state it very well in my last posting -- what I meant was that the sum of the direct and ground-reflected rays tend to produce a linearly or nearly linearly polarized wave even when you start out circular.

Roy Lewallen, W7EL

4918. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 20:29:24 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <EChYk.1839$QX3.69@nwrddc02.gnilink.net>
Source record: 19692

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:iYudnbXlC48fPqzUnZ2dnUVZ_i2dnZ2d@posted.easystreetonline...
> Jerry wrote:
>>
>> Hi Roy
>>
>> Just for conversation, I submit that an antenna with good hemispheric
>> CP coverage could be made with 4 dipoles.
>>
>> Jerry KD6JDJ
>
> Yes, there's the quadrifilar helix which I believe fits that description.
> Another, which I built decades ago at 450 MHz, is the "skew planar"
> antenna which resembles a cloverleaf but with the "leaves" rotated 45
> degrees. Although I haven't seen either one constructed at HF, on
> reflection I don't see any reason you couldn't.
>
> There's still the problem of ground reflection, though. I didn't state it
> very well in my last posting -- what I meant was that the sum of the
> direct and ground-reflected rays tend to produce a linearly or nearly
> linearly polarized wave even when you start out circular.
>
> Roy Lewallen, W7EL

Hi Roy

I say with some humor - Have you considered the DCA as described in the
Feb2008 QST? For most conditions the DCA performs better than a
quadrafilar helix and it is much easier to construct.

Jerry KD6JDJ

4919. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 20:32:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <VtydnT5-baZIO6zUnZ2dnUVZ_uednZ2d@posted.easystreetonline>
Source record: 19693

Jerry wrote:

> Hi Roy
>
> I say with some humor - Have you considered the DCA as described in the
> Feb2008 QST? For most conditions the DCA performs better than a
> quadrafilar helix and it is much easier to construct.
>
> Jerry KD6JDJ

No, I haven't built a circularly polarized antenna for over 30 years.

Roy Lewallen, W7EL

4920. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 20:59:27 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <d89268c6-4b81-48b5-a02e-09a76a401b5f@3g2000yqs.googlegroups.com>
Source record: 19694

On Nov 29, 1:10 pm, Roy Lewallen wrote:

> As you can see, you can get reasonably good results using
> EZNEC+ and near field analysis, although the vast majority
> of people this intensely interested in the mechanisms of AM
> broadcasting aren't hobbyists but rather professional
> engineers who are using EZNEC Pro/4.

Thanks very much for your numbers and comments, Roy.

I would never have thought to try to use EZNEC near-field analysis to compute the groundwave if I hadn't read the suggestion to do so in this thread. That was my first, and will be my last attempt at that.

When I need to calculate the MW ground wave for a particular distance, monopole height, frequency and ground conductivity I use the FCC method of first determining the inverse distance field of the radiator at 1 km for 1 kW of radiated power, and then using that value in a program I have with the FCC's MW propagation curves in digitized form.

My point when starting this thread was to show that the elevation pattern radiation actually launched by vertical monopoles on any frequency does not have a zero/very low relative amplitude at/near the horizontal plane, which from what I read on these NGs seems to be a popular belief.

RF

4921. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 22:05:35 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <P0jYk.402264$TT4.342833@attbi_s22>
Source record: 19695

>> Hi Roy
>>
>> I say with some humor - Have you considered the DCA as described in the
>> Feb2008 QST? For most conditions the DCA performs better than a
>> quadrafilar helix and it is much easier to construct.
>>
>> Jerry KD6JDJ
>
> No, I haven't built a circularly polarized antenna for over 30 years.
>
> Roy Lewallen, W7EL

The conversation reminds me, in 1947, I lived in Dayton, OH. Not far from Columbus, OH and the home of Kraus. He was the guest speaker one evening at the Engineers club in Dayton and I attended. He did his usual trick, a 400 MHz tone modulated oscillator and a receiver, both with plain vanilla dipoles. Spaced across the audfitorium, he would hold up a piece of cardboard between the two and stop the signal. Then he hooked both to a pair of his helix antennas and tried but could not stop the signal. Of course, he had a Faraday shield between TWO layers of cardboard. Some, who had looked into his background more deeply than I, told him what he was doing. To me it was remarkable.

NOT more remarkable than a ham in Dayton, call unknown, who had erected a 4 turn square helix for 20 Meters at his home in honor of the occasion. Made of Aluminum downspout pipe, 16 foot on a side, complete with reflector of chicken wire and supported on a long length of 2 x 4. Before the days of CDR, but rotated with a prop pitch motor. I'm not certain of what the neighbors thought of it, but it sure looked impressive to me at age 22.

W4ZCB

4922. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 22:38:37 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <9POdnUtpVODzWazUnZ2dnUVZ_qvinZ2d@earthlink.com>
Source record: 19696
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Helmut Wabnig wrote:
>
> Why don't you sell your house and move to a place next to the TV
> transmitter station. You will only need a piece of wire then.
> Or the bare finger.
> Must be wet, of course.

Have you ever tried to get a clear picture, "next to the TV transmitter station"? The radiation pattern on the transmitting antenna leaves almost no signal in the shadow of the tower. I had to point the OTA antenna towards another tower a half mile away to get enough signal to monitor the 5 MW EIRP signal at the Channel 55 tower in Orange City, Florida. People within a half mile of the tower base couldn't get a clear signal.

--
http://improve-usenet.org/index.html

aioe.org, Goggle Groups, and Web TV users must request to be white listed, or I will not see your messages.

If you have broadband, your ISP may have a NNTP news server included in your account: http://www.usenettools.net/ISP.htm

There are two kinds of people on this earth:
The crazy, and the insane.
The first sign of insanity is denying that you're crazy.

4923. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-29 22:51:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <7rOdnUs3XbfgWqzUnZ2dnUVZ_u6dnZ2d@posted.easystreetonline>
Source record: 19697

Richard Fry wrote:
> On Nov 29, 1:10 pm, Roy Lewallen wrote:
>
>> As you can see, you can get reasonably good results using
>> EZNEC+ and near field analysis, although the vast majority
>> of people this intensely interested in the mechanisms of AM
>> broadcasting aren't hobbyists but rather professional
>> engineers who are using EZNEC Pro/4.
> --------
>
> Thanks very much for your numbers and comments, Roy.
>
> I would never have thought to try to use EZNEC near-field analysis to
> compute the groundwave if I hadn't read the suggestion to do so in
> this thread. That was my first, and will be my last attempt at that.

I've suggested it to you on at least one of the several occasions you've brought this subject up, in the thread "Re:Rhombics" on Oct. 1, 2006. I've also mentioned it at least 10 other times on this newsgroup going back as far as 1998. Reg used to entertain himself by periodically complaining about EZNEC's lack of ground wave analysis, and most of those postings mentioning the near field technique were in response to his postings. I see you've taken on that aspect of Reg's former source of entertainment. You and Reg were just about the only hobbyists who have this intense interest in EZNEC and ground wave analysis, and now that Reg is gone it's pretty much down to you. Of course you could directly get the results you want from NEC-2, which is free and readily available. I assume the reason you don't simply do that is that it wouldn't be as amusing.

> When I need to calculate the MW ground wave for a particular distance,
> monopole height, frequency and ground conductivity I use the FCC
> method of first determining the inverse distance field of the radiator
> at 1 km for 1 kW of radiated power, and then using that value in a
> program I have with the FCC's MW propagation curves in digitized form.

Since you can use this method to get results you believe to be correct, why do you need EZNEC? If you want another program to give you the same answers, why not use NEC-2? NEC uses the same method as the one used to generate the FCC's curves. But I believe the FCC curves account for Earth curvature while NEC doesn't, so I'm told they begin deviating at somewhere around a couple of hundred miles.

> My point when starting this thread was to show that the elevation
> pattern radiation actually launched by vertical monopoles on any

> frequency does not have a zero/very low relative amplitude at/near the
> horizontal plane, which from what I read on these NGs seems to be a
> popular belief.

I don't believe I've ever read that. But if anyone does believe it, a much larger number believe just about the opposite -- that the signal strength from a vertical is maximum at zero elevation angle at great distances from the antenna. This of course comes from the ubiquitous plots of the pattern of a vertical over perfect ground.

Guess that's enough for now. Maybe you can go a little longer before bringing it up again the next time? In the meantime, I suggest you either update your v. 4.0 EZNEC demo program or replace it with v. 5.0. The demo programs are still free.

Roy Lewallen, W7EL

4924. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 00:23:38 UTC
From: jimlux@earthlink.net
Message-ID: <3380966c-624d-4c90-9fa6-842c02903946@40g2000prx.googlegroups.com>
Source record: 19698
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

On Nov 28, 1:28 pm, Wimpie <wimabc...@tetech.nl> wrote:
> Hello,
>
> I made an excel sheet to simulate Fresnel diffraction patterns. I used
> a 2 way data table to generate the "infinitesimal" contributions from
> the EM field. After summation of the contributions in the 2D tables,
> a have one result cell (that holds |E|) and three input cells
> (variables) for x-, y-, and z- coordinate for the observation point.
> When I change the coordinates manually, the results seem OK.
>

> Does somebody know a solution for this (I do not prefer a VB one)?
>

Excel is a notoriously bad thing to use for statistics or numerical
analysis. Aside from the pain the rear nature once you get past
trivial manipulations, there are some serious calculation issues to
worry about (since Excel isn't rigorously tested for its
implementation, these also change as versions change)

http://www.burns-stat.com/pages/Tutor/spreadsheet_addiction.html
covers a lot of the problems.

You're better off biting the bullet and using something like Matlab
(academic license $100) or Octave (free, but not quite as fancy as
Matlab, but mostly compatible) or similar products.

4925. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 00:46:13 UTC
From: jimlux@earthlink.net
Message-ID: <bc27685f-2b9d-495f-bb97-a55c33d5c761@y1g2000pra.googlegroups.com>
Source record: 19699

On Nov 27, 12:58 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> On Nov 25, 11:26 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>

> Jim
> IEEE state that if papers were open source it would threaten the
> presence of the IEEE?

No.. it's that a significant part of IEEE's budget derives from publishing copyrighted standards and journals. One argument for the copyrighting of standards is that it provides a legal club to go after someone publishing an adulterated version. I'm not sure that really holds water, but there it is.
The cost of actually printing the journals is significant, and has to come from somewhere. They're not exactly huge circulation, and mostly have no advertising, but are printed on high quality stock with good quality typesetting.

> This statement was in regard to the high costs of obtaining copies
> from the IEEE without
> having to pay the high costs of belonging .

The cost to get a single copy is quite high compared to the cost to get access to thousands by being a member (check out those CCC prices at the bottom of the first page.. they're fairly pricey.. a dozen papers a year and you've just paid for your membership and access to Xplore)

I understand the need for
> peer review by academics but not necessarily a private entity
> and the IEEE rights to publish such so, are the IEEE demanding SOLE
> ownership of presented papers?

IEEE performs a useful function by organizing all those peer reviewers (finding them, getting the papers to them, haranguing them for their reviews, etc.).. Being an editor is a lot of work, and is often done as a labor of love by the editor (or, as "part of your job" in academe), as is being a decent reviewer. IEEE requests copyright transfer to them for papers published in their journals for a variety of reasons, and with a variety of exceptions.
1) Makes sure that you're not publishing the same thing in multiple places at the same time..
2) If your work was done, e.g., on gov't contract, often, the contract requires that the paper be public domain, and the IEEE is cool with that.
3) The author can publish the paper on their own website with an

appropriate disclaimer.

> I am assuming that all papers presented by the Universities as well as
> thesis papers belong to the parent university
> based on a recent antenna patent awarded to a University derived from
> a student dissertation.

Not necessarily ("all" is pretty all-encompassing).. A lot depends on
the funding source for the work.

This leaves
> an outstanding question !. If the university a public entity,
> reserves the rights of all papers arrived at the university
> then what rights do they hold that allows transference from the public
> domain of those rights to a private institution to the detriment of
> the public
> that finance them?

Those rights were never in the public domain to begin with. One might
argue that the underlying idea is in the public domain, but the
written description of has a copyright that belongs to the author
(except for a "work for hire") and the author gets to decide what they
do with it. And, I would argue that arranging for the publication of
the work in a "learned journal" is a pretty effective way of
disseminating the work to the general public. The fact that IEEE (or
Inst of Physics or AAAS, etc.) get an assignment of copyright as part
of the process is part of the cost of doing that publication. And
it's a fact that as online publication becomes easier, work IS being
disseminated by these means.

However, one should not disregard the significant value brought to the
process by the formalized peer review system. Yes, it has flaws and
can be (and has been) subverted, but it works moderately well.

Compare to the situation a hundred or two hundred years ago. I don't
complain that "the system" isn't moving as rapidly as technology might
allow, because the system has a fairly long time constant, which is
actually a good thing, since it prevents rapid whipsawing to follow
fashion. A printed journal will still be readable 100 or 200 years
from now. The same cannot necessarily be said of djvu or pdf or tiff
or other elecronic forms.

One should also not complain too loudly about the lack of heritage
journals on line for free. It costs a LOT to scan thing and put them
online, particularly if they're searchable. If you could convince
Congress to do it as a service to mankind, that would be a worthy
goal, but for now, someone's got to pay for it.

> Regards
> Art Unwin

4926. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 02:16:44 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9ffaf055-e3e5-4b33-9914-027b718705b6@n10g2000yqm.googlegroups.com>
Source record: 19700

On Nov 29, 6:46 pm, jim...@earthlink.net wrote:
> On Nov 27, 12:58 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>
> > On Nov 25, 11:26 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>
> > Jim
> > IEEE state that if papers were open source it would threaten the
> > presence of the IEEE?
>
> No.. it's that a significant part of IEEE's budget derives from
> publishing copyrighted standards and journals. One argument for the
> copyrighting of standards is that it provides a legal club to go after
> someone publishing an adulterated version. I'm not sure that really
> holds water, but there it is.
> The cost of actually printing the journals is significant, and has to
> come from somewhere. They're not exactly huge circulation, and mostly
> have no advertising, but are printed on high quality stock with good
> quality typesetting.
>
> > This statement was in regard to the high costs of obtaining copies
> > from the IEEE without
> > having to pay the high costs of belonging .
>
> The cost to get a single copy is quite high compared to the cost to
> get access to thousands by being a member (check out those CCC prices
> at the bottom of the first page.. they're fairly pricey.. a dozen
> papers a year and you've just paid for your membership and access to
> Xplore)
>
> I understand the need for
>
> > peer review by academics but not necessarily a private entity
> > and the IEEE rights to publish such so, are the IEEE demanding SOLE
> > ownership of presented papers?
>
> IEEE performs a useful function by organizing all those peer reviewers
> (finding them, getting the papers to them, haranguing them for their
> reviews, etc.).. Being an editor is a lot of work, and is often done
> as a labor of love by the editor (or, as "part of your job" in
> academe), as is being a decent reviewer. IEEE requests copyright
> transfer to them for papers published in their journals for a variety
> of reasons, and with a variety of exceptions.
> 1) Makes sure that you're not publishing the same thing in multiple
> places at the same time..

> 2) If your work was done, e.g., on gov't contract, often, the contract
> requires that the paper be public domain, and the IEEE is cool with
> that.
> 3) The author can publish the paper on their own website with an
> appropriate disclaimer.
>
> > I am assuming that all papers presented by the Universities as well as
> > thesis papers belong to the parent university
> > based on a recent antenna patent awarded to a University derived from
> > a student dissertation.
>
> Not necessarily ("all" is pretty all-encompassing).. A lot depends on
> the funding source for the work.
>
> This leaves
>
> > an outstanding question !. If the university a public entity,
> > reserves the rights of all papers arrived at the university
> > then what rights do they hold that allows transference from the public
> > domain of those rights to a private institution to the detriment of
> > the public
> > that finance them?
>
> Those rights were never in the public domain to begin with. One might
> argue that the underlying idea is in the public domain, but the
> written description of has a copyright that belongs to the author
> (except for a "work for hire") and the author gets to decide what they
> do with it. And, I would argue that arranging for the publication of
> the work in a "learned journal" is a pretty effective way of
> disseminating the work to the general public. The fact that IEEE (or
> Inst of Physics or AAAS, etc.) get an assignment of copyright as part
> of the process is part of the cost of doing that publication. And
> it's a fact that as online publication becomes easier, work IS being
> disseminated by these means.
>
> However, one should not disregard the significant value brought to the
> process by the formalized peer review system. Yes, it has flaws and
> can be (and has been) subverted, but it works moderately well.
>
> Compare to the situation a hundred or two hundred years ago. I don't
> complain that "the system" isn't moving as rapidly as technology might
> allow, because the system has a fairly long time constant, which is
> actually a good thing, since it prevents rapid whipsawing to follow
> fashion.   A printed journal will still be readable 100 or 200 years
> from now. The same cannot necessarily be said of djvu or pdf or tiff
> or other elecronic forms.
>
> One should also not complain too loudly about the lack of heritage
> journals on line for free. It costs a LOT to scan thing and put them
> online, particularly if they're searchable. If you could convince

> Congress to do it as a service to mankind, that would be a worthy
> goal, but for now, someone's got to pay for it.
>
> > Regards
> > Art Unwin

If the paper is under the auspices of the University it belongs to the
University.Period
Same goes for doctorate dissertations plus patent rights if applicable
to disertations.
Since it is a public University I question their rights to with hold
information
from the public at large. This is a great inconvenience to those laid
off,
unemployed that wish to stay up to date while searching for
employment.
To with hold information from the general public can be seen as a
crime against the Country
and there are other ways of obtaining reviews without non revealment
to the public.
Universities already prevent online useage of their technical
libraries but there is not one good reason why
studies paid for by the public taxes should not be placed on the
INTERNET.
To deprive the unemployed, retired, teachers and those under license
by federal authorities in pursuit of
science advancement is a crime against the Country by denying it a
path to a better society.
If there is a need for overview by one's peers then Universities and
education bodies should be able
to handle things for themselves instead providing papers to a private
institution for personal benefits.
It is time for CHANGE in the US where the ability for its people to
access any means that is to the
countries benefit as well as it constituents.If a patent holder or
applicant has no rights with regard to dissemination of his studies
then there is no real need for concealment by public entities
When public papers are handled by those elected by the people the
present professional bodies will have to allow the market to decide
whether there is a place for them
I suppose eventually there will be a request in federal court that
such information must be released for the press or the publiwhich can
be hastened by
informing your Congressman or Senator of the

THEFT OF PUBLIC FUNDS
BY PRIVATE ENTITIES
Art

4927. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 02:24:24 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <0b4f13dc-2e77-414b-aff8-22fe2c948f8f@j39g2000yqn.googlegroups.com>
Source record: 19601

On Nov 29, 4:51 pm, Roy Lewallen wrote:

> Since you can use this method to get results you believe
> to be correct, why do you need EZNEC?

Roy:

Don't _you_ believe that the results I posted using the FCC method I described to be "correct?"

Regardless, and to answer your question -- I don't really need EZNEC. But it can be interesting to see how various analytic methods compare.

Quite a few years ago and after due investigation/consideration, I paid about $300 for the NEC-2 products of one of EZNEC's competitors, because I preferred its graphical output choices and print quality, its higher segment limit compared to EZNEC+, and the customization it allowed in its printed output legends. This capability included the synthesis and import into the NEC model of any one of many dozens of 2-D and 3-D structures, to their specific mechanical specifications defined by the NEC user.

The main reason I use EZNEC occasionally is to investigate the claims of others who use EZNEC.

Sorry to be blunt , Roy, but then you asked.

RF wrote:
> > My point when starting this thread was to show that the elevation
> > pattern radiation actually launched by vertical monopoles on any
> > frequency does not have a zero/very low relative amplitude at/near the
> > horizontal plane, which from what I read on these NGs seems to be a
> > popular belief.

Roy Lewallen responded:
> I don't believe I've ever read that. But if anyone does believe it, a
> much larger number believe just about the opposite -- that the signal
> strength from a vertical is maximum at zero elevation angle at great
> distances from the antenna.

?? My reading of these NGs shows that many/most amateur radio operators ignore/discount the fact that the peak radiation launched by a vertical monopole of 5/8 lambda or less in height ALWAYS occurs in the horizontal plane., regardless of the operating frequency, or the r-f ground in use.

The radiation/reception characteristics at low elevation angles of such an antenna can be useful in establishing contacts with the most distant possible single-hop DX sites, can they not?

RF

4928. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 03:21:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <qYudnZWlb68om6_UnZ2dnUVZ_gKdnZ2d@posted.easystreetonline>
Source record: 19602

Richard Fry wrote:
> . . .
> ?? My reading of these NGs shows that many/most amateur radio
> operators ignore/discount the fact that the peak radiation launched by
> a vertical monopole of 5/8 lambda or less in height ALWAYS occurs in
> the horizontal plane., regardless of the operating frequency, or the r-
> f ground in use.

I don't think most amateurs care about the locally launched radiation, except when dealing with local RFI. That low angle radiation decays to essentially nothing within a few miles at HF and even less at VHF and above. So it's of no use for communicating beyond a few miles.

> The radiation/reception characteristics at low elevation angles of
> such an antenna can be useful in establishing contacts with the most
> distant possible single-hop DX sites, can they not?
>
> RF

They can not. I see you're still a bit confused about what happens to that ground wave signal. Beyond a few miles at HF, that low angle radiation decays to essentially zero. The pattern of the field beyond that distance resembles the one reported by EZNEC and other programs giving distant far field data. And they correctly show that unless the ground has very high conductivity at the reflection point, there will be very little field remaining at very low angles beyond that ground wave decay distance.

The performance of an antenna when communicating with a distant station is precisely what EZNEC is attempting to show you. If you want to know how it will do at various elevation angles for DX, or even at distances of a few hundred miles, look at those plots. At HF, ground wave analysis will only tell you how well the antenna will do when talking with someone across town. Which is why there's very little interest in ground wave analysis among amateurs, HF broadcasters, or just about anyone except AM broadcasters.

Roy Lewallen, W7EL

4929. Re: SteppIR support question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 04:03:43 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <BgoYk.5422$zQ3.215@newsfe12.iad>
Source record: 19603

"Bill Ogden" <billogden@optonline.net> wrote in message
news:49315526$0$20307$607ed4bc@cv.net...
> I have the 30/40 add-on for a 3-element SteppIR. Seems to work well.
> However, the middle element (a double element with a "U" fitting at each
> end) droops more that the two simple elements. This probably does not
> affect the operation of the antenna, but it looks odd.
>
> I have been thinking about extending the mast a few feet (probably with
PVC)
> and using dacron rope from the mast to the ends of the middle element, to
> give a little more vertical support. However, unless the mast extension
is
> rather long, there would be a substantial horizontal force pulling the
ends
> of the element toward the center.
>
> Has anyone done something about the drooping center element?
>
> Bill - W2WO

If you used an intermediary structure, you could eliminate/reduce
deformation of the element.

I can't engineer it for you but consider that you could have your Dacron
rope attached to another structure, perhaps more PVC, suspended above the
drooping element by rope loops on both sides, each supporting one side of
the (now no longer) drooping element. (A suspension bridge comes to mind,
in that the weight of the roadbed rests on the vertical suspension cables,
whose stresses are transferred in turn to the towers and the anchors.)

Just a thought

4930. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 10:47:55 UTC
From: Dave <noone@nowhere.com>
Message-ID: <vbuYk.1895$us6.202@nwrddc01.gnilink.net>
Source record: 19604

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:9ffaf055-e3e5-4b33-9914-027b718705b6@n10g2000yqm.googlegroups.com...
> THEFT OF PUBLIC FUNDS BY PRIVATE ENTITIES

so go file a criminal complaint... even at 'public' universities not all research work is paid for by the public. many projects are funded by private companies and other entities who retain the right to such work and any patents that may result. now of course most patents are publicly available, but not all of them... go figure that one out. of course how much more are you willing to be taxed to support electronic publishing of everything written at a public university? that service doesn't come for free, and the sheer volume of that stuff would make it downright expensive.

4931. Re: SteppIR support question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 11:42:22 UTC
From: ml <m@di.net>
Message-ID: <m-538F6E.06422230112008@news.optonline.net>
Source record: 19605

In article <BgoYk.5422$zQ3.215@newsfe12.iad>,
"Sal M. Onella" <salmonella@food.poisoning.org> wrote:

> "Bill Ogden" <billogden@optonline.net> wrote in message
> news:49315526$0$20307$607ed4bc@cv.net...
> > I have the 30/40 add-on for a 3-element SteppIR. Seems to work well.
> > However, the middle element (a double element with a "U" fitting at each
> > end) droops more that the two simple elements. This probably does not
> > affect the operation of the antenna, but it looks odd.
> >
> > I have been thinking about extending the mast a few feet (probably with
> PVC)
> > and using dacron rope from the mast to the ends of the middle element, to
> > give a little more vertical support. However, unless the mast extension
> is
> > rather long, there would be a substantial horizontal force pulling the
> ends
> > of the element toward the center.
> >
> > Has anyone done something about the drooping center element?
> >
> > Bill - W2WO
>
> If you used an intermediary structure, you could eliminate/reduce
> deformation of the element.
>
> I can't engineer it for you but consider that you could have your Dacron
> rope attached to another structure, perhaps more PVC, suspended above the
> drooping element by rope loops on both sides, each supporting one side of
> the (now no longer) drooping element. (A suspension bridge comes to mind,
> in that the weight of the roadbed rests on the vertical suspension cables,
> whose stresses are transferred in turn to the towers and the anchors.)
>
> Just a thought

if the parts are made by the original manuf, perhaps you should
contact them to see what they recomend to releive that droop,
and might even have a pre made solution, it's worth a email
to them at least

if they don't offer premade hardware perhaps they would at leas
suggest a solution that wouldn't unduly effect the antenna

4932. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 12:20:33 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <25c1cce4-33dc-45b7-85f7-4979c85fd572@x38g2000yqj.googlegroups.com>
Source record: 19606

On Nov 29, 9:21 pm, Roy Lewallen wrote:
> Richard Fry wrote:
> > The radiation/reception characteristics at low elevation angles of
> > such an antenna can be useful in establishing contacts with the most
> > distant possible single-hop DX sites, can they not?

> They can not. I see you're still a bit confused about what happens to
> that ground wave signal. Beyond a few miles at HF, that low angle
> radiation decays to essentially zero. The pattern of the field beyond
> that distance resembles the one reported by EZNEC and other programs
> giving distant far field data. And they correctly show that unless the
> ground has very high conductivity at the reflection point, there will be
> very little field remaining at very low angles beyond that ground wave
> decay distance.

I'm not considering that the ground wave signal _provides_ any of that low-angle DX coverage. It is the direct radiation existing in the radiation pattern of the monopole at low elevation angles that can do so. No ground reflection is necessary to create that field - it is launched by the monopole itself.

Below is a link to a clip from Terman's Radio Engineers Handbook, 1st edition, showing that the greatest single-hop range for skywave signals occurs from the radiation of the monopole at elevation angles of less than ten degrees. But looking at a NEC far-field analysis this would seem impossible, due to the greatly reduced fields in this sector that NEC shows for a vertical monopole over real earth.

This clip was done for MW frequencies, but the concept would apply equally at HF, would it not?

http://i62.photobucket.com/albums/h85/rfry-100/TermanFig55.jpg

RF

4933. Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 13:05:31 UTC
From: Douglas W Adair <n8wwm@allr.net>
Message-ID: <ggu32u$4i7$1@news.motzarella.org>
Source record: 19607
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

I like them two at a time--co-phased. Is there any gain to be had that way
or am I just skin pipe dreaming at the petro?

4934. Re: PLEASE FORWARD TO DOUG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 13:09:44 UTC
From: Douglas W Adair <n8wwm@allr.net>
Message-ID: <ggu3at$6ge$1@news.motzarella.org>
Source record: 19608
Cross-posted to: misc.transport.trucking,rec.radio.amateur.antenna

THANKS!

N8WWM

4935. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 14:21:37 UTC
From: Dave <dave@dave.dave>
Message-ID: <4932a172$0$31164$bd467cd0@news.dslextreme.com>
Source record: 19609

Douglas W Adair wrote:
> I like them two at a time--co-phased. Is there any gain to be had that way
> or am I just skin pipe dreaming at the petro?
>
>
Any time you double-illuminate the far field you are creating lobes and
nulls. A single omnidirectional radiator is optimal for a moving
station, unless you have means to steer the lobes whilst steering the
vehicle.

They do look bad-ass, but just connect one of them and you'll have
better overall performance (theoretically).

4936. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 14:42:37 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <50e47e6c-5ba0-4a84-8c1f-d9184efc6485@w34g2000yqm.googlegroups.com>
Source record: 19610

On Nov 30, 4:47 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:9ffaf055-e3e5-4b33-9914-027b718705b6@n10g2000yqm.googlegroups.com...
>
> > THEFT OF PUBLIC FUNDS BY PRIVATE ENTITIES
>
> so go file a criminal complaint... even at 'public' universities not all
> research work is paid for by the public. many projects are funded by
> private companies and other entities who retain the right to such work and
> any patents that may result. now of course most patents are publicly
> available, but not all of them... go figure that one out. of course how
> much more are you willing to be taxed to support electronic publishing of
> everything written at a public university? that service doesn't come for
> free, and the sheer volume of that stuff would make it downright expensive.

I have asked the trusties what the policy is regarding this before I
proceed.
I am in the rujst belt and there are many engineers that have and are
going to be laid off.
They will not be able to afford to stay abreast of things and thus
will be hurtin the coming depression.
Not good for the Countries future I would say
Art

4937. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 16:08:14 UTC
From: Dave <dave@dave.dave>
Message-ID: <4932ba6e$0$31213$bd467cd0@news.dslextreme.com>
Source record: 19611

Dave wrote:
> Douglas W Adair wrote:
>> I like them two at a time--co-phased. Is there any gain to be had that
>> way or am I just skin pipe dreaming at the petro?
>>
> Any time you double-illuminate the far field you are creating lobes and
> nulls. A single omnidirectional radiator is optimal for a moving
> station, unless you have means to steer the lobes whilst steering the
> vehicle.
>
> They do look bad-ass, but just connect one of them and you'll have
> better overall performance (theoretically).

You could phase them for favoring the direction of travel, I suppose.
That might be the idea.

4938. Lightning Info?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 16:15:29 UTC
From: ml <m@di.net>
Message-ID: <m-0E914D.11152930112008@news.optonline.net>
Source record: 19612

hi

I wondered what would happen if lightning hit my station.
Realize that it's impossible to say exactly but in general i wonder
what the 'step' of failure would be ...

My set up is fairly simple:

I have a few J poles (stainless rods)
some dipoles around 80f some are 10ga some 14
a gps antenna
a fiberglass 900mhz and 1.2g

a 2m and 440 sat eggbeater

most are connected via lmr 400 some lmr600

preamps on the sat are cat 5 fed
one dipole has a sgc tuner fed also via cat5

straight run from roof down a concreate 2x3ft 'shaft' opens on
roof down to elec closet on my floor then into my apt

I have ICE lightning protectors (14story building i am on 4thfl)
almost near where coax enters my apt

they are 'grounded' to the elec ground which I tested and is good as
elec grounds go

typically when weather is bad i unscrew the coax going to the radios
at the ice and leave dangling this creates about a 2ft 'gap'

so assuming a worst case and my roof antennas take a direct hit

what would i theorize would happen?

I suspect the 14g dipole wire would vaporize perhaps also the 10ga

perhaps the jpole might remain?

i suspect the egg beaters would partially vaporize and their baluns
melt

the sgc would fail,

would the coax vaporize at the roof?

would i suspect (distance from roof to ICE @ apt 175ft of coax
) the coax would carry much power measured at my apt end? or
would it vaporize first??

if not would it be absorbed by the concreate walls given the distance? /arc? by the time it got to my apt?

assuming there would be power down to the ice and given it's connected to elec ground would anyone suspect they would dissipate the power to gnd? or just arc over the apt?

any general thoughts as to what might actually happen in this scenario from both a practical and theoritical would be appreciated

i always wonder what would be logical to assume in a direct hit scenario

thanks

4939. Re: SteppIR support question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 16:22:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <27115c31-477f-4e84-89e7-bf779dda74b3@33g2000yqm.googlegroups.com>
Source record: 19613

On Nov 30, 5:42 am, ml <m...@di.net> wrote:
> In article <BgoYk.5422$zQ3....@newsfe12.iad>,
> "Sal M. Onella" <salmone...@food.poisoning.org> wrote:
>
>
>
> > "Bill Ogden" <billog...@optonline.net> wrote in message
> >news:49315526$0$20307$607ed4bc@cv.net...
> > > I have the 30/40 add-on for a 3-element SteppIR. Seems to work well.
> > > However, the middle element (a double element with a "U" fitting at each
> > > end) droops more that the two simple elements. This probably does not
> > > affect the operation of the antenna, but it looks odd.
>
> > > I have been thinking about extending the mast a few feet (probably with
> > PVC)
> > > and using dacron rope from the mast to the ends of the middle element, to
> > > give a little more vertical support. However, unless the mast extension
> > is
> > > rather long, there would be a substantial horizontal force pulling the
> > ends
> > > of the element toward the center.
>
> > > Has anyone done something about the drooping center element?
>
> > > Bill - W2WO
>
> > If you used an intermediary structure, you could eliminate/reduce
> > deformation of the element.
>
> > I can't engineer it for you but consider that you could have your Dacron
> > rope attached to another structure, perhaps more PVC, suspended above the
> > drooping element by rope loops on both sides, each supporting one side of
> > the (now no longer) drooping element. (A suspension bridge comes to mind,
> > in that the weight of the roadbed rests on the vertical suspension cables,
> > whose stresses are transferred in turn to the towers and the anchors.)
>
> > Just a thought
>
> if the parts are made by the original manuf, perhaps you should
> contact them to see what they recomend   to releive   that   droop,
> and might even have   a pre made solution,   it's worth a email
> to them at least
>
> if they don't offer   premade hardware   perhaps they would at leas

> suggest a solution that wouldn't unduly effect the antenna

I had a simiar case with a fibre glass tube of extremme length.
I injected insulated foam inside the tube and deflection was greatly
reduced.
This ofcourse is no substitute for securing a stiffener of a suitable
material to
the center length of the radiator
Art

4940. Re: PLEASE FORWARD TO DOUG

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 17:12:40 UTC
From: mopeyzakween@yahoo.com
Message-ID: <56baef04-38ba-4e1d-98cd-126fe3337f03@j35g2000yqh.googlegroups.com>
Source record: 19614
Cross-posted to: misc.transport.trucking,rec.radio.amateur.antenna

On Nov 30, 8:09 am, "Douglas W Adair" <n8...@allr.net> wrote:
> THANKS!
>
> N8WWM

http://nimbusters.org/forum/read.php?board=8&id=647774

4941. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 17:13:24 UTC
From: mopeyzakween@yahoo.com
Message-ID: <1eb9139c-254b-4431-8a03-9d0bf8cc113f@3g2000yqs.googlegroups.com>
Source record: 19615

On Nov 30, 11:08 am, Dave <d...@dave.dave> wrote:
> Dave wrote:
> > Douglas W Adair wrote:
> >> I like them two at a time--co-phased. Is there any gain to be had that
> >> way or am I just skin pipe dreaming at the petro?
>
> > Any time you double-illuminate the far field you are creating lobes and
> > nulls. A single omnidirectional radiator is optimal for a moving
> > station, unless you have means to steer the lobes whilst steering the
> > vehicle.
>
> > They do look bad-ass, but just connect one of them and you'll have
> > better overall performance (theoretically).
>
> You could phase them for favoring the direction of travel, I suppose.
> That might be the idea.

http://nimbusters.org/forum/read.php?board=8&id=647774

4942. Re: HOMO HELP DESK

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 17:50:04 UTC
From: KD8CTL <gavie@hotmail.com>
Message-ID: <4932d250$0$17066$6e1ede2f@read.cnntp.org>
Source record: 19616
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Call or write:

Lance & Lisa Adair
10431 Jackman Rd
Temperance, MI 48182-9629
(734) 854-2426

4943. Re: A question about dummy load

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 17:52:11 UTC
From: KD8CTL <gavie@hotmail.com>
Message-ID: <4932d2cf$0$17066$6e1ede2f@read.cnntp.org>
Source record: 19617

That's the part of me that ran down my daddys leg.

N8WWM

4944. Hey Roy! Who's playing Gospel on 1610 kHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 17:54:49 UTC
From: Dave <dave@dave.dave>
Message-ID: <4932d36d$0$31192$bd467cd0@news.dslextreme.com>
Source record: 19618

Thanks.

4945. Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 20:02:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1de21ee7-161a-44d2-98be-0c87f24b6fdf@z1g2000yqn.googlegroups.com>
Source record: 19619

Since we are at the low sun cycle I shoose
1" hexigon poultry wire for the mash on my 3 metre dish
At what frequency will there be a noticable effect on aperture
starting with top band?
Many thanks
Art KB9MZ...,XG

4946. Re: Lightning Info?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 21:32:44 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <mBDYk.2140$YU6.370@bignews8.bellsouth.net>
Source record: 19620

"ml" <m@di.net> wrote in message
news:m-0E914D.11152930112008@news.optonline.net...
> hi
>
> I wondered what would happen if lightning hit my station.
> Realize that it's impossible to say exactly but in general i wonder
> what the 'step' of failure would be ...

Maybe you should play it safe and use the "Lee Trevino one-iron" lightning protection club.
I believe it was Lee Trevino who started it - during a thuinderstorm, when lightning was hitting all around, the golfer pulled a one-iron out of his bag and held it up high saying that 'even God couldn't hit a one-iron'.
So wrap your coax around a one-iron and hope you've been a good boy.
:-)

4947. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 21:40:08 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <ilDYk.2143$YU6.444@bignews8.bellsouth.net>
Source record: 19621
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

If fed in phase and spaced correctly, there could be gain to the front and
to the back with a decreased propogation to the sides.
This is usually desirable if traveling on a mostly straight stretch of
highway. I think the spacing is a little too far apart for use on most cars.

"Douglas W Adair" <n8wwm@allr.net> wrote in message
news:ggu32u$4i7$1@news.motzarella.org...
>I like them two at a time--co-phased. Is there any gain to be had that way
>or am I just skin pipe dreaming at the petro?
>

4948. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 21:44:45 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <p726j4hi0oqrlqm2k1hfdcqsmra042g623@4ax.com>
Source record: 19622

On Thu, 27 Nov 2008 12:57:42 +0000, Dave <dave@dave.dave> wrote:

>JosephKK wrote:
>> On Sun, 16 Nov 2008 19:20:11 +0000, Dave <dave@dave.dave> wrote:
>>
>>> Richard Harrison wrote:
>>>> Dave wrote:
>>>> "Continuous Tone Coded Subaudible Squelch"
>>>>
>>>> I like that better than "Continuous Tone Coded Squelch System" as
>>>> "System" is nondescriptive.
>>>>
>>>> Best regards, Richard Harrison, KB5WZI
>>>>
>>> I think it's from the MOCOM 70 Service Manual. Motorola called it
>>> "Private Line".
>>>
>> Since it appears that you do not want a telephone DTMF decoder what is
>> it that you want to decode?
>>
>No decoding involved. It's a tone that unsquelches an FM radio.

Which make and model / series? There are dozens of variations.

4949. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 21:45:03 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <ktdb06-lnj.ln1@mail.specsol.com>
Source record: 19623

Art Unwin <ArthurUnwin@gmail.com> wrote:
> Since we are at the low sun cycle I shoose
> 1" hexigon poultry wire for the mash on my 3 metre dish
> At what frequency will there be a noticable effect on aperture
> starting with top band?
> Many thanks
> Art KB9MZ...,XG

The rule of thumb is things less that .1 wavelengths in size have
negligable effects, so roughly up to about 1 GHz.

--
Jim Pennino

Remove .spam.sux to reply.

4950. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 21:59:49 UTC
From: kb9rqz@yahoo.com
Message-ID: <j636j4dr2uc543dmdsfaktcc03jpg96ii4@4ax.com>
Source record: 19624
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4951. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 22:21:37 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <920eb81b-c385-4e3e-bc6b-f9d7e8c57720@v42g2000yqv.googlegroups.com>
Source record: 19625
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Nov 30, 4:40 pm, "Hal Rosser" <hmros...@bellsouth.net> wrote:
> If fed in phase and spaced correctly, there could be gain to the front and
> to the back with a decreased propogation to the sides.
> This is usually desirable if traveling on a mostly straight stretch of
> highway. I think the spacing is a little too far apart for use on most cars.
>
> "Douglas W Adair" <n8...@allr.net> wrote in
messagenews:ggu32u$4i7$1@news.motzarella.org...
>
>
>
> >I like them two at a time--co-phased. Is there any gain to be had that way
> >or am I just skin pipe dreaming at the petro?- Hide quoted text -
>
> - Show quoted text -

I figure this is for an 18 wheeler on CB. In that case the dual
antennas make the patern more omni. Back in the 70s I belonged to a CB
club and we did some test of the effects of auto body styles on
radiation patterns. We discovered body stle and mounting location were
as important if not more so than the antena you were using.

An 18 wheeler with a single antenna mounted on a mirror has a really
ragged radiation pattern. Two antennas makes it a lot less ragged,
still a far way from being omni-directional.

Jimmie

4952. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 22:24:28 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <e7eeba88-a5d3-4cd3-be5c-1cfcbc74a5a7@33g2000yqm.googlegroups.com>
Source record: 19626
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

On 30 nov, 01:23, jim...@earthlink.net wrote:
> On Nov 28, 1:28 pm, Wimpie <wimabc...@tetech.nl> wrote:
>
> > Hello,
>
> > I made an excel sheet to simulate Fresnel diffraction patterns. I used
> > a 2 way data table to generate the "infinitesimal" contributions from
> > the EM field. After summation of the contributions in the 2D tables,
> > a have one result cell (that holds |E|) and three input cells
> > (variables) for x-, y-, and z- coordinate for the observation point.
> > When I change the coordinates manually, the results seem OK.
>
> > Does somebody know a solution for this (I do not prefer a VB one)?
>
> Excel is a notoriously bad thing to use for statistics or numerical
> analysis. Aside from the pain the rear nature once you get past
> trivial manipulations, there are some serious calculation issues to
> worry about (since Excel isn't rigorously tested for its
> implementation, these also change as versions change)
>
> http://www.burns-stat.com/pages/Tutor/spreadsheet_addiction.html
> covers a lot of the problems.
>
> You're better off biting the bullet and using something like Matlab
> (academic license $100) or Octave (free, but not quite as fancy as
> Matlab, but mostly compatible) or similar products.

Hello,

Thanks for replying Richard and Jim. I hoped somebody had a similar problem and knew a work-around. I know Excel is not the perfect tool to do this, but I did similar things with reasonable results. I hoped using data tables would speed up the spreadsheet design (until now it didn't).

I do not have OO.org installed on this machine. A brother in law has it on his PC, so when I visit him I will try to load the worksheet into OO calc (or set it up in OO calc).

When this (OO calc) doesn't give the desired result, I have to change to something that supports programming. I am not a student so Matlab might not be option. I looked at "octave", "python" and "R". These require some study also. Other option is to use an old general purpose SW development package (C or Pascal based).

I think I have to spend some time to decide what to use...

Best regards,

Wim
PA3DJS
www.tetech.nl
removing abc results in valid PM

4953. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 22:52:16 UTC
From: Dave <dave@dave.dave>
Message-ID: <49331921$0$31202$bd467cd0@news.dslextreme.com>
Source record: 19627

JosephKK wrote:
> On Thu, 27 Nov 2008 12:57:42 +0000, Dave <dave@dave.dave> wrote:
>
>> JosephKK wrote:
>>> On Sun, 16 Nov 2008 19:20:11 +0000, Dave <dave@dave.dave> wrote:
>>>
>>>> Richard Harrison wrote:
>>>>> Dave wrote:
>>>>> "Continuous Tone Coded Subaudible Squelch"
>>>>>
>>>>> I like that better than "Continuous Tone Coded Squelch System" as
>>>>> "System" is nondescriptive.
>>>>>
>>>>> Best regards, Richard Harrison, KB5WZI
>>>>>
>>>> I think it's from the MOCOM 70 Service Manual. Motorola called it
>>>> "Private Line".
>>> Since it appears that you do not want a telephone DTMF decoder what is
>>> it that you want to decode?
>>>
>> No decoding involved. It's a tone that unsquelches an FM radio.
>
> Which make and model / series? There are dozens of variations.
>
These are the standard CTCSS freqs:

http://www.batnet.com/~mfwright/ht220plcodes.html

http://en.wikipedia.org/wiki/CTCSS

4954. Re: No More Free TV (was Log-Periodic Antenna Design)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 23:22:10 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <eo76j4lhguipcd2to63n9qotmcqt227k3c@4ax.com>
Source record: 19628

On Thu, 27 Nov 2008 22:36:14 -0500, T <kd1s.nospam@cox.nospam.net>
wrote:

>In article <ggmk1d$9cp$1@news.motzarella.org>, mygarbagecan@verizon.net
>says...
>>
>> "Dave" <noone@nowhere.com> wrote in message
>> news:SuyXk.1461$QX3.351@nwrddc02.gnilink.net...
>> > TV has never been 'free'. you pay for it with every product you purchase
>> > that is advertised on tv. and of course you pay for it in taxes, and also
>> > in product purchases from sponsors, for 'public' tv channels. tanstaafl!
>> >
>> My squawk with "pay" TV is that you pay to get it, and then have to
>> additionally watch commercials.
>>
>>
>>
>
>I have exactly the same argument against "pay" TV. So what are we paying
>for?

Wait for it...

To get to the new(ish) movies even faster? Naw.

To maintain the publisher / studio system of property rights? Maybe.

To help keep the inherited great wealth rich, rich, could be

maybe it is just people being people? No way.

4955. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 23:27:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dk76j418mm7t3km7r1mp4og33k73hacncb@4ax.com>
Source record: 19629

On Sun, 30 Nov 2008 21:45:03 GMT, jimp@specsol.spam.sux.com wrote:

>Art Unwin <ArthurUnwin@gmail.com> wrote:
>> Since we are at the low sun cycle I shoose
>> 1" hexigon poultry wire for the mash on my 3 metre dish
>> At what frequency will there be a noticable effect on aperture
>> starting with top band?
>> Many thanks
>> Art KB9MZ...,XG
>
>The rule of thumb is things less that .1 wavelengths in size have
>negligable effects, so roughly up to about 1 GHz.

Hi Jim,

You neglect to mention that a 3 meter dish would be wholly (no pun intended) transparent to RF in the top band. It could be solid metal to no notice by a radiator (or receiver).

It would be like blocking the sound 3 feet from the stage at a Led Zepplin concert with a Japanese parasol. -Huh?-

73's
Richard Clark, KB7QHC

4956. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 23:33:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ae86j4l3rrg1hq7ubcc0mag8bgtptj97kq@4ax.com>
Source record: 19630
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

On Sun, 30 Nov 2008 14:24:28 -0800 (PST), Wimpie <wimabctel@tetech.nl>
wrote:

>I know Excel is not the perfect tool
>to do this, but I did similar things with reasonable results.

Hi Wim,

After following Jim's link, and reading it to considerable depth, I
wouldn't trust Excel to do anything more than 3rd grade arithmetic.
Even then, there are too many examples to suggest I still could get
burned. Take heed of their cautions that "reasonable results" are not
always accurate results.

Could the financial meltdown be attributable to rounding errors in
spreadsheets?

Make the investment and go with R.

73's
Richard Clark, KB7QHC

4957. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 23:55:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <8mlb06-ask.ln1@mail.specsol.com>
Source record: 19631

Richard Clark <kb7qhc@comcast.net> wrote:
> On Sun, 30 Nov 2008 21:45:03 GMT, jimp@specsol.spam.sux.com wrote:
>
>>Art Unwin <ArthurUnwin@gmail.com> wrote:
>>> Since we are at the low sun cycle I shoose
>>> 1" hexigon poultry wire for the mash on my 3 metre dish
>>> At what frequency will there be a noticable effect on aperture
>>> starting with top band?
>>> Many thanks
>>> Art KB9MZ...,XG
>>
>>The rule of thumb is things less that .1 wavelengths in size have
>>negligable effects, so roughly up to about 1 GHz.
>
> Hi Jim,
>
> You neglect to mention that a 3 meter dish would be wholly (no pun
> intended) transparent to RF in the top band. It could be solid metal
> to no notice by a radiator (or receiver).
>
> It would be like blocking the sound 3 feet from the stage at a Led
> Zepplin concert with a Japanese parasol. -Huh?-
>
> 73's
> Richard Clark, KB7QHC

Yeah, I foolishly forgot the source of the question and assumed "top band" meant highest useable frequency.

Unless I hosed the math, a 3 m dish would be a little over 10 db isotropic at 2 m, so the combinatation would "work" from 2 m to 23 cm.

--
Jim Pennino

Remove .spam.sux to reply.

4958. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-11-30 23:57:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9496j49bkrkef80qo1poc7auphvujl99m8@4ax.com>
Source record: 19632

On Sun, 30 Nov 2008 04:20:33 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>showing that the greatest single-hop range for skywave
>signals occurs from the radiation of the monopole at elevation angles
>of less than ten degrees.

Which is uniformly poorer by 12 dB than that launched at 40ï¿½.

73's
Richard Clark, KB7QHC

4959. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 00:07:43 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <hja6j4pnhoekf9dj7v305v0sqv537gbqcr@4ax.com>
Source record: 19633

On Sat, 29 Nov 2008 02:51:59 GMT, "JB" <nospam@goofball.net> wrote:

> ... my blind belief that men in power would honor their
>> duties and responsibilities to the American people has been destroyed.
>>
>> The time when our nation stood on infallible principals, morals, ethics,
>> honors and commitments has slowly disappeared until such territories are
>> loath to intellectuals--other than to demand a return to sanity, truth
>> in government and the publics right to know, and a fair and just system.
>>
>
>This is actually where I have stood since the first grade. Except that the
>public seems to have abdicated it's right to know by entrusting that to
>advertisers and spokesman.
>
>1. Vote no when there is too much verbiage in legislation
>2. Vote such that politicians will tend wear themselves out (on each other)
>before doing harm which often results from an unchallenged decision. This
>also gives the public more of a swing vote in their decisions.
>
>The only infallible is God. Our country takes a tumble every time we lose
>our moral compass. Aside from that, NO country or system has ever been
>infallible. We could be disappointed under any system that we entrust all
>power to men (or women). Be very afraid when they are all in complete
>agreement, because they won't need us for anything anymore.

Defecation on your non-existent deity.

4960. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 00:17:15 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <j5b6j45raeh6691ing7j3tq4e54jnu31f4@4ax.com>
Source record: 19634

On Sat, 29 Nov 2008 03:47:46 GMT, "JB" <nospam@goofball.net> wrote:

>
>"John Smith" <assemblywizard@gmail.com> wrote in message
>news:ggqasm$u15$1@news.albasani.net...
>> JB wrote:
>>
>> > ...
>> > The Forrestal disaster was attributed to druggies. The enemy was no
>doubt
>> > there on board. Many people have yet to figure out about the mechanics
>of
>> > such disasters. I submit that there will be 2 sides to every story to
>come
>> > out of the Vietnam war, and that sufficient truth is often left out to
>allow
>> > that.
>> >
>> > I wrecked a few cars before I learned how to drive. Have you ever been
>> > tortured for information? or just for the hell of it? People who sit
>around
>> > and talk about it over tea aren't fit to judge who a hero is but they
>are
>> > often left to talk about it. Let's just call him "experienced". I
>really
>> > don't consider Obama to be the "Black Messiah" either.
>> >
>> > I feel that both candidates were potential disasters, showing the idiots
>had
>> > prevailed before the election. The vote only served as an international
>> > "poll" on how best to proceed to our doom. It seems the election has
>tried
>> > to set the clock back to what it was before 9/11. Let's see what
>develops
>> > this time around.
>>
>> Along the way, though college, it is pointed out to you that any great
>> story (or, at least a believable one) has a protagonist and an
>> antagonist (sometimes more of them, sometimes less of them); i.e. a
>> "good guy" and a "bad guy." It is based on a storyline where great
>> adversity is found, great sacrifice and energy extended and exerted, and
>> finally the defeat of the enemy is had ... funny, but we will fall for
>> this same line though uncounted books by uncounted authors. Read any
>> great Greek tragedies/novels/plays, Shakespeare knew this and you find

>> it in his offerings. (Or, turn on Rush, "... bad democrats, good
>> republicans ...", this is simply recited over-and-over again to keep
>> idiots in line and massage the weak minds into the hypnotic/religious
>> lies which got us here ... some still have futures which hinge on
>> keeping the insanity alive. Indeed, real change will bring collapse ...)
>>
>> Such is also how our political system is arranged, good guy vs. bad guy
>> (and, you just pick who is good and who is bad, or toss a coin. Or have
>> you allegiances bought and paid for ...) And, so is our foreign policy
>> applied, we are the good guy, they are the bad guy and these are our
>> friends who help us in our great adventure ... fear gets the whole ball
>> rolling, even unjustified fear(s) will work ...
>>
>> Someday, all will see the truth, become ashamed of living such a shallow
>> "truth(s)", and be shamed into higher standards and goals ... until that
>> time, a few can control the minds of many ... and ultimately the world.
>>
>> Regards,
>> JS
>>
>
>I had considered the "good cop", "bad cop" routine, but I really think it
>goes back to the "demoralization" and "destabilization" process that you
>yourself (and myself) admit to in lost faith, but healthy distrust along
>with a sense of reality is vital, but not to the point of being crippled.
>
>Rush noticed that what's "good" for the Country is "bad" for the democrats
>and what's "bad" for the Country is "good" for the democrats. It isn't lost
>on me that "when it bleeds it leads". Who for example is responsible for
>those who apply psychological pressure to "known" gun owners to induce them
>to random mass murder? Who would that benefit? There are many cynical
>people out there with a sick sense of humor. Your assertion that real
>change would bring collapse is too cynical and I wouldn't set myself up to
>be wrong unless there is a complete failure. That just gives us the wrong
>goal. Seek God. I know you hate "religion" but rather than seeking as a
>blind follower, seek as a researcher. Set those things aside that you don't
>immediately understand but don't entirely dismiss them. That is simply
>arrogance. The intellectual is a fathead who completely dismisses that
>which he doesn't understand or what is related to him by the unschooled.
>Those who do that operate contrary to the scientific method. Even a failed
>experiment shouldn't be thrown out, but learned from. Or saved until the
>failure is understood.
>
>In light of that, "The Interview" link I posted earlier, the true threat is
>the cynicism that developed that whole school of thought. It is a process
>of destruction. Not only that, but of unchecked destruction.
>
>

Just everything Rush wanted was worse than what we had.

4961. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 00:21:27 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <89nb06-mra.ln1@p400bob.personal.cox.net>
Source record: 19641
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

I always wondered whether a short/loaded magbase antenna on the trailer roof (so it doesnt hit bridges etc) would work better than a mirror mount...

How much roof to bridge etc clearance is there normally?

I would have a thought a DDRR would have been good too but I read something recently that mentioned performance has never been as good as expected.

Thoughts?

Cheers Bob

JIMMIE wrote:

> An 18 wheeler with a single antenna mounted on a mirror has a really
> ragged radiation pattern. Two antennas makes it a lot less ragged,
> still a far way from being omni-directional.

4962. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 00:25:28 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9a4e6708-fb56-4ccd-af79-d2af926ae592@z1g2000yqn.googlegroups.com>
Source record: 19635

On Nov 30, 5:55 pm, j...@specsol.spam.sux.com wrote:
> Richard Clark <kb7...@comcast.net> wrote:
> > On Sun, 30 Nov 2008 21:45:03 GMT, j...@specsol.spam.sux.com wrote:
>
> >>Art Unwin <ArthurUn...@gmail.com> wrote:
> >>> Since we are at the low sun cycle I shoose
> >>> 1" hexigon poultry wire for the mash on my 3 metre dish
> >>> At what frequency will there be a noticable effect on aperture
> >>> starting with top band?
> >>> Many thanks
> >>> Art KB9MZ...,XG
>
> >>The rule of thumb is things less that .1 wavelengths in size have
> >>negligable effects, so roughly up to about 1 GHz.
>
> > Hi Jim,
>
> > You neglect to mention that a 3 meter dish would be wholly (no pun
> > intended) transparent to RF in the top band. It could be solid metal
> > to no notice by a radiator (or receiver).
>
> > It would be like blocking the sound 3 feet from the stage at a Led
> > Zepplin concert with a Japanese parasol.   -Huh?-
>
> > 73's
> > Richard Clark, KB7QHC
>
> Yeah, I foolishly forgot the source of the question and assumed "top
> band" meant highest useable frequency.
>
> Unless I hosed the math, a 3 m dish would be a little over 10 db
> isotropic at 2 m, so the combinatation would "work" from 2 m to 23 cm.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

I ask the question because the radiator is a helix end fed, helix
being approx 0.3 M diameter. Intuitively, I thought that the 3 M dish
would be large enough
and thus needed a check on the perforations. Could you show how the
"combination" changed things so drastically so I may benefit from the
question?

I stated "intuitively" since the radiation is axia with respect to the
helix
Many thanks
Art

4963. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 00:27:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hra6j4truv55u5srtoocuisn0l0e63t7js@4ax.com>
Source record: 19636

On Sun, 30 Nov 2008 04:20:33 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>But looking at a NEC far-field analysis
>this would seem impossible, due to the greatly reduced fields in this
>sector that NEC shows for a vertical monopole over real earth.

NEC is not a propagation modeler.

However, resourcing the top engineers of the AM field for their
observations of sky-wave and ground-wave field strengths (a typical
service application) where they combine destructively (the "fading
wall"); at a distance of 70 miles, for 50% of the time, both signals
are equal (with propagation variations of phase accounting for
fading).

The graph you supply suggests that this 70 mile distance is obtained
by a launch angle (for the sky-wave) of 60 degrees. The NEC far-field
analysis for the BL&E antenna of 70 foot tall radiator in a field of
113 135 foot radials over average ground has a response of -2.32dB @
60ï¿½ and -1.61dB @ 1ï¿½ which shows a pretty close accord with field
reports from Laport (Fig 2.7).

73's
Richard Clark, KB7QHC

4964. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 00:43:33 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <u1c6j41gtjg28gstf1k06tro2eojc1go4v@4ax.com>
Source record: 19637

On Sun, 30 Nov 2008 23:55:02 GMT, jimp@specsol.spam.sux.com wrote:

>Richard Clark <kb7qhc@comcast.net> wrote:
>> On Sun, 30 Nov 2008 21:45:03 GMT, jimp@specsol.spam.sux.com wrote:
>>
>>>Art Unwin <ArthurUnwin@gmail.com> wrote:
>>>> Since we are at the low sun cycle I shoose
>>>> 1" hexigon poultry wire for the mash on my 3 metre dish
>>>> At what frequency will there be a noticable effect on aperture
>>>> starting with top band?
>>>> Many thanks
>>>> Art KB9MZ...,XG
>>>
>>>The rule of thumb is things less that .1 wavelengths in size have
>>>negligable effects, so roughly up to about 1 GHz.
>>
>> Hi Jim,
>>
>> You neglect to mention that a 3 meter dish would be wholly (no pun
>> intended) transparent to RF in the top band. It could be solid metal
>> to no notice by a radiator (or receiver).
>>
>> It would be like blocking the sound 3 feet from the stage at a Led
>> Zepplin concert with a Japanese parasol. -Huh?-
>>
>> 73's
>> Richard Clark, KB7QHC

>Yeah, I foolishly forgot the source of the question and assumed "top
>band" meant highest useable frequency.
>
>Unless I hosed the math, a 3 m dish would be a little over 10 db
>isotropic at 2 m, so the combinatation would "work" from 2 m to 23 cm.

Well, if you take the question literally, the aperature of a 3 meter
dish is ummm.... 3 meters. If he had said effective aperature, the
answer might be different.

As for top band (160 meters), he might be referring to a chicken wire
ground. This looks marginally applicable:
<http://lists.contesting.com/_topband/2002-09/msg00005.html>

Maybe he's thinking of burying his 3 meter dish and using it as a
ground radial system?

Incidentally, I've had rather bad luck using twisted galvanized chicken wire for making dish antennas. I kept getting intermittent noise crashes and arcing like noise bursts on a 1.7GHz WX satellite system I once threw together. I eventually found that banging on the chicken wire would produce the same noise bursts. I didn't bother trying to find out exactly what was doing the arcing. When I switched to using aluminum flashing and aluminum duct tape for the reflector, the noise went away.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4965. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 00:55:02 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <fuc6j4913gupsfovi1ilal38qeovoe8gqe@4ax.com>
Source record: 19638

On Wed, 26 Nov 2008 12:00:06 -0800, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>On Wed, 26 Nov 2008 15:48:50 GMT, "JB" <nospam@goofball.net> wrote:
>
>>Excellent post.
>
>Thanks. I'll add one more notch on my LCD frame.
>
>>The problem with QEX is not enough submissions.
>
>Well, they rejected one of mine many years ago. The problem was they
>never really said why. When I pressed the editor, he replied that he
>had enough submissions of sufficient quality. I tried again later and
>had it rejected because I wasn't an ARRL member at the time (because I
>was broke). I don't know what was going on, but I wasn't thrilled and
>never bothered again.
>
>>As for the
>>QST AM mods, I was thinking that was ATV, but maybe you were talking about
>>something else.
>
>Something else was converting commercial land mobile FM radios from
>WBFM or later NBFM to AM (A3A) modulation. Mostly, it was adding a
>low level modulation circuit, and converting the power stages from
>Class C to Class A or AB. To me, it was a little like publishing an
>article today on converting a Prius Hybrid automobile to only run on
>gasoline.
>
>>The same applies to QST. If there aren't enough
>>submissions, the only recourse is to hire writers to do columns or fill the
>>empiness with drivel and ads like 73.
>
>Probably true. I submitted an article in about 2002 on using the
>audio time delay through a repeater to do hyperbolic (Loran A style)
>vehicle location. I forgot why it was rejected because I ended up in
>the hospital and my memory from that period is rather muddled. When I
>inquired about the submission a year later, they said that they
>couldn't find it or that it was lost. Then, I mentioned that I still
>wasn't an ARRL member and all communications ceased.
>
>>The best things to come out of 73 was
>>the Star Trek communicator clone and Byte magazine. I hate how Ham Radio
>>magazine died out.

>
>73 published Joe Moell's column on amateur radio direction finding. To
>me, it was worth the price of a subscription. Before I tossed my
>archives, I ripped out and saved most of these issues. Wanna build a
>rotating antenna direction finder? The only references in ham radio
>land you'll find are in these 73 magazine issues. Same with various
>microwave columns. I could have done without Wayne Green's endless
>editorials.
>
>>I was President of the local ham club for a while, and
>>wound up doing the newletter too. For the three or four years of that, I
>>only got 3 submissions from the membership. All the rest I had to either
>>pull out of my A** every month or go around like a reporter and interrogate
>>people.
>
>Our current newsletter editor complains about the same thing.
><http://www.k6bj.org>
>Still, he manages to produce a superior ham radio newsletter. I used
>to submit irregular technical articles and obnoxious opinionated radio
>politix articles. However, one article that I spend considerable time
>writing was butchered beyond recognition. When I asked for an
>explanation, I got nothing. So, no more articles from me.
>
>>On the other hand - What neat inventions can we come up with to share with
>>the World, so it can be exploited and give reason to take more of our
>>spectrum?
>
>It probably shouldn't be an invention. More likely, an unusual or
>interesting application of some existing technology. Your ATV camera
>for disaster services is a good example. Direction finding is still a
>common problem (i.e. stuck public safety transmitters). Perhaps
>demonstrating how some of the dumb|great ideas originating out FCC can
>be made to work (i.e. white space, ultra narrow band FM, on the fly
>TDMA, etc). I could think of lots of useful things to build, design,
>buy, or analyze.
>
>>Interesting to note how public safety volunteers showed Los
>>Angeles Sheriff how neat ATV was and they turned around and petitioned the
>>FCC for those frequencies.
>
>We had some floods a few years ago. The levee broke along the Pajaro
>river. One of our members has a helicopter and volunteered to fly an
>ATV camera over the area for the sheriff. On screen was GPS position
>in APRS format. Everything worked and everyone was suitably
>impressed. Then, nothing. No clue exactly why, but my guess is that
>homebrew is not funded by Homeland Security.
>
>>Oh well, we will probably all be shot in head by the next regime because we
>>are an irritation.
>

>Nope. We will all be promoted to a position of responsibility, where
>we will be setup to fail, thus demonstrating that technologists are no
>better at running the country than politicians, crooks, bureaucrats,
>and thugs.

How very weird. I am the pretty much acknowledged top technologist in
my workplace. Yet i cannot get promoted.

YMMV

4966. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:05:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <2ipb06-cjl.ln1@mail.specsol.com>
Source record: 19639

Jeff Liebermann <jeffl@cruzio.com> wrote:

> Incidentally, I've had rather bad luck using twisted galvanized
> chicken wire for making dish antennas. I kept getting intermittent
> noise crashes and arcing like noise bursts on a 1.7GHz WX satellite
> system I once threw together. I eventually found that banging on the
> chicken wire would produce the same noise bursts. I didn't bother
> trying to find out exactly what was doing the arcing. When I switched
> to using aluminum flashing and aluminum duct tape for the reflector,
> the noise went away.

I've read some reports that such is due to the poor contact of the
twists in chicken wire.

I suppose soldering all the twists would fix it.

--
Jim Pennino

Remove .spam.sux to reply.

4967. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:05:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <9apb06-cjl.ln1@mail.specsol.com>
Source record: 19640

```
Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Nov 30, 5:55 pm, j...@specsol.spam.sux.com wrote:
>> Richard Clark <kb7...@comcast.net> wrote:
>> > On Sun, 30 Nov 2008 21:45:03 GMT, j...@specsol.spam.sux.com wrote:
>>
>> >>Art Unwin <ArthurUn...@gmail.com> wrote:
>> >>> Since we are at the low sun cycle I shoose
>> >>> 1" hexigon poultry wire for the mash on my 3 metre dish
>> >>> At what frequency will there be a noticable effect on aperture
>> >>> starting with top band?
>> >>> Many thanks
>> >>> Art KB9MZ...,XG
>>
>> >>The rule of thumb is things less that .1 wavelengths in size have
>> >>negligable effects, so roughly up to about 1 GHz.
>>
>> > Hi Jim,
>>
>> > You neglect to mention that a 3 meter dish would be wholly (no pun
>> > intended) transparent to RF in the top band.  It could be solid metal
>> > to no notice by a radiator (or receiver).
>>
>> > It would be like blocking the sound 3 feet from the stage at a Led
>> > Zepplin concert with a Japanese parasol.   -Huh?-
>>
>> > 73's
>> > Richard Clark, KB7QHC
>>
>> Yeah, I foolishly forgot the source of the question and assumed "top
>> band" meant highest useable frequency.
>>
>> Unless I hosed the math, a 3 m dish would be a little over 10 db
>> isotropic at 2 m, so the combinatation would "work" from 2 m to 23 cm.
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> I ask the question because the radiator is a helix end fed, helix
> being approx 0.3 M diameter. Intuitively, I thought that the 3 M dish
> would be large enough
> and thus needed a check on the perforations. Could you show how the
> "combination" changed things so drastically so I may benefit from the
```

> question?
> I stated "intuitively" since the radiation is axia with respect to the
> helix
> Many thanks
> Art

A helix doesn't radiate in the axial mode unless the circumference is between about 0.75 and 1.33 wavelengths.

The would put the minimum frequency for a .3 m diameter helix at about 240 Mhz and the maximum frequency at about 420 Mhz.

Also, the reflector for a helix is a flat surface, not a dish, and is normally between about 0.8 to 1.1 wavelengths in diameter. If you make it larger, the sidelobe levels increase.

--
Jim Pennino

Remove .spam.sux to reply.

4968. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:17:13 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f5414f9a-b946-4190-b45d-86321d6378bc@k41g2000yqn.googlegroups.com>
Source record: 19642

On Nov 30, 7:05 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Nov 30, 5:55 pm, j...@specsol.spam.sux.com wrote:
> >> Richard Clark <kb7...@comcast.net> wrote:
> >> > On Sun, 30 Nov 2008 21:45:03 GMT, j...@specsol.spam.sux.com wrote:
>
> >> >>Art Unwin <ArthurUn...@gmail.com> wrote:
> >> >>> Since we are at the low sun cycle I shoose
> >> >>> 1" hexigon poultry wire for the mash on my 3 metre dish
> >> >>> At what frequency will there be a noticable effect on aperture
> >> >>> starting with top band?
> >> >>> Many thanks
> >> >>> Art KB9MZ...,XG
>
> >> >>The rule of thumb is things less that .1 wavelengths in size have
> >> >>negligable effects, so roughly up to about 1 GHz.
>
> >> > Hi Jim,
>
> >> > You neglect to mention that a 3 meter dish would be wholly (no pun
> >> > intended) transparent to RF in the top band. It could be solid metal
> >> > to no notice by a radiator (or receiver).
>
> >> > It would be like blocking the sound 3 feet from the stage at a Led
> >> > Zepplin concert with a Japanese parasol.   -Huh?-
>
> >> > 73's
> >> > Richard Clark, KB7QHC
>
> >> Yeah, I foolishly forgot the source of the question and assumed "top
> >> band" meant highest useable frequency.
>
> >> Unless I hosed the math, a 3 m dish would be a little over 10 db
> >> isotropic at 2 m, so the combinatation would "work" from 2 m to 23 cm.
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > I ask the question because the radiator is a helix end fed, helix
> > being approx 0.3 M diameter. Intuitively, I thought that the 3 M dish
> > would be large enough
> > and thus needed a check on the perforations. Could you show how the

> > "combination" changed things so drastically so I may benefit from the
> > question?
> > I stated "intuitively" since the radiation is axia with respect to the
> > helix
> > Many thanks
> > Art
>
> A helix doesn't radiate in the axial mode unless the circumference is
> between about 0.75 and 1.33 wavelengths.
>
> The would put the minimum frequency for a .3 m diameter helix at about
> 240 Mhz and the maximum frequency at about 420 Mhz.
>
> Also, the reflector for a helix is a flat surface, not a dish, and is
> normally between about 0.8 to 1.1 wavelengths in diameter. If you make
> it larger, the sidelobe levels increase.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

No, No, No. That is not correct. Just as Kraus over estimated the gain
of helix antennas he also made a mistake
in specifying a particular helix angle as well as the impression that
one needs a large diameter helix with reference to wave length.
Ofcourse his work is over 50 years old and is being wittled down with
futher investigation.
I modeled it against perfect ground as the latest papers state that a
wall around the bottom where there is maximum current provides best
gain.
Thus I see the deep and large diameter dish as being an equivalent.
If .1 WL is a rule of thumb then it would seem your first response is
correct.
That is my personal view but I am open to contradiction hopefully with
reasons why
Art

4969. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:39:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <060d49b5-3558-4d07-ba4f-ed5d86f0a9df@v13g2000yqm.googlegroups.com>
Source record: 19643

On Nov 30, 6:55 pm, JosephKK <quiettechb...@yahoo.com> wrote:
> On Wed, 26 Nov 2008 12:00:06 -0800, Jeff Liebermann <je...@cruzio.com>
> wrote:
>
>
>
> >On Wed, 26 Nov 2008 15:48:50 GMT, "JB" <nos...@goofball.net> wrote:
>
> >>Excellent post.
>
> >Thanks. I'll add one more notch on my LCD frame.
>
> >>The problem with QEX is not enough submissions.
>
> >Well, they rejected one of mine many years ago. The problem was they
> >never really said why. When I pressed the editor, he replied that he
> >had enough submissions of sufficient quality. I tried again later and
> >had it rejected because I wasn't an ARRL member at the time (because I
> >was broke). I don't know what was going on, but I wasn't thrilled and
> >never bothered again.
>
> >>As for the
> >>QST AM mods, I was thinking that was ATV, but maybe you were talking about
> >>something else.
>
> >Something else was converting commercial land mobile FM radios from
> >WBFM or later NBFM to AM (A3A) modulation. Mostly, it was adding a
> >low level modulation circuit, and converting the power stages from
> >Class C to Class A or AB. To me, it was a little like publishing an
> >article today on converting a Prius Hybrid automobile to only run on
> >gasoline.
>
> >>The same applies to QST. If there aren't enough
> >>submissions, the only recourse is to hire writers to do columns or fill the
> >>empiness with drivel and ads like 73.
>
> >Probably true. I submitted an article in about 2002 on using the
> >audio time delay through a repeater to do hyperbolic (Loran A style)
> >vehicle location. I forgot why it was rejected because I ended up in
> >the hospital and my memory from that period is rather muddled. When I
> >inquired about the submission a year later, they said that they
> >couldn't find it or that it was lost. Then, I mentioned that I still
> >wasn't an ARRL member and all communications ceased.
>

> >>The best things to come out of 73 was
> >>the Star Trek communicator clone and Byte magazine. I hate how Ham Radio
> >>magazine died out.
>
> >73 published Joe Moell's column on amateur radio direction finding. To
> >me, it was worth the price of a subscription. Before I tossed my
> >archives, I ripped out and saved most of these issues. Wanna build a
> >rotating antenna direction finder? The only references in ham radio
> >land you'll find are in these 73 magazine issues. Same with various
> >microwave columns. I could have done without Wayne Green's endless
> >editorials.
>
> >>I was President of the local ham club for a while, and
> >>wound up doing the newletter too. For the three or four years of that, I
> >>only got 3 submissions from the membership. All the rest I had to either
> >>pull out of my A** every month or go around like a reporter and interrogate
> >>people.
>
> >Our current newsletter editor complains about the same thing.
> ><http://www.k6bj.org>
> >Still, he manages to produce a superior ham radio newsletter. I used
> >to submit irregular technical articles and obnoxious opinionated radio
> >politix articles. However, one article that I spend considerable time
> >writing was butchered beyond recognition. When I asked for an
> >explanation, I got nothing. So, no more articles from me.
>
> >>On the other hand - What neat inventions can we come up with to share with
> >>the World, so it can be exploited and give reason to take more of our
> >>spectrum?
>
> >It probably shouldn't be an invention. More likely, an unusual or
> >interesting application of some existing technology. Your ATV camera
> >for disaster services is a good example. Direction finding is still a
> >common problem (i.e. stuck public safety transmitters). Perhaps
> >demonstrating how some of the dumb|great ideas originating out FCC can
> >be made to work (i.e. white space, ultra narrow band FM, on the fly
> >TDMA, etc). I could think of lots of useful things to build, design,
> >buy, or analyze.
>
> >>Interesting to note how public safety volunteers showed Los
> >>Angeles Sheriff how neat ATV was and they turned around and petitioned the
> >>FCC for those frequencies.
>
> >We had some floods a few years ago. The levee broke along the Pajaro
> >river. One of our members has a helicopter and volunteered to fly an
> >ATV camera over the area for the sheriff. On screen was GPS position
> >in APRS format. Everything worked and everyone was suitably
> >impressed. Then, nothing. No clue exactly why, but my guess is that
> >homebrew is not funded by Homeland Security.
>

> >>Oh well, we will probably all be shot in head by the next regime because we
> >>are an irritation.
>
> >Nope. We will all be promoted to a position of responsibility, where
> >we will be setup to fail, thus demonstrating that technologists are no
> >better at running the country than politicians, crooks, bureaucrats,
> >and thugs.
>
> How very weird. I am the pretty much acknowledged top technologist in
> my workplace. Yet i cannot get promoted.
>
> YMMV

If you exercise free speech then you divulge to all what you are and
who you are.!

4970. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:43:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggvfh3$bp0$1@news.albasani.net>
Source record: 19644

JosephKK wrote:

> ...
> How very weird. I am the pretty much acknowledged top technologist in
> my workplace. Yet i cannot get promoted.
>
> YMMV

Well, I really hate to break this to you, don't look for a
recommendation from me ...

How about anyone else?

Regards,
JS

4971. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:46:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggvfla$bp0$2@news.albasani.net>
Source record: 19645

Art Unwin wrote:

> ...
> If you exercise free speech then you divulge to all what you are and
> who you are.!

Hmmm, you are very correct. However, that "free speech" might just have
been some "canned crap" he picked up ...

Regards,
JS

4972. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:47:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggvfoj$bp0$3@news.albasani.net>
Source record: 19646

JosephKK wrote:

> ...
> Defecation on your non-existent deity.
>

Yeah, this just "all happened", right.

I bet you see that a lot ...

Regards,
JS

4973. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:50:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggvfsr$bp0$4@news.albasani.net>
Source record: 19647

JosephKK wrote:

> ...
> Just everything Rush wanted was worse than what we had.
>

I like listening to Rush, very entertaining ...

I am unable to wrap my mind around the fact "they" pay him 40-50 million a year for such mind numbing dribble ... but hey, "they" got us here in the first place!

Regards,
JS

4974. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:55:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <2hsb06-fvl.ln1@mail.specsol.com>
Source record: 19648

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Nov 30, 7:05 pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > On Nov 30, 5:55 pm, j...@specsol.spam.sux.com wrote:
>> >> Richard Clark <kb7...@comcast.net> wrote:
>> >> > On Sun, 30 Nov 2008 21:45:03 GMT, j...@specsol.spam.sux.com wrote:
>>
>> >> >>Art Unwin <ArthurUn...@gmail.com> wrote:
>> >> >>> Since we are at the low sun cycle I shoose
>> >> >>> 1" hexigon poultry wire for the mash on my 3 metre dish
>> >> >>> At what frequency will there be a noticable effect on aperture
>> >> >>> starting with top band?
>> >> >>> Many thanks
>> >> >>> Art KB9MZ...,XG
>>
>> >> >>The rule of thumb is things less that .1 wavelengths in size have
>> >> >>negligable effects, so roughly up to about 1 GHz.
>>
>> >> > Hi Jim,
>>
>> >> > You neglect to mention that a 3 meter dish would be wholly (no pun
>> >> > intended) transparent to RF in the top band. It could be solid metal
>> >> > to no notice by a radiator (or receiver).
>>
>> >> > It would be like blocking the sound 3 feet from the stage at a Led
>> >> > Zepplin concert with a Japanese parasol.   -Huh?-
>>
>> >> > 73's
>> >> > Richard Clark, KB7QHC
>>
>> >> Yeah, I foolishly forgot the source of the question and assumed "top
>> >> band" meant highest useable frequency.
>>
>> >> Unless I hosed the math, a 3 m dish would be a little over 10 db
>> >> isotropic at 2 m, so the combinatation would "work" from 2 m to 23 cm.
>>
>> >> --
>> >> Jim Pennino
>>
>> >> Remove .spam.sux to reply.
>>
>> > I ask the question because the radiator is a helix end fed, helix
>> > being approx 0.3 M diameter. Intuitively, I thought that the 3 M dish
>> > would be large enough

>> > and thus needed a check on the perforations. Could you show how the
>> > "combination" changed things so drastically so I may benefit from the
>> > question?
>> > I stated "intuitively" since the radiation is axia with respect to the
>> > helix
>> > Many thanks
>> > Art
>>
>> A helix doesn't radiate in the axial mode unless the circumference is
>> between about 0.75 and 1.33 wavelengths.
>>
>> The would put the minimum frequency for a .3 m diameter helix at about
>> 240 Mhz and the maximum frequency at about 420 Mhz.
>>
>> Also, the reflector for a helix is a flat surface, not a dish, and is
>> normally between about 0.8 to 1.1 wavelengths in diameter. If you make
>> it larger, the sidelobe levels increase.
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> No, No, No. That is not correct.

Yes, yes, yes, it is all corrct.

> Just as Kraus over estimated the gain
> of helix antennas he also made a mistake

Nothing was said about gain.

> in specifying a particular helix angle

Nothing was said about the helix angle.

> as well as the impression that
> one needs a large diameter helix with reference to wave length.

A circumferance of 0.75 to 1.33 wavelengths is required for radiation
in the axial mode.

> Ofcourse his work is over 50 years old and is being wittled down with
> futher investigation.

Nope; correctness has no expiration date.

> I modeled it against perfect ground

A pointless exercise.

> as the latest papers state that a
> wall around the bottom where there is maximum current provides best
> gain.

What papers are these; the ones from the outhouse?

A short "wall" around the outer edge of the reflector reduces side lobes.

> Thus I see the deep and large diameter dish as being an equivalent.

Most people would call that delusional.

> If .1 WL is a rule of thumb then it would seem your first response is
> correct.

Of course my first response was correct; things smaller than 0.1 wavelengths
can usually be ignored.

--
Jim Pennino

Remove .spam.sux to reply.

4975. Re: HOMO HELP DESK

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 01:59:00 UTC
From: mopeyzakween@yahoo.com
Message-ID: <94ed7292-d9d2-4b99-b6c4-856468281d5a@f3g2000yqf.googlegroups.com>
Source record: 19649
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

http://nimbusters.org/forum/read.php?board=8&id=647774

4976. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 02:00:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ggvgfr$d9f$1@news.albasani.net>
Source record: 19650

Richard Fry wrote:

> _______
>
> I'm not considering that the ground wave signal _provides_ any of that
> low-angle DX coverage. It is the direct radiation existing in the
> radiation pattern of the monopole at low elevation angles that can do
> so. No ground reflection is necessary to create that field - it is
> launched by the monopole itself.
>
> Below is a link to a clip from Terman's Radio Engineers Handbook, 1st
> edition, showing that the greatest single-hop range for skywave
> signals occurs from the radiation of the monopole at elevation angles
> of less than ten degrees. But looking at a NEC far-field analysis
> this would seem impossible, due to the greatly reduced fields in this
> sector that NEC shows for a vertical monopole over real earth.
>
> This clip was done for MW frequencies, but the concept would apply
> equally at HF, would it not?
>
> http://i62.photobucket.com/albums/h85/rfry-100/TermanFig55.jpg
>
> RF
>

I for one, think you correct. What is "launched" at the antenna obeys physics laws at 100 ft., 1000 ft., 10,000 ft., 100,000 ft., 1,000,000 ft. ... the signal does not ever suffer magical, mystical, supernatural manipulations--EVER!

Regards,
JS

4977. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 02:05:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <8vsb06-fvl.ln1@mail.specsol.com>
Source record: 19551

Art Unwin <ArthurUnwin@gmail.com> wrote:

> If you exercise free speech then you divulge to all what you are and
> who you are.!

Please divulge full legal name, birthdate and birthplace, SSN, address,
telephone number, mothers maiden name and all bank account and credit card
numbers.

--
Jim Pennino

Remove .spam.sux to reply.

4978. Re: Lightning Info?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 02:18:05 UTC
From: nm5k@wt.net
Message-ID: <50a4c049-f036-4f10-bc31-18a1c0926849@p2g2000prf.googlegroups.com>
Source record: 19552

On Nov 30, 10:15 am, ml <m...@di.net> wrote:

>
> i always wonder what would be logical to assume in a direct hit
> scenario
>
> thanks

You don't mention what the roof antennas are mounted on.
IE: metal masts, vent pipes, etc?? Well grounded, or not?
If you are depending on the feedlines taking the brunt of the
strike to ground, yes, could be some damage along the way.
I doubt the dipoles would have much trouble, but the J-pole
could well take the strike. Or any other vertical pointy antennas.
That you are grounding at the entry will probably save the
house if you have a good low resistance ground at that point.

But it would be better to have the supporting antenna masts
take the brunt of the strike to ground via good ground wires
or straps if on the roof, or even better, directly planted on the
ground.
You will still have current on the feed lines, but it will be much
less than if they have to carry the whole load.
This is why I've always preferred using a stand alone metal
mast as my support. I'll mount my dipoles slightly lower than
the tip of the mast. Sometimes I'll have ground planes or
verticals on top, but if I do, I always run the coax all the way
down to the base of the mast before leading it to the shack.
I've had two strikes to that mast in the last few years and
had no damage at all. The mast acted as the lightning rod,
and the antennas just floated along for the ride.
I have the coax cables grounded outside the window, and
you can hear an audible arc at the instant of the strike.
So there is current on the lines to ground, but it's not enough
to hurt anything.
But if I used the coax as the only path to ground, I wouldn't
feel near as optimistic it would survive without damage.
And 175 ft is a pretty long path to take if it's not straight
down to ground. You want all those cables snubbed to
ground at a point well before they get to the ICE.
If they dangle from overhead down to the ICE, the potential
will be quite large.

4979. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 02:26:33 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <14i6j4de89piej2i8s3onqeaimh3ijdpda@4ax.com>
Source record: 19553

On Sun, 30 Nov 2008 16:55:02 -0800, JosephKK <quiettechblue@yahoo.com>
wrote:

>On Wed, 26 Nov 2008 12:00:06 -0800, Jeff Liebermann <jeffl@cruzio.com>
>wrote:
>>Nope. We will all be promoted to a position of responsibility, where
>>we will be setup to fail, thus demonstrating that technologists are no
>>better at running the country than politicians, crooks, bureaucrats,
>>and thugs.

>How very weird. I am the pretty much acknowledged top technologist in
>my workplace. Yet i cannot get promoted.
>YMMV

That's because nobody has found a reason to want you to fail. There
can be many reasons for this. Optimistically, you have a well managed
company, that keeps people in positions where they are best suited.
That's rather rare as most companies will follow the Peter's Principle
method of promotion (rise to your level of incompetence).

Another possibility is that you have successfully eliminated any and
all competition for your position, thus making find a replacement
impossible. Unless you have a suitable replacement trained and
waiting, most companies will not your promotion to create vacuum.

In some companies, a promotion is tracked by a raise in salary and
benefits. In some countries and companies, it's actually impossible
to get a raise without a change of title. Perhaps your company needs
to manufacture a suitable position and title for your promotion? Note:
Assassinating your boss is not a viable option.

It's also possible that you have hit the glass ceiling, where
promotion is no longer possible. For example, many family owned
companies will not promote non-family members beyond a certain point.
If you're the wrong race, religion, sex, age, or nationality, you will
have problems getting a promotion. Same with failing to join the
correct country club, attending semi-mandatory social occasions,
wearing the wrong style clothes, attending the wrong church, and
generally sticking out like a sore thumb. Conformity pays well.

It's conceivable that you also lack sufficient initiative to obtain a
promotion. Many managers assume that someone that keeps their mouth
shut, does not need a promotion. Leaving your resume floating around
your desk is great way to either indicate that it's time to move up or
move out. Unfortunately, it can also get you fired, so use this trick
sparingly.

Anyway, if you need advice on what NOT to do in order to get promoted,
I have a long list of personal experiences that eventually inspired me
to become self-employed. I can't say that it was the right decision
from the financial point of view. However, I can say that I probably
saved a few companies from self destruction by removing myself from
their management structure.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

4980. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 03:01:57 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <f0b0ce39-5703-4af5-afb4-51f53063163e@v4g2000yqa.googlegroups.com>
Source record: 19554

On Nov 30, 8:26 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 30 Nov 2008 16:55:02 -0800, JosephKK <quiettechb...@yahoo.com>
> wrote:
>
> >On Wed, 26 Nov 2008 12:00:06 -0800, Jeff Liebermann <je...@cruzio.com>
> >wrote:
> >>Nope. We will all be promoted to a position of responsibility, where
> >>we will be setup to fail, thus demonstrating that technologists are no
> >>better at running the country than politicians, crooks, bureaucrats,
> >>and thugs.
> >How very weird. I am the pretty much acknowledged top technologist in
> >my workplace. Yet i cannot get promoted.
> >YMMV
>
> That's because nobody has found a reason to want you to fail. There
> can be many reasons for this. Optimistically, you have a well managed
> company, that keeps people in positions where they are best suited.
> That's rather rare as most companies will follow the Peter's Principle
> method of promotion (rise to your level of incompetence).
>
> Another possibility is that you have successfully eliminated any and
> all competition for your position, thus making find a replacement
> impossible. Unless you have a suitable replacement trained and
> waiting, most companies will not your promotion to create vacuum.
>
> In some companies, a promotion is tracked by a raise in salary and
> benefits. In some countries and companies, it's actually impossible
> to get a raise without a change of title. Perhaps your company needs
> to manufacture a suitable position and title for your promotion? Note:
> Assassinating your boss is not a viable option.
>
> It's also possible that you have hit the glass ceiling, where
> promotion is no longer possible. For example, many family owned
> companies will not promote non-family members beyond a certain point.
> If you're the wrong race, religion, sex, age, or nationality, you will
> have problems getting a promotion. Same with failing to join the
> correct country club, attending semi-mandatory social occasions,
> wearing the wrong style clothes, attending the wrong church, and
> generally sticking out like a sore thumb. Conformity pays well.
>
> It's conceivable that you also lack sufficient initiative to obtain a
> promotion. Many managers assume that someone that keeps their mouth
> shut, does not need a promotion. Leaving your resume floating around
> your desk is great way to either indicate that it's time to move up or

> move out. Unfortunately, it can also get you fired, so use this trick
> sparingly.
>
> Anyway, if you need advice on what NOT to do in order to get promoted,
> I have a long list of personal experiences that eventually inspired me
> to become self-employed. I can't say that it was the right decision
> from the financial point of view. However, I can say that I probably
> saved a few companies from self destruction by removing myself from
> their management structure.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com
> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

My best friend H B Mutter N3CBW had a position of one of three
military top judges
where he was on call for any major criminal case which could involve
the maximum
sentence. However as a Judge he had his own ideas of morality that
sometimes clashed
with beaucrasy but he always held to his guns which is why I respected
him so much.
Eventually he was offered a generous retirement based on a perceived
malady, so in the end he won.
This was the only way out available to beaurocracy, the common man
does not have such leverage
and is blown away. He now lies at Arlington cemetary bless his soul, I
miss him so much
Art Unwin KB9MZ.....xg

4981. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 03:02:45 UTC
From: richard <member@newsguy.com>
Message-ID: <ick6j4h943reigndh869bmbehnt2epamtr@4ax.com>
Source record: 19555
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Sun, 30 Nov 2008 08:05:31 -0500, "Douglas W Adair" <n8wwm@allr.net>
wrote:

>I like them two at a time--co-phased. Is there any gain to be had that way
>or am I just skin pipe dreaming at the petro?
>

Not much on a big truck.
Since most of the usable cophased signal is blocked by the cab and
trailer. I've found a single antenna works just as good.

What hurts the system the most, is the factory installed crap.
They generally use the smaller 75ohm cable and use splice after splice
to make it work. I generally get my own cable, bypass their stuff.

One thing to remember in cophasing, cable length DOES make a
difference. If they are not equal, things will be out of whack. Unlike
in a single antenna where length is not an issue.

Oh and for all you loudmouths out there, the only reason they say you
must have x amount of feet, is to sell the damn cable.

In reality, the shorter the cable, the better off you are.

Have you held an FCC license for radio work?
I have.

4982. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 03:13:33 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <83359815-e420-48c5-b91f-292e6102fe3c@t11g2000yqg.googlegroups.com>
Source record: 19556

```
On Nov 30, 7:55 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Nov 30, 7:05 pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > On Nov 30, 5:55 pm, j...@specsol.spam.sux.com wrote:
> >> >> Richard Clark <kb7...@comcast.net> wrote:
> >> >> > On Sun, 30 Nov 2008 21:45:03 GMT, j...@specsol.spam.sux.com wrote:
>
> >> >> >>Art Unwin <ArthurUn...@gmail.com> wrote:
> >> >> >>> Since we are at the low sun cycle I shoose
> >> >> >>> 1" hexigon poultry wire for the mash on my 3 metre dish
> >> >> >>> At what frequency will there be a noticable effect on aperture
> >> >> >>> starting with top band?
> >> >> >>> Many thanks
> >> >> >>> Art KB9MZ...,XG
>
> >> >> >>The rule of thumb is things less that .1 wavelengths in size have
> >> >> >>negligable effects, so roughly up to about 1 GHz.
>
> >> >> > Hi Jim,
>
> >> >> > You neglect to mention that a 3 meter dish would be wholly (no pun
> >> >> > intended) transparent to RF in the top band.  It could be solid metal
> >> >> > to no notice by a radiator (or receiver).
>
> >> >> > It would be like blocking the sound 3 feet from the stage at a Led
> >> >> > Zepplin concert with a Japanese parasol.   -Huh?-
>
> >> >> > 73's
> >> >> > Richard Clark, KB7QHC
>
> >> >> Yeah, I foolishly forgot the source of the question and assumed "top
> >> >> band" meant highest useable frequency.
>
> >> >> Unless I hosed the math, a 3 m dish would be a little over 10 db
> >> >> isotropic at 2 m, so the combinatation would "work" from 2 m to 23 cm.
>
> >> >> --
> >> >> Jim Pennino
>
> >> >> Remove .spam.sux to reply.
>
> >> > I ask the question because the radiator is a helix end fed, helix
> >> > being approx 0.3 M diameter. Intuitively, I thought that the 3 M dish
```

> >> > would be large enough
> >> > and thus needed a check on the perforations. Could you show how the
> >> > "combination" changed things so drastically so I may benefit from the
> >> > question?
> >> > I stated "intuitively" since the radiation is axia with respect to the
> >> > helix
> >> > Many thanks
> >> > Art
>
> >> A helix doesn't radiate in the axial mode unless the circumference is
> >> between about 0.75 and 1.33 wavelengths.
>
> >> The would put the minimum frequency for a .3 m diameter helix at about
> >> 240 Mhz and the maximum frequency at about 420 Mhz.
>
> >> Also, the reflector for a helix is a flat surface, not a dish, and is
> >> normally between about 0.8 to 1.1 wavelengths in diameter. If you make
> >> it larger, the sidelobe levels increase.
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > No, No, No. That is not correct.
>
> Yes, yes, yes, it is all corrct.
>
> > Just as Kraus over estimated the gain
> > of helix antennas he also made a mistake
>
> Nothing was said about gain.
>
> > in specifying a particular helix angle
>
> Nothing was said about the helix angle.
>
> > as well as the impression that
> > one needs a large diameter helix with reference to wave length.
>
> A circumferance of 0.75 to 1.33 wavelengths is required for radiation
> in the axial mode.
>
> > Ofcourse his work is over 50 years old and is being wittled down with
> > futher investigation.
>
> Nope; correctness has no expiration date.
>
> > I modeled it against perfect ground
>

> A pointless exercise.
>
> > as the latest papers state that a
> > wall around the bottom where there is maximum current provides best
> > gain.
>
> What papers are these; the ones from the outhouse?
>
> A short "wall" around the outer edge of the reflector reduces side lobes.
>
> > Thus I see the deep and large diameter dish as being an equivalent.
>
> Most people would call that delusional.

I am aware of that. One person once said the world was round!

If one was persuasive enough at the beginninghundred years or so later
if one said
the world was flat he would be called delusional.
If one was very persuasive in the first place he would be rediculed as
it was so obvious to all in the first place.
I hope you get to live another hundred years so that you can meld into
the new crowd of lemmings
Regards
Art

>
> > If .1 WL is a rule of thumb then it would seem your first response is
> > correct.
>
> Of course my first response was correct; things smaller than 0.1 wavelengths
> can usually be ignored.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

4983. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 03:29:02 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <6ak6j4p5d8q1n3r84lkcmamkt8rdoko1qq@4ax.com>
Source record: 19557

On Sat, 29 Nov 2008 16:46:13 -0800 (PST), jimlux@earthlink.net wrote:

>On Nov 27, 12:58 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
>> On Nov 25, 11:26 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>>
>
>> Jim
>> IEEE state that if papers were open source it would threaten the
>> presence of the IEEE?
>
>No.. it's that a significant part of IEEE's budget derives from
>publishing copyrighted standards and journals. One argument for the
>copyrighting of standards is that it provides a legal club to go after
>someone publishing an adulterated version. I'm not sure that really
>holds water, but there it is.
>The cost of actually printing the journals is significant, and has to
>come from somewhere. They're not exactly huge circulation, and mostly
>have no advertising, but are printed on high quality stock with good
>quality typesetting.

The physical printing costs are actually minimal, distribution costs
more now.

>
>
>> This statement was in regard to the high costs of obtaining copies
>> from the IEEE without
>> having to pay the high costs of belonging .
>
>The cost to get a single copy is quite high compared to the cost to
>get access to thousands by being a member (check out those CCC prices
>at the bottom of the first page.. they're fairly pricey.. a dozen
>papers a year and you've just paid for your membership and access to
>Xplore)

Just a few years ago i could get physical reprints of articles from
most journals for about $3 each, now electronic reprints cost $20 or
more? I think we all can figure out where the money is going.

>
>
> I understand the need for
>> peer review by academics but not necessarily a private entity
>> and the IEEE rights to publish such so, are the IEEE demanding SOLE
>> ownership of presented papers?
>

>IEEE performs a useful function by organizing all those peer reviewers
>(finding them, getting the papers to them, haranguing them for their
>reviews, etc.).. Being an editor is a lot of work, and is often done
>as a labor of love by the editor (or, as "part of your job" in
>academe), as is being a decent reviewer. IEEE requests copyright
>transfer to them for papers published in their journals for a variety
>of reasons, and with a variety of exceptions.
>1) Makes sure that you're not publishing the same thing in multiple
>places at the same time..
>2) If your work was done, e.g., on gov't contract, often, the contract
>requires that the paper be public domain, and the IEEE is cool with
>that.
>3) The author can publish the paper on their own website with an
>appropriate disclaimer.
>
>> I am assuming that all papers presented by the Universities as well as
>> thesis papers belong to the parent university
>> based on a recent antenna patent awarded to a University derived from
>> a student dissertation.
>
>Not necessarily ("all" is pretty all-encompassing).. A lot depends on
>the funding source for the work.
>
>
>This leaves
>> an outstanding question !. If the university a public entity,
>> reserves the rights of all papers arrived at the university
>> then what rights do they hold that allows transference from the public
>> domain of those rights to a private institution to the detriment of
>> the public
>> that finance them?
>
>Those rights were never in the public domain to begin with. One might
>argue that the underlying idea is in the public domain, but the
>written description of has a copyright that belongs to the author
>(except for a "work for hire") and the author gets to decide what they
>do with it.

Funny thing about "work for hire", the hiring entity is the one with
any legal rights here in the US. But the NIH for some strange reason
does not assert its rights. The IEEE does not publish work for hire
generally, but charges for submissions.

> And, I would argue that arranging for the publication of
>the work in a "learned journal" is a pretty effective way of
>disseminating the work to the general public. The fact that IEEE (or
>Inst of Physics or AAAS, etc.) get an assignment of copyright as part
>of the process is part of the cost of doing that publication. And
>it's a fact that as online publication becomes easier, work IS being
>disseminated by these means.

Yes, but more an more by others, and the academic journals reviewers
are not paid. The other publishers do not do the review so quality
suffers. The old school publishers need to learn that they cannot
just take it all.

>
>However, one should not disregard the significant value brought to the
>process by the formalized peer review system. Yes, it has flaws and
>can be (and has been) subverted, but it works moderately well.
>
>Compare to the situation a hundred or two hundred years ago. I don't
>complain that "the system" isn't moving as rapidly as technology might
>allow, because the system has a fairly long time constant, which is
>actually a good thing, since it prevents rapid whipsawing to follow
>fashion. A printed journal will still be readable 100 or 200 years
>from now. The same cannot necessarily be said of djvu or pdf or tiff
>or other elecronic forms.

I am not so sure about that. The need for preservable media is being
recognized. It has even been discussed in learned journals.

>
>One should also not complain too loudly about the lack of heritage
>journals on line for free. It costs a LOT to scan thing and put them
>online, particularly if they're searchable. If you could convince
>Congress to do it as a service to mankind, that would be a worthy
>goal, but for now, someone's got to pay for it.
>
>
>> Regards
>> Art Unwin

4984. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 03:49:16 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <b52a3362-b3e6-4e1b-939d-2f1bf8baff46@x14g2000yqk.googlegroups.com>
Source record: 19558
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Nov 30, 10:02 pm, richard <mem...@newsguy.com> wrote:
> On Sun, 30 Nov 2008 08:05:31 -0500, "Douglas W Adair" <n8...@allr.net>
> wrote:
>
> >I like them two at a time--co-phased. Is there any gain to be had that way
> >or am I just skin pipe dreaming at the petro?
>
> Not much on a big truck.
> Since most of the usable cophased signal is blocked by the cab and
> trailer. I've found a single antenna works just as good.
>
> What hurts the system the most, is the factory installed crap.
> They generally use the smaller 75ohm cable and use splice after splice
> to make it work. I generally get my own cable, bypass their stuff.
>
Since the feed point impedance of most of those antennas is really way
less than 50 ohms 75 ohm cable may not be the best choice to make a
phaasing harness. Most of the time 50 ohm cable works better

4985. Re: The ugly pig fucker is

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 03:59:10 UTC
From: mopeyzakween@yahoo.com
Message-ID: <b42f8f22-f308-420e-ad91-f45f2c839ea5@13g2000yql.googlegroups.com>
Source record: 19559
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Nov 29, 10:45 pm, Steve <moparho...@hotmail.com> wrote:
> Lelnad see scott.
>
> --
> http://NewsReader.Com/

http://nimbusters.org/hams/read.php?board=1&id=14088

4986. Lawsuit countdown 1 more day to SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 04:07:33 UTC
From: kb9rqz@yahoo.com
Message-ID: <qno6j49ogerbku6gidj499uurc0kvhdfpf@4ax.com>
Source record: 19560
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Sun, 30 Nov 2008 19:59:10 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4987. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 04:29:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b601f214-2619-44d0-8bfa-a11df7171327@k19g2000yqg.googlegroups.com>
Source record: 19561

On Nov 30, 9:29 pm, JosephKK <quiettechb...@yahoo.com> wrote:
> On Sat, 29 Nov 2008 16:46:13 -0800 (PST), jim...@earthlink.net wrote:
> >On Nov 27, 12:58 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> >> On Nov 25, 11:26 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>
> >> Jim
> >> IEEE state that if papers were open source it would threaten the
> >> presence of the IEEE?
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> >No.. it's that a significant part of IEEE's budget derives from
> >publishing copyrighted standards and journals. One argument for the
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> >someone publishing an adulterated version. I'm not sure that really
> >holds water, but there it is.
> >The cost of actually printing the journals is significant, and has to
> >come from somewhere. They're not exactly huge circulation, and mostly
> >have no advertising, but are printed on high quality stock with good
> >quality typesetting.
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> The physical printing costs are actually minimal, distribution costs
> more now.
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>
>
> >> This statement was in regard to the high costs of obtaining copies
> >> from the IEEE without
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> >The cost to get a single copy is quite high compared to the cost to
> >get access to thousands by being a member (check out those CCC prices
> >at the bottom of the first page.. they're fairly pricey.. a dozen
> >papers a year and you've just paid for your membership and access to
> >Xplore)
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> Just a few years ago i could get physical reprints of articles from
> most journals for about $3 each, now electronic reprints cost $20 or
> more? I think we all can figure out where the money is going.
>
>
>
>
>
> > I understand the need for
> >> peer review by academics but not necessarily a private entity

> >> and the IEEE rights to publish such so, are the IEEE demanding SOLE
> >> ownership of presented papers?
>
> >IEEE performs a useful function by organizing all those peer reviewers
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> >reviews, etc.).. Being an editor is a lot of work, and is often done
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> >academe), as is being a decent reviewer. IEEE requests copyright
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> >1) Makes sure that you're not publishing the same thing in multiple
> >places at the same time..
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> >3) The author can publish the paper on their own website with an
> >appropriate disclaimer.
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> >> I am assuming that all papers presented by the Universities as well as
> >> thesis papers belong to the parent university
> >> based on a recent antenna patent awarded to a University derived from
> >> a student dissertation.
>
> >Not necessarily ("all" is pretty all-encompassing).. A lot depends on
> >the funding source for the work.
>
> >This leaves
> >> an outstanding question !. If the university a public entity,
> >> reserves the rights of all papers arrived at the university
> >> then what rights do they hold that allows transference from the public
> >> domain of those rights to a private institution to the detriment of
> >> the public
> >> that finance them?
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> >Those rights were never in the public domain to begin with. One might
> >argue that the underlying idea is in the public domain, but the
> >written description of has a copyright that belongs to the author
> >(except for a "work for hire") and the author gets to decide what they
> >do with it.
>
> Funny thing about "work for hire", the hiring entity is the one with
> any legal rights here in the US. But the NIH for some strange reason
> does not assert its rights. The IEEE does not publish work for hire
> generally, but charges for submissions.
>
> > And, I would argue that arranging for the publication of
> >the work in a "learned journal" is a pretty effective way of
> >disseminating the work to the general public. The fact that IEEE (or
> >Inst of Physics or AAAS, etc.) get an assignment of copyright as part
> >of the process is part of the cost of doing that publication. And

> >it's a fact that as online publication becomes easier, work IS being
> >disseminated by these means.
>
> Yes, but more an more by others, and the academic journals reviewers
> are not paid. The other publishers do not do the review so quality
> suffers. The old school publishers need to learn that they cannot
> just take it all.
>
>
>
> >However, one should not disregard the significant value brought to the
> >process by the formalized peer review system. Yes, it has flaws and
> >can be (and has been) subverted, but it works moderately well.
>
> >Compare to the situation a hundred or two hundred years ago. I don't
> >complain that "the system" isn't moving as rapidly as technology might
> >allow, because the system has a fairly long time constant, which is
> >actually a good thing, since it prevents rapid whipsawing to follow
> >fashion.   A printed journal will still be readable 100 or 200 years
> >from now. The same cannot necessarily be said of djvu or pdf or tiff
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> I am not so sure about that. The need for preservable media is being
> recognized. It has even been discussed in learned journals.
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>
>
> >One should also not complain too loudly about the lack of heritage
> >journals on line for free. It costs a LOT to scan thing and put them
> >online, particularly if they're searchable. If you could convince
> >Congress to do it as a service to mankind, that would be a worthy
> >goal, but for now, someone's got to pay for it.
>
> >> Regards
> >> Art Unwin

Spoke to my son about this subject as he works for a California
University.
He states that this subject is on a unstoppable role in several states
because of diminishing distribution of papers.
Together with high costs for separate papers that is also diminishing
in demand.and was a money maker
(As jobs are lost so goes the membership costs I suppose)
He said that some Universities are already changing from the old set
up and google is being very agressive about it.
Apparently there is already a group on the net with connections to all
phases of science where you can obtain a
UNPUBLISHED paper for a modest fee so there are new avenues emerging.
Haven't got a policy statement from the local trustees at Champaign
Illinois as yet.

Regards
Art

4988. Lawsuit countdown today is SoL (Statute of Limitiations) for k3vr w4nti has another 14 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 05:21:45 UTC
From: kb9rqz@yahoo.com
Message-ID: <c3s6j450lrbpdti6874jmarelt1irl2e71@4ax.com>
Source record: 19562
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Sun, 30 Nov 2008 19:59:10 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>On Nov 29, 10:45ï¿½pm, Steve <moparho...@hotmail.com> wrote:
>> Lelnad see scott.
>>
>> --
>> ï¿½ ï¿½ ï¿½ ï¿½ ï¿½ ï¿½ ï¿½ ï¿½ ï¿½http://NewsReader.Com/
>
>http://nimbusters.org/hams/read.php?board=1&id=14088

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4989. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 05:21:46 UTC
From: kb9rqz@yahoo.com
Message-ID: <53t6j4t6luh1rumkou7rkffd0gn0jajmk5@4ax.com>
Source record: 19563
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

4990. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 05:57:51 UTC
From: dplatt@radagast.org
Message-ID: <vvac06-hnb.ln1@radagast.org>
Source record: 19564
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

>>I like them two at a time--co-phased. Is there any gain to be had that way
>>or am I just skin pipe dreaming at the petro?

>If fed in phase and spaced correctly, there could be gain to the front and
>to the back with a decreased propogation to the sides.
>This is usually desirable if traveling on a mostly straight stretch of
>highway. I think the spacing is a little too far apart for use on most cars.

I believe you're correct. This is a "broadside array" configuration.

Its gain over a single radiator rises roughly linearly (measured in dB over a single radiator) up to separations of around 5/8 wavelength. A separation of 1/2 wavelength gives around 4 dB gain over a single radiator and a very nice clean pattern (deep null to the sides) - this is the spacing most frequently described in the literature (e.g. Kraus, Terman) for broadside arrays. Gain maxes out at just under 5 dB at a 5/8-wavelength spacing (at the cost of a small side-lobe). [Figures are from the ARRL Antenna Book of a few years ago]

Whether it's worth doing for a vehicle-mobile system is another question. You need more than .4 wavelengths of separation to get 3 dB of gain (half a nominal S-unit) - at 11-meter frequencies that's around 14 feet of separation, which I think not many vehicles will allow. Perhaps if you're driving a "wide load" transporter truck?

At 6 feet of separation between antennas you'd have only around .2 wavelength, which yields less than 1 dB of gain over a single radiator. Hardly seems cost-effective.

It might make more sense for 2-meter operation... but as most 2-meter mobile seems to be repeater-based, you really want omni rather than shaped-beam-down-the-road most of the time.

There's also the matching issue. Each radiator in the array will have a feedpoint impedance different than what would have if used alone. You'll have to take this into account when designing the phasing harness, and you may need an impedance-matching network at the combining point to establish the 50-ohm load that your transceiver expects. If you don't match properly your transceiver won't see the load it expects, and may not deliver full rated power into the load - you could easily lose more signal strength this way than the array will gain back. If you do match properly, there will be some amount of loss in the matching network.

There ain't no free lunch, alas.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4991. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 07:42:00 UTC
From: richardharrison@webtv.net
Message-ID: <22051-49339548-2288@storefull-3253.bay.webtv.net>
Source record: 19565

Art wrote:
"I stated "intuitively" since the radiation is axia with respect to the helix."

A 3 M diameter has about 9.42 M circumference so becomes an effective axial radiator instead of a radial radiator at the frequency near where its circumference becomes one wavelength. This frequency is 300/(pi)(diameter) or about 10 MHz. A reflecting surface to make an axial helix unidirectional needs to be at least as large as the projection of the helix on the surface of the reflector. Its diameter should then be about 3 M or more and would be effective only at frequencies exceeding 10 MHz which is where the helix becomes an end-fire device anyway.

Best regards, Richard Harrison, KB5WZI

4992. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 09:37:39 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <koGdncO3mpLVf67UnZ2dnUVZ_j2dnZ2d@supernews.com>
Source record: 19571
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Dave Platt" <dplatt@radagast.org> wrote in message
news:vvac06-hnb.ln1@radagast.org...
>>>I like them two at a time--co-phased. Is there any gain to be had that
>>>way
>>>or am I just skin pipe dreaming at the petro?
>
>>If fed in phase and spaced correctly, there could be gain to the front and
>>to the back with a decreased propogation to the sides.
>>This is usually desirable if traveling on a mostly straight stretch of
>>highway. I think the spacing is a little too far apart for use on most
>>cars.
>
> I believe you're correct. This is a "broadside array" configuration.
>
> Its gain over a single radiator rises roughly linearly (measured in dB
> over a single radiator) up to separations of around 5/8 wavelength. A
> separation of 1/2 wavelength gives around 4 dB gain over a single
> radiator and a very nice clean pattern (deep null to the sides) - this
> is the spacing most frequently described in the literature (e.g.
> Kraus, Terman) for broadside arrays. Gain maxes out at just under 5
> dB at a 5/8-wavelength spacing (at the cost of a small side-lobe).
> [Figures are from the ARRL Antenna Book of a few years ago]
>
> Whether it's worth doing for a vehicle-mobile system is another
> question. You need more than .4 wavelengths of separation to get 3 dB
> of gain (half a nominal S-unit) - at 11-meter frequencies that's around
> 14 feet of separation, which I think not many vehicles will allow.
> Perhaps if you're driving a "wide load" transporter truck?
>
> At 6 feet of separation between antennas you'd have only around .2
> wavelength, which yields less than 1 dB of gain over a single
> radiator. Hardly seems cost-effective.
>
> It might make more sense for 2-meter operation... but as most 2-meter
> mobile seems to be repeater-based, you really want omni rather than
> shaped-beam-down-the-road most of the time.
>
> There's also the matching issue. Each radiator in the array will have
> a feedpoint impedance different than what would have if used alone.
> You'll have to take this into account when designing the phasing
> harness, and you may need an impedance-matching network at the
> combining point to establish the 50-ohm load that your transceiver
> expects. If you don't match properly your transceiver won't see the

> load it expects, and may not deliver full rated power into the load -
> you could easily lose more signal strength this way than the array
> will gain back. If you do match properly, there will be some amount
> of loss in the matching network.
>
> There ain't no free lunch, alas.

Wow, Richard.

This guy seems 7 fuckloads smarter than you.

Wonder if he ever "held an FCC license for radio work"?

>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

--
Popeye
"Best thing for him, really. His therapy
was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

4993. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 11:28:23 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <975fda9c-749f-4b5b-8412-37b702f89d11@h5g2000yqh.googlegroups.com>
Source record: 19566

On Nov 30, 5:57 pm, Richard Clark wrote:
> On Sun, 30 Nov 2008 04:20:33 -0800 (PST), Richard Fry wrote:
> >showing that the greatest single-hop range for skywave
> >signals occurs from the radiation of the monopole at elevation angles
> >of less than ten degrees.
>
> Which is uniformly poorer by 12 dB than that launched at 40°.

Radiation from the monopole from zero to 10 degree elevation is not "poorer by 12 dB" than that launched at 40 degrees. It is greater.

The _reception_ of such radiation is a different matter, as the total, skywave path length, and therefore the propagation losses are different for those elevation sectors. This accounts for the lower value of received field at the greater distances, as shown in Terman's Fig 55.

RF

4994. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 12:06:32 UTC
From: Jon LA4RT <dev@null.com>
Message-ID: <1mfxl8cd6f.fsf@persaunet.uninett.no>
Source record: 19567
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

Wimpie <wimabctel@tetech.nl> writes:

> Hello,
>
> Thanks for replying Richard and Jim. I hoped somebody had a similar
> problem and knew a work-around. I know Excel is not the perfect tool
> to do this, but I did similar things with reasonable results. I hoped
> using data tables would speed up the spreadsheet design (until now it
> didn't).
>
> I do not have OO.org installed on this machine. A brother in law has
> it on his PC, so when I visit him I will try to load the worksheet
> into OO calc (or set it up in OO calc).
>
> When this (OO calc) doesn't give the desired result, I have to change
> to something that supports programming. I am not a student so Matlab
> might not be option. I looked at "octave", "python" and "R". These
> require some study also. Other option is to use an old general purpose
> SW development package (C or Pascal based).
>
> I think I have to spend some time to decide what to use...

You can write plug-ins for Gnumeric in Python. However, it's best to
run Gnumeric on Linux (or another Unix of your choice). There is
Windows version, but unfortunately, it is somewhat unstable.

Jon LA4RT

4995. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 12:09:34 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4c01c839-226f-4d83-b41f-64ea4ebd8c23@e18g2000yqo.googlegroups.com>
Source record: 19568

On Nov 30, 6:27 pm, Richard Clark wrote:
> However, resourcing the top engineers of the AM field for their
> observations of sky-wave and ground-wave field strengths (a typical
> service application) where they combine destructively (the "fading
> wall"); at a distance of 70 miles, for 50% of the time, both signals
> are equal (with propagation variations of phase accounting for
> fading).

With more research you'll find that the fading zone is not located a fixed 70 miles away from every AM station.

The fading zone occurs wherever the skywave and groundwave are approximately equal, and that varies with frequency, the elevation pattern of the monopole, the conductivity of the groundwave path, and the altitude of the ionosphere.

Most Class A (50 kW, non-directional day & night) AM broadcast stations use a monopole of about 195 degrees in height, as this extends the groundwave coverage radius over that of a 90 degree monopole without generating a substantial high-angle lobe to interfere with the groundwave where it otherwise would have a useful value.

Where substantial skywave signals are present from a ~195 degree radiator, the groundwave already has been attenuated by propagation loss to a low and nearly unusable value. This increases the distance to the fading zone, and reduces its width.

This, too, is from the research of RCA's George Brown of BL&E fame, as a result of his investigation and correction in 1935 of a serious amount of nighttime fading from a ~225 degree monopole used by 50 kW WCAU in Philadelphia.

RF

4996. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 12:16:29 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <u51d06-ifc.ln1@p400bob.personal.cox.net>
Source record: 19569
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

Hi Wim

I'll admit I am having difficulty visualizing what you are doing with data tables and was about to suggest using a macro to generate the plot values until I saw your "no VB" comment.

When you say "data table", is that a pivot table? I have sheets with calcs based on pivot table outputs that are then used in further pivot tables. Looks horribly messy but it works. (Noting that the accuracy problems arent a problem for me due to what I am calculating for)

Cheers Bob W5/VK2YQA

Wimpie wrote:

> Does somebody know a solution for this (I do not prefer a VB one)?

4997. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 13:07:35 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <49e4437f-4fc8-4176-b19d-36b20ee85078@h20g2000yqn.googlegroups.com>
Source record: 19570

Earlier I wrote:
I'm not considering that the ground wave signal _provides_ any of that low-angle DX coverage. It is the direct radiation existing in the radiation pattern of the monopole at low elevation angles that can do so.

... and as a postscript --

Even though in most cases amateurs don't care about the ground wave from a vertical monopole, a lesson can be taken from the broadcast community in that maximizing the radiation from a monopole at angles less than ten degrees will maximize the distance to the single-hop coverage radius (other things equal).

This can be done by using a vertical monopole greater than 1/4-wave in electrical height. A 5/8-wave vertical provides the highest gain in that elevation sector.

RF

4998. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 13:35:57 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <eup7j4948st10f2eqajnd4rb5vuhlf5dqh@4ax.com>
Source record: 19572

On Sun, 30 Nov 2008 22:52:16 +0000, Dave <dave@dave.dave> wrote:

>JosephKK wrote:
>> On Thu, 27 Nov 2008 12:57:42 +0000, Dave <dave@dave.dave> wrote:
>>
>>> JosephKK wrote:
>>>> On Sun, 16 Nov 2008 19:20:11 +0000, Dave <dave@dave.dave> wrote:
>>>>
>>>>> Richard Harrison wrote:
>>>>>> Dave wrote:
>>>>>> "Continuous Tone Coded Subaudible Squelch"
>>>>>>
>>>>>> I like that better than "Continuous Tone Coded Squelch System" as
>>>>>> "System" is nondescriptive.
>>>>>>
>>>>>> Best regards, Richard Harrison, KB5WZI
>>>>>>
>>>>> I think it's from the MOCOM 70 Service Manual. Motorola called it
>>>>> "Private Line".
>>>> Since it appears that you do not want a telephone DTMF decoder what is
>>>> it that you want to decode?
>>>>
>>> No decoding involved. It's a tone that unsquelches an FM radio.
>>
>> Which make and model / series? There are dozens of variations.
>>
>These are the standard CTCSS freqs:
>
>http://www.batnet.com/~mfwright/ht220plcodes.html
>
>http://en.wikipedia.org/wiki/CTCSS

Have you read your own references?

Bottom line, most any tunable tone decoder.

4999. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 13:44:33 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <heq7j49kqvvoap7884ud7pe2sg34cstmj9@4ax.com>
Source record: 19573

On Mon, 01 Dec 2008 02:05:01 GMT, jimp@specsol.spam.sux.com wrote:

>Art Unwin <ArthurUnwin@gmail.com> wrote:
>
>> If you exercise free speech then you divulge to all what you are and
>> who you are.!
>
>Please divulge full legal name, birthdate and birthplace, SSN, address,
>telephone number, mothers maiden name and all bank account and credit card
>numbers.

I installed pop off legs a long time ago.

5000. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 13:50:59 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <fqq7j4t21g6eno705ms8o6em6mlv8q5i0k@4ax.com>
Source record: 19574

On Sun, 30 Nov 2008 18:26:33 -0800, Jeff Liebermann <jeffl@cruzio.com>
wrote:

>On Sun, 30 Nov 2008 16:55:02 -0800, JosephKK <quiettechblue@yahoo.com>
>wrote:
>
>>On Wed, 26 Nov 2008 12:00:06 -0800, Jeff Liebermann <jeffl@cruzio.com>
>>wrote:
>>>Nope. We will all be promoted to a position of responsibility, where
>>>we will be setup to fail, thus demonstrating that technologists are no
>>>better at running the country than politicians, crooks, bureaucrats,
>>>and thugs.
>
>>How very weird. I am the pretty much acknowledged top technologist in
>>my workplace. Yet i cannot get promoted.
>>YMMV
>
>That's because nobody has found a reason to want you to fail. There
>can be many reasons for this. Optimistically, you have a well managed
>company, that keeps people in positions where they are best suited.
>That's rather rare as most companies will follow the Peter's Principle
>method of promotion (rise to your level of incompetence).
>
>Another possibility is that you have successfully eliminated any and
>all competition for your position, thus making find a replacement
>impossible. Unless you have a suitable replacement trained and
>waiting, most companies will not your promotion to create vacuum.
>
>In some companies, a promotion is tracked by a raise in salary and
>benefits. In some countries and companies, it's actually impossible
>to get a raise without a change of title. Perhaps your company needs
>to manufacture a suitable position and title for your promotion? Note:
>Assassinating your boss is not a viable option.
>
>It's also possible that you have hit the glass ceiling, where
>promotion is no longer possible. For example, many family owned
>companies will not promote non-family members beyond a certain point.
>If you're the wrong race, religion, sex, age, or nationality, you will
>have problems getting a promotion. Same with failing to join the
>correct country club, attending semi-mandatory social occasions,
>wearing the wrong style clothes, attending the wrong church, and
>generally sticking out like a sore thumb. Conformity pays well.
>
>It's conceivable that you also lack sufficient initiative to obtain a

>promotion. Many managers assume that someone that keeps their mouth
>shut, does not need a promotion. Leaving your resume floating around
>your desk is great way to either indicate that it's time to move up or
>move out. Unfortunately, it can also get you fired, so use this trick
>sparingly.
>
>Anyway, if you need advice on what NOT to do in order to get promoted,
>I have a long list of personal experiences that eventually inspired me
>to become self-employed. I can't say that it was the right decision
>from the financial point of view. However, I can say that I probably
>saved a few companies from self destruction by removing myself from
>their management structure.

Good stuff. I think i need to reconsider hanging out my own shingle.
It is not the best time out there versus a stable position though.

5001. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 14:13:23 UTC
From: Dave <dave@dave.dave>
Message-ID: <4933f104$0$31170$bd467cd0@news.dslextreme.com>
Source record: 19575

JosephKK wrote:
> On Sun, 30 Nov 2008 22:52:16 +0000, Dave <dave@dave.dave> wrote:
>
>> JosephKK wrote:

>>> Which make and model / series? There are dozens of variations.
>>>
>> These are the standard CTCSS freqs:
>>
>> http://www.batnet.com/~mfwright/ht220plcodes.html
>>
>> http://en.wikipedia.org/wiki/CTCSS
>
> Have you read your own references?
>
> Bottom line, most any tunable tone decoder.
>
If a vibrating reed can be considered a "decoder" then you are correct.

However, there are not "dozens of variations".

5002. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 14:15:35 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <65bd01d1-d27a-4685-a6be-c8360de17bad@u14g2000yqg.googlegroups.com>
Source record: 19576

On Nov 29, 2:18 pm, Roy Lewallen <w...@eznec.com> wrote:
> Jerry wrote:
> > Just for conversation, I submit that an antenna with good hemispheric
> > CP coverage could be made with 4 dipoles.

> Yes, there's the quadrifilar helix which I believe fits that
> description. Another, which I built decades ago at 450 MHz, is the "skew
> planar" antenna which resembles a cloverleaf but with the "leaves"
> rotated 45 degrees...

Getting back to Jerry's idea - yes, four linear dipoles can generate
nearly perfect omnidirectional c-pol. This is a design of Nils
Lindenblad many decades ago, and I've done some NEC-2 modeling of it.
The link below leads to a rendered view of that model.

http://i62.photobucket.com/albums/h85/rfry-100/LindenbladRendered.gif

> There's still the problem of ground reflection, though. I didn't state
> it very well in my last posting -- what I meant was that the sum of the
> direct and ground-reflected rays tend to produce a linearly or nearly
> linearly polarized wave even when you start out circular.

This isn't true at least at VHF and UHF, where the ground reflection
mostly just reverses the polarization sense of the incident wave.
This have been demonstrated by the much-improved images seen on analog
TV receivers in city centers when using c-pol transmit and receive
antennas, because multipath reflections ("ghosts") tend to be
suppressed by the receiving antenna.

RF

5003. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 14:28:34 UTC
From: Dave <dave@dave.dave>
Message-ID: <4933f492$0$31204$bd467cd0@news.dslextreme.com>
Source record: 19577

Richard Fry wrote:

>
> This isn't true at least at VHF and UHF, where the ground reflection
> mostly just reverses the polarization sense of the incident wave.
> This have been demonstrated by the much-improved images seen on analog
> TV receivers in city centers when using c-pol transmit and receive
> antennas, because multipath reflections ("ghosts") tend to be
> suppressed by the receiving antenna.
>
> RF

Can you show us one of these C-POL receive antennas?

5004. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 15:07:13 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <d3435973-2379-48f7-83ef-661fbdc123b4@t3g2000yqa.googlegroups.com>
Source record: 19578

On Dec 1, 8:28 am, Dave <d...@dave.dave> wrote:

> Can you show us one of these C-POL receive antennas?

Here's a link to one example for VHF and UHF TV...

http://www.kathrein-scala.com/catalog/HDCA-5CP.pdf

Of course the Lindenblad, or even 1/2 of one could be used, also.
Using half a Lindenblad would make it true c-pol only in two
directions, but if you can aim it in the right direction that may be
OK.

RF

5005. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 15:09:46 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4d4a1a5f-e02f-44ce-a861-a88a31fca58b@t2g2000yqm.googlegroups.com>
Source record: 19579

On Dec 1, 9:07 am, Richard Fry <r...@adams.net> wrote:
> Here's a link to one example for VHF and UHF TV...

Oops. That one is VHF only.

5006. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 15:22:47 UTC
From: "The Honorable Dr. Rocky Roads Presiding Judge" <wookiee@att.net>
Message-ID: <z9ydneDlBcZ0nanUnZ2dnUVZ_vninZ2d@giganews.com>
Source record: 19580
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Douglas W. "Popeye" Frederick" <Popeye@finalprotectivefire.com> wrote in
message news:koGdncO3mpLVf67UnZ2dnUVZ_j2dnZ2d@supernews.com...
>
> This guy seems 7 fuckloads smarter than you.

That coming from someone that lost the internet in his truck because he
didn't know when to stop? ROTFLMAO

"Fuckin Sprint shut me down without warning"
http://groups.google.com/group/misc.transport.trucking/msg/0f0ccb6f15cac165

5007. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 15:45:06 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <6ETYk.2175$us6.1028@nwrddc01.gnilink.net>
Source record: 19581

"Richard Fry" <rfry@adams.net> wrote in message
news:65bd01d1-d27a-4685-a6be-c8360de17bad@u14g2000yqg.googlegroups.com...
On Nov 29, 2:18 pm, Roy Lewallen <w...@eznec.com> wrote:
> Jerry wrote:
> > Just for conversation, I submit that an antenna with good hemispheric
> > CP coverage could be made with 4 dipoles.

> Yes, there's the quadrifilar helix which I believe fits that
> description. Another, which I built decades ago at 450 MHz, is the "skew
> planar" antenna which resembles a cloverleaf but with the "leaves"
> rotated 45 degrees...

Getting back to Jerry's idea - yes, four linear dipoles can generate
nearly perfect omnidirectional c-pol. This is a design of Nils
Lindenblad many decades ago, and I've done some NEC-2 modeling of it.
The link below leads to a rendered view of that model.

http://i62.photobucket.com/albums/h85/rfry-100/LindenbladRendered.gif

RF

Hi Richard

The Lindenblad is Omniazimuth CP. The QHA is hemispherical CP. Some
explanation of the DCA is shown in the Feb 2008 QST.

Jerry

5008. FS T-2X Tailtwister Rotor NIB Lower Price

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:02:48 UTC
From: Charlie Hugg <k5mbx@sbcglobal.net>
Message-ID: <KUTYk.8289$x%.3824@nlpi070.nbdc.sbc.com>
Source record: 19582

I have for sale a brand new Telex Hy-Gain T-2X (Tailtwister) rotor. It comes complete in the original box and has never been used. The rotator has never been out of the box except when I took it out to test it. It is the older version without the plugs for the control cable. It has the original manual and accessory packet and it comes with approximately 50 feet of new rotor cable. It lists new for $799.95, and I'll take $475 plus shipping for it and the cable. See more specs at the Hy-Gain website at: http://www.hy-gain.com/Catergories.php?sec=8 Thanks, Charlie Hugg, K5MBX

5009. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:03:36 UTC
From: Top <top@neo.rr.invalid>
Message-ID: <Xns9B6770730EE1Atopneorrinvalid@130.133.1.4>
Source record: 19583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Douglas W Adair" <n8wwm@allr.net> wrote in
news:ggu32u$4i7$1@news.motzarella.org:

> I like them two at a time--co-phased. Is there any gain to
> be had that way or am I just skin pipe dreaming at the
> petro?
>
>

If you are going to co-phase get a comercially produced co-phase
harness. Mount the anteneas 54" apart for cb band.

5010. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:11:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q038j4563f22odcg5e66m10376k61b8duc@4ax.com>
Source record: 19584

On Mon, 1 Dec 2008 03:28:23 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>Radiation from the monopole from zero to 10 degree elevation is not
>"poorer by 12 dB" than that launched at 40 degrees. It is greater.

This is the suggestion of your own supplied graphic. I thought it
rather obtuse as a topic of introduction too.

>The _reception_ of such radiation is a different matter, as the total,
>skywave path length, and therefore the propagation losses are
>different for those elevation sectors.

And yet you discount that as an NEC analysis, strange. All far-fields
are taken from the perspective of distance.

73's
Richard Clark, KB7QHC

5011. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:21:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h538j4t6pbsb0iji3kldic9vs0scmqndc3@4ax.com>
Source record: 19585

On Mon, 1 Dec 2008 04:09:34 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>On Nov 30, 6:27ï¿½pm, Richard Clark wrote:
>> However, resourcing the top engineers of the AM field for their
>> observations of sky-wave and ground-wave field strengths (a typical
>> service application) where they combine destructively (the "fading
>> wall"); at a distance of 70 miles, for 50% of the time, both signals
>> are equal (with propagation variations of phase accounting for
>> fading).
>_____________
>
>With more research you'll find that the fading zone is not located a
>fixed 70 miles away from every AM station.

Laport is authority enough for an instance for me. His data drawn
from field experience supports my model employing your reference which
responds to your complaint:
>>NEC far-field analysis this would seem impossible,
>>due to the greatly reduced fields in this sector
a statement that lacks quantifiables, and against which Laport's
example and my model only vary by 0.7 dB.

As I have asked in the past, what are your expectations for the
accuracy you expect? If it is tighter than 1dB (something exceedingly
difficult to accurately measure in the field for an absolute), then
that has been demonstrated. If it is tighter than that, your
expectations exceed the capacity of the equipment of that era that
established the FCC groundwave charts.

73's
Richard Clark, KB7QHC

5012. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:25:35 UTC
From: richardharrison@webtv.net
Message-ID: <22051-49340FFF-2398@storefull-3253.bay.webtv.net>
Source record: 19587

I wrote:
"A 3 M diameter has about 9.42 M circumference so becomes effective as its circumference is about one wavelength or about 11.8 MHz. At lower frequencies radiation from a helix is radial rather than axial."

Rounding:
300/10M=30 Mhz.
Likewise:
300/1M=300 Mhz.
If Art`s helix is only about 1 meter in circumference, not 10 meters, it will only be effective as an end-fire antenna above about 300 MHz, not 30 MHz. The good news is that his reflector can be proportionally smaller.

Best regards, Richard Harrison, KB5WZI

5013. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:27:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9d2ddf66-3c7f-41e1-a1a2-0418e944f8ac@x8g2000yqk.googlegroups.com>
Source record: 19586

On Dec 1, 1:42 am, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "I stated "intuitively" since the radiation is axia with respect to the
> helix."
>
> A 3 M diameter has about 9.42 M circumference so becomes an effective
> axial radiator instead of a radial radiator at the frequency near where
> its circumference becomes one wavelength. This frequency is
> 300/(pi)(diameter) or about 10 MHz. A reflecting surface to make an
> axial helix unidirectional needs to be at least as large as the
> projection of the helix on the surface of the reflector. Its diameter
> should then be about 3 M or more and would be effective only at
> frequencies exceeding 10 MHz which is where the helix becomes an
> end-fire device anyway.
>
> Best regards, Richard Harrison, KB5WZI

Richard
That is good information that has a trend to my way of thinking.

A heads up as to where this information comes from would be very
helpfull to
me in my on going experiments

These ratios of diameter to length does have a penalty in wavelengths
used
but hopefully in less reflector diameter which is not to be viewed as
a phase enabling point of view
If one viewed a helix as an array of loop radiators then phasing would
be important but then prevents
the formation of smaller volume radiation designs. For those who rely
solely on "off the cuff" thoughts
may well deride what I am doing but I have done my homework and am now
pursueing implematation
since experiments consist of more than the exercises of the brain
without the need of personal observations,
without which advances would be crippled and science laboratories
would become extinct
My thinking now leans toward solenoid style with a air bound core for
maximum flux density
within the core in "rifle shot" pattern. I have had a similar antenna
for the 80 metre band where the helix diameter
is just 4" which is quite directional even tho as low as 30 feet!.
Thus I am very much encouraged in

this new design which is light enough for me to carry and install
together with improvements added over my past effort
tho it will not have the tilting feature at least not in the near
future. I am anxious to add the tilting feature some time next year
in an effort to extend individual QSO time as propagation changes ,but
it is low on program requirements
Best regards
Art Unwin KB9MZ.....xg

5014. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:49:21 UTC
From: richard <member@newsguy.com>
Message-ID: <cp48j4l95glmkjhdud4v2qmgerd7r9an71@4ax.com>
Source record: 19589
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Mon, 1 Dec 2008 04:37:39 -0500, "Douglas W. \"Popeye\" Frederick"
<Popeye@finalprotectivefire.com> wrote:

>"Dave Platt" <dplatt@radagast.org> wrote in message
>news:vvac06-hnb.ln1@radagast.org...
>>>>I like them two at a time--co-phased. Is there any gain to be had that
>>>>way
>>>>or am I just skin pipe dreaming at the petro?
>>
>>>If fed in phase and spaced correctly, there could be gain to the front and
>>>to the back with a decreased propogation to the sides.
>>>This is usually desirable if traveling on a mostly straight stretch of
>>>highway. I think the spacing is a little too far apart for use on most
>>>cars.
>>
>> I believe you're correct. This is a "broadside array" configuration.
>>
>> Its gain over a single radiator rises roughly linearly (measured in dB
>> over a single radiator) up to separations of around 5/8 wavelength. A
>> separation of 1/2 wavelength gives around 4 dB gain over a single
>> radiator and a very nice clean pattern (deep null to the sides) - this
>> is the spacing most frequently described in the literature (e.g.
>> Kraus, Terman) for broadside arrays. Gain maxes out at just under 5
>> dB at a 5/8-wavelength spacing (at the cost of a small side-lobe).
>> [Figures are from the ARRL Antenna Book of a few years ago]
>>
>> Whether it's worth doing for a vehicle-mobile system is another
>> question. You need more than .4 wavelengths of separation to get 3 dB
>> of gain (half a nominal S-unit) - at 11-meter frequencies that's around
>> 14 feet of separation, which I think not many vehicles will allow.
>> Perhaps if you're driving a "wide load" transporter truck?
>>
>> At 6 feet of separation between antennas you'd have only around .2
>> wavelength, which yields less than 1 dB of gain over a single
>> radiator. Hardly seems cost-effective.
>>
>> It might make more sense for 2-meter operation... but as most 2-meter
>> mobile seems to be repeater-based, you really want omni rather than
>> shaped-beam-down-the-road most of the time.
>>
>> There's also the matching issue. Each radiator in the array will have
>> a feedpoint impedance different than what would have if used alone.
>> You'll have to take this into account when designing the phasing

>> harness, and you may need an impedance-matching network at the
>> combining point to establish the 50-ohm load that your transceiver
>> expects. If you don't match properly your transceiver won't see the
>> load it expects, and may not deliver full rated power into the load -
>> you could easily lose more signal strength this way than the array
>> will gain back. If you do match properly, there will be some amount
>> of loss in the matching network.
>>
>> There ain't no free lunch, alas.
>
> Wow, Richard.
>
> This guy seems 7 fuckloads smarter than you.
>
> Wonder if he ever "held an FCC license for radio work"?

If i had said it, you would have a field day accusing me of all kinds
of shit.

Since the late 60's i've been working with CB and have done all kinds
of experiments with antennas on a car. You name it, I had it.

As he pointed out, the big problem with CB is, you need way much more
space than a vehicle offers to truly get any usable gain from
cophasing.

Do you know the wavelength of 11 meters?
if 27 feet, the normal height of base antenna, is equal to 5/8 or 1/4
wave, then what is 8/8 or 100%? Well over 100 feet.

So to get the true proportion for proper cophasing, the road aint wide
enough and neither is the vehicle.

The only reason truckers run two antennas is because it looks cooler.

The effectiveness of cophasing in a truck is screwed by the factory
installed crap.

5015. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:50:53 UTC
From: "The Honorable Dr. Rocky Roads Presiding Judge" <wookiee@att.net>
Message-ID: <ev-dnROiLaMQiKnUnZ2dnUVZ_iydnZ2d@giganews.com>
Source record: 19588
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Top" <top@neo.rr.invalid> wrote in message
news:Xns9B6770730EE1Atopneorrinvalid@130.133.1.4...
>
> If you are going to co-phase get a comercially produced co-phase
> harness. Mount the anteneas 54" apart for cb band.

Please list your references

5016. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:52:58 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <15067de5-7763-4e33-80d3-3bad43077b5f@j39g2000yqn.googlegroups.com>
Source record: 19590

On Dec 1, 10:11 am, Richard Clark <kb7...@comcast.net> wrote:
> On Mon, 1 Dec 2008 03:28:23 -0800 (PST), Richard Fry <r...@adams.net>
> >The _reception_ of such radiation is a different matter, as the total,
> >skywave path length, and therefore the propagation losses are
> >different for those elevation sectors.
>
> And yet you discount that as an NEC analysis, strange. All far-fields
> are taken from the perspective of distance.

Far-field NEC analysis does not consider propagation loss for a
skywave and its reflection from the ionosphere.

Terman's Fig 55 does that, as well as to include earth curvature in
such loss figures.

//

5017. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:56:26 UTC
From: NightRogue <nospam@nospam.com>
Message-ID: <_GUYk.404979$TT4.56720@attbi_s22>
Source record: 19591
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"The Honorable Dr. Rocky Roads Presiding Judge" <wookiee@att.net> wrote in
message news:z9ydneDlBcZ0nanUnZ2dnUVZ_vninZ2d@giganews.com...
>
> "Douglas W. "Popeye" Frederick" <Popeye@finalprotectivefire.com> wrote in
> message news:koGdncO3mpLVf67UnZ2dnUVZ_j2dnZ2d@supernews.com...
> >
> > This guy seems 7 fuckloads smarter than you.
>
> That coming from someone that lost the internet in his truck because he
> didn't know when to stop? ROTFLMAO

And this from the coward who forgot to set her brakes and blamed it on
someone who was not only NOT there, but was in a different state posting on
here, and she calls everyone else and "idiot"?? That's funny as hell.

5018. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 16:57:54 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <5ddfc048-8d77-4d18-8d81-a4f84f128097@j35g2000yqh.googlegroups.com>
Source record: 19592

On Dec 1, 10:21 am, Richard Clark <kb7...@comcast.net> wrote:
> As I have asked in the past, what are your expectations for the
> accuracy you expect? If it is tighter than 1dB (something exceedingly
> difficult to accurately measure in the field for an absolute), then
> that has been demonstrated.

If you can truly get within 1 dB of the FCC curves with your NEC model in the AM broadcast band then that's good enough for me. Probably not good enough for the FCC, though.

RF

5019. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 17:03:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3ad840fb-125a-4ec6-9ced-aadb2133cdbe@j39g2000yqn.googlegroups.com>
Source record: 19593

On Dec 1, 10:25 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> I wrote:
>
> "A 3 M diameter has about 9.42 M circumference so becomes effective as
> its circumference is about one wavelength or about 11.8 MHz. At lower
> frequencies radiation from a helix is radial rather than axial."
>
> Rounding:
> 300/10M=30 Mhz.
> Likewise:
> 300/1M=300 Mhz.
> If Art`s helix is only about 1 meter in circumference, not 10 meters, it
> will only be effective as an end-fire antenna above about 300 MHz, not
> 30 MHz. The good news is that his reflector can be proportionally
> smaller.
>
> Best regards, Richard Harrison, KB5WZI

Richard
I would disagree with the above as it has it's roots in a loop array
yagi style
where phasing is of the essence. What Kraus did do is to destroy the
notion that
a radiator has to be straight to be effective which is borne out by
Gauss.
At the time he did his work (over 50 years ago) radar and other
advances pointed to the use of
higher frequencies and away from HF which then opened the advantages
of circular polarization
Thus his work to my knoweledge has not been extended to HF via known
observables, an avenue ideally
identified with hams with the experimental bent coupled with a
technical educatioin.
If others have already experimented in this particular area I would be
happy to hear of their experiences and actual
scalar obsevables.
The fact that my full scale experiments have exposed facts that are
contrary to that of 50 years ago
is what drives me on this task tho the labour tasking can sometimes be
exaspirating but non the less necessary
rather than relying solely on just personal thoughts, intuitions and
deductions,After all I am a qualified engineer
and certainly would not have got very far in life if I thought a

testing regimen is not a requirement any more
Regards
Art Unwin.......xg

5020. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 17:34:21 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <do58j4tq8jfqmnd1f0q2suu5mtpo5vakrs@4ax.com>
Source record: 19594

On Mon, 01 Dec 2008 05:50:59 -0800, JosephKK <quiettechblue@yahoo.com>
wrote:

>Good stuff. I think i need to reconsider hanging out my own shingle.
>It is not the best time out there versus a stable position though.

Maybe. I'm not an authority on self-employment and small biz.
However, I've been doing it for 25 years, so I must be doing something
right.

One of my "hobbies" was collecting business cards sitting on the
counter at the local retail electronics parts supplier. Every time
there was a layoff or downturn in the industry, a wide assortment of
business cards for newly minted consultants would appear. I would
grab a card, and scribble the date on the back. I would then wait to
see how long they would last. 6 months was the running average before
they found employment and/or decided consulting was not for them. A
few moved out of the area. I wasn't very organized or accurate, but
when the local economy sucked, there were perhaps 100 consultants.
When it was going full blast, perhaps 10.

A fairly small number survived over the years, and have built up a
customer base and revenue source sufficient to maintain their
lifestyle. Several have day jobs as well. One characteristic I noted
was the higher up in corporate America they went, the smaller the
likelihood of survival as a consultant. My guess is that this is
because of their addiction to the corporate support structure. For
example, I was horrified at the prospect of having to buy my own
stationary supplies, instead of simply stealing them from the company.

Another characteristic is that most consultants get their start by
obtaining work from their former employers. That included me. If you
burn your bridges when leaving a company, you will have problems.
Later, as your contacts move to other companies, your business base
will expand with them. If you have a mentor, do everything you can to
make them happy. I would say that without the business provided by a
very small number of industry contacts, I would have starved long ago.
I should also mention that I started my biz taking on small consulting
projects while still employed. I didn't need the money, but I was
bored and knew that I would evenutally need the experience and
contacts.

At one point, I had illusions of designing and producing antennas.
It's an ideal product. Few people understand how they work. Antennas
tend to be surround by hype and are often close to magic. Testing is
difficult and expensive. Product comparisons are non-existent.

Religion and bias toward specific styles and manufacturers seem to be the prime criteria for selection. The weirder it looks, the better it sells. Aesthetic concerns have provided a whole new market. There are already some rather dubious antenna products on the market. Etc. In all, it's a perfectly acceptable small market waiting to be exploited. Hopefully, my marketing and sales expertise will adequately compensate for my marginal antenna design abilities. I had plans to build the product line using the audiophile model, where garish industrial design and endless ambiguous buzzwords have done quite well. Due to health problems, I doubt that I'll do anything, so it's all yours.

Good luck.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5021. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 17:45:28 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <b5cb7145-0a23-4316-8e3f-c43be1131ef9@r40g2000yqj.googlegroups.com>
Source record: 19595

On Dec 1, 10:21 am, Richard Clark <kb7...@comcast.net> wrote:
> On Mon, 1 Dec 2008 04:09:34 -0800 (PST), Richard Fry <r...@adams.net>
> >With more research you'll find that the fading zone is not located a
> >fixed 70 miles away from every AM station.
>
> Laport is authority enough for an instance for me. His data drawn
> from field experience supports my model...

And supporting my statement about the location of the fade zone not being a fixed 70 miles from a monopole, note this quote starting at the bottom of page 103 of that text applying to Laport's Fig 2.7 (your cited authority):

"For a 190 degree radiator, the fields are not shown because it is known immediately from the chart thus far computed that the signal will be severely noise-limited before arriving at the distance where fading is objectionable."

As Laport wrote his book Radio Antenna Engineering in 1952, he would have been working from the advantage of the research and discoveries of George Brown about this subject some 23 years earlier.

RF

5022. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 17:58:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh18jq$a1e$1@news.albasani.net>
Source record: 19596

Jeff Liebermann wrote:

> ...
> At one point, I had illusions of designing and producing antennas.
> It's an ideal product. Few people understand how they work. Antennas
> tend to be surround by hype and are often close to magic. Testing is
> difficult and expensive. Product comparisons are non-existent.
> Religion and bias toward specific styles and manufacturers seem to be
> the prime criteria for selection. The weirder it looks, the better it
> sells. Aesthetic concerns have provided a whole new market. There
> are already some rather dubious antenna products on the market. Etc.
> In all, it's a perfectly acceptable small market waiting to be
> exploited. Hopefully, my marketing and sales expertise will
> adequately compensate for my marginal antenna design abilities. I had
> plans to build the product line using the audiophile model, where
> garish industrial design and endless ambiguous buzzwords have done
> quite well. Due to health problems, I doubt that I'll do anything, so
> it's all yours.
>
> Good luck.
>

One of the most important paragraphs ever to have been posted to this NG ...

The logic and energy brought to bear is nothing short of astounding, and provokes a "RIGHT ON, THUMBS UP" out of me ... :-)

However, the part of success in selling snake oil, "In all, it's a perfectly acceptable small market waiting to be exploited", I'd have to see to believe ... the market seems saturated already!

Warm regards,
JS

5023. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 17:58:40 UTC
From: JB <nospam@goofball.net>
Message-ID: <kBVYk.2205$us6.285@nwrddc01.gnilink.net>
Source record: 19597

> > Defecation on your non-existent deity.
> >
>
> Yeah, this just "all happened", right.
>
> I bet you see that a lot ...
>
> Regards,
> JS

Needs to be reminded that gravity doesn't work that way. Stand on your head
and try it.

5024. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 18:06:03 UTC
From: JB <nospam@goofball.net>
Message-ID: <flVYk.2162$QX3.831@nwrddc02.gnilink.net>
Source record: 19598

> > > Defecation on your non-existent deity.
> > Yeah, this just "all happened", right.
> >
> > I bet you see that a lot ...
> >
> Needs to be reminded that gravity doesn't work that way. Stand on your
head
> and try it.
Repeat ten times and average the results.

5025. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 18:21:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh19vj$bq2$1@news.albasani.net>
Source record: 19599

JB wrote:

> ...
> Needs to be reminded that gravity doesn't work that way. Stand on your head
> and try it.
>

Better yet, grab a hand full of plastic, glass, metal, wood, etc. and
toss it into a mud-puddle, come back in a few million years and see what
you can "dig up", what has "evolved" into being ...

While I cannot absolutely rule out molecules, atoms and other assorted
particles, materials and wavelengths of energies arranging themselves
into complex organisms, at least one of which has self-awareness--it
flies in the face of all forms of logic/maths/sciences I have ever had
contact with ... but true, ya' never know, ya' just never know.

Regards,
JS

5026. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 18:25:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <20b8j4l8u29b7685p5h1knqbqkul995vub@4ax.com>
Source record: 19600

On Mon, 1 Dec 2008 08:52:58 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>Far-field NEC analysis does not consider propagation loss for a
>skywave and its reflection from the ionosphere.
>
>Terman's Fig 55 does that, as well as to include earth curvature in
>such loss figures.

And this is relative to what?

73's
Richard Clark, KB7QHC

5027. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 18:38:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <63b8j4pcivmvi3qts828926ufbnp92f10s@4ax.com>
Source record: 19502

On Mon, 1 Dec 2008 09:45:28 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>And supporting my statement about the location of the fade zone not
>being a fixed 70 miles from a monopole, note this quote starting at
>the bottom of page 103 of that text applying to Laport's Fig 2.7 (your
>cited authority):

Laport says much more than that about the fading wall. It took only
his one instance to correlate his chart to your chart and to my model
to give me pause to wonder what you are griping about when you
complain:
>>...NEC far-field analysis this would seem impossible,
>>due to the greatly reduced fields in this sector ....
a statement that lacks quantifiables. "Impossible" is
yellow-journalism fluff and the less than 1dB variations is within the
accumulation of field errors of the "possible" that went into
engineering reports. "Impossible" and "possible" are, to all intents
and purposes, describing the same thing.

What is it that is impossible? Or is this about seeming?

73's
Richard Clark, KB7QHC

5028. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 18:39:46 UTC
From: JB <nospam@goofball.net>
Message-ID: <SbWYk.2166$QX3.556@nwrddc02.gnilink.net>
Source record: 19501

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:50e47e6c-5ba0-4a84-8c1f-d9184efc6485@w34g2000yqm.googlegroups.com...
On Nov 30, 4:47 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:9ffaf055-e3e5-4b33-9914-027b718705b6@n10g2000yqm.googlegroups.com...
>
> > THEFT OF PUBLIC FUNDS BY PRIVATE ENTITIES
>
> so go file a criminal complaint... even at 'public' universities not all
> research work is paid for by the public. many projects are funded by
> private companies and other entities who retain the right to such work and
> any patents that may result. now of course most patents are publicly
> available, but not all of them... go figure that one out. of course how
> much more are you willing to be taxed to support electronic publishing of
> everything written at a public university? that service doesn't come for
> free, and the sheer volume of that stuff would make it downright
expensive.

I have asked the trusties what the policy is regarding this before I
proceed.
I am in the rujst belt and there are many engineers that have and are
going to be laid off.
They will not be able to afford to stay abreast of things and thus
will be hurtin the coming depression.
Not good for the Countries future I would say
Art

What irks me is the video conference links that major universities have so
that their Russian counterparts can participate in the board meetings. Some
kind of open access thing. Them and Ron Burkle. What was this about
suppression?

5029. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 18:46:42 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gh1beiraq1@news.jpl.nasa.gov>
Source record: 19504

JosephKK wrote:
> On Sat, 29 Nov 2008 16:46:13 -0800 (PST), jimlux@earthlink.net wrote:
>
>> The cost of actually printing the journals is significant, and has to
>> come from somewhere. They're not exactly huge circulation, and mostly
>> have no advertising, but are printed on high quality stock with good
>> quality typesetting.
>
> The physical printing costs are actually minimal, distribution costs
> more now.

Say it costs about $0.05/page for offset printing on glossy stock (no idea if that's right, but it's probably within a factor of 10). A 100 page journal is then $5 in raw production costs, per unit. (and we'll assuming binding, etc. is included)

But you have to add typography and editing and composition. I'd find it hard to believe that a complete journal could be set up in less than 100 work hours. So, about $10K.

If the circulation of the journal is 200 copies, then that's another $10K in repro costs. You're up to $10/issue, before you've distributed it, maintained the subscriber list, etc. These things all cost money (been there, provided the service, made a living from it, barely).

Check out what the "print to order" publishers charge. (e.g. Lulu.com) (100 page, paperback perfect bound is about $5.30, exclusive of shipping)

]
>
>>
>>> This statement was in regard to the high costs of obtaining copies
>>> from the IEEE without
>>> having to pay the high costs of belonging .
>> The cost to get a single copy is quite high compared to the cost to
>> get access to thousands by being a member (check out those CCC prices
>> at the bottom of the first page.. they're fairly pricey.. a dozen
>> papers a year and you've just paid for your membership and access to
>> Xplore)
>
> Just a few years ago i could get physical reprints of articles from
> most journals for about $3 each, now electronic reprints cost $20 or
> more? I think we all can figure out where the money is going.
>

I think you'd have to go back quite a ways in time to get to $3/article. Grabbing a few things on my desk, a 2001 IEEE Proceedings article runs you $10. A paper in a 2004 Trans Antennas and Prop is $20. A 1982 Proceedings of IEEE paper runs $0.75. Jim Breakall's paper on HF propagation modeling over mountains in 1994 IEEE Trans A&P is $4.00

Of course, those are just the costs if you photocopy it yourself and submit the fee to the copyright clearance center.

And, a lot of times, the author of the paper will send you a copy, if you write and ask. (That's actually one of the fun parts about publishing.. Getting those post cards from obscure places in the world 10 years later: "Meine geehrte Kollege, bitte schicken Sie mir ....")

Granted if the author is dead or unreachable, that's a challenge.

>>
> Funny thing about "work for hire", the hiring entity is the one with
> any legal rights here in the US. But the NIH for some strange reason
> does not assert its rights.

One would have to look at the specific contracts/grant language, but I'll bet they require dissemination in something like PubMed these days. The days of the Principal Investigator keeping their data secret for decades while they dribble out a paper a year, are dying, if not dead, at least for publicly funded work.

On NASA missions, there's typically a clause that requires dissemination of the raw data from an instrument within 6 months, and you're required to have budgeted for that dissemination in your proposal.

The IEEE does not publish work for hire
> generally, but charges for submissions.

Of course the IEEE publishes work for hire. If you work for Boeing, write a paper, and get it published, Boeing owns the copyright (as work for hire), and executes a license to IEEE to use it. And they don't always charge for submissions. My very first published paper (wasn't with IEEE, as it happens) had the page fees waived, because I was in high school at the time.

5030. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 18:49:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <40c8j45l309q3ra44tgjbe6dbb3q8onkb0@4ax.com>
Source record: 19503

On Mon, 1 Dec 2008 08:27:22 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I have had a similar antenna
>for the 80 metre band where the helix diameter
>is just 4" which is quite directional even tho as low as 30 feet!.

My transistor radio antenna of 50 years ago was smaller than that and
could do better at lower frequencies: Triple the wavelength, 4 times
smaller, and at one tenth the height. That is a 120 fold advantage
over your design. It cost $12, and the antenna came with it for free!

73's
Richard Clark, KB7QHC

5031. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 19:10:20 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gh1cqt$18lg$1@f04n12.cac.psu.edu>
Source record: 19505

John Smith wrote:
> JB wrote:
>
>> ...
>> Needs to be reminded that gravity doesn't work that way. Stand on
>> your head
>> and try it.
>>
>
> Better yet, grab a hand full of plastic, glass, metal, wood, etc. and
> toss it into a mud-puddle, come back in a few million years and see what
> you can "dig up", what has "evolved" into being ...
>
> While I cannot absolutely rule out molecules, atoms and other assorted
> particles, materials and wavelengths of energies arranging themselves
> into complex organisms, at least one of which has self-awareness--it
> flies in the face of all forms of logic/maths/sciences I have ever had
> contact with ... but true, ya' never know, ya' just never know.

Self-arranging and self replication are actually easy enough to do that the old definition of life that depends on that have been discarded for much tighter definitions, Otherwise we would already be able to claim that we created life.

As an example, lipids, or phospholipids, are a common substance (read oils) that have the tendency to form into small bilayer spheres that isolate the interior from the exterior world. Then what is needed is for the right compounds to get trapped inside that sphere, and maybe something interesting will happen.

http://blog.wired.com/wiredscience/2008/09/biologists-on-t.html?npu=1&mbid=yhp

A immune system analog:

http://www.sandia.gov/media/NewsRel/NR2002/nanoarch.htm

Point is, these things are not some impossible to happen, "just so" scheme. As time goes on, it looks more and more like on a planet capable of sustaining life, life will happen.

Now if someone wanted to claim that some entity made that planet that could support life, then these things happened - that is a different story.

- 73 de Mike N3LI -

5032. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 19:10:50 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <0cce9d5c-d6c2-4b96-9cce-f80c376888f8@w3g2000yqc.googlegroups.com>
Source record: 19506

On Dec 1, 12:25 pm, Richard Clark <kb7...@comcast.net> wrote:

> And this is relative to what?

To my post saying:

> On Mon, 1 Dec 2008 04:09:34 -0800 (PST), Richard Fry <r...@adams.net>
> >With more research you'll find that the fading zone is not located a
> >fixed 70 miles away from every AM station.

followed by your post saying:

>And yet you discount that as an NEC analysis, strange. All far-fields
>are taken from the perspective of distance.

You're not following.

RF

5033. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 19:22:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3ae8j4pdlc4up6olun0vgutociat3g1d8o@4ax.com>
Source record: 19507

On Mon, 1 Dec 2008 11:10:50 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>On Dec 1, 12:25ï¿½pm, Richard Clark <kb7...@comcast.net> wrote:
>
>> And this is relative to what?
>
>To my post saying:
>
>> On Mon, 1 Dec 2008 04:09:34 -0800 (PST), Richard Fry <r...@adams.net>
>> >With more research you'll find that the fading zone is not located a
>> >fixed 70 miles away from every AM station.
>
>followed by your post saying:
>
>>And yet you discount that as an NEC analysis, strange. All far-fields
>>are taken from the perspective of distance.
>
>You're not following.

And this is relative to what?

73's
Richard Clark, KB7QHC

5034. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 19:40:06 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <9f8b5929-cc70-4164-85dd-ca79a39f0fb0@v15g2000yqn.googlegroups.com>
Source record: 19508

On Dec 1, 12:38 pm, Richard Clark <kb7...@comcast.net> wrote in
response to my quote below:

>> Below is a link to a clip from Terman's Radio Engineers Handbook, 1st
>> edition, showing that the greatest single-hop range for skywave
>> signals occurs from the radiation of the monopole at elevation angles
>> of less than ten degrees. But looking at a NEC far-field analysis
>> this would seem impossible, due to the greatly reduced fields in this
>> sector that NEC shows for a vertical monopole over real earth.

> What is it that is impossible? Or is this about seeming?

---

1. A far-field NEC analysis of the elevation radiation pattern of a
monopole over real earth shows little to no relative field below 10
degrees elevation. No doubt that is true of your NEC model under
discussion here, is it not?

2. Terman's Fig 55, and the experience and field measurements of AM
broadcast stations for many decades shows that there is _considerable_
radiation launched in this sector. In fact for monopoles of 5/8 wave
and less the radiated field is maximum in the horizontal plane.

How would you characterize the discrepancy existing between items 1
and 2 above?

RF

5035. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 19:43:58 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <e9f09db9-6895-4a07-a6aa-df84a2c280ea@x38g2000yqj.googlegroups.com>
Source record: 19509

On Dec 1, 1:22 pm, Richard Clark <kb7...@comcast.net> wrote:

> >> And this is relative to what?
>>
> And this is relative to what?

Juvenile.

5036. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 20:04:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh1g1bike1@news.albasani.net>
Source record: 19510

Michael Coslo wrote:

> ...
> Self-arranging and self replication are actually easy enough to do that
> the old definition of life that depends on that have been discarded for
> much tighter definitions, Otherwise we would already be able to claim
> that we created life.
>
> As an example, lipids, or phospholipids, are a common substance (read
> oils) that have the tendency to form into small bilayer spheres that
> isolate the interior from the exterior world. Then what is needed is for
> the right compounds to get trapped inside that sphere, and maybe
> something interesting will happen.
>
>
> http://blog.wired.com/wiredscience/2008/09/biologists-on-t.html?npu=1&mbid=yhp
>
>
>
> A immune system analog:
>
>
> http://www.sandia.gov/media/NewsRel/NR2002/nanoarch.htm
>
>
> Point is, these things are not some impossible to happen, "just so"
> scheme. As time goes on, it looks more and more like on a planet capable
> of sustaining life, life will happen.
>
> Now if someone wanted to claim that some entity made that planet that
> could support life, then these things happened - that is a different story.
>
> - 73 de Mike N3LI -

I'd say that was the best argument for aliens I have ever seen ...

Since the universe is some ~13.7 billion years old, and the earth only
~6 billion ... it would be quite interesting to meet one of those races
who are ~1 billion years ahead of us ... I am waiting, indeed, have been
for some time now.

Regards,
JS

5037. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 20:42:18 UTC
From: Top <top@neo.rr.invalid>
Message-ID: <Xns9B679FB1947D4topneorrinvalid@130.133.1.4>
Source record: 19511
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

richard <member@newsguy.com> wrote in
news:cp48j4l95glmkjhdud4v2qmgerd7r9an71@4ax.com:

> On Mon, 1 Dec 2008 04:37:39 -0500, "Douglas W. \"Popeye\"
> Frederick" <Popeye@finalprotectivefire.com> wrote:
>
>>"Dave Platt" <dplatt@radagast.org> wrote in message
>>news:vvac06-hnb.ln1@radagast.org...
>>>>>I like them two at a time--co-phased. Is there any gain
>>>>>to be had that way
>>>>>or am I just skin pipe dreaming at the petro?
>>>
>>>>>If fed in phase and spaced correctly, there could be gain
>>>>to the front and to the back with a decreased propogation
>>>>to the sides. This is usually desirable if traveling on a
>>>>mostly straight stretch of highway. I think the spacing
>>>>is a little too far apart for use on most cars.
>>>
>>> I believe you're correct. This is a "broadside array"
>>> configuration.
>>>
>>> Its gain over a single radiator rises roughly linearly
>>> (measured in dB over a single radiator) up to separations
>>> of around 5/8 wavelength. A separation of 1/2 wavelength
>>> gives around 4 dB gain over a single radiator and a very
>>> nice clean pattern (deep null to the sides) - this is the
>>> spacing most frequently described in the literature (e.g.
>>> Kraus, Terman) for broadside arrays. Gain maxes out at
>>> just under 5 dB at a 5/8-wavelength spacing (at the cost
>>> of a small side-lobe). [Figures are from the ARRL Antenna
>>> Book of a few years ago]
>>>
>>> Whether it's worth doing for a vehicle-mobile system is
>>> another question. You need more than .4 wavelengths of
>>> separation to get 3 dB of gain (half a nominal S-unit) -
>>> at 11-meter frequencies that's around 14 feet of
>>> separation, which I think not many vehicles will allow.
>>> Perhaps if you're driving a "wide load" transporter
>>> truck?
>>>
>>> At 6 feet of separation between antennas you'd have only
>>> around .2 wavelength, which yields less than 1 dB of gain
>>> over a single radiator. Hardly seems cost-effective.

>>>
>>> It might make more sense for 2-meter operation... but as
>>> most 2-meter mobile seems to be repeater-based, you
>>> really want omni rather than shaped-beam-down-the-road
>>> most of the time.
>>>
>>> There's also the matching issue. Each radiator in the
>>> array will have a feedpoint impedance different than what
>>> would have if used alone. You'll have to take this into
>>> account when designing the phasing harness, and you may
>>> need an impedance-matching network at the combining point
>>> to establish the 50-ohm load that your transceiver
>>> expects. If you don't match properly your transceiver
>>> won't see the load it expects, and may not deliver full
>>> rated power into the load - you could easily lose more
>>> signal strength this way than the array will gain back.
>>> If you do match properly, there will be some amount of
>>> loss in the matching network.
>>>
>>> There ain't no free lunch, alas.
>>
>> Wow, Richard.
>>
>> This guy seems 7 fuckloads smarter than you.
>>
>> Wonder if he ever "held an FCC license for radio work"?
>
>
> If i had said it, you would have a field day accusing me of
> all kinds of shit.
>
> Since the late 60's i've been working with CB and have done
> all kinds of experiments with antennas on a car. You name
> it, I had it.
>
> As he pointed out, the big problem with CB is, you need way
> much more space than a vehicle offers to truly get any
> usable gain from cophasing.
>
> Do you know the wavelength of 11 meters?
> if 27 feet, the normal height of base antenna, is equal to
> 5/8 or 1/4 wave, then what is 8/8 or 100%? Well over 100
> feet.
>
> So to get the true proportion for proper cophasing, the
> road aint wide enough and neither is the vehicle.
>
> The only reason truckers run two antennas is because it
> looks cooler.
>

> The effectiveness of cophasing in a truck is screwed by the
> factory installed crap.
>

You still didn't give any useful information. No surpise since you have none. For an average of the cb band running 1/4 wave the antennas should be spaced 54 inches apart. Use a commercially produced cophase harness if you can find it. Make sure you match the SWR and you will out do any other mobile off the front or rear.

Toop

5038. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 20:43:32 UTC
From: Top <top@neo.rr.invalid>
Message-ID: <Xns9B679FE77268Ftopneorrinvalid@130.133.1.4>
Source record: 19512
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"NightRogue" <nospam@nospam.com> wrote in
news:_GUYk.404979$TT4.56720@attbi_s22:

>
> "The Honorable Dr. Rocky Roads Presiding Judge"
> <wookiee@att.net> wrote in message
> news:z9ydneDlBcZ0nanUnZ2dnUVZ_vninZ2d@giganews.com...
>>
>> "Douglas W. "Popeye" Frederick"
>> <Popeye@finalprotectivefire.com> wrote in message
>> news:koGdncO3mpLVf67UnZ2dnUVZ_j2dnZ2d@supernews.com...
>> >
>> > This guy seems 7 fuckloads smarter than you.
>>
>> That coming from someone that lost the internet in his
>> truck because he didn't know when to stop? ROTFLMAO
>
>
> And this from the coward who forgot to set her brakes and
> blamed it on someone who was not only NOT there, but was in
> a different state posting on here, and she calls everyone
> else and "idiot"?? That's funny as hell.
>
>
>
How many days has he been a rookie now?

5039. FS: Like New MFJ-989C 3KW Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 21:05:54 UTC
From: Charlie Hugg <k5mbx@sbcglobal.net>
Message-ID: <TkYYk.8972$c45.7507@nlpi065.nbdc.sbc.com>
Source record: 19513

FS: MFJ-989C Versa Tuner V 3000 Watt Roller Inductor Tuner. It is in
Excellent condition and works perfectly. Asking $195.00 plus shipping.
Pictures available on request. Thanks, Charlie Hugg, K5MBX

5040. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 21:36:22 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <1fd0c759-0893-4806-b33f-a654fda7889e@t2g2000yqm.googlegroups.com>
Source record: 19514
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

On 1 dic, 13:16, Bob Bob <bob3b...@suddenlink.net> wrote:
> Hi Wim
>
> I'll admit I am having difficulty visualizing what you are doing with
> data tables and was about to suggest using a macro to generate the plot
> values until I saw your "no VB" comment.
>
> When you say "data table", is that a pivot table? I have sheets with
> calcs based on pivot table outputs that are then used in further pivot
> tables. Looks horribly messy but it works. (Noting that the accuracy
> problems arent a problem for me due to what I am calculating for)
>
> Cheers Bob W5/VK2YQA
>
> Wimpie wrote:
> > Does somebody know a solution for this (I do not prefer a VB one)?

Hello to Bob and the other contributors

I used the table function that enters row or column data into a
formula and plot the result under the row or right to the column. I
use the 2 variable version that results in a square with 400 cells. I
add them with the sum function.

The reason for mentioning "VB not preferred" is because of when I have
to divert to programming, I prefer to abandon Excel (for this
application) and use another environment.

Following this thread and advise from other people, I will abandon
Excel for this Fresnel calculation.

Regarding stability issues, some people also advised me to use the
Unix/Linux program instead of the windows port. So I still have to
do some investigation, as I do not have a machine with Linux on it.

Best regards and thanks for the info,

Wim
PA3DJS
www.tetech.nl
Remove abc and the mail address is OK.

5041. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 21:38:12 UTC
From: "The Honorable Dr. Rocky Roads Presiding Judge" <wookiee@att.net>
Message-ID: <a039272c-07c6-4974-b1ab-42ae74319f25@h20g2000yqn.googlegroups.com>
Source record: 19515
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

Top wrote:
> "NightRogue" <nospam@nospam.com> wrote in
> news:_GUYk.404979$TT4.56720@attbi_s22:
>
> >
> > "The Honorable Dr. Rocky Roads Presiding Judge"
> > <wookiee@att.net> wrote in message
> > news:z9ydneDlBcZ0nanUnZ2dnUVZ_vninZ2d@giganews.com...
> >>
> >> "Douglas W. "Popeye" Frederick"
> >> <Popeye@finalprotectivefire.com> wrote in message
> >> news:koGdncO3mpLVf67UnZ2dnUVZ_j2dnZ2d@supernews.com...
> >> >
> >> > This guy seems 7 fuckloads smarter than you.
> >>
> >> That coming from someone that lost the internet in his
> >> truck because he didn't know when to stop? ROTFLMAO
> >
> >
> > And this from the coward who forgot to set her brakes and
> > blamed it on someone who was not only NOT there, but was in
> > a different state posting on here, and she calls everyone
> > else and "idiot"?? That's funny as hell.
> >
> >
> >
> How many days has he been a rookie now?

trolls

5042. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 21:38:51 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <h0l8j4tobplo8j87s6l29qemvjdm6cbq4c@4ax.com>
Source record: 19516

On Mon, 01 Dec 2008 09:58:09 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>However, the part of success in selling snake oil, "In all, it's a
>perfectly acceptable small market waiting to be exploited", I'd have to
>see to believe ... the market seems saturated already!

Acording to my mentor (now retired), the secret to success for a small business is to find a narrow corner of the market, so narrow that it won't attract the attention of the big guys, and do everything you can to own it. Small companies just don't have the resources of the big guys. The trick is to avoid them, not lock horns with the big guys.. Therefore, I don't see anyone going into the land mobile, TV, tower, GPS, cellular, or car antenna business. These certainly are saturated, although you might be able to compete on a cost basis. Where small companies have succeeded are in the niche markets, such as Stepper IR, various weird CB antenna contrivances, and wi-fi antennas. If you've got connections in Homeland Security, consider military and paramilitary antenna system.

As for snake oil, I don't consider giving the customer what they want to be snake oil. If the market demands garrish, weird looking, strange, camouflaged, and/or colorful antennas, it's not snake oil. Several vendors have demonstrated that weird looking sells well. If that's what the customer wants, I don't see a problem.

It's also possible to produce deluxe versions of common antennas. For example, I suspect a gold plated antenna, with rare earth doping to improve conductivity, and ceramic insulators made from clay found in Area 51, to be sellable. It's not that far from what I read in the audiophile catalogs, with their $500 power cords, wooden amplifier boxes, glass turntables, and acoustic pretzel speaker enclosures. You might not sell too many of these deluxe versions, but you'll make lots of money on each one.
<http://www.audioadvisor.com>
<http://www.audioadvisor.com/prodinfo.asp?number=CRGRPC>

Remember, the surest sign of success is pollution. Since the market for antenna products are not yet totally polluted, I don't consider the market to be anywhere near saturated or successful.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

5043. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 22:03:30 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gh1mvj$17rs$1@f04n12.cac.psu.edu>
Source record: 19517

Jeff Liebermann wrote:

> As for snake oil, I don't consider giving the customer what they want
> to be snake oil. If the market demands garrish, weird looking,
> strange, camouflaged, and/or colorful antennas, it's not snake oil.
> Several vendors have demonstrated that weird looking sells well. If
> that's what the customer wants, I don't see a problem.

I'm thinking of pink dipoles for the YL Hamettes!

> It's also possible to produce deluxe versions of common antennas. For
> example, I suspect a gold plated antenna, with rare earth doping to
> improve conductivity, and ceramic insulators made from clay found in
> Area 51, to be sellable. It's not that far from what I read in the
> audiophile catalogs, with their $500 power cords, wooden amplifier
> boxes, glass turntables, and acoustic pretzel speaker enclosures. You
> might not sell too many of these deluxe versions, but you'll make lots
> of money on each one.
> <http://www.audioadvisor.com>
> <http://www.audioadvisor.com/prodinfo.asp?number=CRGRPC>

Of course, the manufacturer would have to live with themselves. I would go as far as the goofy pink antenna I mentioned above. I don't think I would have the lack of integrity to make the bogus claims made for stuff like the Audiophile industry does. They have a distinct Carney/Rube thing going on with their customers.

I got it!

My urine contains special compounds because of my consumption of asparagus, chocolate and beer. This cause my urine to have special properties that cause magnetic particles to increase their flux concentration, giving increased power output, more brilliant lows and Highs, and making for much less listening fatigue.

I will sell bottles of the miracle liquid for 1000 dollars per liter. However, as everyone knows, ther eis nothing like freshness for the important compounds, so for 25 thousand dollars plus air and food expensies, I will come to visit and pee on your speakers......

- 73 de Mike N3LI -

5044. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 22:22:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0pm8j4tteb5g2nbkl5eg76cdqd2igbre2c@4ax.com>
Source record: 19518

On Mon, 1 Dec 2008 11:40:06 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>1. A far-field NEC analysis of the elevation radiation pattern of a
>monopole over real earth shows little to no relative field below 10
>degrees elevation. No doubt that is true of your NEC model under
>discussion here, is it not?

I see that this question bears on my previous correspondence where you
have failed to attend to that relevance. In fact, my model's 1ï¿½
response is only 1.6dB below the peak response at 8ï¿½ (both of which
are below 10ï¿½). That peak response is roughly half a dB below a
perfect ground response at 0ï¿½.

I will again repeat two questions that seem to plague you to the point
of silence in their regard:

1.
What is the relevance of your side topic? Please answer it within
that side thread where I raise this question.

2.
>>>...NEC far-field analysis this would seem impossible,
>>>due to the greatly reduced fields in this sector ....
your statement lacks quantifiables. "Impossible" is
yellow-journalism fluff and the less than 1dB variations I have
reported are within the accumulation of field errors of the "possible"
that went into engineering reports. "Impossible" and "possible" are,
to all intents and purposes, describing the same thing.

What is it that is impossible? Or is this about seeming?

73's
Richard Clark, KB7QHC

5045. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 22:30:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <22p8j49ihp3hor8rjk82t2r0pl49nm457v@4ax.com>
Source record: 19519
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

On Mon, 1 Dec 2008 13:36:22 -0800 (PST), Wimpie <wimabctel@tetech.nl>
wrote:

>Regarding stability issues, some people also advised me to use the
>Unix/Linux program instead of the windows port. So I still have to
>do some investigation, as I do not have a machine with Linux on it.

Hi Wim,

Unix/Linux is all fine and well, but if the package is OS sensitive,
then that package is suspect in its own right. The OS has (should
have) nothing to do with the libraries that perform the computations.

Your aversion to VB is well founded in shared libraries (I presume,
however, your aversion is for coding, but the visceral response is
true to form).

Going back 25 years ago when I was designing FFTs. I wholly abandoned
MS whose expensive compiler and math libraries (upwards to $600) were
abysmal in comparison to the $50 TurboPascal product.

73's
Richard Clark, KB7QHC

5046. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 23:24:30 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <0d2c2a9d-8e3f-4832-b708-79ae141985b0@w34g2000yqm.googlegroups.com>
Source record: 19520

"Richard Clark" wrote
> On Mon, 1 Dec 2008 11:40:06 -0800 (PST), Richard Fry wrote:
>
>>1. A far-field NEC analysis of the elevation radiation pattern of a
>>monopole over real earth shows little to no relative field below 10
>>degrees elevation. No doubt that is true of your NEC model under
>>discussion here, is it not?
>
> I see that this question bears on my previous correspondence where
> you have failed to attend to that relevance. In fact, my model's 1°
> response is only 1.6dB below the peak response at 8° (both of which
> are below 10°). That peak response is roughly half a dB below a
> perfect ground response at 0°.

Then your NEC analysis is not a _FAR-FIELD_ NEC analysis, as repeatedly I have referenced in my posts, and even as is shown in your quote of the same point, above.

I suggest you carefully read and consider what I write as many times as is necessary in order to avoid such gaffes.

The rest of your post of the date/time quoted above I will dismiss, as I have already responded to it.

RF

5047. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-01 23:57:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <VR_Yk.2229$QX3.1546@nwrddc02.gnilink.net>
Source record: 19521

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:1de21ee7-161a-44d2-98be-0c87f24b6fdf@z1g2000yqn.googlegroups.com...
> Since we are at the low sun cycle I shoose
> 1" hexigon poultry wire for the mash on my 3 metre dish
> At what frequency will there be a noticable effect on aperture
> starting with top band?
> Many thanks
> Art KB9MZ...,XG

he's sucking you all in now... 'TOP BAND'!!! yes, he means a 3m DISH as a
reflector for his axial mode helix that is probably only inches in diameter
on 160m! this is his dream 'rifle shot' antenna!

5048. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 00:01:18 UTC
From: Dave <noone@nowhere.com>
Message-ID: <iV_Yk.2231$QX3.2224@nwrddc02.gnilink.net>
Source record: 19522
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Douglas W Adair" <n8wwm@allr.net> wrote in message
news:ggu32u$4i7$1@news.motzarella.org...
>I like them two at a time--co-phased. Is there any gain to be had that way
>or am I just skin pipe dreaming at the petro?
>

the real gain in that arrangement is in the thickness of the sales man's
wallet.

5049. Re: Lightning Info?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 00:03:48 UTC
From: ml <m@di.net>
Message-ID: <m-FBECA5.19034801122008@news.optonline.net>
Source record: 19523

In article
<50a4c049-f036-4f10-bc31-18a1c0926849@p2g2000prf.googlegroups.com>,
nm5k@wt.net wrote:

> On Nov 30, 10:15 am, ml <m...@di.net> wrote:
>
> >
> > i always wonder what would be logical to assume in a direct hit
> > scenario
> >
> > thanks
>
> You don't mention what the roof antennas are mounted on.
> IE: metal masts, vent pipes, etc?? Well grounded, or not?
> If you are depending on the feedlines taking the brunt of the
> strike to ground, yes, could be some damage along the way.
> I doubt the dipoles would have much trouble, but the J-pole
> could well take the strike. Or any other vertical pointy antennas.
> That you are grounding at the entry will probably save the
> house if you have a good low resistance ground at that point.
>
> But it would be better to have the supporting antenna masts
> take the brunt of the strike to ground via good ground wires
> or straps if on the roof, or even better, directly planted on the
> ground.
> You will still have current on the feed lines, but it will be much
> less than if they have to carry the whole load.
> This is why I've always preferred using a stand alone metal
> mast as my support. I'll mount my dipoles slightly lower than
> the tip of the mast. Sometimes I'll have ground planes or
> verticals on top, but if I do, I always run the coax all the way
> down to the base of the mast before leading it to the shack.
> I've had two strikes to that mast in the last few years and
> had no damage at all. The mast acted as the lightning rod,
> and the antennas just floated along for the ride.
> I have the coax cables grounded outside the window, and
> you can hear an audible arc at the instant of the strike.
> So there is current on the lines to ground, but it's not enough
> to hurt anything.
> But if I used the coax as the only path to ground, I wouldn't
> feel near as optimistic it would survive without damage.
> And 175 ft is a pretty long path to take if it's not straight
> down to ground. You want all those cables snubbed to

> ground at a point well before they get to the ICE.
> If they dangle from overhead down to the ICE, the potential
> will be quite large.

<<> hi thanks very much for responding

I should have mentioned that all the antennas are mounted on heavy
ga metal support masts around 10ft and bolted to a brick wall
of the elevator room

i am up 14 stories building wouldn't let me run any wires to
ground on the outside of the building from the roof wish i could

so currently it's just my ice protectors inside my apt on 4th fl
'grounded' to the elec

is't really to much i have access to living in an apt, i'l like
to be able to chip the concreate away inside the elevator room to
get at a beam and clamp onto that but they wouldn't allow that
nor penatrating the room to feed the wire out

there is a electrical box up there i suppose i might be able to
run a small wire from it to the masts not sure if code will
allow using elec conduit in an elevator room as a 'ground ' in
this fashion i suspect not and the inspector is up there
regularly and not sure how much lightning protection that would
afford maybe bleed al little so a smaller hit

i appreciate your sharing the ideas
thanks

5050. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 00:41:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j209j45t83bdbken8dar5gqa0en6nrmeu7@4ax.com>
Source record: 19524

On Mon, 1 Dec 2008 15:24:30 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>Then your NEC analysis is not a _FAR-FIELD_ NEC analysis, as
>repeatedly I have referenced in my posts, and even as is shown in your
>quote of the same point, above.

So, how do we parse your reply? I see the assertion from you
>>>no relative field below 10 degrees elevation.
I see from me
>> my model's 1ï¿½ response is only 1.6dB below
>> the peak response at 8ï¿½ (both of which are below 10ï¿½).
>>That peak response is roughly half a dB below a
>> perfect ground response at 0ï¿½.

To the greater part of the community in this group, the difference
between
>>>no relative field below 10 degrees elevation.
and roughly half a dB below perfect at 8ï¿½ elevation (which qualifies
as below 10ï¿½ elevation) would leave us to believe you equate
no relative field = a field at 0.6dB below perfect
Unless, of course, you care to ammend this with quantifiables of your
own.

This portends you cannot answer for your assertion:
>>>...NEC far-field analysis this would seem impossible,
>>>due to the greatly reduced fields in this sector ....
your statement (now statements) lacks quantifiables. "Impossible" is
yellow-journalism fluff and the less than 1dB variations I have
reported are within the accumulation of field errors of the "possible"
that went into engineering reports. "Impossible" and "possible" are,
to all intents and purposes, describing the same thing.

What is it that is impossible? Or is this about seeming?

73's
Richard Clark, KB7QHC

5051. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 01:53:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh24ea$9aj$1@news.albasani.net>
Source record: 19525
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

Richard Clark wrote:
>> ... I wholly abandoned
> MS whose expensive compiler and math libraries (upwards to $600) were
> abysmal in comparison to the $50 TurboPascal product.
>
> 73's
> Richard Clark, KB7QHC

Indeed, if someone prefers pascal (hey, any language is OK with me, even
Fortran--<wink Roy>)

Here is 5.5 ... I would suspect it will get you what you want:

http://dn.codegear.com/article/20803

Grab the zip file.

Regards,
JS

5052. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 01:54:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh24hb$9aj$2@news.albasani.net>
Source record: 19526

Richard Fry wrote:

> ...
> Juvenile.

Richard Fry, meet Richard Clark ... I warned you <silly-grin>

Regards,
JS

5053. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 02:00:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh24rt$9aj$3@news.albasani.net>
Source record: 19527

Richard Clark wrote:

> ...
> What is it that is impossible? Or is this about seeming?
>
> 73's
> Richard Clark, KB7QHC

So then, you found "another one." And, when his energy runs out, when he is done with you, you will still be posting your "last man standing cr*p" ... (Cecil mentioned that--I caught on)

How impressive ... men have known you, men have argued with you, men have debated you ... men have found you a fool ... <yawn>

Go back to your cave troll, await the next, he will eventually tire of you ... <double-yawn>

You waste our efforts ...

Regards,
JS

5054. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 02:05:46 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ru49j4dp2eemcdqbrv7l5lnf6uuf5fni42@4ax.com>
Source record: 19528

On Mon, 01 Dec 2008 17:03:30 -0500, Michael Coslo <mjc5@psu.edu>
wrote:

>I will sell bottles of the miracle liquid for 1000 dollars per liter.
>However, as everyone knows, ther eis nothing like freshness for the
>important compounds, so for 25 thousand dollars plus air and food
>expensies, I will come to visit and pee on your speakers......
> - 73 de Mike N3LI -

Sorry, but a similar product has already been invented and been on the
market for about 5 years:
<http://j-walk.com/other/wifispray/>

The ladyfriend would probably buy the pink antennas. She just bought
a pink bicycle. In disgust, I bought her pink garden tools and a
stuffed pink pig. That might also explain why I'm spending the
evening posting useless usenet drivel, instead of engaging in
debauchery. Anyway, pink is the "in" color, so I guess it's ok:
<http://images.google.com/images?q=pink+camouflage>
<http://images.google.com/images?q=pink+products>

At one time I was labelled an "effet commie liberal pinko swine" (or
something like that), but that was long ago.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

5055. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 02:05:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh2560$9aj$4@news.albasani.net>
Source record: 19529

Jeff Liebermann wrote:

> ...
> Remember, the surest sign of success is pollution. Since the market
> for antenna products are not yet totally polluted, I don't consider
> the market to be anywhere near saturated or successful.

Jeff:

Sorry to have clipped your post so severely, however, anyone with a real newsgroup reader has access to the original ...

You might be right, I was just expressing an opinion, one which is impossible to justify ... :-)

Warm regards,
JS

5056. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 02:09:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh25cm$9aj$5@news.albasani.net>
Source record: 19530

Michael Coslo wrote:

>> ...
> My urine contains special compounds because of my consumption of
> asparagus, chocolate and beer. This cause my urine to have special
> properties that cause magnetic particles to increase their flux
> concentration, giving increased power output, more brilliant lows and
> Highs, and making for much less listening fatigue.
> ...
> - 73 de Mike N3LI -

My gawd man! Finally, something which makes sense.

Say they hire you to disperse your urine beneath these antennas in
question, my gawd, ground conductivity, conductivity and factors would
off scale!

Let us see EZNEC take that into consideration!

ROFLOL!!!!

GOOD POST! <wink>

Regards,
JS

5057. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 02:11:40 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gh25gq$10t$2@news.jpl.nasa.gov>
Source record: 19533

Jeff Liebermann wrote:
> On Mon, 01 Dec 2008 17:03:30 -0500, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> I will sell bottles of the miracle liquid for 1000 dollars per liter.
>> However, as everyone knows, ther eis nothing like freshness for the
>> important compounds, so for 25 thousand dollars plus air and food
>> expensies, I will come to visit and pee on your speakers......
>> - 73 de Mike N3LI -
>
> Sorry, but a similar product has already been invented and been on the
> market for about 5 years:
> <http://j-walk.com/other/wifispray/>
>
> The ladyfriend would probably buy the pink antennas. She just bought
> a pink bicycle. In disgust, I bought her pink garden tools and a
> stuffed pink pig. That might also explain why I'm spending the
> evening posting useless usenet drivel, instead of engaging in
> debauchery. Anyway, pink is the "in" color, so I guess it's ok:
> <http://images.google.com/images?q=pink+camouflage>
> <http://images.google.com/images?q=pink+products>
>
> At one time I was labelled an "effet commie liberal pinko swine" (or
> something like that), but that was long ago.
>
In the outdoor sporting equipment trades (aka huntin/shootin/fishin) the
phrase is "pink it and shrink it"..

5058. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 02:13:36 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gh25kd$10t$3@news.jpl.nasa.gov>
Source record: 19534
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

John Smith wrote:
> Richard Clark wrote:
>>> ... I wholly abandoned
>> MS whose expensive compiler and math libraries (upwards to $600) were
>> abysmal in comparison to the $50 TurboPascal product.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> Indeed, if someone prefers pascal (hey, any language is OK with me, even
> Fortran--<wink Roy>)
>
> Here is 5.5 ... I would suspect it will get you what you want:
>
> http://dn.codegear.com/article/20803
>
> Grab the zip file.
>
> Regards,
> JS
Octave (the Matlab clone) is available for almost all platforms, and is
quite easy to learn to use. For things like manipulating matrices and
vectors, it's pretty slick. The real Matlab has better graphics
packages (in terms of integration with the package, etc.), but from a
straight out computation standpoint, Octave works just as well.

5059. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 02:42:49 UTC
From: "The Honorable Dr. Rocky Roads Presiding Judge" <wookiee@att.net>
Message-ID: <47c1d283-cc39-48e8-a8c9-89e0dd8591cd@41g2000yqf.googlegroups.com>
Source record: 19531
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

Dave wrote:
> "Douglas W Adair" <n8wwm@allr.net> wrote in message
> news:ggu32u$4i7$1@news.motzarella.org...
> >I like them two at a time--co-phased. Is there any gain to be had that way
> >or am I just skin pipe dreaming at the petro?
> >
>
> the real gain in that arrangement is in the thickness of the sales man's
> wallet.

They certainly look better just like dual stacks look better than a
single stack.

5060. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 02:44:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh27egclf1@news.albasani.net>
Source record: 19532

Michael Coslo wrote:

> ...
> Self-arranging and self replication are actually easy enough to do that
> the old definition of life that depends on that have been discarded for
> much tighter definitions, Otherwise we would already be able to claim
> that we created life.
>
> As an example, lipids, or phospholipids, are a common substance (read
> oils) that have the tendency to form into small bilayer spheres that
> isolate the interior from the exterior world. Then what is needed is for
> the right compounds to get trapped inside that sphere, and maybe
> something interesting will happen.
>
>
> http://blog.wired.com/wiredscience/2008/09/biologists-on-t.html?npu=1&mbid=yhp
>
>
>
> A immune system analog:
>
>
> http://www.sandia.gov/media/NewsRel/NR2002/nanoarch.htm
>
>
> Point is, these things are not some impossible to happen, "just so"
> scheme. As time goes on, it looks more and more like on a planet capable
> of sustaining life, life will happen.
>
> Now if someone wanted to claim that some entity made that planet that
> could support life, then these things happened - that is a different story.
>
> - 73 de Mike N3LI -

You know, in your particular case, I have been too nice ...

Nothing yet, has been a human creation which even comes close to
mimicking a very lowly virus ...

You are an idiot, all your posts here have only described you sheer
idiot nature in exact detail ... you are loathsome, you are an absolute
idiot, you are something I pick off my shoe when walking my dog and not
paying adequate attention ...

Now, let those who find you different come to the aid of you ego ... I
wipe you off like the chit from my boot ...

Regards,
JS

5061. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 03:19:28 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <ut2dncgcWbrQNKnUnZ2dnUVZ_hWdnZ2d@earthlink.com>
Source record: 19535

Roy:

[snip]
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:KIudnRgm9PMXMa3UnZ2dnUVZ_sLinZ2d@posted.easystreetonline...
> Dave wrote:
>>
>> Circular polarization means you have equal H-Pol and V-Pol radiation,
>> with one polarization 90 degrees ahead (or behind) of the other.
.
.
.
> That's not a very good description, although it's correct. But here's a
> little more complete description: The electric (E) field of a horizontally
> polarized wave is horizontal, and the E field of a vertically polarized
> wave is vertical. But the E field of a circularly polarized wave rotates
> at the transmission frequency, one revolution per cycle. The instantaneous
> amplitude of a vertically or horizontally polarized field is sinusoidal,
> varying at the transmission frequency. The amplitude of a circularly
> polarized wave is constant.
[snip]

Hmmmm....

Roy, I don't believe that is a "complete" description of circular polarization either.

My understanding is that circular polarization is what we call the polarization of electromagnetic radiation when the electric field vector E rotates with an angular velocity rather than oscillating back and forth in a single (linear) direction.

Roy, your description of circular polarization above seems to imply that the angular velocity of the E vector of a circularly polarized wave is always "synchronized" with the signal frequency since you stated that it rotates at one revolution per cycle, or one radian per radian per second.

This of course is the (normal?) situation if the antenna is say a helix firing along its axis or say crossed dipoles fed with a 90 degree phase shift, but... to be more complete, we should note that...

Circular polarization does not have to be "synchronous"!

Consider...

What would you call the polarization type of the radiation emitted by the following radiator?

An ordinary linear dipole fed with RF from a feedline through two slip rings arranged such that a mechanical drive is able to rotate the dipole at some arbitrary mechanical angular velocity completely unsynchronized with the RF carrier.

For example, say it's a 5m dipole driven with 30MHz carrier signal and mechanically rotated at 1000 revolutions per minute.

Such an arrangement would result in circularly polarized radiation with the E vector having angular velocity of 1000 revolutions per minute and a carrier frequency of 30MHz which definitely is not one revolution per cycle.

Thoughts, comments?

--

Pete
Indialantic By-the-Sea, FL

5062. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 03:32:09 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <cf4832bb-ef6d-4ca5-b368-916dccb51094@g38g2000yqd.googlegroups.com>
Source record: 19536

On Dec 1, 8:00 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Richard Clark wrote:
> > ...
> > What is it that is impossible? Or is this about seeming?
>
> > 73's
> > Richard Clark, KB7QHC
>
> So then, you found "another one." And, when his energy runs out, when
> he is done with you, you will still be posting your "last man standing
> cr*p" ... (Cecil mentioned that--I caught on)
>
> How impressive ... men have known you, men have argued with you, men
> have debated you ... men have found you a fool ... <yawn>
>
> Go back to your cave troll, await the next, he will eventually tire of
> you ... <double-yawn>
>
> You waste our efforts ...
>
> Regards,
> JS

No John they are like souls, looking for some body to talk to,
Looking for some body to argue with,Looking for somebody to fraternise
with.
Leave them alone as they are so happy at this time making friendly
fools of each other
like the chant of two natives bouncing around a wood fire banging two
sticks together.
While they are slapping each other like guys like kb9..... can write
in peace knowing that for
the moment they are safe. Personaly I am happy that they have found
each other thus
leaving others alone for cordial conversations and debate without the
concern of seeing
a foot suddenly appear from the next cubical. Soon the whistle will
blow when they both
have to retreat to the nursery to have their diapers changed.
It is going to take RF a long time to determine what he is dealing
with and Richard is
not likely to let go with out a fight
Sad Sad Sad but funny at the same time

5063. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 03:37:25 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>
Source record: 19537
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

```
"Top" <top@neo.rr.invalid> wrote in message
news:Xns9B679FB1947D4topneorrinvalid@130.133.1.4...
> richard <member@newsguy.com> wrote in
> news:cp48j4l95glmkjhdud4v2qmgerd7r9an71@4ax.com:
>
>> On Mon, 1 Dec 2008 04:37:39 -0500, "Douglas W. \"Popeye\"
>> Frederick" <Popeye@finalprotectivefire.com> wrote:
>>
>>>"Dave Platt" <dplatt@radagast.org> wrote in message
>>>news:vvac06-hnb.ln1@radagast.org...
>>>>>I like them two at a time--co-phased. Is there any gain
>>>>>to be had that way
>>>>>or am I just skin pipe dreaming at the petro?
>>>>
>>>>>If fed in phase and spaced correctly, there could be gain
>>>>>to the front and to the back with a decreased propogation
>>>>>to the sides. This is usually desirable if traveling on a
>>>>>mostly straight stretch of highway. I think the spacing
>>>>>is a little too far apart for use on most cars.
>>>>
>>>> I believe you're correct. This is a "broadside array"
>>>> configuration.
>>>>
>>>> Its gain over a single radiator rises roughly linearly
>>>> (measured in dB over a single radiator) up to separations
>>>> of around 5/8 wavelength. A separation of 1/2 wavelength
>>>> gives around 4 dB gain over a single radiator and a very
>>>> nice clean pattern (deep null to the sides) - this is the
>>>> spacing most frequently described in the literature (e.g.
>>>> Kraus, Terman) for broadside arrays. Gain maxes out at
>>>> just under 5 dB at a 5/8-wavelength spacing (at the cost
>>>> of a small side-lobe). [Figures are from the ARRL Antenna
>>>> Book of a few years ago]
>>>>
>>>> Whether it's worth doing for a vehicle-mobile system is
>>>> another question. You need more than .4 wavelengths of
>>>> separation to get 3 dB of gain (half a nominal S-unit) -
>>>> at 11-meter frequencies that's around 14 feet of
>>>> separation, which I think not many vehicles will allow.
>>>> Perhaps if you're driving a "wide load" transporter
>>>> truck?
>>>>
>>>> At 6 feet of separation between antennas you'd have only
```

>>>> around .2 wavelength, which yields less than 1 dB of gain
>>>> over a single radiator. Hardly seems cost-effective.
>>>>
>>>> It might make more sense for 2-meter operation... but as
>>>> most 2-meter mobile seems to be repeater-based, you
>>>> really want omni rather than shaped-beam-down-the-road
>>>> most of the time.
>>>>
>>>> There's also the matching issue. Each radiator in the
>>>> array will have a feedpoint impedance different than what
>>>> would have if used alone. You'll have to take this into
>>>> account when designing the phasing harness, and you may
>>>> need an impedance-matching network at the combining point
>>>> to establish the 50-ohm load that your transceiver
>>>> expects. If you don't match properly your transceiver
>>>> won't see the load it expects, and may not deliver full
>>>> rated power into the load - you could easily lose more
>>>> signal strength this way than the array will gain back.
>>>> If you do match properly, there will be some amount of
>>>> loss in the matching network.
>>>>
>>>> There ain't no free lunch, alas.
>>>
>>> Wow, Richard.
>>>
>>> This guy seems 7 fuckloads smarter than you.
>>>
>>> Wonder if he ever "held an FCC license for radio work"?
>>
>>
>> If i had said it, you would have a field day accusing me of
>> all kinds of shit.
>>
>> Since the late 60's i've been working with CB and have done
>> all kinds of experiments with antennas on a car. You name
>> it, I had it.
>>
>> As he pointed out, the big problem with CB is, you need way
>> much more space than a vehicle offers to truly get any
>> usable gain from cophasing.
>>
>> Do you know the wavelength of 11 meters?
>> if 27 feet, the normal height of base antenna, is equal to
>> 5/8 or 1/4 wave, then what is 8/8 or 100%? Well over 100
>> feet.
>>
>> So to get the true proportion for proper cophasing, the
>> road aint wide enough and neither is the vehicle.
>>
>> The only reason truckers run two antennas is because it

>> looks cooler.
>>
>> The effectiveness of cophasing in a truck is screwed by the
>> factory installed crap.
>>
>
> You still didn't give any useful information. No surpise since
> you have none. For an average of the cb band running 1/4 wave
> the antennas should be spaced 54 inches apart. Use a
> commercially produced cophase harness if you can find it. Make
> sure you match the SWR and you will out do any other mobile
> off the front or rear.
>
> Top
>

Thanks Top!

--
Popeye
"Best thing for him, really. His therapy
was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

5064. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 03:53:44 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <mhb9j4d7ltcgmv6vncnaiac6lfctj6uhiu@4ax.com>
Source record: 19538

On Mon, 01 Dec 2008 14:13:23 +0000, Dave <dave@dave.dave> wrote:

>JosephKK wrote:
>> On Sun, 30 Nov 2008 22:52:16 +0000, Dave <dave@dave.dave> wrote:
>>
>>> JosephKK wrote:
>
>>>> Which make and model / series? There are dozens of variations.
>>>>
>>> These are the standard CTCSS freqs:
>>>
>>> http://www.batnet.com/~mfwright/ht220plcodes.html
>>>
>>> http://en.wikipedia.org/wiki/CTCSS
>>
>> Have you read your own references?
>>
>> Bottom line, most any tunable tone decoder.
>>
>If a vibrating reed can be considered a "decoder" then you are correct.
>
>However, there are not "dozens of variations".

Sure can. Collins Radio used mechanical resonators in an HF radio ISB
diversity 2240 baud modems. Then they used a switched capacitor meta
resonator. Then they used DDS synchronous comparison. And of course
there are various narrow band filter methods. And of course whatever
internal method the 8870 DTMF decoder uses. Who knows what methods
can be implemented in fast UC or small DSP or even an FPGA, except it
will not be a mechanical resonator. I suppose a mathematical model of
a mechanical resonator though.

5065. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 03:58:50 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <7b114078-503e-4165-ac63-81792119bf15@i20g2000prf.googlegroups.com>
Source record: 19539
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Dec 1, 6:42 pm, "The Honorable Dr. Rocky Roads Presiding Judge"
<wook...@att.net> wrote:
> Dave wrote:
> > "Douglas W Adair" <n8...@allr.net> wrote in message
> >news:ggu32u$4i7$1@news.motzarella.org...
> > >I like them two at a time--co-phased. Is there any gain to be had that way
> > >or am I just skin pipe dreaming at the petro?
>
> > the real gain in that arrangement is in the thickness of the sales man's
> > wallet.
>
- They certainly look better just like dual stacks
- look better than a single stack.

breaker, Breaker. BREAKER !

Ken I Gita Ray Di Oh Checka !?!

5066. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 03:59:15 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <no2Zk.2328$us6.467@nwrddc01.gnilink.net>
Source record: 19540

"Peter O. Brackett" <none@no-such-domain.nul> wrote in message
news:ut2dncgcWbrQNKnUnZ2dnUVZ_hWdnZ2d@earthlink.com...
> Roy:
>
> [snip]
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:KIudnRgm9PMXMa3UnZ2dnUVZ_sLinZ2d@posted.easystreetonline...
>> Dave wrote:
>>>
>>> Circular polarization means you have equal H-Pol and V-Pol radiation,
>>> with one polarization 90 degrees ahead (or behind) of the other.
> .
> .
> .
>> That's not a very good description, although it's correct. But here's a
>> little more complete description: The electric (E) field of a
>> horizontally polarized wave is horizontal, and the E field of a
>> vertically polarized wave is vertical. But the E field of a circularly
>> polarized wave rotates at the transmission frequency, one revolution per
>> cycle. The instantaneous amplitude of a vertically or horizontally
>> polarized field is sinusoidal, varying at the transmission frequency. The
>> amplitude of a circularly polarized wave is constant.
> [snip]
>
> Hmmmm....
>
> Roy, I don't believe that is a "complete" description of circular
> polarization either.
>
> My understanding is that circular polarization is what we call the
> polarization of electromagnetic radiation when the electric field vector E
> rotates with an angular velocity rather than oscillating back and forth in
> a single (linear) direction.
>
> Roy, your description of circular polarization above seems to imply that
> the angular velocity of the E vector of a circularly polarized wave is
> always "synchronized" with the signal frequency since you stated that it
> rotates at one revolution per cycle, or one radian per radian per second.
>
> This of course is the (normal?) situation if the antenna is say a helix
> firing along its axis or say crossed dipoles fed with a 90 degree phase
> shift, but... to be more complete, we should note that...
>
> Circular polarization does not have to be "synchronous"!

>
> Consider...
>
> What would you call the polarization type of the radiation emitted by the
> following radiator?
>
> An ordinary linear dipole fed with RF from a feedline through two slip
> rings arranged such that a mechanical drive is able to rotate the dipole
> at some arbitrary mechanical angular velocity completely unsynchronized
> with the RF carrier.
>
> For example, say it's a 5m dipole driven with 30MHz carrier signal and
> mechanically rotated at 1000 revolutions per minute.
>
> Such an arrangement would result in circularly polarized radiation with
> the E vector having angular velocity of 1000 revolutions per minute and a
> carrier frequency of 30MHz which definitely is not one revolution per
> cycle.
>
> Thoughts, comments?
>
> --
>
> Pete
> Indialantic By-the-Sea, FL

Hi Pete

Your idea of rotating a linearly polarized 30 MHz dipole at 1000 RPM does not relate to the term "Elyptical Polarization" which is often called Circular Polarization. The Wikipedia information is fairly complete as it defines CP..

Jerry KD6JDJ

5067. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 04:12:53 UTC
From: "The Honorable Dr. Rocky Roads Presiding Judge" <wookiee@att.net>
Message-ID: <gh2ckbsos1@news.motzarella.org>
Source record: 19541
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

Phuck off you scumbag loser. Nobody and I mean nobody is a better trucker
than I.

5068. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 04:26:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh2ddrhiv1@news.albasani.net>
Source record: 19542

Art Unwin wrote:

> ...
> No John they are like souls, looking for some body to talk to,
> Looking for some body to argue with,Looking for somebody to fraternise
> with.
> Leave them alone as they are so happy at this time making friendly
> fools of each other
> like the chant of two natives bouncing around a wood fire banging two
> sticks together.
> While they are slapping each other like guys like kb9..... can write
> in peace knowing that for
> the moment they are safe. Personaly I am happy that they have found
> each other thus
> leaving others alone for cordial conversations and debate without the
> concern of seeing
> a foot suddenly appear from the next cubical. Soon the whistle will
> blow when they both
> have to retreat to the nursery to have their diapers changed.
> It is going to take RF a long time to determine what he is dealing
> with and Richard is
> not likely to let go with out a fight
> Sad Sad Sad but funny at the same time

Art:

I will not lie to you, I have a hard time following you. Sometimes I even doubt your sanity, your grounds on which you make your statements, very often, evade me--however, you have never neared the "fool status" I place the "reciter of Shakespeare" in (read this as Richard Clark!) ... you at least bring me areas I wonder about and do not sound so foolish ... :-)

Regards,
JS

5069. Re: Lightning Info?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 05:37:14 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <kqh9j4h7taa27eq5nbhsajplnfsq48k75t@4ax.com>
Source record: 19543

On Mon, 01 Dec 2008 19:03:48 -0500, ml <m@di.net> wrote:

>In article
><50a4c049-f036-4f10-bc31-18a1c0926849@p2g2000prf.googlegroups.com>,
> nm5k@wt.net wrote:
>
>> On Nov 30, 10:15ï¿½am, ml <m...@di.net> wrote:
>>
>> >
>> > i always ï¿½wonder ï¿½ what ï¿½would be logical to assume ï¿½ in a ï¿½direct ï¿½hit
ï¿½
>> > scenario
>> >
>> > thanks
>>
>> You don't mention what the roof antennas are mounted on.
>> IE: metal masts, vent pipes, etc?? Well grounded, or not?
>> If you are depending on the feedlines taking the brunt of the
>> strike to ground, yes, could be some damage along the way.
>> I doubt the dipoles would have much trouble, but the J-pole
>> could well take the strike. Or any other vertical pointy antennas.
>> That you are grounding at the entry will probably save the
>> house if you have a good low resistance ground at that point.
>>
>> But it would be better to have the supporting antenna masts
>> take the brunt of the strike to ground via good ground wires
>> or straps if on the roof, or even better, directly planted on the
>> ground.
>> You will still have current on the feed lines, but it will be much
>> less than if they have to carry the whole load.
>> This is why I've always preferred using a stand alone metal
>> mast as my support. I'll mount my dipoles slightly lower than
>> the tip of the mast. Sometimes I'll have ground planes or
>> verticals on top, but if I do, I always run the coax all the way
>> down to the base of the mast before leading it to the shack.
>> I've had two strikes to that mast in the last few years and
>> had no damage at all. The mast acted as the lightning rod,
>> and the antennas just floated along for the ride.
>> I have the coax cables grounded outside the window, and
>> you can hear an audible arc at the instant of the strike.
>> So there is current on the lines to ground, but it's not enough
>> to hurt anything.
>> But if I used the coax as the only path to ground, I wouldn't
>> feel near as optimistic it would survive without damage.

>> And 175 ft is a pretty long path to take if it's not straight
>> down to ground. You want all those cables snubbed to
>> ground at a point well before they get to the ICE.
>> If they dangle from overhead down to the ICE, the potential
>> will be quite large.
>
><<> hi thanks very much for responding
>
>I should have mentioned that all the antennas are mounted on heavy
>ga metal support masts around 10ft and bolted to a brick wall
>of the elevator room
>
>i am up 14 stories building wouldn't let me run any wires to
>ground on the outside of the building from the roof wish i could
>
>so currently it's just my ice protectors inside my apt on 4th fl
>'grounded' to the elec

That is not going to cut it. You Must have protection "on the roof"
to comply with code. You need lightning arrestors on each feed line
on the roof.

>
>is't really to much i have access to living in an apt, i'l like
>to be able to chip the concreate away inside the elevator room to
>get at a beam and clamp onto that but they wouldn't allow that
>nor penatrating the room to feed the wire out

They are lack electrical knowledge, so apparently do you.

>
>there is a electrical box up there i suppose i might be able to
>run a small wire from it to the masts

Not a small wire, you want just as big at the ground wire to the
electrical box, a small wire will not protect.

> not sure if code will
>allow using elec conduit in an elevator room as a 'ground ' in
>this fashion i suspect not

No it does not meet code, not UBC nor NEC.

> and the inspector is up there
>regularly and not sure how much lightning protection that would
>afford maybe bleed al little so a smaller hit
>
> i appreciate your sharing the ideas
>thanks

Get yourself a local person knowledgeable in the field.

5070. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 05:38:01 UTC
From: richardharrison@webtv.net
Message-ID: <22051-4934C9B9-2619@storefull-3253.bay.webtv.net>
Source record: 19544

Art wrote:
"I would disagree with the above as it has its roots in a large yagi style where phasing is of the essence."

Kraus says on page 268 of the 3rd edition of "Antennas":
"The natural adjustment of phase velocity so that the fields from each turn add nearly in phase in the axial direction accounts for the persistence of the axial mode of radiation over a nearly 2 to 1 range in frequency."

In Kraus` 1950 version of "Antennas" on page 178 he writes:
"A first-order transmission mode on the helix, designated T1, becomes permissible when the helix circumference lambda in free space is of the order of 1 wavelength."

I don`t argue with Terman or Kraus.

Best regards, Richard Harrison, KB5WZI

5071. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 05:44:01 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <oni9j4hq6m1me9au5sgtuorehk9k54d358@4ax.com>
Source record: 19545

On Mon, 01 Dec 2008 01:05:02 GMT, jimp@specsol.spam.sux.com wrote:

>Jeff Liebermann <jeffl@cruzio.com> wrote:
>
>> Incidentally, I've had rather bad luck using twisted galvanized
>> chicken wire for making dish antennas. I kept getting intermittent
>> noise crashes and arcing like noise bursts on a 1.7GHz WX satellite
>> system I once threw together. I eventually found that banging on the
>> chicken wire would produce the same noise bursts. I didn't bother
>> trying to find out exactly what was doing the arcing. When I switched
>> to using aluminum flashing and aluminum duct tape for the reflector,
>> the noise went away.
>
>I've read some reports that such is due to the poor contact of the
>twists in chicken wire.
>
>I suppose soldering all the twists would fix it.

Probably would, but sounds damn tiresome.

5072. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 05:58:02 UTC
From: dplatt@radagast.org
Message-ID: <acve06-bei.ln1@radagast.org>
Source record: 19546
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

In article <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>,
Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:

>> You still didn't give any useful information. No surpise since
>> you have none. For an average of the cb band running 1/4 wave
>> the antennas should be spaced 54 inches apart. Use a
>> commercially produced cophase harness if you can find it. Make
>> sure you match the SWR and you will out do any other mobile
>> off the front or rear.

>> Top

> Thanks Top!

I think that Top's calculations (and recommendations) are a bit off?

CB has an 11-meter wavelength. There are just over 39 inches in a
meter. Hence, the wavelength is around 430 inches.

A 54-inch separation is only .12 wavelength. From the chart in the
ARRL Antenna Book, it looks as if you'll get less than .5 dB of
directional gain, compared with a single radiator of the same type and
size. That's less than one tenth (!) of a nominal S-unit. You'd be
very hard put to be able to detect this small of a difference in
practice - it'll be less than the amount of signal variation you'll
encounter due to reflections from nearby objects.

In terms of getting yourself a directional-gain benefit, I think a
co-phased two-radiator broadside array with a 54-inch separation is
essentially useless on CB frequencies. There just isn't enough gain
to matter.

Now, as somebody else suggested, using such an array might get you a
more consistent near-omnidirectional pattern than a single radiator
would deliver, if your antennas are mounted less than optimally (e.g.
on your sideview mirror post). Using two co-phase antennas might be
worthwhile for this reason, even if you don't get a significant amount
of directional gain.

I suspect you'd get more bang for your buck by simply mounting a
single antenna in a better location (e.g. roof mount) and paying
attention to making the antenna's grounding to the chassis/groundplane
as direct and solid as possible.

--
Dave Platt <dplatt@radagast.org> AE6EO

Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5073. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 06:15:20 UTC
From: Top <top@neo.rr.invalid>
Message-ID: <Xns9B68CB1835A9topneorrinvalid@130.133.1.4>
Source record: 19547
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

dplatt@radagast.org (Dave Platt) wrote in
news:acve06-bei.ln1@radagast.org:

> In article
> <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>, Douglas
> W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com>
> wrote:
>
>>> You still didn't give any useful information. No surpise
>>> since you have none. For an average of the cb band
>>> running 1/4 wave the antennas should be spaced 54 inches
>>> apart. Use a commercially produced cophase harness if you
>>> can find it. Make sure you match the SWR and you will out
>>> do any other mobile off the front or rear.
>
>>> Top
>
>> Thanks Top!
>
> I think that Top's calculations (and recommendations) are a
> bit off?
>
> CB has an 11-meter wavelength. There are just over 39
> inches in a meter. Hence, the wavelength is around 430
> inches.
>
> A 54-inch separation is only .12 wavelength. From the
> chart in the ARRL Antenna Book, it looks as if you'll get
> less than .5 dB of directional gain, compared with a single
> radiator of the same type and size. That's less than one
> tenth (!) of a nominal S-unit. You'd be very hard put to
> be able to detect this small of a difference in practice -
> it'll be less than the amount of signal variation you'll
> encounter due to reflections from nearby objects.
>
> In terms of getting yourself a directional-gain benefit, I
> think a co-phased two-radiator broadside array with a
> 54-inch separation is essentially useless on CB
> frequencies. There just isn't enough gain to matter.
>
> Now, as somebody else suggested, using such an array might
> get you a more consistent near-omnidirectional pattern than
> a single radiator would deliver, if your antennas are

> mounted less than optimally (e.g. on your sideview mirror
> post). Using two co-phase antennas might be worthwhile for
> this reason, even if you don't get a significant amount of
> directional gain.
>
> I suspect you'd get more bang for your buck by simply
> mounting a single antenna in a better location (e.g. roof
> mount) and paying attention to making the antenna's
> grounding to the chassis/groundplane as direct and solid as
> possible.
>

Cophase being omindirectional? You need to do some more
reading before you try to correct anything.

5074. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 06:18:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <68d2d676-afaf-4d19-afe6-70f977e2355f@e18g2000yqo.googlegroups.com>
Source record: 19548

On Dec 1, 11:38 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "I would disagree with the above as it has its roots in a large yagi
> style where phasing is of the essence."
>
> Kraus says on page 268 of the 3rd edition of "Antennas":
> "The natural adjustment of phase velocity so that the fields from each
> turn add nearly in phase in the axial direction accounts for the
> persistence of the axial mode of radiation over a nearly 2 to 1 range in
> frequency."
>
> In Kraus` 1950 version of "Antennas" on page 178 he writes:
> "A first-order transmission mode on the helix, designated T1, becomes
> permissible when the helix circumference lambda in free space is of the
> order of 1 wavelength."
>
> I don`t argue with Terman or Kraus.
>
> Best regards, Richard Harrison, KB5WZI

I see no problem with it either, what is the point of the above?
They both have said a lot of things that I agree with.
Really Richard you needed to start another thread if you had a
particular point in mind

5075. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 07:55:02 UTC
From: dplatt@radagast.org
Message-ID: <m76f06-ue3.ln1@radagast.org>
Source record: 19549
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

In article <Xns9B68CB1835A9topneorrinvalid@130.133.1.4>,
Top <top@neo.rr.invalid> wrote:

>Cophase being omindirectional? You need to do some more
>reading before you try to correct anything.

The directionality of a broadside array (with the two radiators fed exactly in phase) depends very strongly on the separation between the two antennas. For separations of 1/4 wavelength or less, there's very little directionality - the pattern is very close to omnidirectional.

Every dual-antenna truck setup I've seen has been a side-by-side mounting (e.g. one on the left mirror and one on the right), and the harness feeds them both in-phase. I've been assuming that this was what was being meant by "co-phase".

If so, I stand by my statement that two CB antennas, fed in phase through a co-phase harness (i.e. no phase difference between the two), and separated by only 54 inches, produces a nearly-omnidirectional signal. The two antennas need to be further apart, before the pattern becomes significantly directional.

Take a look at the NEC plots at http://www.cosjwt.com/index.php?a=20 to see... the 4.5-foot separation model produces a pattern which is almost circular. There is little gain towards the front and back, and very little loss off to the sides. These plots seem to jibe well with other references I've read (Terman, Kraus, and the graphs in the ARRL Antenna Book).

The other alternative is an end-fire array, with the antennas fed signals of opposite phase - with these then there can be significant directionality even with close spacing of the antennas. In a truck-antenna system, this would require placing the antennas one in front of the other, separating them by several feet, and inverting the phase of the signal sent to one of the two antennas (perhaps by having the feed coax to one antenna be 1/2-wavelength longer than the other). You could get several dB of gain this way... but the close spacing will cause the antenna feedpoint impedance to drop a lot, and some form of matching network will certainly be required to keep the radio happy and develop maximum power from the transmitter.

The two bottom plots on the site I mentioned above, show the effect of feeding the antennas with signals of different phase. In these examples, the pattern is being skewed off to one side - the difference in feedline length is converting the antenna from a broadside array to

an end-fire array. With the right amount of phase shift, you end up
with a cardioid pattern, with a broad lobe in one direction and a very
deep null in the other.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5076. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 08:17:22 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <W46dnbfJTIiCcqnUnZ2dnUVZ_rfinZ2d@supernews.com>
Source record: 19550
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Dave Platt" <dplatt@radagast.org> wrote in message
news:acve06-bei.ln1@radagast.org...
> In article <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>,
> Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:
>
>>> You still didn't give any useful information. No surpise since
>>> you have none. For an average of the cb band running 1/4 wave
>>> the antennas should be spaced 54 inches apart. Use a
>>> commercially produced cophase harness if you can find it. Make
>>> sure you match the SWR and you will out do any other mobile
>>> off the front or rear.
>
>>> Top
>
>> Thanks Top!
>
> I think that Top's calculations (and recommendations) are a bit off?

I'm a "single antenna" guy myself.

I think, in a truck, at least, that "big radio" is synonymous with "big
wristwatch". :-)

We can't mount the antennae high or center, because the 13', 6" height of
the truck is where the low bridges start.

Also, most tractors have this horrific system that intergrates AM/FM with
the CB coax.

A CB stick on the left mirror and an AM/FM on the right, and a splitter in
the coax, so I always run my own coax seperately.

And I have a cellular antenna on one side, any way, for dual plane signal
boost, and it has to be 8" (I think) away from other sticks.

But hhhhhere's a question for the braintrust:

I'm after a (mobile) VHF radio that's common to northern (i.e., the Yukon,
and Northwest Territories) Canadian truckers- who don't monitor CB bands.

(info:) http://forums.qrz.com/showthread.php?t=171741

I'm sure, as a sine wave challenged layman, that I can't use the same
antenna and coax as my CB?

> CB has an 11-meter wavelength. There are just over 39 inches in a
> meter. Hence, the wavelength is around 430 inches.

>
> A 54-inch separation is only .12 wavelength. From the chart in the
> ARRL Antenna Book, it looks as if you'll get less than .5 dB of
> directional gain, compared with a single radiator of the same type and
> size. That's less than one tenth (!) of a nominal S-unit. You'd be
> very hard put to be able to detect this small of a difference in
> practice - it'll be less than the amount of signal variation you'll
> encounter due to reflections from nearby objects.
>
> In terms of getting yourself a directional-gain benefit, I think a
> co-phased two-radiator broadside array with a 54-inch separation is
> essentially useless on CB frequencies. There just isn't enough gain
> to matter.
>
> Now, as somebody else suggested, using such an array might get you a
> more consistent near-omnidirectional pattern than a single radiator
> would deliver, if your antennas are mounted less than optimally (e.g.
> on your sideview mirror post). Using two co-phase antennas might be
> worthwhile for this reason, even if you don't get a significant amount
> of directional gain.
>
> I suspect you'd get more bang for your buck by simply mounting a
> single antenna in a better location (e.g. roof mount) and paying
> attention to making the antenna's grounding to the chassis/groundplane
> as direct and solid as possible.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

--
Popeye
"Best thing for him, really. His therapy
was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

5077. Re: Lightning Info?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 08:19:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh2r34vdb1@news.albasani.net>
Source record: 19351

JosephKK wrote:

> ...
> Get yourself a local person knowledgeable in the field.

Here are my humble thoughts upon this all ... let me warn you, there has been no extensive testing done, and I live in the central valley of California--lightening is as rare as diamonds here ...

However, I have run as heavy as #8 wire, fearing protection ...

After much thought, I now have #12, I am sure it will vaporize in a direct strike (if it ever happens in my lifetime), but those vaporized particles and molecules will provide a path to ground which the lightening will continue to follow to complete discharge ... after which, will need replacing ...

But then, I might have missed something; what are your thoughts?

Warm regards,
JS

5078. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 10:54:09 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <5153e8ba-9085-4510-bf95-416c2ae7560a@r40g2000yqj.googlegroups.com>
Source record: 19352

"Richard Clark" wrote in message
> On Mon, 1 Dec 2008 15:24:30 -0800 (PST), Richard Fry wrote:
>
>>Then your NEC analysis is not a _FAR-FIELD_ NEC analysis, as
>>repeatedly I have referenced in my posts, and even as is shown in your
>>quote of the same point, above.
>
> So, how do we parse your reply? (ad nauseum).

It is clear that your interest in this thread has turned to playing
word games.

But not with me, anymore.

RF

5079. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 11:09:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <ScmdnZsP4dYZiqjUnZ2dnUVZ_tTinZ2d@posted.easystreetonline>
Source record: 19353

Peter O. Brackett wrote:
>
> Hmmmm....
>
> Roy, I don't believe that is a "complete" description of circular
> polarization either.
>
> My understanding is that circular polarization is what we call the
> polarization of electromagnetic radiation when the electric field vector
> E rotates with an angular velocity rather than oscillating back and
> forth in a single (linear) direction.
>
> Roy, your description of circular polarization above seems to imply that
> the angular velocity of the E vector of a circularly polarized wave is
> always "synchronized" with the signal frequency since you stated that it
> rotates at one revolution per cycle, or one radian per radian per second.
>
> This of course is the (normal?) situation if the antenna is say a helix
> firing along its axis or say crossed dipoles fed with a 90 degree phase
> shift, but... to be more complete, we should note that...
>
> Circular polarization does not have to be "synchronous"!
>
> Consider...
>
> What would you call the polarization type of the radiation emitted by
> the following radiator?
>
> An ordinary linear dipole fed with RF from a feedline through two slip
> rings arranged such that a mechanical drive is able to rotate the dipole
> at some arbitrary mechanical angular velocity completely unsynchronized
> with the RF carrier.
>
> For example, say it's a 5m dipole driven with 30MHz carrier signal and
> mechanically rotated at 1000 revolutions per minute.
>
> Such an arrangement would result in circularly polarized radiation with
> the E vector having angular velocity of 1000 revolutions per minute and
> a carrier frequency of 30MHz which definitely is not one revolution per
> cycle.
>
> Thoughts, comments?

That certainly doesn't fit the classical definition of circular polarization. Circular and linear polarizations are special cases of elliptical polarization, which all fields actually have, and which is universally defined in terms of polarization change over each period. Whatever you want to call the field your mechanical arrangement is producing, it's not circular polarization in the sense universally used in the literature.

Roy Lewallen, W7EL

5080. Re: Quad and circular polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 11:18:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <N4ydnRympokbhKjUnZ2dnUVZ_sLinZ2d@posted.easystreetonline>
Source record: 19354

Richard Fry wrote:
> On Nov 29, 2:18 pm, Roy Lewallen <w...@eznec.com> wrote:
>> Jerry wrote:
>>> Just for conversation, I submit that an antenna with good hemispheric
>>> CP coverage could be made with 4 dipoles.
>
>> Yes, there's the quadrifilar helix which I believe fits that
>> description. Another, which I built decades ago at 450 MHz, is the "skew
>> planar" antenna which resembles a cloverleaf but with the "leaves"
>> rotated 45 degrees...
>
> Getting back to Jerry's idea - yes, four linear dipoles can generate
> nearly perfect omnidirectional c-pol. This is a design of Nils
> Lindenblad many decades ago, and I've done some NEC-2 modeling of it.
> The link below leads to a rendered view of that model.
>
> http://i62.photobucket.com/albums/h85/rfry-100/LindenbladRendered.gif
>
>> There's still the problem of ground reflection, though. I didn't state
>> it very well in my last posting -- what I meant was that the sum of the
>> direct and ground-reflected rays tend to produce a linearly or nearly
>> linearly polarized wave even when you start out circular.
>
> This isn't true at least at VHF and UHF, where the ground reflection
> mostly just reverses the polarization sense of the incident wave.
> This have been demonstrated by the much-improved images seen on analog
> TV receivers in city centers when using c-pol transmit and receive
> antennas, because multipath reflections ("ghosts") tend to be
> suppressed by the receiving antenna.

The polarization reversal on reflection occurs only when the wave is
normal to a large (in terms of wavelength) flat surface. If it reflects
at a glancing angle, the sum of the direct and reflected rays end up
being nearly linear, or at least elliptical, depending on the reflection
angle and reflection coefficient. Glancing reflections from ground are
just about impossible to avoid at HF, but the also occur at VHF and above.

Roy Lewallen, W7EL

5081. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 11:28:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <TvednZ2XCutBhqjUnZ2dnUVZ_jednZ2d@posted.easystreetonline>
Source record: 19355

Jeff Liebermann wrote:
> . . .
> At one point, I had illusions of designing and producing antennas.
> It's an ideal product. Few people understand how they work. Antennas
> tend to be surround by hype and are often close to magic. Testing is
> difficult and expensive. Product comparisons are non-existent.
> Religion and bias toward specific styles and manufacturers seem to be
> the prime criteria for selection. The weirder it looks, the better it
> sells. Aesthetic concerns have provided a whole new market. There
> are already some rather dubious antenna products on the market. Etc.
> In all, it's a perfectly acceptable small market waiting to be
> exploited. Hopefully, my marketing and sales expertise will
> adequately compensate for my marginal antenna design abilities. I had
> plans to build the product line using the audiophile model, where
> garish industrial design and endless ambiguous buzzwords have done
> quite well. Due to health problems, I doubt that I'll do anything, so
> it's all yours.

I suggest you stick with the amateur market, which pretty much fits your description. There are other antenna customers, though, who depend intensely on antenna performance for the operation and performance of their products and missions. All my consulting clients, and a large number of my professional software customers, are in this category. They can't afford careless or substandard design, and simply won't tolerate it.

Roy Lewallen, W7EL

5082. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 12:09:11 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Gz9Zk.9053$be.4321@nlpi061.nbdc.sbc.com>
Source record: 19356

JosephKK wrote:
> jimp@specsol.spam.sux.com wrote:
>> I've read some reports that such is due to the poor contact of the
>> twists in chicken wire.
>>
>> I suppose soldering all the twists would fix it.
>
> Probably would, but sounds damn tiresome.

Hardware cloth is already soldered.
--
73, Cecil http://www.w5dxp.com

5083. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 13:50:26 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gh3ef2$1l48$1@f04n12.cac.psu.edu>
Source record: 19357

Jeff Liebermann wrote:
> On Mon, 01 Dec 2008 17:03:30 -0500, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> I will sell bottles of the miracle liquid for 1000 dollars per liter.
>> However, as everyone knows, ther eis nothing like freshness for the
>> important compounds, so for 25 thousand dollars plus air and food
>> expensies, I will come to visit and pee on your speakers......
>> - 73 de Mike N3LI -
>
> Sorry, but a similar product has already been invented and been on the
> market for about 5 years:
> <http://j-walk.com/other/wifispray/>

Oh dear, people have to look out for bogus products like that! My wizz
is the wonderful wizz, the wizz that was, becuz becuz becuz becuz......
becuz of the wonderful things it does....

> The ladyfriend would probably buy the pink antennas. She just bought
> a pink bicycle. In disgust, I bought her pink garden tools and a
> stuffed pink pig. That might also explain why I'm spending the
> evening posting useless usenet drivel, instead of engaging in
> debauchery. Anyway, pink is the "in" color, so I guess it's ok:
> <http://images.google.com/images?q=pink+camouflage>
> <http://images.google.com/images?q=pink+products>

Pink really does suck as a color. My mentor, Opus the penguin, said it
best. If a million people believe a wrong thing, it is still a wrong thing.

- 73 d eMike N3LI -

5084. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 13:58:37 UTC
From: Dave <dave@dave.dave>
Message-ID: <49353f0e$0$31202$bd467cd0@news.dslextreme.com>
Source record: 19358

JosephKK wrote:
> On Mon, 01 Dec 2008 14:13:23 +0000, Dave <dave@dave.dave> wrote:
>
>> JosephKK wrote:
>>> On Sun, 30 Nov 2008 22:52:16 +0000, Dave <dave@dave.dave> wrote:
>>>
>>>> JosephKK wrote:
>>>>> Which make and model / series? There are dozens of variations.
>>>>>
>>>> These are the standard CTCSS freqs:
>>>>
>>>> http://www.batnet.com/~mfwright/ht220plcodes.html
>>>>
>>>> http://en.wikipedia.org/wiki/CTCSS
>>> Have you read your own references?
>>>
>>> Bottom line, most any tunable tone decoder.
>>>
>> If a vibrating reed can be considered a "decoder" then you are correct.
>>
>> However, there are not "dozens of variations".
>
> Sure can. Collins Radio used mechanical resonators in an HF radio ISB
> diversity 2240 baud modems. Then they used a switched capacitor meta
> resonator. Then they used DDS synchronous comparison. And of course
> there are various narrow band filter methods. And of course whatever
> internal method the 8870 DTMF decoder uses. Who knows what methods
> can be implemented in fast UC or small DSP or even an FPGA, except it
> will not be a mechanical resonator. I suppose a mathematical model of
> a mechanical resonator though.
>
Damn, you overthink things. The subject is PL, as generally used in
2-way mobile and hand-held radios and base stations. There are a few
variations, as a handful of tones have been added to the original group.

The receiver looks for a tone in the audio of an incoming signal. If
that tone is heard, that part of the squelch system unmutes the audio.

I have no idea how you got from that to Collins HF Modems, but I'm sure
it was a lovely trip for someone.

5085. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 14:02:22 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gh3f5e$1l4a$1@f04n12.cac.psu.edu>
Source record: 19359

John Smith wrote:

> You know, in your particular case, I have been too nice ...
>
> Nothing yet, has been a human creation which even comes close to
> mimicking a very lowly virus ...

And yet, if you are so sure, why do you not have the courage of your convictions to say, "Man cannot and never ever will create such a thing as a lowly virus.

Your sentence leaves open the possibility that man might create such a thing tomorrow, next week, some time.

> You are an idiot, all your posts here have only described you sheer
> idiot nature in exact detail ... you are loathsome, you are an absolute
> idiot, you are something I pick off my shoe when walking my dog and not
> paying adequate attention ...

And oddly enough, that doesn't bother me much, or at all. Everyone is an idiot in someone's book.

I gave you references, I give you a reasoned post, even gave you a part in agreement that there is a possibility that some being being created it all.

Your response is that I am fecal matter on your shoe. I am the idiot.

- 73 de Mike N3LI -

5086. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 16:34:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b24d25af-5108-498f-afb2-d315d15a42b4@l39g2000yqn.googlegroups.com>
Source record: 19360

On Dec 2, 6:09 am, Cecil Moore <nos...@w5dxp.com> wrote:
> JosephKK wrote:
> > j...@specsol.spam.sux.com wrote:
> >> I've read some reports that such is due to the poor contact of the
> >> twists in chicken wire.
>
> >> I suppose soldering all the twists would fix it.
>
> > Probably would, but sounds damn tiresome.
>
> Hardware cloth is already soldered.
> --
> 73, Cecil http://www.w5dxp.com

Problem there Cecil is the windmill effect
on the rotor. Even tv antennas in the Midwest get a hammering
while power generastor windmills are sprouting all over the place
to harvest same. One of these huge windmills lost one of its blades a
short time ago

5087. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 17:03:27 UTC
From: richard <member@newsguy.com>
Message-ID: <hmnaj4pm2ai5pq11n2ocklh8defapelsb5@4ax.com>
Source record: 19361
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Mon, 1 Dec 2008 21:58:02 -0800, dplatt@radagast.org (Dave Platt)
wrote:

>In article <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>,
>Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:
>
>>> You still didn't give any useful information. No surpise since
>>> you have none. For an average of the cb band running 1/4 wave
>>> the antennas should be spaced 54 inches apart. Use a
>>> commercially produced cophase harness if you can find it. Make
>>> sure you match the SWR and you will out do any other mobile
>>> off the front or rear.
>
>>> Top
>
>> Thanks Top!
>
>I think that Top's calculations (and recommendations) are a bit off?
>
>CB has an 11-meter wavelength. There are just over 39 inches in a
>meter. Hence, the wavelength is around 430 inches.

Almost got it right but a little off.

The higher the "meter" the frequency gets lower.
11 meters is roughly 27mhz.
10 meters is roughly 28mhz.
2 meters is 144 mhz.

A "wave" is based on the physical length between nodes of the
frequency.

In reality, one wavelength at 27mhz is about 36 feet long.
A standard 102inch whip is a 1/4 wave antenna.

Just for you mister know it all top,
you might want to gander at this site.

http://www.cosjwt.com/index.php?a=20

It blows your 54" theory right straight to hell and then some.

As you'll see by the charts, there is virtually no difference between
1 and 2 antennas mounted on a truck.

5088. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 17:06:01 UTC
From: richard <member@newsguy.com>
Message-ID: <dlqaj45820fa9r9kdsoucauakg1l4h1pn5@4ax.com>
Source record: 19362
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On 2 Dec 2008 06:15:20 GMT, Top <top@neo.rr.invalid> wrote:

>dplatt@radagast.org (Dave Platt) wrote in
>news:acve06-bei.ln1@radagast.org:
>
>> In article
>> <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>, Douglas
>> W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com>
>> wrote:
>> I suspect you'd get more bang for your buck by simply
>> mounting a single antenna in a better location (e.g. roof
>> mount) and paying attention to making the antenna's
>> grounding to the chassis/groundplane as direct and solid as
>> possible.
>>
>
>Cophase being omindirectional? You need to do some more
>reading before you try to correct anything.

IF the cophased antennas are less than 1/4 wave apart, there is
virtually no change.

5089. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 17:11:01 UTC
From: richard <member@newsguy.com>
Message-ID: <cpqaj45pnt8bn7ao582pgkfekau4nmqsm9@4ax.com>
Source record: 19363
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Mon, 1 Dec 2008 23:55:02 -0800, dplatt@radagast.org (Dave Platt)
wrote:

>In article <Xns9B68CB1835A9topneorrinvalid@130.133.1.4>,
>Top <top@neo.rr.invalid> wrote:
>
>>Cophase being omindirectional? You need to do some more
>>reading before you try to correct anything.
>
>The directionality of a broadside array (with the two radiators fed
>exactly in phase) depends very strongly on the separation between the
>two antennas. For separations of 1/4 wavelength or less, there's very
>little directionality - the pattern is very close to omnidirectional.
>
>Every dual-antenna truck setup I've seen has been a side-by-side
>mounting (e.g. one on the left mirror and one on the right), and the
>harness feeds them both in-phase. I've been assuming that this was
>what was being meant by "co-phase".
>
>If so, I stand by my statement that two CB antennas, fed in phase
>through a co-phase harness (i.e. no phase difference between the two),
>and separated by only 54 inches, produces a nearly-omnidirectional
>signal. The two antennas need to be further apart, before the pattern
>becomes significantly directional.
>
>Take a look at the NEC plots at http://www.cosjwt.com/index.php?a=20
>to see... the 4.5-foot separation model produces a pattern which is
>almost circular. There is little gain towards the front and back, and
>very little loss off to the sides. These plots seem to jibe well with
>other references I've read (Terman, Kraus, and the graphs in the ARRL
>Antenna Book).
>
>The other alternative is an end-fire array, with the antennas fed
>signals of opposite phase - with these then there can be significant
>directionality even with close spacing of the antennas. In a
>truck-antenna system, this would require placing the antennas one in
>front of the other, separating them by several feet, and inverting the
>phase of the signal sent to one of the two antennas (perhaps by having
>the feed coax to one antenna be 1/2-wavelength longer than the other).
>You could get several dB of gain this way... but the close spacing
>will cause the antenna feedpoint impedance to drop a lot, and some
>form of matching network will certainly be required to keep the radio
>happy and develop maximum power from the transmitter.

>
>The two bottom plots on the site I mentioned above, show the effect of
>feeding the antennas with signals of different phase. In these
>examples, the pattern is being skewed off to one side - the difference
>in feedline length is converting the antenna from a broadside array to
>an end-fire array. With the right amount of phase shift, you end up
>with a cardioid pattern, with a broad lobe in one direction and a very
>deep null in the other.

Ya gots to understand with whom you are trying to communicate.
"Top" is the master know it all who has absolutely no background in
electronics. He just drives a truck and thinks that gives him the
knowledge. You've heard of "Billy Big Rigger"? You just met the dude.
Top just goes along with what other truckers have said over the years.

I have the actual working experience to back me up with.
The only thing Top knows about CB is how to yack on it.

5090. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 17:17:50 UTC
From: richard <member@newsguy.com>
Message-ID: <43raj4t26k9e1m4ik30edsq5mpbda20okd@4ax.com>
Source record: 19364
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Tue, 2 Dec 2008 03:17:22 -0500, "Douglas W. \"Popeye\" Frederick"
<Popeye@finalprotectivefire.com> wrote:

>"Dave Platt" <dplatt@radagast.org> wrote in message
>news:acve06-bei.ln1@radagast.org...
>> In article <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>,
>> Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:
>>
>>>> You still didn't give any useful information. No surpise since
>>>> you have none. For an average of the cb band running 1/4 wave
>>>> the antennas should be spaced 54 inches apart. Use a
>>>> commercially produced cophase harness if you can find it. Make
>>>> sure you match the SWR and you will out do any other mobile
>>>> off the front or rear.
>>
>>>> Top
>>
>>> Thanks Top!
>>
>> I think that Top's calculations (and recommendations) are a bit off?
>
> I'm a "single antenna" guy myself.
>
> I think, in a truck, at least, that "big radio" is synonymous with "big
>wristwatch". :-)
>
> We can't mount the antennae high or center, because the 13', 6" height of
>the truck is where the low bridges start.
>
> Also, most tractors have this horrific system that intergrates AM/FM with
>the CB coax.
>
> A CB stick on the left mirror and an AM/FM on the right, and a splitter in
>the coax, so I always run my own coax seperately.
>
> And I have a cellular antenna on one side, any way, for dual plane signal
>boost, and it has to be 8" (I think) away from other sticks.
>
> But hhhhhere's a question for the braintrust:
>
> I'm after a (mobile) VHF radio that's common to northern (i.e., the Yukon,
>and Northwest Territories) Canadian truckers- who don't monitor CB bands.
>

> (info:) http://forums.qrz.com/showthread.php?t=171741
>
> I'm sure, as a sine wave challenged layman, that I can't use the same
>antenna and coax as my CB?
>

No dumbshit.
As I have tried to explain to you once before, DO NOT buy one of those radios. If you get caught with it in the USA alone, and are transmitting on it, no license? Bye bye. Pay the $10,000 fine lose the radio.

Every trucking company in Canada that uses them has a Canadian license to operate them with. They are not like CB's. They are commercial business radios.

I trust maybe now you'll listen to one of the radio experts for a change.

Would one of you in the radio groups who knows Canadian radios please explain this to the jerk?
He thinks that because he's a trucker, he can have any damn radio he wants in his truck.

5091. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 17:29:14 UTC
From: John Navas <spamfilter1@navasgroup.com>
Message-ID: <gsraj4lelo15685lhiaet0p5nf2riut5a6@4ax.com>
Source record: 19365
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

On Fri, 21 Nov 2008 09:00:09 -0500, "Bill Kearney"
<wkearney99@hotmail.com> wrote in
<FfCdnaXCtoZ3I7vUnZ2dnUVZ_gydnZ2d@speakeasy.net>:

>"DaveC" <me@bogusdomain.net> wrote in message
>news:0001HW.C54BA58A0075A070B01AD9AF@news.sf.sbcglobal.net...

>> Is there any reason to not go for the greatest gain antenna, given that
>> cost is not too important (within reason)?
>
>Alligator effect. Wide mouth receiving everything.

"Alligator effect" normally refers to higher transmit power (not higher
antenna gain) -- big mouth, small ears.

>If you don't need to
>pickup everything then why bother? It just makes it harder for your WiFi
>router to cut through all the noise of distant stations it doesn't
>communicate with. ...

It actually usually makes sense, since higher gain means narrower
receive pattern, which better rejects off-axis interference.
Interference in exactly the same path is possible but unlikely.
--
Best regards, FAQ for Wireless Internet: <http://wireless.navas.us>
John Navas FAQ for Wi-Fi: <http://wireless.navas.us/wiki/Wi-Fi>
Wi-Fi How To: <http://wireless.navas.us/wiki/Wi-Fi_HowTo>
Fixes to Wi-Fi Problems: <http://wireless.navas.us/wiki/Wi-Fi_Fixes>

5092. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 17:33:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qmraj45d5ssv8m15cq6cj0sqp3e73ovo1k@4ax.com>
Source record: 19366

On Tue, 2 Dec 2008 02:54:09 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>It is clear that your interest in this thread has turned to playing
>word games.

This confirms my earlier observation that you had no support for one
rather meek word game from you:
>>>...NEC far-field analysis this would seem impossible,
>>>due to the greatly reduced fields in this sector ....
your statement (now statements) lacks quantifiables. "Impossible" is
yellow-journalism fluff and the less than 1dB variations I have
reported are within the accumulation of field errors of the "possible"
that went into engineering reports. "Impossible" and "possible" are,
to all intents and purposes, describing the same thing.

What is it that is impossible? Or is this about seeming?

If you cannot support your own statements with quantifiables, I can
see why you shy from further pale elaboration.

73's
Richard Clark, KB7QHC

5093. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 17:42:09 UTC
From: JB <nospam@goofball.net>
Message-ID: <RreZk.2348$QX3.732@nwrddc02.gnilink.net>
Source record: 19367

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:gh1cqt$18lg$1@f04n12.cac.psu.edu...
> John Smith wrote:
> > JB wrote:
> >
> >> ...
> >> Needs to be reminded that gravity doesn't work that way. Stand on
> >> your head
> >> and try it.
> >>
> >
> > Better yet, grab a hand full of plastic, glass, metal, wood, etc. and
> > toss it into a mud-puddle, come back in a few million years and see what
> > you can "dig up", what has "evolved" into being ...
> >
> > While I cannot absolutely rule out molecules, atoms and other assorted
> > particles, materials and wavelengths of energies arranging themselves
> > into complex organisms, at least one of which has self-awareness--it
> > flies in the face of all forms of logic/maths/sciences I have ever had
> > contact with ... but true, ya' never know, ya' just never know.
>
> Self-arranging and self replication are actually easy enough to do that
> the old definition of life that depends on that have been discarded for
> much tighter definitions, Otherwise we would already be able to claim
> that we created life.
>
> As an example, lipids, or phospholipids, are a common substance (read
> oils) that have the tendency to form into small bilayer spheres that
> isolate the interior from the exterior world. Then what is needed is for
> the right compounds to get trapped inside that sphere, and maybe
> something interesting will happen.
>
>
>
http://blog.wired.com/wiredscience/2008/09/biologists-on-t.html?npu=1&mbid=yhp
>
>
> A immune system analog:
>
>
> http://www.sandia.gov/media/NewsRel/NR2002/nanoarch.htm
>
>
> Point is, these things are not some impossible to happen, "just so"

> scheme. As time goes on, it looks more and more like on a planet capable
> of sustaining life, life will happen.
>
> Now if someone wanted to claim that some entity made that planet that
> could support life, then these things happened - that is a different
story.
>
> - 73 de Mike N3LI -

None of this disproves the idea that the universe is created along with the laws of physics and the bio-chemical engines that conform to the will of God. Let's face it, science doesn't disprove creation theory at all. It simply tries to explain and make use of what we are provided with. Doesn't mean we shouldn't give thanks.

The Bible explanation of creation isn't more specific than what was appropriate for a developing intellect. Any one with any true intellect will be in awe with the realization that all of the laws of Physics, the extremely refined and complex Bio-Chemical engines that contribute to life in all its forms, and the extreme odds against a planet with the narrow margin of environmental conditions, all would fit the definition of the greatest miracle known. To be known by the only species enabled to know it.

Whereas we struggle to understand where we are and what we are capable of in the here and now (and fall miserably short) The Bible actually dares to and does predict the future and stands as the most insightful understanding of our past, our nature, and hope for the future.

I can certainly understand how people could have a beef with "religion". After all, the Bible even warns us of superstitious people, God haters, hypocrites. Jesus himself warns in his parables that many would be among the righteous planted by the enemy to discourage, usurp and mislead. Who doesn't know of those in a group that gossip and tear down others. It's like a boat on the ocean and some are chopping up the main mast for firewood because they just want to be comfortable, while some are chopping a hole in the hull because they are curious of what is on the other side and have no discipline or forethought. He never said it would be easy.

5094. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 17:52:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bataj499ann7k5v3mcjgkohbdjhdei0lg5@4ax.com>
Source record: 19368

On Tue, 02 Dec 2008 17:42:09 GMT, "JB" <nospam@goofball.net> wrote:

>He never said it would be easy.

and he made it more difficult by not saying it in English (just another example of information suppression by churches if we are to keep even slightly on topic).

73's
Richard Clark, KB7QHC

5095. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 18:29:49 UTC
From: dplatt@radagast.org
Message-ID: <tdbg06-phn.ln1@radagast.org>
Source record: 19370
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

In article <W46dnbfJTIiCcqnUnZ2dnUVZ_rfinZ2d@supernews.com>,
Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:

> But hhhhhere's a question for the braintrust:
>
> I'm after a (mobile) VHF radio that's common to northern (i.e., the Yukon,
>and Northwest Territories) Canadian truckers- who don't monitor CB bands.
>
> (info:) http://forums.qrz.com/showthread.php?t=171741
>
> I'm sure, as a sine wave challenged layman, that I can't use the same
>antenna and coax as my CB?

In principle, you could combine the CB output (27 MHz) with the VHF
radio output (up above the 2-meter band) using a diplexer, and feed
the result down a single coax.

At the antenna end, you'd have a couple of choices. You can use
another diplexer to split out the HF and VHF signals, and feed them to
two separate antennas. Or, you might be able to find a single CB-type
antenna which is also capable of matching up well enough on these VHF
frequencies to work tolerably well.

The chances are very poor that a randomly-selected CB antenna would
give you a tolerable SWR on the 160-or-so-MHz VHF band... and if it
did, there's no telling what its vertical radiation pattern would look
like. An antenna intended for these two bands would probably have to
be custom designed - I can think of a couple of possible ways to do
it. Such a dualband antenna would almost certainly be a compromise
antenna on both bands - it wouldn't work as well as separate antennas
designed for best operation on a single band each.

Commercial HF/VHF diplexers run somewhere around $80, last time I
looked. You'd probably find it less expensive in the end to just run
a second coax and put up a second (VHF-only) whip antenna.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5096. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 19:03:44 UTC
From: Zeke <noway@fart.ad>
Message-ID: <gh40qigti1@aioe.org>
Source record: 19369
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

uuuuhhhh..... you're wrong as usual Bullishit.

Top was Military and got his commo expertise there. IIRC he's not a truck driver at all.

5097. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 19:51:28 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <Op6dndSNf6JTDKjUnZ2dnUVZ_srinZ2d@supernews.com>
Source record: 19371
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Zeke" <noway@fart.ad> wrote in message news:gh40qigti1@aioe.org...
> uuuuhhhh..... you're wrong as usual Bullishit.
>
> Top was <career> Military and got his commo expertise there. IIRC he's
> not a truck driver at all.

Exactly, a matter of public record here that Richard has seen several
times previously, and just forgot.

Here's Richard's esteemed military career (and how he was caught lying
about it): http://bolo_bullis.tripod.com/

What's amazing is that Richard and I were just discussing what a total,
absolute and complete asshole he makes himself look like every time he tries
to make himself look tough or smart at anyone's expense.

Of course he can't hear a word of that, and immediately starts this.

Richard, who is also a career pedophile and damn proud of it, has had, and
will always have, the same problem, and that's that he just can't keep his
festering gob shut.

What amazes me is that he's skunked a dozen usenet groups over the years,
is internationally know as a scumbag, but still sees the world through his
own rose colored glasses, like we might have forgotten his previous and
extensive bombast and flummery.

Funny, or sad?

--
Popeye
"Best thing for him, really. His therapy
was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

5098. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 20:05:07 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <3LudnXfvAI6fCKjUnZ2dnUVZ_qvinZ2d@supernews.com>
Source record: 19372
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"richard" <member@newsguy.com> wrote in message
news:43raj4t26k9e1m4ik30edsq5mpbda20okd@4ax.com...
> On Tue, 2 Dec 2008 03:17:22 -0500, "Douglas W. \"Popeye\" Frederick"
> <Popeye@finalprotectivefire.com> wrote:
>
>>"Dave Platt" <dplatt@radagast.org> wrote in message
>>news:acve06-bei.ln1@radagast.org...
>>> In article <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>,
>>> Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:
>>>
>>>>> You still didn't give any useful information. No surpise since
>>>>> you have none. For an average of the cb band running 1/4 wave
>>>>> the antennas should be spaced 54 inches apart. Use a
>>>>> commercially produced cophase harness if you can find it. Make
>>>>> sure you match the SWR and you will out do any other mobile
>>>>> off the front or rear.
>>>
>>>>> Top
>>>
>>>> Thanks Top!
>>>
>>> I think that Top's calculations (and recommendations) are a bit off?
>>
>> I'm a "single antenna" guy myself.
>>
>> I think, in a truck, at least, that "big radio" is synonymous with "big
>>wristwatch". :-)
>>
>> We can't mount the antennae high or center, because the 13', 6" height
>> of
>>the truck is where the low bridges start.
>>
>> Also, most tractors have this horrific system that intergrates AM/FM
>> with
>>the CB coax.
>>
>> A CB stick on the left mirror and an AM/FM on the right, and a splitter
>> in
>>the coax, so I always run my own coax seperately.
>>
>> And I have a cellular antenna on one side, any way, for dual plane
>> signal
>>boost, and it has to be 8" (I think) away from other sticks.

>>
>> But hhhhhere's a question for the braintrust:
>>
>> I'm after a (mobile) VHF radio that's common to northern (i.e., the
>> Yukon,
>>and Northwest Territories) Canadian truckers- who don't monitor CB bands.
>>
>> (info:) http://forums.qrz.com/showthread.php?t=171741
>>
>> I'm sure, as a sine wave challenged layman, that I can't use the same
>>antenna and coax as my CB?
>>
>
> No dumbshit.
> As I have tried to explain to you once before, DO NOT buy one of those
> radios.

Fuck you, dickhead.

> If you get caught with it in the USA alone, and are
> transmitting on it, no license? Bye bye. Pay the $10,000 fine lose the
> radio.

Sure.

What's the fine for my 250 watt kicker?

Don't forget to add that in.

> Every trucking company in Canada that uses them has a Canadian license
> to operate them with. They are not like CB's. They are commercial
> business radios.
>
> I trust maybe now you'll listen to one of the radio experts for a
> change.

I am.

They said the radios were available, the <private> frequencies, not the
radios, are licensed, and the freqs I'm interested are available to the
public.

And the license, if you want one, is easy and cheap.

Were your mother and father related -before- the wedding?

Inquiring minds want to know.

Because you have an uncanny resemblence to the Deliverance banjo boy.

> Would one of you in the radio groups who knows Canadian radios please
> explain this to the jerk?
> He thinks that because he's a trucker, he can have any damn radio he
> wants in his truck.

Jesus, are you stupid.

Try reading the thread that I cited, that flatly proves you wrong.

And as I already stated, and you apparently forgot, the radio would be for emergencies only, and that I would have no reason to use it in the states.

Your memory is just shot, fuckhead, have you ever met a guy named John Francis?

Or been to Australia?

I find it amazing that you'd be afraid of an FCC fine, that I have a one-in-ten-million chance of -ever- receiving, while you publically brag about being in possession of 45,000 child pornography pictures.

Amazing. Simply amazing.

--
Popeye
"Best thing for him, really. His therapy
was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

5099. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 20:09:11 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <fYmdnSzeMeBpCKjUnZ2dnUVZ_jidnZ2d@supernews.com>
Source record: 19373
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Dave Platt" <dplatt@radagast.org> wrote in message
news:tdbg06-phn.ln1@radagast.org...
> In article <W46dnbfJTIiCcqnUnZ2dnUVZ_rfinZ2d@supernews.com>,
> Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:
>
>> But hhhhhere's a question for the braintrust:
>>
>> I'm after a (mobile) VHF radio that's common to northern (i.e., the
>> Yukon,
>>and Northwest Territories) Canadian truckers- who don't monitor CB bands.
>>
>> (info:) http://forums.qrz.com/showthread.php?t=171741
>>
>> I'm sure, as a sine wave challenged layman, that I can't use the same
>>antenna and coax as my CB?
>
> In principle, you could combine the CB output (27 MHz) with the VHF
> radio output (up above the 2-meter band) using a diplexer, and feed
> the result down a single coax.
>
> At the antenna end, you'd have a couple of choices. You can use
> another diplexer to split out the HF and VHF signals, and feed them to
> two separate antennas. Or, you might be able to find a single CB-type
> antenna which is also capable of matching up well enough on these VHF
> frequencies to work tolerably well.
>
> The chances are very poor that a randomly-selected CB antenna would
> give you a tolerable SWR on the 160-or-so-MHz VHF band... and if it
> did, there's no telling what its vertical radiation pattern would look
> like. An antenna intended for these two bands would probably have to
> be custom designed - I can think of a couple of possible ways to do
> it. Such a dualband antenna would almost certainly be a compromise
> antenna on both bands - it wouldn't work as well as separate antennas
> designed for best operation on a single band each.
>
> Commercial HF/VHF diplexers run somewhere around $80, last time I
> looked. You'd probably find it less expensive in the end to just run
> a second coax and put up a second (VHF-only) whip antenna.

Thanks!

That's the kind of helpful and intelligent response I was looking for.

The radio would be for emergency communications anyway, to trucks in
the -immediate- vicinity.

The 4 "LADD" frequencies are used by the scale houses up there, as well.

>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

--
Popeye
"Best thing for him, really. His therapy
was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

5100. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 20:12:25 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <jImdnQOvaacrC6jUnZ2dnUVZ_o_inZ2d@supernews.com>
Source record: 19374
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"richard" <member@newsguy.com> wrote in message
news:cpqaj45pnt8bn7ao582pgkfekau4nmqsm9@4ax.com...

> Ya gots to understand with whom you are trying to communicate.
> "Top" is the master know it all who has absolutely no background in
> electronics. He just drives a truck and thinks that gives him the
> knowledge. You've heard of "Billy Big Rigger"? You just met the dude.
> Top just goes along with what other truckers have said over the years.
>
> I have the actual working experience to back me up with.
> The only thing Top knows about CB is how to yack on it.

Wow.

Acer laptop: $600

20" monitor: $225

Verizon data card: $50

Watching Richtard stick his pecker in the outlet, -again-,

Priceless.

--
Popeye
"Best thing for him, really. His therapy
was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

5101. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 20:21:41 UTC
From: richard <member@newsguy.com>
Message-ID: <f95bj4pt0394g3bbpkmeporoblkk1kqdpt@4ax.com>
Source record: 19375
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Tue, 2 Dec 2008 14:51:28 -0500, "Douglas W. \"Popeye\" Frederick"
<Popeye@finalprotectivefire.com> wrote:

>"Zeke" <noway@fart.ad> wrote in message news:gh40qigti1@aioe.org...
>> uuuuhhhh..... you're wrong as usual Bullishit.
>>
>> Top was <career> Military and got his commo expertise there. IIRC he's
>> not a truck driver at all.
>
>
> Exactly, a matter of public record here that Richard has seen several
>times previously, and just forgot.

Since this thread is going to groups who do not know me, I will try to
clairify the lies here.

>
> Here's Richard's esteemed military career (and how he was caught lying
>about it): http://bolo_bullis.tripod.com/

First, that is an exact copy of my dd214 acquired under the FOIA.
It states I served. Unlike the lies that promulgate from it that says
I did not.
2nd, why is the word before "discharge" blacked out? That was not done
by the US goverment. It was done to make it look more damning.
I never claimed to be anything I was not. I said I never got beyond
boot camp and my highest rank was E1. The dd214 confirms that.
I said I had enlisted for the ASA but never got involved with it.
While others claimed I had claimed to be super secret spy or in
special forces. Most of those lies were all created by "Just Taylor".

>
> What's amazing is that Richard and I were just discussing what a total,
>absolute and complete asshole he makes himself look like every time he tries
>to make himself look tough or smart at anyone's expense.

I'm not saying I am smarter than many, in this thread I have been
trying to point out that a lot of information given in this thread is
totally wrong. As have others. Why don't you pick on them, asshole.

>
> Of course he can't hear a word of that, and immediately starts this.
>
> Richard, who is also a career pedophile and damn proud of it, has had, and
>will always have, the same problem, and that's that he just can't keep his

>festering gob shut.

Pedophile being defined here as a person who others claim is a
pedophile because the damning word sticks to more feeble brains than
any other word. No one has ever proven, in 10 years, that I am, have
been, or currently am, a true pedophile. It's nothing more than ill
words on a screen.

>
> What amazes me is that he's skunked a dozen usenet groups over the years,
>is internationally know as a scumbag, but still sees the world through his
>own rose colored glasses, like we might have forgotten his previous and
>extensive bombast and flummery.

While shitheads like you keep wanting to let the world know about the
past anyway they can. No proof, just a lot of hot air.

>
> Funny, or sad?

Sad boy you are and you wore a uniform? God help us all.

5102. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 20:29:24 UTC
From: richard <member@newsguy.com>
Message-ID: <996bj49erlba84drgscfafal8nc89mpmgf@4ax.com>
Source record: 19376
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Tue, 2 Dec 2008 10:29:49 -0800, dplatt@radagast.org (Dave Platt)
wrote:

>In article <W46dnbfJTIiCcqnUnZ2dnUVZ_rfinZ2d@supernews.com>,
>Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:
>
>> But hhhhhere's a question for the braintrust:
>>
>> I'm after a (mobile) VHF radio that's common to northern (i.e., the Yukon,
>>and Northwest Territories) Canadian truckers- who don't monitor CB bands.
>>
>> (info:) http://forums.qrz.com/showthread.php?t=171741
>>
>> I'm sure, as a sine wave challenged layman, that I can't use the same
>>antenna and coax as my CB?
>
>In principle, you could combine the CB output (27 MHz) with the VHF
>radio output (up above the 2-meter band) using a diplexer, and feed
>the result down a single coax.
>
>At the antenna end, you'd have a couple of choices. You can use
>another diplexer to split out the HF and VHF signals, and feed them to
>two separate antennas. Or, you might be able to find a single CB-type
>antenna which is also capable of matching up well enough on these VHF
>frequencies to work tolerably well.
>
>The chances are very poor that a randomly-selected CB antenna would
>give you a tolerable SWR on the 160-or-so-MHz VHF band... and if it
>did, there's no telling what its vertical radiation pattern would look
>like. An antenna intended for these two bands would probably have to
>be custom designed - I can think of a couple of possible ways to do
>it. Such a dualband antenna would almost certainly be a compromise
>antenna on both bands - it wouldn't work as well as separate antennas
>designed for best operation on a single band each.
>
>Commercial HF/VHF diplexers run somewhere around $80, last time I
>looked. You'd probably find it less expensive in the end to just run
>a second coax and put up a second (VHF-only) whip antenna.

Trust me. he has no clues as to what you just said.

This fool wants to run a vhf radio in Canada just to talk to Canadian
truckers. He thinks those radios can be bought and used just like a
CB.

As I have operated radios on 47mhz, held a 2nd class fcc license, I think I know a lot more than he does.

5103. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 22:06:53 UTC
From: dplatt@radagast.org
Message-ID: <t4og06-sfl.ln1@radagast.org>
Source record: 19377
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

In article <fYmdnSzeMeBpCKjUnZ2dnUVZ_jidnZ2d@supernews.com>,
Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:

> The radio would be for emergency communications anyway, to trucks in
>the -immediate- vicinity.
>
> The 4 "LADD" frequencies are used by the scale houses up there, as well.

I'd offer a "metoo" for some advice you got from another poster... do
NOT operate unlicensed. Don't even install a radio for which you
don't have whatever license is required by the law in the areas in
which you will be driving.

Planning to use the "Officer, it's only for emergency use" response,
when challenged, could be a very expensive tactic. You might find
out, the hard way, that the local regulatory body takes a "possession
is considered proof of intent to use" approach... even if you don't
get hit with criminal charges or a civil forfeiture order, you could
find that your radios are considered de facto "contraband" and are
subject to being seized without warning.

Here in the US, unlicensed operation could get you hit with equipment
confiscation and a fine of many thousands of dollars.

If you want to operate VHF, you should either get a proper license
(e.g. for business-band frequencies) or stick to radios which have no
legal requirement for a license. For example, here in the U.S., the
MURS (multi-use radio service) is a collection of a few VHF
frequencies (formerly licensed-business-band) which have been
reassigned, and which can be used without a license as long as the
radio you use is properly certificated for this purpose.

I don't know if Canada has a MURS-equivalent, or if any of the
truckers up there use it. Check the regulations before you buy.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5104. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 22:41:55 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <a0f2cfe9-1a65-4da3-ac86-bf4b2e5b8d25@a12g2000yqm.googlegroups.com>
Source record: 19378
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

Jim Lux ha escrito:
> John Smith wrote:
> > Richard Clark wrote:
> >>> ... I wholly abandoned
> >> MS whose expensive compiler and math libraries (upwards to $600) were
> >> abysmal in comparison to the $50 TurboPascal product.
> >>
> >> 73's
> >> Richard Clark, KB7QHC
> >
> > Indeed, if someone prefers pascal (hey, any language is OK with me, even
> > Fortran--<wink Roy>)
> >
> > Here is 5.5 ... I would suspect it will get you what you want:
> >
> > http://dn.codegear.com/article/20803
> >
> > Grab the zip file.
> >

> > Regards,
> > JS
> Octave (the Matlab clone) is available for almost all platforms, and is
> quite easy to learn to use. For things like manipulating matrices and
> vectors, it's pretty slick. The real Matlab has better graphics
> packages (in terms of integration with the package, etc.), but from a
> straight out computation standpoint, Octave works just as well.

Hello Richard, John and Jim,

First, Thanks for the info. I downloaded TP55 via the link. Good thing that Embarcadero (sounds 100% Español) makes available older versions of popular software.

One of the options I had in mind, was to use an older version of Delphi. I prefer this above VB. Structured design isn’t strange to me, so Pascal, is still attractive for me (though it is not as popular as years ago). My lecturer for high level programming was Mr. L. Ammeraal.

I know Turbo Pascal was very popular. Later, many people I know used also the Delphi product (both free time and professional SW development). After that some people switched to C++ builder.

Best regards,

Wim
PA3DJS
www.tetech.nl
forget abc and you have a valid mail address.

5105. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-02 23:01:27 UTC
From: JB <nospam@goofball.net>
Message-ID: <b7jZk.2482$us6.1774@nwrddc01.gnilink.net>
Source record: 19379

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:bataj499ann7k5v3mcjgkohbdjhdei0lg5@4ax.com...
> On Tue, 02 Dec 2008 17:42:09 GMT, "JB" <nospam@goofball.net> wrote:
>
> >He never said it would be easy.
>
> and he made it more difficult by not saying it in English (just
> another example of information suppression by churches if we are to
> keep even slightly on topic).
>
> 73's
> Richard Clark, KB7QHC

Are you always this whimsical? I would point you to Acts chapter 2 but you obviously haven't read any of the Bible or have no reading comprehension. If you were taught that someone's opinion is more important than your own investigation, you are misled. Perhaps you haven't been in a book store lately. If you are skeptical of the translation, bravo! You understand that men can fail. Get a parallel Bible and see how closely the meaning follows. You will find instances of references of what was to come, and what has very nearly completed.

5106. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 00:58:56 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <vuidnbR1n4dCRKjUnZ2dnUVZ_t_inZ2d@supernews.com>
Source record: 19380
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Dave Platt" <dplatt@radagast.org> wrote in message
news:t4og06-sfl.ln1@radagast.org...
> In article <fYmdnSzeMeBpCKjUnZ2dnUVZ_jidnZ2d@supernews.com>,
> Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:
>
>> The radio would be for emergency communications anyway, to trucks in
>>the -immediate- vicinity.
>>
>> The 4 "LADD" frequencies are used by the scale houses up there, as well.
>
> I'd offer a "metoo" for some advice you got from another poster... do
> NOT operate unlicensed. Don't even install a radio for which you
> don't have whatever license is required by the law in the areas in
> which you will be driving.

Thanks, but don't put too much stock in the idiot.

I don't chat on the radio, regardless of how he tries to project his own activities on others, and from what I can discern so far, no license is required.

I notice Richard the expert hasn't provided any such information, either.

Possibly you're not aware of this, but unlicensed 10 meter radios with in-line amps are quite common in our trucks, and openly sold (although one major truckstop chain was, I believe, fined after several warnings) everywhere.

I'll be happy to get a Canadian license if I can, but, I don't need or intend to use the licensed business frequencies.

So, if as I understand, -that's- what I need a license for, I have no need for one.

From the cite: "The Canadian equivalent of the FCC has a site in which it post Northwind Trucking as 165.840 MHZ.. Now in Canada they do not partition the VHF High band into commercial 151-162 and Government 162-174 like we do.. they are all over the place. Also They provide unlicensed LADD channels which are used alot by trucks Ladd 1 -154.1 Ladd 2 -158.94 Ladd 3- 154.325 and Ladd 4 173.370.. Again they are all over the place with stuff up there. Most of the action on Inuvik is on VHF. Nothing appears to be on 30-50 MHZ and the Hospital and Airport are using UHF."

"They provide unlicensed LADD channels which are used alot by trucks"

"They provide unlicensed LADD channels which are used alot by trucks"

"They provide unlicensed LADD channels which are used alot by trucks"

"They provide unlicensed LADD channels which are used alot by trucks"

Where I drive is not where you live.

http://picasaweb.google.com/Popeye8762/20071202Yellowknife#5143243959490865794

That radio may mean the difference between freezing to death or not, or,
literally, being eaten alive.

"Officer, it's only for emergency use" is certainly preferable to that,
and, grossly unlikely anyway.

I've been through a score of vehicle inspections, with an illegal kicker
in -plain sight-, and nobody gives a damn.

They're a whole lot more concerned if we have brakes, and are sober.

Contrary to Stupid Richard's rantings, I've never seen an FCC roadblock in
35 years of driving.

> Planning to use the "Officer, it's only for emergency use" response,
> when challenged, could be a very expensive tactic. You might find
> out, the hard way, that the local regulatory body takes a "possession
> is considered proof of intent to use" approach... even if you don't
> get hit with criminal charges or a civil forfeiture order, you could
> find that your radios are considered de facto "contraband" and are
> subject to being seized without warning.
>
> Here in the US, unlicensed operation could get you hit with equipment
> confiscation and a fine of many thousands of dollars.

I'm sure that's true.

> If you want to operate VHF, you should either get a proper license
> (e.g. for business-band frequencies) or stick to radios which have no
> legal requirement for a license. For example, here in the U.S., the
> MURS (multi-use radio service) is a collection of a few VHF
> frequencies (formerly licensed-business-band) which have been
> reassigned, and which can be used without a license as long as the
> radio you use is properly certificated for this purpose.
>
> I don't know if Canada has a MURS-equivalent, or if any of the
> truckers up there use it. Check the regulations before you buy.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

--
Popeye
"Best thing for him, really. His therapy

was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

5107. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 01:09:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tfmbj4t62jgjiblemohbid2vq4558rdo8l@4ax.com>
Source record: 19381

On Tue, 02 Dec 2008 23:01:27 GMT, "JB" wrote not in Aramaic:

>I would point you to Acts chapter 2 but

So much for testifying, thanx for the Acts of omission.

73's
Richard Clark, KB7QHC

5108. Re: Low-angle Elevation Gain of a 1/4-wave Vertical Monopole

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 02:21:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh4qfa$68k$1@news.albasani.net>
Source record: 19382

Richard Fry wrote:

> ...
> It is clear that your interest in this thread has turned to playing
> word games.
>
> But not with me, anymore.
>
> RF

Yes, exactly! He is like that, yanno? <wink>

Regards,
JS

5109. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 02:23:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh4qiu$68k$2@news.albasani.net>
Source record: 19383

Michael Coslo wrote:
> Jeff Liebermann wrote:
>> On Mon, 01 Dec 2008 17:03:30 -0500, Michael Coslo <mjc5@psu.edu>
>> wrote:
>>
>>> I will sell bottles of the miracle liquid for 1000 dollars per liter.
>>> However, as everyone knows, ther eis nothing like freshness for the
>>> important compounds, so for 25 thousand dollars plus air and food
>>> expensies, I will come to visit and pee on your speakers......
>>> - 73 de Mike N3LI -
>>
>> Sorry, but a similar product has already been invented and been on the
>> market for about 5 years:
>> <http://j-walk.com/other/wifispray/>
>
> Oh dear, people have to look out for bogus products like that! My wizz
> is the wonderful wizz, the wizz that was, becuz becuz becuz becuz......
> becuz of the wonderful things it does....
>
>
>
>> The ladyfriend would probably buy the pink antennas. She just bought
>> a pink bicycle. In disgust, I bought her pink garden tools and a
>> stuffed pink pig. That might also explain why I'm spending the
>> evening posting useless usenet drivel, instead of engaging in
>> debauchery. Anyway, pink is the "in" color, so I guess it's ok:
>> <http://images.google.com/images?q=pink+camouflage>
>> <http://images.google.com/images?q=pink+products>
>
> Pink really does suck as a color. My mentor, Opus the penguin, said it
> best. If a million people believe a wrong thing, it is still a wrong thing.
>
>
> - 73 d eMike N3LI -

Hey, wait! I am selling that exact product for $10.00 USD, you pay
shipping... :-)

Regards,
JS

5110. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 02:28:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh4qs8$6fq$1@news.albasani.net>
Source record: 19384

Michael Coslo wrote:

> ...
> Your response is that I am fecal matter on your shoe. I am the idiot.
>
>
> - 73 de Mike N3LI -

See, you even missed the disdain I hold for you and the ridiculous nature I consider you posts to be composed of ... else you would have been a LOT MORE upset ... read my last post again idiot, I consider you and all your text worthless ... if there was ever a doubt, this clears it, I hope ... and, have a nice day. :-)

Regards,
JS

5111. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 02:30:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh4r08$6fq$2@news.albasani.net>
Source record: 19385

JB wrote:

> ...
> None of this disproves the idea that the universe is created along with the
> laws of physics and the bio-chemical engines that conform to the will of
> God. Let's face it, science doesn't disprove creation theory at all. It
> simply tries to explain and make use of what we are provided with. Doesn't
> mean we shouldn't give thanks.
>
> The Bible explanation of creation isn't more specific than what was
> appropriate for a developing intellect. Any one with any true intellect
> will be in awe with the realization that all of the laws of Physics, the
> extremely refined and complex Bio-Chemical engines that contribute to life
> in all its forms, and the extreme odds against a planet with the narrow
> margin of environmental conditions, all would fit the definition of the
> greatest miracle known. To be known by the only species enabled to know it.
>
> Whereas we struggle to understand where we are and what we are capable of in
> the here and now (and fall miserably short) The Bible actually dares to and
> does predict the future and stands as the most insightful understanding of
> our past, our nature, and hope for the future.
>
> I can certainly understand how people could have a beef with "religion".
> After all, the Bible even warns us of superstitious people, God haters,
> hypocrites. Jesus himself warns in his parables that many would be among
> the righteous planted by the enemy to discourage, usurp and mislead. Who
> doesn't know of those in a group that gossip and tear down others. It's
> like a boat on the ocean and some are chopping up the main mast for firewood
> because they just want to be comfortable, while some are chopping a hole in
> the hull because they are curious of what is on the other side and have no
> discipline or forethought. He never said it would be easy.
>

Man, when good reasoning, common sense and a good education finally hit
you ... your post, above, is going to be a real embarrassment ... :-(

Regards,
JS

5112. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 02:32:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh4r3q$6fq$3@news.albasani.net>
Source record: 19386

Richard Clark wrote:

> ...
> and he made it more difficult by not saying it in English (just
> another example of information suppression by churches if we are to
> keep even slightly on topic).
>
> 73's
> Richard Clark, KB7QHC

Ahh, Richard, you again ...

If not for idiots, such as you, my life would grow boring ... but then,
you already know that ... <BIG smile>

Regards,
JS

5113. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 02:35:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh4r8s$6fq$4@news.albasani.net>
Source record: 19387

JB wrote:

> ...
> Are you always this whimsical? I would point you to Acts chapter 2 but you
> obviously haven't read any of the Bible or have no reading comprehension.
> If you were taught that someone's opinion is more important than your own
> investigation, you are misled. Perhaps you haven't been in a book store
> lately. If you are skeptical of the translation, bravo! You understand
> that men can fail. Get a parallel Bible and see how closely the meaning
> follows. You will find instances of references of what was to come, and
> what has very nearly completed.
>

The idiot is entertaining, if nothing else, huh? But, little use to
most here ... :-(

Regards,
JS

5114. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 02:36:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh4rbg$6fq$5@news.albasani.net>
Source record: 19388

Richard Clark wrote:

> ...
> So much for testifying, thanx for the Acts of omission.
>
> 73's
> Richard Clark, KB7QHC

Yanno, this past week, I was devoid of idiots ... I had to come her for
my "idiot ration", thanks ... :-)

Regards,
JS

5115. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 02:40:19 UTC
From: "The Honorable Dr. Rocky Roads Presiding Judge" <wookiee@att.net>
Message-ID: <g4WdnTene8G9bKjUnZ2dnUVZ_sbinZ2d@giganews.com>
Source record: 19389
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"Douglas W. "Popeye" Frederick" <Popeye@finalprotectivefire.com> wrote in
message news:vuidnbR1n4dCRKjUnZ2dnUVZ_t_inZ2d@supernews.com...
>
> Thanks, but don't put too much stock in the idiot.

You sure put a lot of stock into the idiots Dave Ruff, Shawn and
realitytrasher and the lies you post prove that asshole.

So why are you calling anybody else an idiot when you put so much stock into
Idiots just like Dave Ruff, Shawn realitytrasher and John/nightruanch do?

More at:
http://MTT.JusticeGoneWild.com

5116. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 03:43:18 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <7oednZt5R875navUnZ2dnUVZ_vudnZ2d@supernews.com>
Source record: 19390
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"richard" <member@newsguy.com> wrote in message
news:f95bj4pt0394g3bbpkmeporoblkk1kqdpt@4ax.com...
> On Tue, 2 Dec 2008 14:51:28 -0500, "Douglas W. \"Popeye\" Frederick"
> <Popeye@finalprotectivefire.com> wrote:
>
>>"Zeke" <noway@fart.ad> wrote in message news:gh40qigti1@aioe.org...
>>> uuuuhhhh..... you're wrong as usual Bullishit.
>>>
>>> Top was <career> Military and got his commo expertise there. IIRC he's
>>> not a truck driver at all.
>>
>>
>> Exactly, a matter of public record here that Richard has seen several
>>times previously, and just forgot.
>
>
> Since this thread is going to groups who do not know me, I will try to
> clairify the lies here.

<snicker>

>> Here's Richard's esteemed military career (and how he was caught lying
>>about it): http://bolo_bullis.tripod.com/
>
> First, that is an exact copy of my dd214 acquired under the FOIA.
> It states I served. Unlike the lies that promulgate from it that says
> I did not.
> 2nd, why is the word before "discharge" blacked out?

No one wonders "why".

You've had three or four decades to get a new one, and you don't, and
we -know- why.

>That was not done
> by the US goverment. It was done to make it look more damning.
> I never claimed to be anything I was not. I said I never got beyond
> boot camp and my highest rank was E1. The dd214 confirms that.
> I said I had enlisted for the ASA but never got involved with it.
> While others claimed I had claimed to be super secret spy or in
> special forces. Most of those lies were all created by "Just Taylor".
>
>>
>> What's amazing is that Richard and I were just discussing what a total,
>>absolute and complete asshole he makes himself look like every time he

>>tries
>>to make himself look tough or smart at anyone's expense.
>
> I'm not saying I am smarter than many, in this thread I have been
> trying to point out that a lot of information given in this thread is
> totally wrong. As have others. Why don't you pick on them, asshole.

But whether you're right or wrong, Richard, you can't state anything without a demeaning attack on others, usually embarrassingly incorrect, like you just did to Top.

It's because of your angst and poor self-esteem, probably because of the inbreeding.

And not man enough to correct yourself, from your flagrantly idiotic rant about Top being "billy bigrigger" (when he doesn't drive truck), a term you use frequently, that describes, well, you and Roger, more than anyone else here.

If Top was wrong, you could have -easily- made your point without being abrasive, as others did, yet you attacked.

Which is why -you're- always attacked.

Because you DESERVE it, Richard.

You actively -earn- the animosity of others, because you CAN'T KEEP YOUR FUCKING MOUTH SHUT.

>> Of course he can't hear a word of that, and immediately starts this.
>>
>> Richard, who is also a career pedophile and damn proud of it, has had,
>> and
>>will always have, the same problem, and that's that he just can't keep his
>>festering gob shut.
>
> Pedophile being defined here

No, Richard.

No.

Not "pedophile being defined" however it's convenient to you.

Pedophile -has- a definition, and I've posted it many times, with your grossly inapropriate posting history.

It's a matter of -permanent- record, Richard, and you can't spin puppy shit into butterscotch pudding.

>as a person who others claim is a
> pedophile because the damning word sticks to more feeble brains than
> any other word. No one has ever proven, in 10 years, that I am, have
> been, or currently am, a true pedophile. It's nothing more than ill
> words on a screen.

>
>>
>> What amazes me is that he's skunked a dozen usenet groups over the
>> years,
>>is internationally know as a scumbag, but still sees the world through his
>>own rose colored glasses, like we might have forgotten his previous and
>>extensive bombast and flummery.
>
> While shitheads like you keep wanting to let the world know about the
> past anyway they can. No proof, just a lot of hot air.

I just state the facts, -with- the proof.

You're the one with the revolving definitions and X-files DD214.

You could clear that discharge up -anytime-, and choose to make excuses
instead.

We -know- why, Richard.

>> Funny, or sad?
>
> Sad boy you are

If I was any happier, I'd have to be -two- people.

>and you wore a uniform?

Yeah, for an entire enlistment, imagine that.

I know that's a foriegn concept to you.

>God help us all.

Worry about yourself, dude.

--
Popeye
"Best thing for him, really. His therapy
was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

5117. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 03:52:11 UTC
From: "Douglas W. \"Popeye\" Frederick" <Popeye@finalprotectivefire.com>
Message-ID: <ZcudnSqUOLjhn6vUnZ2dnUVZ_vednZ2d@supernews.com>
Source record: 19391
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"richard" <member@newsguy.com> wrote in message
news:996bj49erlba84drgscfafal8nc89mpmgf@4ax.com...
> On Tue, 2 Dec 2008 10:29:49 -0800, dplatt@radagast.org (Dave Platt)
> wrote:
>
>>In article <W46dnbfJTIiCcqnUnZ2dnUVZ_rfinZ2d@supernews.com>,
>>Douglas W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com> wrote:
>>
>>> But hhhhhere's a question for the braintrust:
>>>
>>> I'm after a (mobile) VHF radio that's common to northern (i.e., the
>>> Yukon,
>>>and Northwest Territories) Canadian truckers- who don't monitor CB bands.
>>>
>>> (info:) http://forums.qrz.com/showthread.php?t=171741
>>>
>>> I'm sure, as a sine wave challenged layman, that I can't use the same
>>>antenna and coax as my CB?
>>
>>In principle, you could combine the CB output (27 MHz) with the VHF
>>radio output (up above the 2-meter band) using a diplexer, and feed
>>the result down a single coax.
>>
>>At the antenna end, you'd have a couple of choices. You can use
>>another diplexer to split out the HF and VHF signals, and feed them to
>>two separate antennas. Or, you might be able to find a single CB-type
>>antenna which is also capable of matching up well enough on these VHF
>>frequencies to work tolerably well.
>>
>>The chances are very poor that a randomly-selected CB antenna would
>>give you a tolerable SWR on the 160-or-so-MHz VHF band... and if it
>>did, there's no telling what its vertical radiation pattern would look
>>like. An antenna intended for these two bands would probably have to
>>be custom designed - I can think of a couple of possible ways to do
>>it. Such a dualband antenna would almost certainly be a compromise
>>antenna on both bands - it wouldn't work as well as separate antennas
>>designed for best operation on a single band each.
>>
>>Commercial HF/VHF diplexers run somewhere around $80, last time I
>>looked. You'd probably find it less expensive in the end to just run
>>a second coax and put up a second (VHF-only) whip antenna.
>
> Trust me. he has no clues as to what you just said.

Not a fuckin clue, Richard, and not ashamed to admit it.

What ever it is, I can learn it, teach it to myself.

I'm not afraid to ask questions, like the one that set you off on this rant, and I'm not afraid to ask for help.

It's -easy- when you're a man.

> This fool wants to run a vhf radio in Canada just to talk to Canadian
> truckers.

That's all in your mind, a baseless lie you repeat with no evidence.

I've stated, clearly and concisely, what the radio is for.

It's your projection of your own actions that leaves you apoplectic.

I'm sure when you're on the radio that you irritate working drivers for miles, till they won't respond to you anymore, and then you key the mike on pathetic country music.

Since -you- do that, -everybody- must...

>He thinks those radios can be bought and used just like a
> CB.

Well, sort of, yes.

My CB is illegal too... ;-)

And no one gives a -damn-.

My 78 Suburban has a ten meter radio and a boat radio in it, neither with a license, for twenty years now.

> As I have operated radios on 47mhz, held a 2nd class fcc license, I
> think I know a lot more than he does.

No one cares.

Still waiting for you, 10 posts later, to provide some actual information instead of the screeching and wailing.

--
Popeye
"Best thing for him, really. His therapy
was going nowhere," -Hannibal Lector.

www.finalprotectivefire.com
http://picasaweb.google.com/Popeye8762

5118. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 04:47:33 UTC
From: JB <nospam@goofball.net>
Message-ID: <FboZk.2563$us6.1822@nwrddc01.gnilink.net>
Source record: 19392

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gh4r08$6fq$2@news.albasani.net...
> JB wrote:
>
> > ...
> > None of this disproves the idea that the universe is created along with
the
> > laws of physics and the bio-chemical engines that conform to the will of
> > God. Let's face it, science doesn't disprove creation theory at all.
It
> > simply tries to explain and make use of what we are provided with.
Doesn't
> > mean we shouldn't give thanks.
> >
> > The Bible explanation of creation isn't more specific than what was
> > appropriate for a developing intellect. Any one with any true intellect
> > will be in awe with the realization that all of the laws of Physics, the
> > extremely refined and complex Bio-Chemical engines that contribute to
life
> > in all its forms, and the extreme odds against a planet with the narrow
> > margin of environmental conditions, all would fit the definition of the
> > greatest miracle known. To be known by the only species enabled to know
it.
> >
> > Whereas we struggle to understand where we are and what we are capable
of in
> > the here and now (and fall miserably short) The Bible actually dares to
and
> > does predict the future and stands as the most insightful understanding
of
> > our past, our nature, and hope for the future.
> >
> > I can certainly understand how people could have a beef with "religion".
> > After all, the Bible even warns us of superstitious people, God haters,
> > hypocrites. Jesus himself warns in his parables that many would be
among
> > the righteous planted by the enemy to discourage, usurp and mislead.
Who
> > doesn't know of those in a group that gossip and tear down others. It's
> > like a boat on the ocean and some are chopping up the main mast for
firewood
> > because they just want to be comfortable, while some are chopping a hole
in
> > the hull because they are curious of what is on the other side and have

no
> > discipline or forethought. He never said it would be easy.
> >
>
> Man, when good reasoning, common sense and a good education finally hit
> you ... your post, above, is going to be a real embarrassment ... :-(
>
Is that a threat?
Let me know when you have proved that rocks came out of nothing,
spontaneously. Then prove life sprang up out of rocks, then prove you
sprang up out of that. You have a long way to go in your religion. In any
case, good reasoning, common sense and good education Left the country long
ago. The dating issue is the only real point of contention, but the Bible
doesn't really specify a date for creation or if it refers to the whole
universe or to our solar system or out world. The specific details of
creation, as in how it was accomplished just aren't there. It's easy for
you to say billions because no one you know was there. My point is:
Science can't prove so you shouldn't slam the book shut just yet.

When you meet your maker, you will have more than your ego to worry about.

5119. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 04:56:02 UTC
From: JB <nospam@goofball.net>
Message-ID: <CjoZk.2567$us6.1826@nwrddc01.gnilink.net>
Source record: 19393

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gh4r08$6fq$2@news.albasani.net...
> JB wrote:
>
> > ...
> > None of this disproves the idea that the universe is created along with
the
> > laws of physics and the bio-chemical engines that conform to the will of
> > God. Let's face it, science doesn't disprove creation theory at all.
It
> > simply tries to explain and make use of what we are provided with.
Doesn't
> > mean we shouldn't give thanks.
> >
> > The Bible explanation of creation isn't more specific than what was
> > appropriate for a developing intellect. Any one with any true intellect
> > will be in awe with the realization that all of the laws of Physics, the
> > extremely refined and complex Bio-Chemical engines that contribute to
life
> > in all its forms, and the extreme odds against a planet with the narrow
> > margin of environmental conditions, all would fit the definition of the
> > greatest miracle known. To be known by the only species enabled to know
it.
> >
> > Whereas we struggle to understand where we are and what we are capable
of in
> > the here and now (and fall miserably short) The Bible actually dares to
and
> > does predict the future and stands as the most insightful understanding
of
> > our past, our nature, and hope for the future.
> >
> > I can certainly understand how people could have a beef with "religion".
> > After all, the Bible even warns us of superstitious people, God haters,
> > hypocrites. Jesus himself warns in his parables that many would be
among
> > the righteous planted by the enemy to discourage, usurp and mislead.
Who
> > doesn't know of those in a group that gossip and tear down others. It's
> > like a boat on the ocean and some are chopping up the main mast for
firewood
> > because they just want to be comfortable, while some are chopping a hole
in
> > the hull because they are curious of what is on the other side and have

no
> > discipline or forethought. He never said it would be easy.
> >
>
> Man, when good reasoning, common sense and a good education finally hit
> you ... your post, above, is going to be a real embarrassment ... :-(
>
Sorry from some difficult sentences but I'm sure you can sound it out ok.

5120. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 05:11:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh54dkddu1@news.albasani.net>
Source record: 19394

JB wrote:

>> ...
> Is that a threat?
> Let me know when you have proved that rocks came out of nothing,
> spontaneously. Then prove life sprang up out of rocks, then prove you
> sprang up out of that. You have a long way to go in your religion. In any
> case, good reasoning, common sense and good education Left the country long
> ago. The dating issue is the only real point of contention, but the Bible
> doesn't really specify a date for creation or if it refers to the whole
> universe or to our solar system or out world. The specific details of
> creation, as in how it was accomplished just aren't there. It's easy for
> you to say billions because no one you know was there. My point is:
> Science can't prove so you shouldn't slam the book shut just yet.
>
> When you meet your maker, you will have more than your ego to worry about.
>

Brother, at 6' 2" I make no threats ... all you see is me for a few seconds ... I don't play games. I don't intimidate, if you stand in my presence, you will know it. So, get past that jerk, this is simply all about text and discussion ...

You are an idiot in my book. I will not attempt to hide that from your. Your arguments are shallow and repeat those make over decades ... if you can do nothing else, could you at least attempt to be entertaining, please?

Bible? I don't remember I ever mentioned that ... what I am talking about is pure logic. Remember maggots and spontaneous generation? Is this what you once more propose? ROFLOL!!!!!!!!!!!!!!!!!!

IDIOTS! A dime a dozen, I tell ya ...

Regards,
JS

5121. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 05:15:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh54m9ddu2@news.albasani.net>
Source record: 19395

JB wrote:

>> ...
> Is that a threat?
> Let me know when you have proved that rocks came out of nothing,
> spontaneously. Then prove life sprang up out of rocks, then prove you
> sprang up out of that. You have a long way to go in your religion. In any
> case, good reasoning, common sense and good education Left the country long
> ago. The dating issue is the only real point of contention, but the Bible
> doesn't really specify a date for creation or if it refers to the whole
> universe or to our solar system or out world. The specific details of
> creation, as in how it was accomplished just aren't there. It's easy for
> you to say billions because no one you know was there. My point is:
> Science can't prove so you shouldn't slam the book shut just yet.
>
> When you meet your maker, you will have more than your ego to worry about.
>

Brother, at 6' 2" I make no threats ... all you see is me for a few seconds ... I don't play games. I don't intimidate, if you stand in my presence, you will know it. So, get past that jerk, this is simply all about text and discussion ...

You are an idiot in my book. I will not attempt to hide that from you. Your arguments are shallow and repeat those made over decades ... if you can do nothing else, could you at least attempt to be entertaining, please?

Bible? I don't remember I ever mentioned that ... what I am talking about is pure logic. Remember maggots and spontaneous generation? Is this what you once more propose? ROFLOL!!!!!!!!!!!!!!!!!!

IDIOTS! A dime a dozen, I tell ya ...

Regards,
JS

5122. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 05:27:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh55baelt1@news.albasani.net>
Source record: 19396

JB wrote:

> Is that a threat?
> ...

Yanno'? Dummy, the last time I had to have a physical altercation was in 1999 ... a lady had her purse snatched, I had to run the guy down and physically take it back, he didn't offer it ... she thanked me, she was nice ...

Everyone else in life thinks me a nice guy, I like it that way ... :-)

Regards,
JS

5123. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 05:37:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh55vk$f8r$1@news.albasani.net>
Source record: 19397

JB wrote:

>> ...
> Sorry from some difficult sentences but I'm sure you can sound it out ok.
>

Absolutely, from my background in education ... you wouldn't even begin
to believe what I know about you, you tell it all, the omissions are
equally as important as the details you provide ... but then, you SHOULD
already have know that ... don't even bother consider such in the future
... please.

Regards,
JS

5124. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 05:40:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh563p$f8r$2@news.albasani.net>
Source record: 19398

Art Unwin wrote:

> ...
> Problem there Cecil is the windmill effect
> on the rotor. Even tv antennas in the Midwest get a hammering
> while power generastor windmills are sprouting all over the place
> to harvest same. One of these huge windmills lost one of its blades a
> short time ago

Hardware cloth, cheap, indestructible, easy, widely-available, etc. ...
don't under rate it!

Regards,
JS

5125. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 05:41:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh565i$f8r$3@news.albasani.net>
Source record: 19399

JB wrote:

>> ...
> Sorry from some difficult sentences but I'm sure you can sound it out ok.
>

Absolutely, from my background in education ... you wouldn't even begin
to believe what I know about you, you tell it all, the omissions are
equally as important as the details you provide ... but then, you SHOULD
already have know that ... don't even bother considering such in the future
... please.

Regards,
JS

5126. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 05:44:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh56ca$f8r$6@news.albasani.net>
Source record: 19400

John Navas wrote:

>> ...
> "Alligator effect" ...

Brings to mind "Alligator Stations" I have contacted in the past--BIG
mouth (large power amplifer) no ears (poor reception on their ends) ...
<grin>

Regards,
JS

5127. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 09:05:38 UTC
From: NightRogue <nospam@nospam.com>
Message-ID: <CZrZk.407495$TT4.31958@attbi_s22>
Source record: 19301
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"The Honorable Dr. Rocky Roads Presiding Judge" <wookiee@att.net> wrote in
message news:g4WdnTene8G9bKjUnZ2dnUVZ_sbinZ2d@giganews.com...
>
> "Douglas W. "Popeye" Frederick" <Popeye@finalprotectivefire.com> wrote in
> message news:vuidnbR1n4dCRKjUnZ2dnUVZ_t_inZ2d@supernews.com...
> >
> > Thanks, but don't put too much stock in the idiot.
>
> You sure put a lot of stock into the idiots Dave Ruff, Shawn and
> realitytrasher and the lies you post prove that asshole.
>
> So why are you calling anybody else an idiot when you put so much stock
into
> Idiots just like Dave Ruff, Shawn realitytrasher and John/nightruanch do?
>
> More at:
> http://MTT.DogwasherGoneWild.com

Quit your crying and get over your loss coward, and just go and buy a new
boyfriend doll..

5128. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 12:14:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <yKuZk.7403$as4.6020@nlpi069.nbdc.sbc.com>
Source record: 19302

John Smith wrote:
> Hardware cloth, cheap, indestructible, easy, widely-available, etc. ...
> don't under rate it!

Also makes a good top hat.
--
73, Cecil http://www.w5dxp.com

5129. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 15:27:46 UTC
From: JB <nospam@goofball.net>
Message-ID: <SzxZk.2529$QX3.513@nwrddc02.gnilink.net>
Source record: 19303

> Absolutely, from my background in education ... you wouldn't even begin
> to believe what I know about you, you tell it all, the omissions are
> equally as important as the details you provide ... but then, you SHOULD
> already have know that ... don't even bother considering such in the
future
> ... please.
>
> Regards,
> JS

Sorry OM you kept dropping out.

5130. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 15:54:24 UTC
From: JB <nospam@goofball.net>
Message-ID: <QYxZk.2618$us6.2216@nwrddc01.gnilink.net>
Source record: 19304

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gh55baelt1@news.albasani.net...
> JB wrote:
>
> > Is that a threat?
> > ...
>
> Yanno'? Dummy, the last time I had to have a physical altercation was in
> 1999 ... a lady had her purse snatched, I had to run the guy down and
> physically take it back, he didn't offer it ... she thanked me, she was
> nice ...
>
> Everyone else in life thinks me a nice guy, I like it that way ... :-)
>
> Regards,
> JS

So, you're a legend in your own mind. Your reactivity by the way indicates you have belligerent tendencies and probably a fascist. The multiple posting may very well mean that you take quite a while to calm down to sanity when you flip out. Work on that or everyone will know where your buttons are and you will be too easily manipulated. But then, you might not have a job unless you were easily manipulated. Another paradox.

Teachers, God bless them, have the position where they assemble knowledge that has been passed to them and must unquestioningly accept that knowledge or take considerable time out to investigate that knowledge themselves. It is a major paradox. There once was an old saying, but it is too unkind. I would like to rephrase it; Those who do, do and those who teach, don't have time to do.

5131. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 19:15:49 UTC
From: You <you@shadow.orgs>
Message-ID: <you-C70C7A.10161003122008@netnews.worldnet.att.net>
Source record: 19305

In article <yKuZk.7403$as4.6020@nlpi069.nbdc.sbc.com>,
Cecil Moore <nospam@w5dxp.com> wrote:

> John Smith wrote:
> > Hardware cloth, cheap, indestructible, easy, widely-available, etc. ...
> > don't under rate it!
>
> Also makes a good top hat.

but not as good as Good Old Tinfoil, for stopping Alien Mind Probes.....

5132. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 20:19:01 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b2bf1071-f182-46df-854c-298753ae2254@g38g2000yqn.googlegroups.com>
Source record: 19306

On Dec 3, 6:14 am, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith wrote:
> > Hardware cloth, cheap, indestructible, easy, widely-available, etc. ...
> > don't under rate it!
>
> Also makes a good top hat.
> --
> 73, Cecil http://www.w5dxp.com

Cecil
The antenna will be capable of use on ALL frequency so I will be able
to observe the ups and downs of the reflectors applicability when I
get it up.
7 inches of snow with two more clippers on the way has put a crimp in
my immediate plans
My thinking is that as the antenna is end fed the need for extra large
size reflecter goes out the windown
as the reflector may perform as a flux guide similar to a long
solenoid. This is new ground so I do not
want to nickel and dime it to death until I have more experience under
my belt. Present dish
education is heavily weighted to phase methods used in planar designs
or alternatively solely on VHF,
the later being slanted designs via pitch and other factors that do
not apply in my case. since my
design evolves around equilibrium . I would also point out that some
of Kraus's work is being thrashed
with respect to gain and may well extend to use of deductions instead
of observables which was heavily used
in empirical gains with respect to pitch angles. Bottom line at the
moment is that the antenna for top band
be light and small enough for me to handle on the towerand on the
ground without the need for me use my prop pitch rotor,
which by itself is a handfull or to call for additional help. If I
can't handle it alone then it defeats my original object with respect
to
small antennas without the normal compromises with respect to
electrical wavelength.
That ofcourse does not rule out diode action in the short run with
respect to poultry fence mesh as a reflector.
Regards
Art

5133. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 20:35:02 UTC
From: Top <top@neo.rr.invalid>
Message-ID: <Xns9B699E902E61Btopneorrinvalid@130.133.1.4>
Source record: 19307
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

richard <member@newsguy.com> wrote in
news:cpqaj45pnt8bn7ao582pgkfekau4nmqsm9@4ax.com:

> On Mon, 1 Dec 2008 23:55:02 -0800, dplatt@radagast.org
> (Dave Platt) wrote:
>
>>In article <Xns9B68CB1835A9topneorrinvalid@130.133.1.4>,
>>Top <top@neo.rr.invalid> wrote:
>>
>>>Cophase being omindirectional? You need to do some more
>>>reading before you try to correct anything.
>>
>>The directionality of a broadside array (with the two
>>radiators fed exactly in phase) depends very strongly on
>>the separation between the two antennas. For separations
>>of 1/4 wavelength or less, there's very little
>>directionality - the pattern is very close to
>>omnidirectional.
>>
>>Every dual-antenna truck setup I've seen has been a
>>side-by-side mounting (e.g. one on the left mirror and one
>>on the right), and the harness feeds them both in-phase.
>>I've been assuming that this was what was being meant by
>>"co-phase".
>>
>>If so, I stand by my statement that two CB antennas, fed in
>>phase through a co-phase harness (i.e. no phase difference
>>between the two), and separated by only 54 inches, produces
>>a nearly-omnidirectional signal. The two antennas need to
>>be further apart, before the pattern becomes significantly
>>directional.
>>
>>Take a look at the NEC plots at
>>http://www.cosjwt.com/index.php?a=20 to see... the 4.5-foot
>>separation model produces a pattern which is almost
>>circular. There is little gain towards the front and back,
>>and very little loss off to the sides. These plots seem to
>>jibe well with other references I've read (Terman, Kraus,
>>and the graphs in the ARRL Antenna Book).
>>
>>The other alternative is an end-fire array, with the
>>antennas fed signals of opposite phase - with these then
>>there can be significant directionality even with close

>>spacing of the antennas. In a truck-antenna system, this
>>would require placing the antennas one in front of the
>>other, separating them by several feet, and inverting the
>>phase of the signal sent to one of the two antennas
>>(perhaps by having the feed coax to one antenna be
>>1/2-wavelength longer than the other). You could get
>>several dB of gain this way... but the close spacing will
>>cause the antenna feedpoint impedance to drop a lot, and
>>some form of matching network will certainly be required to
>>keep the radio happy and develop maximum power from the
>>transmitter.
>>
>>The two bottom plots on the site I mentioned above, show
>>the effect of feeding the antennas with signals of
>>different phase. In these examples, the pattern is being
>>skewed off to one side - the difference in feedline length
>>is converting the antenna from a broadside array to an
>>end-fire array. With the right amount of phase shift, you
>>end up with a cardioid pattern, with a broad lobe in one
>>direction and a very deep null in the other.
>
> Ya gots to understand with whom you are trying to
> communicate. "Top" is the master know it all who has
> absolutely no background in electronics. He just drives a
> truck and thinks that gives him the knowledge. You've heard
> of "Billy Big Rigger"? You just met the dude. Top just goes
> along with what other truckers have said over the years.
>
> I have the actual working experience to back me up with.
> The only thing Top knows about CB is how to yack on it.
>
>

Dave let's agree to our own experiences.

Now to Richard

You forgot who you are talking to again. Nothing unusual for
you to get things wrong. I don't drive a truck unless you are
talking about a pickup. As far as electronics backround I was
in communications in the Army. I spent a good bit of time in
the field in sitiuations where I had no backup so I had to
know enough to make things work when they broke. I don't mean
simple backpack radios either. Then there was the year I spent
teaching radio wave propagation. Another year teaching
programming small and meduim size telephone switches. In 2005
(well after I had retired) I spent the year assembling boards
to build MRI machines. If you think I have no electronics
knowledge then as usual you brain is no bigger than you little
toe.

5134. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 20:57:14 UTC
From: Top <top@neo.rr.invalid>
Message-ID: <Xns9B69A253682A6topneorrinvalid@130.133.1.4>
Source record: 19308
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

```
richard <member@newsguy.com> wrote in
news:dlqaj45820fa9r9kdsoucauakg1l4h1pn5@4ax.com:

> On 2 Dec 2008 06:15:20 GMT, Top <top@neo.rr.invalid> wrote:
>
>>dplatt@radagast.org (Dave Platt) wrote in
>>news:acve06-bei.ln1@radagast.org:
>>
>>> In article
>>> <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>, Douglas
>>> W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com>
>>> wrote:
>>> I suspect you'd get more bang for your buck by simply
>>> mounting a single antenna in a better location (e.g. roof
>>> mount) and paying attention to making the antenna's
>>> grounding to the chassis/groundplane as direct and solid
>>> as possible.
>>>
>>
>>Cophase being omindirectional? You need to do some more
>>reading before you try to correct anything.
>
>
>
> IF the cophased antennas are less than 1/4 wave apart,
> there is virtually no change.
>

I love it when you make an ass of yourself.
```

5135. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 21:28:28 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <5OCZk.8028$D32.1897@flpi146.ffdc.sbc.com>
Source record: 19309

Art Unwin wrote:
> 7 inches of snow with two more clippers on the way has put a crimp in
> my immediate plans

Hmmmmm, I don't seem to have that problem here in
East Texas. Y'all come on down.
--
73, Cecil http://www.w5dxp.com

5136. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 21:32:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <0SCZk.8029$D32.416@flpi146.ffdc.sbc.com>
Source record: 19310
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

Top wrote:
> richard <member@newsguy.com> wrote:
>> IF the cophased antennas are less than 1/4 wave apart,
>> there is virtually no change.
>
> I love it when you make an ass of yourself.

The ARRL Antenna Book says that with 1/8WL spacing,
one can achieve 4.1 dB gain with a high F/B ratio.
--
73, Cecil http://www.w5dxp.com

5137. Wire antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 21:43:59 UTC
From: Butcherman <kd3yt123@atlanticbb.net>
Message-ID: <a2c87a3b-43bd-44ea-8b21-4bb7528215d3@l39g2000yqn.googlegroups.com>
Source record: 19311

Recently got back into radio after 15 year absence..... Have a
question for you antenna gurus. I want to put up a 135 foot doublet.
Question is: Does it need to be supported in the middle? The layout of
my property has no support for the middle of the antenna.

5138. Re: Wire antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 22:16:44 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <fzDZk.6101$hc1.895@flpi150.ffdc.sbc.com>
Source record: 19312

Butcherman wrote:
> Recently got back into radio after 15 year absence..... Have a
> question for you antenna gurus. I want to put up a 135 foot doublet.
> Question is: Does it need to be supported in the middle? The layout of
> my property has no support for the middle of the antenna.

Actually, the two end supports which tend to make the
antenna horizontal are more useful than a single
center support for an inv-V. Short answer is "no", you
don't need a center support.
--
73, Cecil http://www.w5dxp.com

5139. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-03 23:33:37 UTC
From: dplatt@radagast.org
Message-ID: <hjhj06-fkl.ln1@radagast.org>
Source record: 19313
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

In article <0SCZk.8029$D32.416@flpi146.ffdc.sbc.com>,
Cecil Moore <nospam@w5dxp.com> wrote:

>>> IF the cophased antennas are less than 1/4 wave apart,
>>> there is virtually no change.

>> I love it when you make an ass of yourself.

>The ARRL Antenna Book says that with 1/8WL spacing,
>one can achieve 4.1 dB gain with a high F/B ratio.

Cite, please? For which antenna configuration and phasing?

I believe that the high (4.1 dB) figure you are quoting is for an end-fire array, with the two antennas being fed 180 degrees out of phase. Good gain, but somewhat tricky to feed and match due to the low feedpoint impedance and the potential for high losses.

In a truck-antenna situation this would require placing the antennas in a front/back arrangement, not side-to-side. I'm told that this is rarely feasible.

The usual two-antenna truck arrangement I've seen is with antennas side-to-side (one on each rear-view mirror), fed in phase. This is a broadside array, not an end-fire array.

From all I can see (ARRL Antenna Book, Kraus, Terman), a two-radiator in-phase broadside array doesn't start to achieve significant gain (and pattern non-circularity) until you have at least 3/8 wavelength of separation between the radiators. A 1/4-wave separation yields only around 1.1 dB of gain, which (by my calculations) works out to about a 15% increase in useful range in the preferred direction.

My book's at home, but my recollection is that you can't get 4.1 dB of gain out of a two-radiator in-phase broadside array until you have more than 1/2 wavelength of distance between the radiators.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5140. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 03:52:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh7k62gnq1@news.albasani.net>
Source record: 19314

Cecil Moore wrote:
> Art Unwin wrote:
>> 7 inches of snow with two more clippers on the way has put a crimp in
>> my immediate plans
>
> Hmmmmm, I don't seem to have that problem here in
> East Texas. Y'all come on down.

We have heard rumors of that stuff here in California ... ;-)

Regards,
JS

5141. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 04:09:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh7l61hnk1@news.albasani.net>
Source record: 19315

Art Unwin wrote:

> Cecil
> The antenna will be capable of use on ALL frequency so I will be able
> to observe the ups and downs of the reflectors applicability when I
> get it up.
>> ...
> Regards
> Art

It would seem to me, there are but two ways to couple to the ether,
either capacitively or inductively, if such is even possible (there
could be "something else", who knows?)

At a certain ratio of capacitance to inductance, in the design of an
antenna, that "magical/mystical value" of 477 ohms would be reached.

However, you emphasize the inductive coupling ... I see other antennas
emphasizing e and h fields and all sorts of stuff in between.

In all this mumbo-jumbo something may, indeed, exist ... to date, "I
just don't get it" ...

Regards,
JS

5142. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 04:22:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh7lup$ib6$1@news.albasani.net>
Source record: 19316

JB wrote:

> ...
> So, you're a legend in your own mind. Your reactivity by the way indicates
> ...

No, actually not. However, as your text indicates, I "AM SOMETHING" you
don't see in your ghetto, thanks for the "heads-up." People DO tend to
be a product of their environment ... again, reflected in your text.

Regards,
JS

5143. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 04:24:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh7m1e$ib6$2@news.albasani.net>
Source record: 19317

JB wrote:

> ...
> Sorry OM you kept dropping out.
>

Hmmm, "check the equipment on that end", obviously you have a loose connection--somewhere. :-)

Regards,
JS

5144. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 06:00:58 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <_nKZk.8504$x%.2184@nlpi070.nbdc.sbc.com>
Source record: 19318
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

```
Top wrote:
> richard <member@newsguy.com> wrote in
> news:dlqaj45820fa9r9kdsoucauakg1l4h1pn5@4ax.com:
>
>> On 2 Dec 2008 06:15:20 GMT, Top <top@neo.rr.invalid> wrote:
>>
>>> dplatt@radagast.org (Dave Platt) wrote in
>>> news:acve06-bei.ln1@radagast.org:
>>>
>>>> In article
>>>> <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>, Douglas
>>>> W. \"Popeye\" Frederick <Popeye@finalprotectivefire.com>
>>>> wrote:
>>>> I suspect you'd get more bang for your buck by simply
>>>> mounting a single antenna in a better location (e.g. roof
>>>> mount) and paying attention to making the antenna's
>>>> grounding to the chassis/groundplane as direct and solid
>>>> as possible.
>>>>
>>> Cophase being omindirectional? You need to do some more
>>> reading before you try to correct anything.
>>
>>
>> IF the cophased antennas are less than 1/4 wave apart,
>> there is virtually no change.
>>
>
> I love it when you make an ass of yourself.
>

Unfortunatly for you he is correct about cophased antennas less than 1/4
lambda. What the antennas do is to merge the distorted wave patterns
of each antenna into one pattern. Each antenna displays a slightly
distorted pattern that favors the side of your truck that it is mounted
on. The two patterns equal one centered pattern.

Dave N
```

5145. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 06:03:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1c1cd116-457b-4bb1-b56e-40dc2fad0595@z1g2000yqn.googlegroups.com>
Source record: 19319

On Dec 3, 10:09 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > Cecil
> > The antenna will be capable of use on ALL frequency so I will be able
> > to observe the ups and downs of the reflectors applicability when I
> > get it up.
> >> ...
> > Regards
> > Art
>
> It would seem to me, there are but two ways to couple to the ether,
> either capacitively or inductively, if such is even possible (there
> could be "something else", who knows?)
>
> At a certain ratio of capacitance to inductance, in the design of an
> antenna, that "magical/mystical value" of 477 ohms would be reached.
>
> However, you emphasize the inductive coupling ... I see other antennas
> emphasizing e and h fields and all sorts of stuff in between.
I don't emphasize inductive coupling, at least not with what I am
messing with now!
Inductive coupling infers planar antennas acting solely on
intercoupling of elements
while at the same time ignoring the edict of equilibrium that goes
with all laws of science
such that the effects of the "weak force" are ignored. With inter
coupling of elements
you only get approximations as the last element of any array
reradiates half of that
which it receives. Thus the array always needs another element
regardles of the number used
to obtain maximum radiation. In the case of array in equilibrium you
always reach finality
with respect to radiation. All very simple.
On the other hand this 477 ohms figure certainly is mystical to me,
what is the point you
are trying to make? Is it possible that the figure you are using is
bigger than you intended
by being larger than life itself

>
> In all this mumbo-jumbo something may, indeed, exist ... to date, "I
> just don't get it" .

I will take a wild guess here and assume there is some connection to
the
aether which is eternally on your mind. Well John for equilibrium the
aether is contained
within an arbitrary border. That means that all forces add up to zero,
a simple concept of Newton
which also means that the contents are not nothing or a vacuum what
ever that is in celestial terms otherwise the border collapses.
You must also realize that what is within the border must be in a
state of spin as well as being in equilibrium
where spin requires the present of matter. So now you have a basis on
which one can define the Aether
which is something other than nothing or a vacuum. Knowing that
particles flow thu this that is surrounded
by an arbitrary border one could possibly state that for every
addition of a transient particle another particle must
leave and since particles atract or repel that which is in circulation
in spin form must in fact be cluster form of particles.
So John let your mind have a smidgeon of freedom accepting what is
known and put things together the best way you can
so that you have a datum line to build on or change as knoweledge
increases which allows the addition of logic by the removal
of past theoretical assemblies.
All the above is material that you can use in your determination if I
am of sane mind or not. But first you must set your mind free
accepting only that which you can personally derive from first
principles as something that can be built upon.

Brrrrr it is geting cold
Goodnight
Art

..
>
> Regards,
> JS

5146. Re: Wire antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 06:07:00 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <CNednSZe7PLg7qrUnZ2dnUVZ_vKdnZ2d@giganews.com>
Source record: 19320

Butcherman wrote:
> Recently got back into radio after 15 year absence..... Have a
> question for you antenna gurus. I want to put up a 135 foot doublet.
> Question is: Does it need to be supported in the middle? The layout of
> my property has no support for the middle of the antenna.

It depends on how much sag you can tolerate. Less sag and/or more feedline
& antenna weight = greater tensioning.
Bryan WA7PRC

5147. Re: Wire antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 10:14:36 UTC
From: Edward Feustel <efeustel@hughes.net>
Message-ID: <cvafj4hcdknikbii0up5jbjmtju57fmug9@4ax.com>
Source record: 19321

On Wed, 3 Dec 2008 13:43:59 -0800 (PST), Butcherman
<kd3yt123@atlanticbb.net> wrote:

>Recently got back into radio after 15 year absence..... Have a
>question for you antenna gurus. I want to put up a 135 foot doublet.
>Question is: Does it need to be supported in the middle? The layout of
>my property has no support for the middle of the antenna.
KD3Y,
I have a 220 foot dipole with a substantial amount of dacron rope
to the end supports.

I use a 40lb box of Cat Litter on one end to terminate the rope
which runs through a pulley. Although I use lightweight feeder
spreaders, the center does dip some which might affect the
resonant frequency of the antenna, I use a tuner and the
antenna "works" on all bands.

If you don't use a setup like this, it is difficult to get enough
tension and prevent the tree supports from breaking the
antenna. The antenna, made of #10 copperweld, has
stayed up through a number of NE winters.
Regards,
Ed, N5EI

5148. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 11:31:04 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-0412080631040001@jbw-mac.itd.nrl.navy.mil>
Source record: 19322

In article <gh7k62gnq1@news.albasani.net>, John Smith
<assemblywizard@gmail.com> wrote:

> Cecil Moore wrote:
> > Art Unwin wrote:
> >> 7 inches of snow with two more clippers on the way has put a crimp in
> >> my immediate plans
> >
> > Hmmmmm, I don't seem to have that problem here in
> > East Texas. Y'all come on down.
>
> We have heard rumors of that stuff here in California ... ;-)
>
> Regards,
> JS

Yeah, and in Texas you get other stuff on your boots instead of snow ;-))
Sincerely, (hey I voted for that Texan who got to be POTUS),

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

5149. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 12:11:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <cOPZk.6134$hc1.5437@flpi150.ffdc.sbc.com>
Source record: 19323
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

Dave Platt wrote:
> I believe that the high (4.1 dB) figure you are quoting is for an
> end-fire array, with the two antennas being fed 180 degrees out of
> phase.

Actually 135 degree phasing and a cardioid pattern.
180 degree phasing results in a figure-8 pattern with
3.3 dB gain.

Was out of town during the holidays and didn't realize
that the earlier statement was limited to a side-by-side
configuration.

> In a truck-antenna situation this would require placing the antennas
> in a front/back arrangement, not side-to-side.

Yes, but what better place than the top of a metal
trailer? Years ago, I helped a CB friend in AZ install
one on his motor home with about 5 foot spacing if I
remember correctly. Measured front to side ratio was
huge.
--
73, Cecil http://www.w5dxp.com

5150. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 12:17:37 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <JTPZk.12974$Ws1.3209@nlpi064.nbdc.sbc.com>
Source record: 19324

John Smith wrote:
> At a certain ratio of capacitance to inductance, in the design of an
> antenna, that "magical/mystical value" of 477 ohms would be reached.

Rumors are that California is in a different universe.
Guess that "477 ohms" proves it. :-)
--
73, Cecil http://www.w5dxp.com

5151. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 12:21:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <MXPZk.12975$Ws1.10355@nlpi064.nbdc.sbc.com>
Source record: 19325

J. B. Wood wrote:
> Yeah, and in Texas you get other stuff on your boots instead of snow ;-))

Have you seen the "Ski Texas" poster? A guy skiing
down a pile of cow paddies. :-)
--
73, Cecil http://www.w5dxp.com

5152. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 12:50:40 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <5033cc68-c9f8-4320-9f98-f2e27a6cc6e8@d32g2000yqe.googlegroups.com>
Source record: 19326
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

On Dec 4, 7:11 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Dave Platt wrote:
> > I believe that the high (4.1 dB) figure you are quoting is for an
> > end-fire array, with the two antennas being fed 180 degrees out of
> > phase.
>
> Actually 135 degree phasing and a cardioid pattern.
> 180 degree phasing results in a figure-8 pattern with
> 3.3 dB gain.
>
> Was out of town during the holidays and didn't realize
> that the earlier statement was limited to a side-by-side
> configuration.
>
> > In a truck-antenna situation this would require placing the antennas
> > in a front/back arrangement, not side-to-side.
>
> Yes, but what better place than the top of a metal
> trailer? Years ago, I helped a CB friend in AZ install
> one on his motor home with about 5 foot spacing if I
> remember correctly. Measured front to side ratio was
> huge.
> --
> 73, Cecil http://www.w5dxp.com

That would be some pretty short antennas on top of a semi trailer.

I had an arrangement like that on a school bus turned RV many years
ago. It worked great until I found a low underpass in Waycross Ga.

Jimmie

5153. Re: Wire antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 14:03:56 UTC
From: ltdoc@yahoo.com
Message-ID: <e776c7d6-6d0b-4d01-8400-73b7603bfad8@j11g2000yqg.googlegroups.com>
Source record: 19327

To sort of sum things up, how your antenna is supported, center/ends, isn't going to make a lot of difference. Of course, building the thing strong enough to support it's own weight is a 'biggy'. Making it 'fit' the area you have to work with is also a 'biggy'. Then it's just a matter of 'making do' with what you got, sort of. Probably won't be the absolute bestest in the world, but so what, it'll work.
- 'Doc

(when you figure out where to place those 150 foot towers, and make the whole mess rotatable, THEN you can worry about it... right?)

5154. Re: Wire antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 16:04:07 UTC
From: Butcherman <kd3yt123@atlanticbb.net>
Message-ID: <ff94fafc-dd4e-4cd5-8329-c45ee2e7a350@s9g2000prg.googlegroups.com>
Source record: 19328

Thanks everyone. One thing I have in my garage is empty litter cans
that I can fill with sand and use!!
Hope to get antenna up in next couple of weeks. Right now I am running
a approx 40 foot doublet in my
garage roof, anxious to get the larger outside antenna up.

5155. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 17:31:27 UTC
From: Top <top@neo.rr.invalid>
Message-ID: <Xns9B6A7F68A7526topneorrinvalid@130.133.1.4>
Source record: 19329
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

"David G. Nagel" <nagel.david@sbcglobal.net> wrote in
news:_nKZk.8504$x%.2184@nlpi070.nbdc.sbc.com:

> Top wrote:
>> richard <member@newsguy.com> wrote in
>> news:dlqaj45820fa9r9kdsoucauakg1l4h1pn5@4ax.com:
>>
>>> On 2 Dec 2008 06:15:20 GMT, Top <top@neo.rr.invalid>
>>> wrote:
>>>
>>>> dplatt@radagast.org (Dave Platt) wrote in
>>>> news:acve06-bei.ln1@radagast.org:
>>>>
>>>>> In article
>>>>> <wtadnQM_KLwfMKnUnZ2dnUVZ_rmdnZ2d@supernews.com>,
>>>>> Douglas W. \"Popeye\" Frederick
>>>>> <Popeye@finalprotectivefire.com> wrote:
>>>>> I suspect you'd get more bang for your buck by simply
>>>>> mounting a single antenna in a better location (e.g.
>>>>> roof mount) and paying attention to making the
>>>>> antenna's grounding to the chassis/groundplane as
>>>>> direct and solid as possible.
>>>>>
>>>> Cophase being omindirectional? You need to do some more
>>>> reading before you try to correct anything.
>>>
>>>
>>> IF the cophased antennas are less than 1/4 wave apart,
>>> there is virtually no change.
>>>
>>
>> I love it when you make an ass of yourself.
>>
>
> Unfortunatly for you he is correct about cophased antennas
> less than 1/4
> lambda. What the antennas do is to merge the distorted
> wave patterns
> of each antenna into one pattern. Each antenna displays a
> slightly distorted pattern that favors the side of your
> truck that it is mounted on. The two patterns equal one
> centered pattern.
>

> Dave N
>
Forgive me and my apologies to Dave Platt. This was not meant
for him.

5156. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 17:38:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh94id$9ea$1@news.albasani.net>
Source record: 19330

Art Unwin wrote:

>> ...
> On the other hand this 477 ohms figure certainly is mystical to me,
> what is the point you
> are trying to make? Is it possible that the figure you are using is
> bigger than you intended
> by being larger than life itself
>

Oh, I WOULD propose that 477 ohms is "real"; indeed, it as real as gravity. That is the ONLY reason you would find it in antenna calculations and mentioned in books ... however, you are quite correct, it seems it only serves as a "placeholder" and as a "magical number"--its' only purpose, to make equations and assumptions work which would otherwise not ... what that 477 ohms "really is", is the crux of an important omission/guess/fudge-factor/etc.

> ...
> All the above is material that you can use in your determination if I
> am of sane mind or not. But first you must set your mind free
> accepting only that which you can personally derive from first
> principles as something that can be built upon.
>
> Brrrrr it is geting cold
> Goodnight
> Art

Art, I believe you sane enough, you simply "poke at matters" which are taboo ... and, I am loathe to be more specific. You either see the discontinuities which prevent "the picture from being complete", or you do not. If I felt I could go even further out on a limb, I would. For now there are only questions and a search through others thoughts ...

Regards,
JS

5157. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 17:40:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh94mf$9ea$2@news.albasani.net>
Source record: 19331

Cecil Moore wrote:

> ...
> Rumors are that California is in a different universe.
> Guess that "477 ohms" proves it. :-)

Your point being well taken, I can only reply, "477 ohms can ONLY be as important as the equations which depend upon it to function."

Regards,
JS

5158. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 18:01:17 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gh95tedpm1@news.jpl.nasa.gov>
Source record: 19340
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

Dave Platt wrote:
> In article <0SCZk.8029$D32.416@flpi146.ffdc.sbc.com>,
> Cecil Moore <nospam@w5dxp.com> wrote:
>
>>>> IF the cophased antennas are less than 1/4 wave apart,
>>>> there is virtually no change.
>
>>> I love it when you make an ass of yourself.
>
>> The ARRL Antenna Book says that with 1/8WL spacing,
>> one can achieve 4.1 dB gain with a high F/B ratio.
>
> Cite, please? For which antenna configuration and phasing?
>
> I believe that the high (4.1 dB) figure you are quoting is for an
> end-fire array, with the two antennas being fed 180 degrees out of
> phase. Good gain, but somewhat tricky to feed and match due to the
> low feedpoint impedance and the potential for high losses.
>
> In a truck-antenna situation this would require placing the antennas
> in a front/back arrangement, not side-to-side. I'm told that this is
> rarely feasible.
>
> The usual two-antenna truck arrangement I've seen is with antennas
> side-to-side (one on each rear-view mirror), fed in phase. This is a
> broadside array, not an end-fire array.
>
> From all I can see (ARRL Antenna Book, Kraus, Terman), a two-radiator
> in-phase broadside array doesn't start to achieve significant gain
> (and pattern non-circularity) until you have at least 3/8 wavelength
> of separation between the radiators. A 1/4-wave separation yields
> only around 1.1 dB of gain, which (by my calculations) works out to
> about a 15% increase in useful range in the preferred direction.
>
> My book's at home, but my recollection is that you can't get 4.1 dB of
> gain out of a two-radiator in-phase broadside array until you have
> more than 1/2 wavelength of distance between the radiators.
>

Guys.. this is nowhere near a "two 1/4 monopoles over a uniform ground"
that you're seeing in the handbook.

The antennas are 30cm or so from a big metal box (the tractor), and
possibly in close proximity to a even bigger metal box (the trailer).

Before one starts going on about whether you get any gain from two antennas 1/8 wave apart or whatever, look at whether it has any practical benefit in terms of, for instance, filling in nulls.

Modeling (either computational or on a range) would answer

So would practical experience. I suspect that there's enough "real" benefit from the dual whip configuration that it persists.

5159. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 18:07:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh969nbof1@news.albasani.net>
Source record: 19332

Cecil Moore wrote:
> John Smith wrote:
>> At a certain ratio of capacitance to inductance, in the design of an
>> antenna, that "magical/mystical value" of 477 ohms would be reached.
>
> Rumors are that California is in a different universe.
> Guess that "477 ohms" proves it. :-)

Oh gawd, you got me 377 (it exists in my calculator as a variable "fs"
(or "free space"), I seldom enter it from a keyboard) ... its'
computation given here:

http://whatis.techtarget.com/definition/0,,sid9_gci845268,00.html

I do that, yanno'? :-(

Regards,
JS

5160. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 18:14:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <p6VZk.10236$ZP4.7425@nlpi067.nbdc.sbc.com>
Source record: 19333

John Smith wrote:
> Cecil Moore wrote:
>> Rumors are that California is in a different universe.
>> Guess that "477 ohms" proves it. :-)
>
> Your point being well taken, I can only reply, "477 ohms can ONLY be as
> important as the equations which depend upon it to function."

Dang John, you missed the point. In the free space
that exists in my universe in Texas that figure is
376.73031346177... ohms.

Is 477 ohms the Z0 of free space in the land of
fruits and nuts? :-)
--
73, Cecil http://www.w5dxp.com

5161. confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 18:15:36 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <886fe89d-1769-4ce4-8d37-d167bb81dab7@q9g2000yqc.googlegroups.com>
Source record: 19334

Hello,

I've been trying to wrap my head about this problem for days and can't seem to figure it out.

Zigbee technology allows you to transmit at 250 kbps. I'm comparing the required power to transmit at that rate to the required minimum power based on the path loss equations to reach the minimum receiver sensitivity of the 802.15.4 physical layer for Zigbee of roughly -94 dBm. Simple enough right?

To analyze the required power to transmit at 250 kbps for Zigbee, I've just re-arranged the Shannon capacity formula of Rate = w * log_2 (1 + (Pt * G)/(w*N + I)). Here, w is the bandwidth, Pt is the transmit power, Pt * G is the received signal power, N is the white Gaussian noise and I is the sum of interference powers.

For Zigbee, these values are as follows:
w = 5 MHz
N (in dB) = 10*log10(k) + 10*log10(T) where k is boltzmann's constant of 1.23E-23 and T is the temperature in Kelvin of 300 degrees. In Watts, N is approximately 3.6900e-021.

I've assumed no interference at this stage, so I = 0. Simple enough so far right?

So to calculate the required transmit power to reach a rate of 250 kbps, I've just re-arranged this equation to yield:
Pt = [2^(250 kbps/w) - 1]*(w * N + I)/G and plugging in the above values gives me a reasonable transmit power of 1.6 uW.

The reason I haven't talked about G yet is that I'm addressing it here. G is the channel quality (path loss) and is defined as follows:

G(freq,D) = GrdBi+ GtdBi- 20*log10(4*pi*freq*d0/c) - 10*pathLossExponent*log10(D/d0) (in dB)

I'm using unity gains so GrdBi = GtdBi = 0 dBi. Other parameters are:
freq = 2.4 GHz
d0 = 1m as the reference distance
c = 3.0 x 10^8
pathLossExponent = 2, and
D = 500 metres

Hence, G (in Watts) * Pt is the received signal power. G(2.4E9, 500) is the path loss transmitting at 2.4 GHz a distance of 500m away. G (2.4E9, 500) = -94.0254 dB

Now the first thing that I mentioned was the receiver sensitivity for Zigbee of -94 dBm, Analyzing G (in dB). The required transmit power considering this path loss is easily calculated as:

-94 dBm = P_required + G(2.4E9, 500)

P_required is then easily calculated as -94 dBm - G(2.4E9, 500) = 0.0254 dBm. This translates to a transmit power of 1 mW. This required power is LARGER than the maximum permissible power to transmit at 250 kbps, which is the maximum data rate for Zigbee. So how does this make sense?

However, 1mW happens to be the maximum transmit power of Zigbee of roughly 0 dBm, so there may be a range problem here.

Testing other distances, say 300m, we get a maximum transmit power Pt = 5.9181e-007 = 0.59 uW to transmit at 250 kbps, but a P_required = -4.41 dBm = 3.6211e-004, which is > our maximum transmit power Pt.

So again, we run into the same problem at 300m. It just doesn't make sense to me. Can anybody shed some light on this? I hope my math is clear. Thanks in advance.

5162. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 18:23:19 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <c3f789dc-3506-4441-90e3-2b356a37c3b8@k8g2000yqn.googlegroups.com>
Source record: 19335

On Dec 4, 1:15 pm, Ginu <osheik...@gmail.com> wrote:
> Hello,
>
> I've been trying to wrap my head about this problem for days and can't
> seem to figure it out.
>
> Zigbee technology allows you to transmit at 250 kbps. I'm comparing
> the required power to transmit at that rate to the required minimum
> power based on the path loss equations to reach the minimum receiver
> sensitivity of the 802.15.4 physical layer for Zigbee of roughly -94
> dBm. Simple enough right?
>
> To analyze the required power to transmit at 250 kbps for Zigbee, I've
> just re-arranged the Shannon capacity formula of Rate = w * log_2 (1 +
> (Pt * G)/(w*N + I)). Here, w is the bandwidth, Pt is the transmit
> power, Pt * G is the received signal power, N is the white Gaussian
> noise and I is the sum of interference powers.
>
> For Zigbee, these values are as follows:
> w = 5 MHz
> N (in dB) = 10*log10(k) + 10*log10(T) where k is boltzmann's constant
> of 1.23E-23 and T is the temperature in Kelvin of 300 degrees. In
> Watts, N is approximately 3.6900e-021.
>
> I've assumed no interference at this stage, so I = 0. Simple enough so
> far right?
>
> So to calculate the required transmit power to reach a rate of 250
> kbps, I've just re-arranged this equation to yield:
> Pt = [2^(250 kbps/w) - 1]*(w * N + I)/G and plugging in the above
> values gives me a reasonable transmit power of 1.6 uW.
>
> The reason I haven't talked about G yet is that I'm addressing it
> here. G is the channel quality (path loss) and is defined as follows:
>
> G(freq,D) = GrdBi+ GtdBi- 20*log10(4*pi*freq*d0/c) -
> 10*pathLossExponent*log10(D/d0) (in dB)
>
> I'm using unity gains so GrdBi = GtdBi = 0 dBi. Other parameters are:
> freq = 2.4 GHz
> d0 = 1m as the reference distance
> c = 3.0 x 10^8
> pathLossExponent = 2, and
> D = 500 metres

>
> Hence, G (in Watts) * Pt is the received signal power. G(2.4E9, 500)
> is the path loss transmitting at 2.4 GHz a distance of 500m away. G
> (2.4E9, 500) = -94.0254 dB
>
> Now the first thing that I mentioned was the receiver sensitivity for
> Zigbee of -94 dBm, Analyzing G (in dB). The required transmit power
> considering this path loss is easily calculated as:
>
> -94 dBm = P_required + G(2.4E9, 500)
>
> P_required is then easily calculated as -94 dBm - G(2.4E9, 500) =
> 0.0254 dBm. This translates to a transmit power of 1 mW. This required
> power is LARGER than the maximum permissible power to transmit at 250
> kbps, which is the maximum data rate for Zigbee. So how does this make
> sense?
>
> However, 1mW happens to be the maximum transmit power of Zigbee of
> roughly 0 dBm, so there may be a range problem here.
>
> Testing other distances, say 300m, we get a maximum transmit power Pt
> = 5.9181e-007 = 0.59 uW to transmit at 250 kbps, but a P_required =
> -4.41 dBm = 3.6211e-004, which is > our maximum transmit power Pt.
>
> So again, we run into the same problem at 300m. It just doesn't make
> sense to me. Can anybody shed some light on this? I hope my math is
> clear. Thanks in advance.

Just a bit of clarification. The node needs to transmit above
P_required for successful reception at the receiver above its minimum
receiver sensitivity, but this P_required is greater than the power
that correlates to a data rate of 250 kbps. To me this doesn't make
sense. I thought I should add in that conclusion. Thanks.

5163. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 18:30:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh97jmdie1@news.albasani.net>
Source record: 19336

Art Unwin wrote:

> ...
> Brrrrr it is geting cold
> Goodnight
> Art

To get us closer to being on the same page:

http://www.physlink.com/Education/askExperts/ae674.cfm

Says it better than I ever could.

Regards,
JS

5164. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 18:35:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh97t6$e0d$1@news.albasani.net>
Source record: 19337

Cecil Moore wrote:

> ...
> Dang John, you missed the point. In the free space
> that exists in my universe in Texas that figure is
> 376.73031346177... ohms.
>
> Is 477 ohms the Z0 of free space in the land of
> fruits and nuts? :-)

Cecil:

LOL!

I was slow on the uptake, sorry old man ... :-(

I know that is a terrible sin here, one I make too frequently ... you got me! I punched [1 x "fs"] into the calculator, got the ~377 and immediately recognized my error ... just gettin' old and slow here ...

It was wise of you to make a point of it ... thanks!

Regards,
JS

5165. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 18:49:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <24f93744-5fbf-46f4-9df9-08453f200945@33g2000yqm.googlegroups.com>
Source record: 19338

On Dec 4, 11:38 am, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> > On the other hand this 477 ohms figure certainly is mystical to me,
> > what is the point you
> > are trying to make? Is it possible that the figure you are using is
> > bigger than you intended
> > by being larger than life itself
>
> Oh, I WOULD propose that 477 ohms is "real"; indeed, it as real as
> gravity. That is the ONLY reason you would find it in antenna
> calculations and mentioned in books ... however, you are quite correct,
> it seems it only serves as a "placeholder" and as a "magical
> number"--its' only purpose, to make equations and assumptions work which
> would otherwise not ... what that 477 ohms "really is", is the crux of
> an important omission/guess/fudge-factor/etc.
>
> > ...
> > All the above is material that you can use in your determination if I
> > am of sane mind or not. But first you must set your mind free
> > accepting only that which you can personally derive from first
> > principles as something that can be built upon.
>
> > Brrrrr it is geting cold
> > Goodnight
> > Art
>
> Art, I believe you sane enough, you simply "poke at matters" which are
> taboo ... and, I am loathe to be more specific. You either see the
> discontinuities which prevent "the picture from being complete", or you
> do not. If I felt I could go even further out on a limb, I would. For
> now there are only questions and a search through others thoughts ...
>
> Regards,
> JS

John,
my first point was the 477 error but you didn't catch on.No problem
Regarding taboo. When the gloves are taken off then every thing
goes !.
The first person to fire does not make the rules for what then ensues.
When a animal kicks you in the crotch then there is a good chance it

has rabies
and you do what you have to do,. Ofcourse you can run away but then
that
would be very painful and lasts a life time. Let it drop
My very best regards
Art Unwin KB9MZ.......xg

5166. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 18:52:20 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <1e1005af-3d5d-4678-af72-76fd6c319c42@20g2000yqt.googlegroups.com>
Source record: 19339

On Dec 4, 12:14 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith wrote:
> > Cecil Moore wrote:
> >> Rumors are that California is in a different universe.
> >> Guess that "477 ohms" proves it. :-)
>
> > Your point being well taken, I can only reply, "477 ohms can ONLY be as
> > important as the equations which depend upon it to function."
>
> Dang John, you missed the point. In the free space
> that exists in my universe in Texas that figure is
> 376.73031346177... ohms.
>
> Is 477 ohms the Z0 of free space in the land of
> fruits and nuts? :-)
> --
> 73, Cecil http://www.w5dxp.com

"Fruits and Nuts" whow that is really taboo

5167. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 19:30:59 UTC
From: dplatt@radagast.org
Message-ID: <jonl06-c18.ln1@radagast.org>
Source record: 19341
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

In article <gh95tedpm1@news.jpl.nasa.gov>,
Jim Lux <james.p.lux@jpl.nasa.gov> wrote:

>Guys.. this is nowhere near a "two 1/4 monopoles over a uniform ground"
>that you're seeing in the handbook.
>
>The antennas are 30cm or so from a big metal box (the tractor), and
>possibly in close proximity to a even bigger metal box (the trailer).
>
>Before one starts going on about whether you get any gain from two
>antennas 1/8 wave apart or whatever, look at whether it has any
>practical benefit in terms of, for instance, filling in nulls.

That potential (and quite possibly real) benefit has already been
mentioned a couple of times in this thread.

>So would practical experience. I suspect that there's enough "real"
>benefit from the dual whip configuration that it persists.

I strongly suspect that you're right, and I think I've been trying to
make that very point. The benefit to a typical two-antenna truck
setup isn't that it provides a lot of gain (and thus a
non-omnidirectional pattern), because in fact it doesn't (the spacing
is too small). Rather, the practical pattern is going to be closer to
a true omnidirectional pattern than can be achieved by a single
side-mounted antenna alone. The final pattern may actually have
less gain in a few directions, but may have shallower nulls and thus
a more consistent overall coverage.

It's one of those weird situations, in which the reason for the
benefit that can be perceived is actually just the *opposite* of what
one may believe at first!

I must admit a bit of scepticism in re Cecil's suggestion to use a
90-degree-phase-shifted endfire array feed... at least, for most car
and trucking applications. Granted, it'd give quite a bit of gain in
the forward direction... but at the expense of a deep null in the
rearward. It'd be great for speaking with the guy a few miles in
front of you... but you'd lose the ability to talk well with the guy a
few miles in back of you. If every vehicle used this sort of antenna
pattern, overall coverage would probably be worse (4 dB of gain in the
forward direction wouldn't compensate for a 10 or 20 dB null in the
rear direction of the next vehicle).

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5168. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 20:42:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh9fce$o0i$1@news.albasani.net>
Source record: 19342

Art Unwin wrote:

>> ...
> John,
> my first point was the 477 error but you didn't catch on.No problem
>> ...
> My very best regards
> Art Unwin KB9MZ.......xg

Yes, both you and Cecil were kind enough to point it out ... hey, what can I say? I was an idiot and slow on the uptake. I will attempt to be more observant, but hey, I make such mistakes, now and then ...

Not 477 ohms but 377 ohms, not 477 ohms but 377 ohms ... now, writing that another 98 times and I may have it! :-)

Regards,
JS

5169. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 20:44:24 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <IiXZk.7509$as4.4434@nlpi069.nbdc.sbc.com>
Source record: 19343
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

Jim Lux wrote:
> Before one starts going on about whether you get any gain from two
> antennas 1/8 wave apart or whatever, look at whether it has any
> practical benefit in terms of, for instance, filling in nulls.

The theory is that for mobile CB, one wants radiated energy
distributed up and down the highway, not to the sides.
--
73, Cecil http://www.w5dxp.com

5170. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 20:47:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <dlXZk.7510$as4.1548@nlpi069.nbdc.sbc.com>
Source record: 19345

Art Unwin wrote:
> "Fruits and Nuts" whow that is really taboo

Not in Texas. :-)
--
73, Cecil http://www.w5dxp.com

5171. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 20:47:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh9flu$od4$1@news.albasani.net>
Source record: 19344

Art Unwin wrote:

> ...
> "Fruits and Nuts" whow that is really taboo

You and Cecil, both, have my location in error ... I DON'T live in the Gay Bay! (i.e., San Francisco) :-)

Personally, I am attempting to get my representatives to sponsor a bill to give every documented gay person $100,000 to move to Texas!!!! <evil grin>

Regards,
JS

5172. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 20:50:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <XkXZk.5584$8_3.3975@flpi147.ffdc.sbc.com>
Source record: 19346
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,misc.transport.trucking

Dave Platt wrote:
> I must admit a bit of scepticism in re Cecil's suggestion to use a
> 90-degree-phase-shifted endfire array feed... at least, for most car
> and trucking applications. Granted, it'd give quite a bit of gain in
> the forward direction... but at the expense of a deep null in the
> rearward. It'd be great for speaking with the guy a few miles in
> front of you... but you'd lose the ability to talk well with the guy a
> few miles in back of you.

You would also lose interference from the rear. Simply
arrange a switched phase-shifting feedline that can aim
the beam forward or backward. It's like a Yagi mounted
on a motorhome.
--
73, Cecil http://www.w5dxp.com

5173. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 21:02:20 UTC
From: JB <nospam@goofball.net>
Message-ID: <wzXZk.2775$QX3.167@nwrddc02.gnilink.net>
Source record: 19347

> > So, you're a legend in your own mind. Your reactivity by the way
indicates
>
> No, actually not. However, as your text indicates, I "AM SOMETHING" you
> don't see in your ghetto, thanks for the "heads-up." People DO tend to
> be a product of their environment ... again, reflected in your text.
>
> Regards,
> JS

Environment's no excuse for bad behavior, but it is often the case. Maybe you haven't seen any miracles in yours. They can be found even amongst great turmoil and evil. Try to get out of your comfort zone and travel some, even spend some time in other cultures. Jails of Mexico, Beverly Hills, anywhere. It can be a better teacher than the classroom. I can pray that you're eyes be opened to what you can't see.

5174. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 21:25:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh9hrm$r3c$1@news.albasani.net>
Source record: 19348

JB wrote:

> ...
> Environment's no excuse for bad behavior, but it is often the case. Maybe
> you haven't seen any miracles in yours. They can be found even amongst
> great turmoil and evil. Try to get out of your comfort zone and travel
> some, even spend some time in other cultures. Jails of Mexico, Beverly
> Hills, anywhere. It can be a better teacher than the classroom. I can pray
> that you're eyes be opened to what you can't see.
>

Here. Take your "Last Man Standing" award, enjoy ...

Regards,
JS

5175. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 21:27:21 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <fe3a07a0-1b19-4946-a8c2-19e1753ddfa6@s20g2000yqh.googlegroups.com>
Source record: 19349

On Dec 4, 3:02 pm, "JB" <nos...@goofball.net> wrote:
> > > So, you're a legend in your own mind. Your reactivity by the way
> indicates
>
> > No, actually not. However, as your text indicates, I "AM SOMETHING" you
> > don't see in your ghetto, thanks for the "heads-up." People DO tend to
> > be a product of their environment ... again, reflected in your text.
>
> > Regards,
> > JS
>
> Environment's no excuse for bad behavior, but it is often the case. Maybe
> you haven't seen any miracles in yours. They can be found even amongst
> great turmoil and evil. Try to get out of your comfort zone and travel
> some, even spend some time in other cultures. Jails of Mexico, Beverly
> Hills, anywhere. It can be a better teacher than the classroom. I can pray
> that you're eyes be opened to what you can't see.

What on Earth is going on here? So you have a conflict?
What do you both want of each other so this can be put aside
if you so wish?
The subject was that many technical people are getting laid off.
This removes them from access to public university white papers.
After a year or so they will be encouraged to look for a alternative
career
They then find that that University white papers are not open source
to facilitate recomended change
Universities widen the Rust Belt towards both coasts. Universities
decline in services without public funds
Universities react and recruit teachers from India to prevent furthur
spread of the Rust Belt but efforts to late.
America becomes the latest Empire to bite the dust as a Mexican
becomes P=resident and encourages change
over from corn to hemp and all are happy overnight. The audacity of
hope fades away.

5176. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 21:43:23 UTC
From: richardharrison@webtv.net
Message-ID: <8995-49384EFB-465@storefull-3253.bay.webtv.net>
Source record: 19350

Art wrote:
"With inter coupling of elments you only get approximations as the last element of any array radiates half of that which it receives."

That might be true if the final element in the array is exactly matched to a load. If the element is lossless and perfectly mismatched, i.e. its load is a short-circuit, 100% of its received energy can be reradiated.

I choose to respond to Art on this thread and not to start another to contradict his prior art.

Best regards, Richard Harrison, KB5WZI

5177. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 22:42:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <M%YZk.8905$Ei5.6671@flpi143.ffdc.sbc.com>
Source record: 19451

John Smith wrote:
> You and Cecil, both, have my location in error ... I DON'T live in the
> Gay Bay! (i.e., San Francisco) :-)

Yep, when I lived there, the characteristic impedance
of free space was still 377 ohms. :-)

> Personally, I am attempting to get my representatives to sponsor a bill
> to give every documented gay person $100,000 to move to Texas!!!! <evil
> grin>

The climate in Texas is not very good for gays. Texas
is the only state that still has the legal right to
secede from the Union. Don't be surprised if it happens
under Obama's "rule". One of his transition staff actually
asserted that he would be "READY TO *RULE* FROM DAY ONE".
--
73, Cecil http://www.w5dxp.com

5178. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 23:04:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gh9nmi$2ca$1@news.albasani.net>
Source record: 19452

Cecil Moore wrote:

> ...
> The climate in Texas is not very good for gays. Texas
> is the only state that still has the legal right to
> secede from the Union. Don't be surprised if it happens
> under Obama's "rule". One of his transition staff actually
> asserted that he would be "READY TO *RULE* FROM DAY ONE".

Don't think that you will be alone. Although, "they" attempt to paint my state as a bunch of gay-pinko-commies, some of us don't think so ...

However, given the "last eight" and the party which got us here, I am willing to see what happens first (Bush NEVER lifted a finger to repair the criminal actions of Clinton--NAFTA is only one example.) And, IMHO, printing 850 billion dollars and giving it away to those using practices which got us here in the first place is NO ANSWER ... I'd say the fox already runs the hen-house.

Keep your finger on the trigger, but don't fire until you see the whites of their eyes ... :-)

Regards,
JS

5179. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-04 23:33:14 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <bNZZk.8718$yr3.3921@nlpi068.nbdc.sbc.com>
Source record: 19453

Cecil Moore wrote:
> John Smith wrote:
>> You and Cecil, both, have my location in error ... I DON'T live in the
>> Gay Bay! (i.e., San Francisco) :-)
>
> Yep, when I lived there, the characteristic impedance
> of free space was still 377 ohms. :-)
>
>> Personally, I am attempting to get my representatives to sponsor a
>> bill to give every documented gay person $100,000 to move to
>> Texas!!!! <evil grin>
>
> The climate in Texas is not very good for gays. Texas
> is the only state that still has the legal right to
> secede from the Union. Don't be surprised if it happens
> under Obama's "rule". One of his transition staff actually
> asserted that he would be "READY TO *RULE* FROM DAY ONE".

Texans are too chicken to secede from anything, but it's a nice thought.
If Texas were to secede, the rest of us could say, (stealing from Dr.
Martin Luther King) "Free! Free, at last!"
73,
Tom Donaly, KA6RUH

5180. Re: Wire antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 01:07:53 UTC
From: ltdoc@yahoo.com
Message-ID: <b676ee8d-fadb-408a-8c72-6dccbf13d592@41g2000yqf.googlegroups.com>
Source record: 19454

Those empty litter cans and sand is one alternative. Personally, I
just go down the hall to that little square room. Whatever. :)
- 'Doc

5181. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 02:04:43 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <49388c5a$0$60070$8046368a@newsreader.iphouse.net>
Source record: 19455

Art Unwin wrote:
>
> I am aware of that. One person once said the world was round!
>

Actually most learned people knew the world was round since before
Christ. The circumference was measured to something better than 10%
accuracy using only sticks and shadows.

>
> If one was persuasive enough at the beginninghundred years or so later
> if one said
> the world was flat he would be called delusional.
> If one was very persuasive in the first place he would be rediculed as
> it was so obvious to all in the first place.
> I hope you get to live another hundred years so that you can meld into
> the new crowd of lemmings
> Regards
> Art

And delusional you are. No doubt about it.

tom
K0TAR

5182. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 02:22:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gha38cets1@news.albasani.net>
Source record: 19456

Tom Ring wrote:

> ...
> Actually most learned people knew the world was round since before
> Christ. The circumference was measured to something better than 10%
> accuracy using only sticks and shadows.
>
> tom
> K0TAR

Actually, "sticks and shadows" is nice, for emphasis ... "wells and shadows" would be a bit more accurate:

http://www.madsci.org/posts/archives/2002-01/1012504968.Sh.r.html

Regards,
JS

5183. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 05:59:34 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <3fb935d1-c45a-45eb-90a8-7b8890a5a6d8@v38g2000yqb.googlegroups.com>
Source record: 19457

On Dec 4, 1:23 pm, Ginu <osheik...@gmail.com> wrote:
> On Dec 4, 1:15 pm, Ginu <osheik...@gmail.com> wrote:
>
>
>
> > Hello,
>
> > I've been trying to wrap my head about this problem for days and can't
> > seem to figure it out.
>
> > Zigbee technology allows you to transmit at 250 kbps. I'm comparing
> > the required power to transmit at that rate to the required minimum
> > power based on the path loss equations to reach the minimum receiver
> > sensitivity of the 802.15.4 physical layer for Zigbee of roughly -94
> > dBm. Simple enough right?
>
> > To analyze the required power to transmit at 250 kbps for Zigbee, I've
> > just re-arranged the Shannon capacity formula of Rate = w * log_2 (1 +
> > (Pt * G)/(w*N + I)). Here, w is the bandwidth, Pt is the transmit
> > power, Pt * G is the received signal power, N is the white Gaussian
> > noise and I is the sum of interference powers.
>
> > For Zigbee, these values are as follows:
> > w = 5 MHz
> > N (in dB) = 10*log10(k) + 10*log10(T) where k is boltzmann's constant
> > of 1.23E-23 and T is the temperature in Kelvin of 300 degrees. In
> > Watts, N is approximately 3.6900e-021.
>
> > I've assumed no interference at this stage, so I = 0. Simple enough so
> > far right?
>
> > So to calculate the required transmit power to reach a rate of 250
> > kbps, I've just re-arranged this equation to yield:
> > Pt = [2^(250 kbps/w) - 1]*(w * N + I)/G and plugging in the above
> > values gives me a reasonable transmit power of 1.6 uW.
>
> > The reason I haven't talked about G yet is that I'm addressing it
> > here. G is the channel quality (path loss) and is defined as follows:
>
> > G(freq,D) = GrdBi+ GtdBi- 20*log10(4*pi*freq*d0/c) -
> > 10*pathLossExponent*log10(D/d0) (in dB)
>
> > I'm using unity gains so GrdBi = GtdBi = 0 dBi. Other parameters are:
> > freq = 2.4 GHz

> > d0 = 1m as the reference distance
> > c = 3.0 x 10^8
> > pathLossExponent = 2, and
> > D = 500 metres
>
> > Hence, G (in Watts) * Pt is the received signal power. G(2.4E9, 500)
> > is the path loss transmitting at 2.4 GHz a distance of 500m away. G
> > (2.4E9, 500) = -94.0254 dB
>
> > Now the first thing that I mentioned was the receiver sensitivity for
> > Zigbee of -94 dBm, Analyzing G (in dB). The required transmit power
> > considering this path loss is easily calculated as:
>
> > -94 dBm = P_required + G(2.4E9, 500)
>
> > P_required is then easily calculated as -94 dBm - G(2.4E9, 500) =
> > 0.0254 dBm. This translates to a transmit power of 1 mW. This required
> > power is LARGER than the maximum permissible power to transmit at 250
> > kbps, which is the maximum data rate for Zigbee. So how does this make
> > sense?
>
> > However, 1mW happens to be the maximum transmit power of Zigbee of
> > roughly 0 dBm, so there may be a range problem here.
>
> > Testing other distances, say 300m, we get a maximum transmit power Pt
> > = 5.9181e-007 = 0.59 uW to transmit at 250 kbps, but a P_required =
> > -4.41 dBm = 3.6211e-004, which is > our maximum transmit power Pt.
>
> > So again, we run into the same problem at 300m. It just doesn't make
> > sense to me. Can anybody shed some light on this? I hope my math is
> > clear. Thanks in advance.
>
> Just a bit of clarification. The node needs to transmit above
> P_required for successful reception at the receiver above its minimum
> receiver sensitivity, but this P_required is greater than the power
> that correlates to a data rate of 250 kbps. To me this doesn't make
> sense. I thought I should add in that conclusion. Thanks.

anyone?

5184. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 07:10:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <26jhj45uis2adlkbm9i741pjva33aq2deu@4ax.com>
Source record: 19458

On Thu, 4 Dec 2008 21:59:34 -0800 (PST), Ginu <osheikh81@gmail.com>
wrote:

>anyone?

You appear to be contradicting yourself:
>P_required... translates to a transmit power of 1 mW.
...
>However, 1mW happens to be the maximum transmit power
However?

As for:
> I hope my math is clear.
If your conclusions for these case tests depart from rational
expectations; then you have one of two possibilites:

1. Your math may be clear, but wholly invalid (transcription error of
complex formulas into ascii text is a bummer);

b. Your math may be clear or murky, and otherwise entirely correct,
but you did it wrong.

iii. You suffer from transcription AND "plug-n-chug" errors;

four. Zigbee technology doesn't work.

If this is a classroom problem, you need to resolve it yourself. If
this is an engineering problem, what did the Zigbee help-line offer?
There's probably a simple nomograph posted at their website or in
their application notes.

73's
Richard Clark, KB7QHC

5185. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 11:10:02 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <bpen06-40p.ln1@p400bob.personal.cox.net>
Source record: 19460

So at 5AM I may not be too sharp...

The formula you used doesnt seem to allow for the required demod s/n. QAM64 for example (from memory) is around 30dB so this has to be "added" to the path loss. Differing mod/demod/FEC have differing margin requirmeents. Somewhere in there too you have to stipulate the bit loss rate "allowed".

In the past I use to calculate the noise floor at b/w, apply RX noise figure and then add the margin.

When I last did this I upset my employer by saying that their marketing hype was flawed. They had specified a lowest usable sensitivity that after applying the required demod s/n was below the calculated noise floor for that b/w. We were in fact consistently getting RX sensitivty issues during the manufacturing phase for this reason... Marketing had created a spec that wasnt possible!

Also, I dont know about 802.15 but I do know that 802.11 has variable data rates (ie bandwidth) that can be advertised something like "54Mbps and -87dBm sensitivity". The numbers dont actually go together. At 54Mbps you might get -77dBm and you have to use 11Mbps to get -87dBm!

I'll admit I havent studied your maths in detail....

The above probably not a lot of use to you... Sorry!

Cheers Bob VK2YQA

Ginu wrote:
> Hello,
>
> I've been trying to wrap my head about this problem for days and can't
> seem to figure it out.

5186. CONVICTED CRACK DEALER RANDY CHAPMAN, KB5URP...HAS SHUT HIS PEE PEE HOLDERS LATELY!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 11:13:03 UTC
From: mopeyzakween@yahoo.com
Message-ID: <714acc7e-a6ed-424b-8c66-4cf70edab0d5@f20g2000yqg.googlegroups.com>
Source record: 19459
Cross-posted to: rec.radio.cb,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna

READ AND LEARN OF THE CONVICTED DRUG DEALER!!! LOL!!!!
Randy's glass house got a window broken, we see!

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL

AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

5187. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 14:21:03 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ghbdcf$k06i$1@tr22n12.aset.psu.edu>
Source record: 19461

Art Unwin wrote:
> On Dec 4, 3:02 pm, "JB" <nos...@goofball.net> wrote:
>>>> So, you're a legend in your own mind. Your reactivity by the way
>> indicates
>>
>>> No, actually not. However, as your text indicates, I "AM SOMETHING" you
>>> don't see in your ghetto, thanks for the "heads-up." People DO tend to
>>> be a product of their environment ... again, reflected in your text.
>>> Regards,
>>> JS
>> Environment's no excuse for bad behavior, but it is often the case. Maybe
>> you haven't seen any miracles in yours. They can be found even amongst
>> great turmoil and evil. Try to get out of your comfort zone and travel
>> some, even spend some time in other cultures. Jails of Mexico, Beverly
>> Hills, anywhere. It can be a better teacher than the classroom. I can pray
>> that you're eyes be opened to what you can't see.
>
> What on Earth is going on here? So you have a conflict?
> What do you both want of each other so this can be put aside
> if you so wish?
> The subject was that many technical people are getting laid off.
> This removes them from access to public university white papers.
> After a year or so they will be encouraged to look for a alternative
> career
> They then find that that University white papers are not open source
> to facilitate recomended change
> Universities widen the Rust Belt towards both coasts. Universities
> decline in services without public funds
> Universities react and recruit teachers from India to prevent furthur
> spread of the Rust Belt but efforts to late.
> America becomes the latest Empire to bite the dust as a Mexican
> becomes P=resident and encourages change
> over from corn to hemp and all are happy overnight. The audacity of
> hope fades away.

Phew! Stop to catch your breath Art. 8^)

Actually, I wondered what this thread was all about.

So I'll bite.

Much of what is out there is free for all.

But the source of the money for research is often from companies who
are using the research to enhance their companies position in the
marketplace.

Now we can discuss how much of a public university is actually public, and whether or not it should all be public or not, but the background has shifted.

Once upon a time, industry funded an amount of their assets toward research. As time went on, some folks decided that that research money was wasted, and was better spent giving back to the shareholders. That was a smart move - if you couldn't see past the end of your nose.

So after it was seen that wrecking your R and D department was a great way to become a technological backwater, they started looking for a less expensive way to get research done. The answer was the universities. So here we are. We can argue about whether or not it should be all open source or not, but from industries perspective, not having the research open to all makes sense.

Needless to say, a one paragraph dissertation of the situation is necessarily truncated as all hell....

Not to say one way is better than any other, although personally, I kind of liked the older paradigm of company based R and D. But the new method sends money to the universities.

- 73 de Mike N3LI - da village idiot.........

5188. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 14:48:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghbf00$tc3$1@news.albasani.net>
Source record: 19462

Michael Coslo wrote:

> ...
> So after it was seen that wrecking your R and D department was a
> great way to become a technological backwater, they started looking for
> a less expensive way to get research done. The answer was the
> universities. So here we are. We can argue about whether or not it
> should be all open source or not, but from industries perspective, not
> having the research open to all makes sense.
> ...
> - 73 de Mike N3LI - da village idiot.........

Excellent point Mike.

When I returned to bring my degree up, the department received quite a chunk of money from the military, and a military contractor, for research into weapons targeting.

A sane mind does need to be in control and differentiate between TRUE "public knowledge" and non-public knowledge ...

And, a public college should refrain from getting into the position of competition with private industry (or, even influencing competition in public industry)--EVEN if the money and perks are tempting. We used to have men of such high standards, morals and ethics involved that there was little if any controversy ... :-(

Regards,
JS

5189. FS: 10-80 SLINKY dipole antenna with coax choke balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 16:04:44 UTC
From: DC <nobody@pseudo.borked.net>
Message-ID: <218efc18baf4ecd2a8571a65b068d8cb@pseudo.borked.net>
Source record: 19463

http://easyurl.net/Slinky

5190. Re: A few questions about collinear coaxial antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 16:33:13 UTC
From: tucker@conninc.com
Message-ID: <4ae79385-cdca-45a2-b3f0-8cd361409284@v13g2000yqm.googlegroups.com>
Source record: 19464

On Nov 25, 5:55 pm, "Thomas Magma" <somewh...@overtherainbow.com>
wrote:
> Hello,
>
> I am about to attempt to build a UHF collinear coaxial antenna and am trying
> to finalize a design. I have done a lot of reading and am a little confused
> on a few things. First off I have read contradicting statements whether to
> use odd or even number of 1/2 wave elements. 1, 3, 5... or 1,2,4... Also I
> don't understand what the 1/4 wave whip is doing on the top without a ground
> plane (found in most designs), is this necessary for a receive antenna?.
>
> Instead of using coaxial cable, I will be building the 1/2 wave and 1/4 wave
> transmission lines out of ridged copper pipe with air as it's dielectric in
> order to maximize the velocity of propagation and therefore making true 1/2
> wave elements. Does anyone see anything wrong with this approach?
>
> Thomas

I just built one of these using thin wall 1 1/4" aluminum tubing and
bare 20ga copper wire for inside. It was a tri band
for 50, 144 & 440 mhz, section = 1/4 and 3 x 1/2 wave then top 1/4
section cut for 146mhz. SWR is higher than I
like but it receives and signal reports are so much better than my
factory 5/8 antenna I will now try to lower the swr.
I used short pieces of PVC to couple the tubing, its freestanding and
15' tall, very light weight, I used old swmming pool cleaner
telescopic pole for the elements.

N4aeq

unaxesc

5191. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 16:55:55 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ac1872e9-3081-45c1-9c23-b3d15d45cace@v13g2000yqm.googlegroups.com>
Source record: 19465

On Dec 5, 8:21 am, Michael Coslo <m...@psu.edu> wrote:
> Art Unwin wrote:
> > On Dec 4, 3:02 pm, "JB" <nos...@goofball.net> wrote:
> >>>> So, you're a legend in your own mind. Your reactivity by the way
> >> indicates
>
> >>> No, actually not. However, as your text indicates, I "AM SOMETHING" you
> >>> don't see in your ghetto, thanks for the "heads-up." People DO tend to
> >>> be a product of their environment ... again, reflected in your text.
> >>> Regards,
> >>> JS
> >> Environment's no excuse for bad behavior, but it is often the case. Maybe
> >> you haven't seen any miracles in yours. They can be found even amongst
> >> great turmoil and evil. Try to get out of your comfort zone and travel
> >> some, even spend some time in other cultures. Jails of Mexico, Beverly
> >> Hills, anywhere. It can be a better teacher than the classroom. I can pray
> >> that you're eyes be opened to what you can't see.
>
> > What on Earth is going on here? So you have a conflict?
> > What do you both want of each other so this can be put aside
> > if you so wish?
> > The subject was that many technical people are getting laid off.
> > This removes them from access to public university white papers.
> > After a year or so they will be encouraged to look for a alternative
> > career
> > They then find that that University white papers are not open source
> > to facilitate recomended change
> > Universities widen the Rust Belt towards both coasts. Universities
> > decline in services without public funds
> > Universities react and recruit teachers from India to prevent furthur
> > spread of the Rust Belt but efforts to late.
> > America becomes the latest Empire to bite the dust as a Mexican
> > becomes P=resident and encourages change
> > over from corn to hemp and all are happy overnight. The audacity of
> > hope fades away.
>
>   Phew! Stop to catch your breath Art. 8^)
>
>   Actually, I wondered what this thread was all about.
>
>   So I'll bite.
>
>   Much of what is out there is free for all.
>

> But the source of the money for research is often from companies who
> are using the research to enhance their companies position in the
> marketplace.
>
> Now we can discuss how much of a public university is actually public,
> and whether or not it should all be public or not, but the background
> has shifted.
>
> Once upon a time, industry funded an amount of their assets toward
> research. As time went on, some folks decided that that research money
> was wasted, and was better spent giving back to the shareholders. That
> was a smart move - if you couldn't see past the end of your nose.
>
> So after it was seen that wrecking your R and D department was a great
> way to become a technological backwater, they started looking for a less
> expensive way to get research done. The answer was the universities. So
> here we are. We can argue about whether or not it should be all open
> source or not, but from industries perspective, not having the research
> open to all makes sense.
>
> Needless to say, a one paragraph dissertation of the situation is
> necessarily truncated as all hell....
>
> Not to say one way is better than any other, although personally, I
> kind of liked the older paradigm of company based R and D. But the new
> method sends money to the universities.
>
> - 73 de Mike N3LI - da village idiot.........

Mike
My point is that IF the work of Universities is to be published it
should be open source
instead of giving it to a private entity. I see no point in preventing
oversite by the public at large
from seeing how their taxes are being spent. The fruits of our taxes
should not be channelled off
to prevent private institutions from going bankrupt. Private
companies can always, and do, have their own Rand D
if they want totally privacy for commercial reasons. PARTIAL funding
does not give them the right to the same
privacy. As the pool of engineers get smaller so does the disemination
of scientific information,.
Is that what America really want for the future?

5192. Lawsuit countdown K3VR is SoL (Statute of Limitiations) for w4nti has another 10 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 17:14:46 UTC
From: kb9rqz@yahoo.com
Message-ID: <4boij49e2di8uabrrgba2i16rj32qhs8eb@4ax.com>
Source record: 19466
Cross-posted to: rec.radio.cb,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 5 Dec 2008 03:13:03 -0800 (PST), mopeyzakween@yahoo.com wrote:

>READ AND LEARN OF THE CONVICTED DRUG DEALER!!! LOL!!!!
>Randy's glass house got a window broken, we see!
can the spam pease I don't know or care about the man does he even
post online?

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5193. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 17:29:33 UTC
From: kb9rqz@yahoo.com
Message-ID: <r7pij49dr6sc5tg0e42tup04m7qmip1hvt@4ax.com>
Source record: 19467
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5194. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 17:29:33 UTC
From: Dave <noone@nowhere.com>
Message-ID: <1yd_k.25$7I6.8@nwrddc01.gnilink.net>
Source record: 19468

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:ac1872e9-3081-45c1-9c23-b3d15d45cace@v13g2000yqm.googlegroups.com...

>My point is that IF the work of Universities is to be published it
>should be open source
>instead of giving it to a private entity.

but many universities ARE private entities. And if private funds are used for research, or funds from industry sponsors are used, then there should be no doubt that the funder's should decide what gets published and what they keep private.

> I see no point in preventing
>oversite by the public at large
>from seeing how their taxes are being spent.

have you actually gone to a public university and asked for access to their library where such things are normally archived? personally i don't think i need to pay to have everything done at a public university published for the world. that would be a bigger expense than the research is actually worth in many cases.

>As the pool of engineers get smaller so does the disemination
>of scientific information,.

Engineers are NOT scientists. Engineers design things that perform specific functions, they may solve practical problems, but they are NOT the ones doing most of the basic research type of work. At my last job they wanted to change my job title from 'Engineer' to 'Scientist', this was a place that DID perform research that was funded by industry, most of which was kept private for use by the funders. I refused the job title change because I preferred to do the practical stuff and make products for the customers that did something useful instead of the research and experimentation and writing reports.

5195. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 18:56:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gatij41jnrtnh7tvhm8qnlqp5nusim2lse@4ax.com>
Source record: 19469

On Fri, 5 Dec 2008 08:55:55 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

> I see no point in preventing
>oversite by the public at large
>from seeing how their taxes are being spent.

I wonder how long that sentiment would last if we demanded full
disclosure and retention of patent rights from those on the dole who
claim they are inventors?

* * * * T I L T !!!! * * * *

The question becomes: Are you willing to pay back your social
security to the taxpayers who support you?

Knowing how that answer will be evaded, avoided, denied, dismissed
(each or all with manufactured outrage suited to this Soap Opera), no,
you won't. As Perot used to say, "That dog don't hunt!"

As such, the status quo will be maintained and inventors on the dole
will keep their dignity and professors will keep their research.
Equilibrium! ;-)

73's
Richard Clark, KB7QHC

5196. Re: FS: 10-80 SLINKY dipole antenna with coax choke balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 20:27:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghc2qtmni1@news.albasani.net>
Source record: 19470

DC wrote:
> http://easyurl.net/Slinky
>

THAT balun, MOST CERTAINLY, does NOT look adequate for 80m! (and, that is ONLY for starters ...)

Something tells me you need more "research" into baluns ... (that balun looks like a 1:1 unun to me ... or, call it a current choke ...

Hint: Coax is unbalanced, a dipole IS balanced.

Regards,
JS

5197. skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-05 23:25:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3bcbd65f-cc4d-4193-9311-72ec12218b12@s20g2000yqh.googlegroups.com>
Source record: 19471

At 3 times the standard depth of skin depth the density is 5 percent
of that on the surface, below which only copper losses with respect to
a time varying current. So what exactly forces a time varying current
to take an alternate route of travel from the center of a conductor
when the resistance is so low compared to other routes that could be
taken.?
Note : center resistance is lower than that on the surface because
skin depth (opposing eddy currents) cannot form.
Art

5198. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 00:38:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghchhn$8is$1@news.albasani.net>
Source record: 19472

Art Unwin wrote:
> ... So what exactly forces a time varying current
> to take an alternate route of travel from the center of a conductor
> when the resistance is so low compared to other routes that could be
> taken.?
> Note : center resistance is lower than that on the surface because
> skin depth (opposing eddy currents) cannot form.
> Art

I think that question is probably best answered with a question(s) ...

What is a thin element?; What is a thick element? What is the surface area of the element(s) in question?; what are the power densities involved?; Does the surface quality of the element cause these measurements to vary?; In all cases ever recorded, is it ALWAYS the level you gave, i.e., no anomalies?

I have always thought 1/4 copper tubing with a tenalized SS welding wire of heavy gage though its center was superior at high power, a lot get by with much thinner elements. On 10m and lower, I would, generally, use heavy wall copper pipe of 1/2", or so ... on wifi antennas, I use 1/8 heavy wall brass hobby tubing--I suspect no advantage over thin wall.

I would love access to facilities to investigate this, that lacking, I would love data I could trust ... what do you find so interesting that rf might be forced deeper into the surface of elements? I assume from all my readings and studies that rf prefers the surface--the higher the freq(s) the more the phenomenon is noted/enforced.

Regards,
JS

5199. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 01:01:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <g2vo06-6kl.ln1@mail.specsol.com>
Source record: 19473

Art Unwin <ArthurUnwin@gmail.com> wrote:
> At 3 times the standard depth of skin depth the density is 5 percent
> of that on the surface, below which only copper losses with respect to
> a time varying current. So what exactly forces a time varying current
> to take an alternate route of travel from the center of a conductor
> when the resistance is so low compared to other routes that could be
> taken.?
> Note : center resistance is lower than that on the surface because
> skin depth (opposing eddy currents) cannot form.
> Art

Babble.

Skin depth and what cause it:

http://en.wikipedia.org/wiki/Skin_depth

--
Jim Pennino

Remove .spam.sux to reply.

5200. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 01:06:49 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <bb8420f7-1dad-414a-af5c-193437e61f96@d14g2000yqb.googlegroups.com>
Source record: 19474

On Dec 5, 6:38 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ... So what exactly forces a time varying current
> > to take an alternate route of travel from the center of a conductor
> > when the resistance is so low compared to other routes that could be
> > taken.?
> > Note : center resistance is lower than that on the surface because
> > skin depth (opposing eddy currents) cannot form.
> > Art
>
> I think that question is probably best answered with a question(s) ...
>
> What is a thin element?; What is a thick element? What is the surface
> area of the element(s) in question?; what are the power densities
> involved?; Does the surface quality of the element cause these
> measurements to vary?; In all cases ever recorded, is it ALWAYS the
> level you gave, i.e., no anomalies?
>
> I have always thought 1/4 copper tubing with a tenalized SS welding wire
> of heavy gage though its center was superior at high power, a lot get by
> with much thinner elements. On 10m and lower, I would, generally, use
> heavy wall copper pipe of 1/2", or so ... on wifi antennas, I use 1/8
> heavy wall brass hobby tubing--I suspect no advantage over thin wall.
>
> I would love access to facilities to investigate this, that lacking, I
> would love data I could trust ... what do you find so interesting that
> rf might be forced deeper into the surface of elements? I assume from
> all my readings and studies that rf prefers the surface--the higher the
> freq(s) the more the phenomenon is noted/enforced.
>
> Regards,
> JS

Well John the impedance gets lower as the percent of the wavelength
goes down
Exercising limits when the radiation surface is zero then so is the
radiation
The point I am stating is that a fractional wavelength is less that a
wavelength
and copper losses thru the center is less than an ohm so where is
there a lesser
impedance route fot the current to travel to become a closed circuit
without radiating?
I am just making the point again that antenna knoweledge on this

newsgroup is very sparce
Most do not accept I sq R jn all cases,and most will not accept the existence of a Faraday cage!
RF does prefer to exist on the surface if and only if contra forces cannot be over come.
But then "engineers are not scientists" according to one poster so perusal of white papers is not necessary
as the truth is unimportant. So the single question again.....
What is the lowest resistance part from the top of a fractional wavelength antenna to obtain a closed circuit?
Simple and to the point and no word games as the application of true true science is indicated to those thus qualified
Art

5201. Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 01:17:45 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <dq-dnZXd6Y0gT6TUnZ2dnUVZ_rjinZ2d@earthlink.com>
Source record: 19475

Group:

Warning... this could be mind blowing!

Conventionally electromagnetic wave 'polarization' refers to the relative physical spatial orientation of the electric field vector (E) of an electromagnetic wave.

It is commonly understood that polarization of electromagnetic waves may be either linear or circular.

Linear Polarization (LP):

Of course waves that are linearly polarized may have any arbitrary orientation angle (theta) with respect to a reference frame such as the earth's surface. For example most common linear amateur antennas produce and/or respond to waves of linear polarization, and these antennas produce either either horizonally or vertically polarized waves depending upon the orientation of the (linear) antenna with respect to the earth's surface (ground).

As examples; a 1/2 wave length dipole for 10 meters hung at 30 feet between two trees of equal height produces a largely horizonally polarized wave and, a 2 meter 1/4 wave dipole mounted in the center of the roof of an automobile produces a largely vertically polarized wave.

Of course as electromagnetic waves are propagated throughout an environment are never purely orientated and usually contain an ensemble of many orientations, because the waves are reflected from the ground, trees, buildings, mountains, bridges, moving vehicles, and sometimes propogated through moving and anisotropic media such as the ionosphere, etc... and so the multiple reflection surfaces at various angles to the earth's surface and/or refractions and Faraday rotations will conspire to "mix up" the original orientation of the E vector of a purely linear transmitted wave and usually produces a quite mixed polarization at distance from an emitting antenna.

Malus' Law {I = Io [cos(theta)]^^2} describes the response of a linearly polarized receiving antenna to waves arriving at a polarization angle theta relative to the receiving antenna's preferred orientation. i.e a horizontally polarized antenna will produce maximum response to horizontally polarized waves and a minimum response (zero) to a vertically polarized wave and vice versa.

Of course in practice, because of the multipath reflections and refractions the 'cross response' is never exactly zero or maximum as predicted by Malus Law.

Just the same it is preferable to have the orientation of a receiving antenna 'aligned' with that of a particular transmitting antenna. In the HF region it is difficult for hams to "rotate" the orientation of their receiving antennas to maximize signal pickup based upon polarization, and so most hams are forced to take whatever response their relatively fixed antennas produce to the relatively unknown orientation of received waves.

In military or commercial installations, where money and space may not be an issue, either electronically or mechanically derived spatial antenna polarization diversity can be utilized to maximize received signal strength based upon arriving polarization. Polarization diversity receivers...

Circular Polarization (CP):

Circular polarization describes the condition when an electromagnetic wave is spinning or rotating with around its direction of transmission. That is the electric vector (E) of a circularly polarized electromagnetic wave is rotating with an angular velocity as the wave travels through space. This is in contrast to the E vector of a linearly polarized wave which merely oscillates in one linear direction.

Just as with linear polarization (horizontal and vertical) there are two different distinctly possible orientations for circularily polarized waves, these are known as Right Hand Circular Polarization (RHCP) and Left Hand Circular Polarization (LHCP). There are actually two well known conventions used to label R and L CP depending upon the community of interest, namely physics/optics and electrical/electronics. Usually electronics folks refer the direction of rotation to the rotation of the E vector around the direction of travel from a transmitting antenna, whilst the optical physicists refer the rotation of E around the direction of travel towards a receiving lens. It's the same as the definition of up and down, it's all in the eye of the beholder. Regardless there are two orientations for CP

Apparently circular polarization is less commonly known and understood than linear (horizontal/vertical) polarization especially among hams.

There exist RHCP antennas and there are LHCP antennas. Perhaps one of the easiest forms of CP antennas for hams to understand are the axial mode helix antennas first discovered/studied by the great radio astronomer/ham John Kraus W8JK. Axial mode helix antennas may be "wound" with either a right hand thread or a left hand thread.

Again Malus Law applies, in an easily applied modified form and so... RHCP receiving antennas respond to RHCP waves and LHCP receiving antennas respond to LHCP waves. A purely RHCP antenna will produce zero response to an LHCP wave, etc...

An interesting effect happens upon reflection of CP waves. An RHCP wave reflected from a perfectly reflecting surface returns (is echoed) as a LHCP wave!

CP propagation is often used in Satellite communications where a satellite may use both RHCP and LHCP transmitting antennas on the same frequency for

communicating independently with two different ground stations using R and L CP antennas on the same frequency. CP frequency diversity doubles channel capacity!

Yet another common form of CP antenna uses crossed linear antennas fed with a 90 degree (Pi/2) phase difference excitation.

As far as I know all currently known CP antennas such as axial mode helixes and crossed 90 degree linear arrays produce CP waves where the angular velocity of rotation is one revolution per cycle of the RF carrier, or in other words one radian of circular rotation for each radian of frequency transmitted. In other words most well known CP antennas produce ONLY synchronous CP, where the angular velocity of rotation of the E vector is synchronized exactly with the frequency of the wave being transmitted.

I believe that the well known and understood situation of purely synchronous CP is NOT necessesarily the only form of CP.

Warning... The following may be an invention!

Consider the case of a linear antenna, say a dipole, fed from a feed line over rotating slip rings, such that the antenna can be rotated while it is transmitting.

Now transmit on that dipole antenna whilst mechanically spinning it clockwise [RHCP?] (with a mechanical motor of some kind).

The dipole antenna is linear and thuse emits linear polariztion, except it is mechanically spinning, and so the E vector emanating from the antenna will be rotating with respect to its direction of travel.

In this case the angular velocity of the motor that spins the linear antenna need not be synchronous with the frequency being radiated.

For example we could mechanically spin the antenna at 330 rpm while transmitting a carrier of 1 GHz.

This would most certainly produce circular polarization. For is not the E vector spinning at 330 revs!

In fact the astute newsreader may note that we need not use a motor to rotate the antenna. In fact, I can propose several ways of "electronically" rotating the linear antenna at any arbitrary angular velocity, not necessarily synchronous with the transmitted frequency and so produce a so-called non-synchronous CP at any desired rate of rotation.

Clearly, according to Malus Law, the maximum response to the non-synchronous CP received waves from this 'rotating' antenna contraption would be from a similarily rotating receiving antenna!

Question?

What would be the response of an axial mode helix antenna or say crossed 90 degree fed dipoles or any other "synchronous" CP antenna to such a non-synchronous wave produces by a rotating antenna?

Would the response of a syncrhronous axial mode helix be less than that of a sympathetically rotating receiving antenna?

What?

Thoughts, comments?

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5202. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 01:43:57 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d7a0d95b-0650-479a-a1db-4c11e0660aff@h20g2000yqn.googlegroups.com>
Source record: 19476

On Dec 5, 7:01 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > At 3 times the standard depth of skin depth the density is 5 percent
> > of that on the surface, below which only copper losses with respect to
> > a time varying current. So what exactly forces a time varying current
> > to take an alternate route of travel from the center of a conductor
> > when the resistance is so low compared to other routes that could be
> > taken.?
> > Note : center resistance is lower than that on the surface because
> > skin depth (opposing eddy currents) cannot form.
> > Art
>
> Babble.
>
> Skin depth and what cause it:
>
> http://en.wikipedia.org/wiki/Skin_depth
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Good grief. wilkipedia that you refered to is absolutelly correct
I am looking for somebody well vested in RF. If you can point to
an error in the given mathematics text
then you can regain my respect.
Pretty hard to do without a modern college education in physics or
electrical engineering
Next self perceived expert come forward.
Art

5203. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 02:01:00 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <qe2p06-hvl.ln1@mail.specsol.com>
Source record: 19477

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Dec 5, 7:01 pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > At 3 times the standard depth of skin depth the density is 5 percent
>> > of that on the surface, below which only copper losses with respect to
>> > a time varying current. So what exactly forces a time varying current
>> > to take an alternate route of travel from the center of a conductor
>> > when the resistance is so low compared to other routes that could be
>> > taken.?
>> > Note : center resistance is lower than that on the surface because
>> > skin depth (opposing eddy currents) cannot form.
>> > Art
>>
>> Babble.
>>
>> Skin depth and what cause it:
>>
>> http://en.wikipedia.org/wiki/Skin_depth
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> If you can point to
> an error in the given mathematics text

What "given mathematics text"?

--
Jim Pennino

Remove .spam.sux to reply.

5204. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 02:09:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghcms0ert1@news.albasani.net>
Source record: 19478

Art Unwin wrote:

>> ...
> Art

I expected someone to pop-in with an ultra-simplistic explanation, and poof!; Claim the problem explained ...

I myself pay enough attention that, I can see the point you make. Indeed, anyone with even half-a-brain, interested in rf and having worked with antennas in a hands-on reality, i.e., build rather than buy, would have come across this enigma.

Real world example:

I have watched amateurs pump 1+KW into, what I consider, incredibly thin elements/conductors (my math skills indicate current carrying capacity of the wire is being vastly exceeded, at points/nodes.) And, it has struck me that I don't see this element vaporize at a current node! Indeed, I don't even see a pronounced sag/heating/softening of such elements ...

The simple/short explanation makes all our "antenna prophetic/predicting" formulas and equations work ... the long explanation is a bit more complex, me thinks ...

Regards,
JS

5205. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 02:13:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <130eaf8b-2829-4c6f-bdbb-ddfb21d981a3@g38g2000yqd.googlegroups.com>
Source record: 19479

On Dec 5, 8:01 pm, j...@specsol.spam.sux.com wrote:
> Art Unwin <ArthurUn...@gmail.com> wrote:
> > On Dec 5, 7:01 pm, j...@specsol.spam.sux.com wrote:
> >> Art Unwin <ArthurUn...@gmail.com> wrote:
> >> > At 3 times the standard depth of skin depth the density is 5 percent
> >> > of that on the surface, below which only copper losses with respect to
> >> > a time varying current. So what exactly forces a time varying current
> >> > to take an alternate route of travel from the center of a conductor
> >> > when the resistance is so low compared to other routes that could be
> >> > taken.?
> >> > Note : center resistance is lower than that on the surface because
> >> > skin depth (opposing eddy currents) cannot form.
> >> > Art
>
> >> Babble.
>
> >> Skin depth and what cause it:
>
> >>http://en.wikipedia.org/wiki/Skin_depth
>
> >> --
> >> Jim Pennino
>
> >> Remove .spam.sux to reply.
>
> > If you can point to
> > an error in the given mathematics text
>
> What "given mathematics text"?
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

What you pointed to as being contrary to what I stated
Silly statement with a liberal smattering of "bable"
does nothing to suggest that you are up to date education in the art.
Next please
Art

5206. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 02:30:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <qa4p06-j6m.ln1@mail.specsol.com>
Source record: 19480

Art Unwin <ArthurUnwin@gmail.com> wrote:
> On Dec 5, 8:01 pm, j...@specsol.spam.sux.com wrote:
>> Art Unwin <ArthurUn...@gmail.com> wrote:
>> > On Dec 5, 7:01 pm, j...@specsol.spam.sux.com wrote:
>> >> Art Unwin <ArthurUn...@gmail.com> wrote:
>> >> > At 3 times the standard depth of skin depth the density is 5 percent
>> >> > of that on the surface, below which only copper losses with respect to
>> >> > a time varying current. So what exactly forces a time varying current
>> >> > to take an alternate route of travel from the center of a conductor
>> >> > when the resistance is so low compared to other routes that could be
>> >> > taken.?
>> >> > Note : center resistance is lower than that on the surface because
>> >> > skin depth (opposing eddy currents) cannot form.
>> >> > Art
>>
>> >> Babble.
>>
>> >> Skin depth and what cause it:
>>
>> >>http://en.wikipedia.org/wiki/Skin_depth
>>
>> >> --
>> >> Jim Pennino
>>
>> >> Remove .spam.sux to reply.
>>
>> > If you can point to
>> > an error in the given mathematics text
>>
>> What "given mathematics text"?
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> What you pointed to as being contrary to what I stated

What I pointed to wasn't a "mathematics text" and if it is contrary
to what you stated, that is because your statements are babbling
nonsense.

--
Jim Pennino

Remove .spam.sux to reply.

5207. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 02:51:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <F4qdnS9YA_A6daTUnZ2dnUVZ_t3inZ2d@posted.easystreetonline>
Source record: 19481

Peter O. Brackett wrote:
> . . .
> It is commonly understood that polarization of electromagnetic waves may
> be either linear or circular.

Then some education is in order. Electromagnetic waves are elliptically polarized. The two extreme special cases of this are linear and circular (with axial ratio of zero -- or infinite depending on your choice of definition -- and one respectively). There are an infinite number of other possible elliptical polarizations with different axial ratios.

> Linear Polarization (LP):
>
> Of course waves that are linearly polarized may have any arbitrary
> orientation angle (theta) with respect to a reference frame such as the
> earth's surface. For example most common linear amateur antennas
> produce and/or respond to waves of linear polarization, and these
> antennas produce either either horizonally or vertically polarized waves
> depending upon the orientation of the (linear) antenna with respect to
> the earth's surface (ground).

Of course linear polarization can have any orientation, not just vertical or horizontal. And even those terms lose meaning when away from the Earth. However, it's often convenient to mathematically separate waves into two superposed components of horizontal and vertical polarization.

> As examples; a 1/2 wave length dipole for 10 meters hung at 30 feet
> between two trees of equal height produces a largely horizonally
> polarized wave and, a 2 meter 1/4 wave dipole mounted in the center of
> the roof of an automobile produces a largely vertically polarized wave.

The polarization of the dipole signal will be purely horizontal only directly broadside. The signal off the ends are purely vertically polarized, and in other directions neither horizontal nor vertical.

> Of course as electromagnetic waves are propagated throughout an
> environment are never purely orientated and usually contain an ensemble
> of many orientations, because the waves are reflected from the ground,
> trees, buildings, mountains, bridges, moving vehicles, and sometimes
> propogated through moving and anisotropic media such as the ionosphere,
> etc... and so the multiple reflection surfaces at various angles to the
> earth's surface and/or refractions and Faraday rotations will conspire
> to "mix up" the original orientation of the E vector of a purely linear
> transmitted wave and usually produces a quite mixed polarization at
> distance from an emitting antenna.

By "mixed" polarization, I assume you mean a single polarization which
is neither horizontal nor vertical and can be described as a "mixture"
of a purely horizontal and a purely vertical wave.

> Malus' Law {I = Io [cos(theta)]^^2} describes the response of a linearly
> polarized receiving antenna to waves arriving at a polarization angle
> theta relative to the receiving antenna's preferred orientation. i.e a
> horizontally polarized antenna will produce maximum response to
> horizontally polarized waves and a minimum response (zero) to a
> vertically polarized wave and vice versa.
>
> Of course in practice, because of the multipath reflections and
> refractions the 'cross response' is never exactly zero or maximum as
> predicted by Malus Law.

It's also difficult to get the polarizations of the antennas exactly right.

> Just the same it is preferable to have the orientation of a receiving
> antenna 'aligned' with that of a particular transmitting antenna. In
> the HF region it is difficult for hams to "rotate" the orientation of
> their receiving antennas to maximize signal pickup based upon
> polarization, and so most hams are forced to take whatever response
> their relatively fixed antennas produce to the relatively unknown
> orientation of received waves.

There's no advantage at HF of having the antenna orientations the same
if the path is via the ionosphere.

> In military or commercial installations, where money and space may not
> be an issue, either electronically or mechanically derived spatial
> antenna polarization diversity can be utilized to maximize received
> signal strength based upon arriving polarization. Polarization
> diversity receivers...
>
> Circular Polarization (CP):
>
> . . .

> Again Malus Law applies, in an easily applied modified form and so...
> RHCP receiving antennas respond to RHCP waves and LHCP receiving
> antennas respond to LHCP waves. A purely RHCP antenna will produce zero
> response to an LHCP wave, etc...

Interesting. Can you work an example for us? I'm curious as to what you
use for theta in the "law's" equation.

> An interesting effect happens upon reflection of CP waves. An RHCP wave
> reflected from a perfectly reflecting surface returns (is echoed) as a
> LHCP wave!

Only if it strikes the surface directly head-on. Otherwise you get an
elliptically polarized wave. The axial ratio depends on the angle of
incidence and, if the reflector isn't perfectly conducting, on the
impedance of the surface.

> CP propagation is often used in Satellite communications where a
> satellite may use both RHCP and LHCP transmitting antennas on the same
> frequency for communicating independently with two different ground
> stations using R and L CP antennas on the same frequency. CP frequency
> diversity doubles channel capacity!

I think you mean that polarization (not frequency) diversity doubles
channel capacity.

> Yet another common form of CP antenna uses crossed linear antennas fed
> with a 90 degree (Pi/2) phase difference excitation.
>
> As far as I know all currently known CP antennas such as axial mode
> helixes and crossed 90 degree linear arrays produce CP waves where the
> angular velocity of rotation is one revolution per cycle of the RF
> carrier, or in other words one radian of circular rotation for each
> radian of frequency transmitted. In other words most well known CP
> antennas produce ONLY synchronous CP, where the angular velocity of
> rotation of the E vector is synchronized exactly with the frequency of
> the wave being transmitted.

That is, in fact, the definition of circular or elliptical polarization.

> I believe that the well known and understood situation of purely
> synchronous CP is NOT necessesarily the only form of CP.

It's the only one which fits the definition. If you choose to rotate the
polarization at some other rate, you should call it something else.

> Warning... The following may be an invention!
>
> Consider the case of a linear antenna, say a dipole, fed from a feed
> line over rotating slip rings, such that the antenna can be rotated
> while it is transmitting.
>
> Now transmit on that dipole antenna whilst mechanically spinning it
> clockwise [RHCP?] (with a mechanical motor of some kind).
>
> The dipole antenna is linear and thuse emits linear polariztion, except
> it is mechanically spinning, and so the E vector emanating from the
> antenna will be rotating with respect to its direction of travel.
>
> In this case the angular velocity of the motor that spins the linear
> antenna need not be synchronous with the frequency being radiated.
>
> For example we could mechanically spin the antenna at 330 rpm while
> transmitting a carrier of 1 GHz.
>
> This would most certainly produce circular polarization. For is not the
> E vector spinning at 330 revs!

Sorry, it doesn't. An unavoidable side effect of the synchronicity
change is that the amplitude of the E field still changes at a 1 GHz

rate, going through a complete cycle from max to zero to max to zero to max each nanosecond. A circularly polarized wave doesn't change amplitude with time. A non-circular elliptical wave changes amplitude but not fully to zero each cycle.

Circularly polarized waves have many characteristics and particular relationships to linearly polarized waves. The waves you're producing don't have some of these characteristics, like the constant amplitude. Your method doesn't produce circularly polarized waves even though the polarization does indeed change with time.

> In fact the astute newsreader may note that we need not use a motor to
> rotate the antenna. In fact, I can propose several ways of
> "electronically" rotating the linear antenna at any arbitrary angular
> velocity, not necessarily synchronous with the transmitted frequency and
> so produce a so-called non-synchronous CP at any desired rate of rotation.
>
> Clearly, according to Malus Law, the maximum response to the
> non-synchronous CP received waves from this 'rotating' antenna
> contraption would be from a similarily rotating receiving antenna!
>
> Question?
>
> What would be the response of an axial mode helix antenna or say crossed
> 90 degree fed dipoles or any other "synchronous" CP antenna to such a
> non-synchronous wave produces by a rotating antenna?

Because a circularly polarized antenna responds equally well to all orientations of linear polarization, the normal helix wouldn't be aware of the polarization rotation -- unless the polarization rotation was fast enough to be nearly synchronous.

> Would the response of a syncrhronous axial mode helix be less than that
> of a sympathetically rotating receiving antenna?

No.

> What?
>
> Thoughts, comments?

Sorry, I didn't find it "mind-blowing".
>
> -- Pete K1PO
> -- Indialantic By-the-Sea, FL

Roy Lewallen, W7EL

5208. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 03:24:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2cd2c48b-f9cf-4c0a-a09c-878b464a0fdd@f3g2000yqf.googlegroups.com>
Source record: 19482

On Dec 5, 8:09 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...
>
> > Art
>
> I expected someone to pop-in with an ultra-simplistic explanation, and
> poof!; Claim the problem explained ...
>
> I myself pay enough attention that, I can see the point you make.
> Indeed, anyone with even half-a-brain, interested in rf and having
> worked with antennas in a hands-on reality, i.e., build rather than buy,
> would have come across this enigma.
>
> Real world example:
>
> I have watched amateurs pump 1+KW into, what I consider, incredibly thin
> elements/conductors (my math skills indicate current carrying capacity
> of the wire is being vastly exceeded, at points/nodes.) And, it has
> struck me that I don't see this element vaporize at a current node!
> Indeed, I don't even see a pronounced sag/heating/softening of such
> elements ...
>
> The simple/short explanation makes all our "antenna
> prophetic/predicting" formulas and equations work ... the long
> explanation is a bit more complex, me thinks ...
>
> Regards,
> JS

John., there are one or two who can provide the correct answer.
One is an old timer on this group from years ago who I believe is well
versed in RF
and has made a couple of postings lately. Funny thing is that when an
addition was made to electrical laws by Heaviside
and Maxwell it was just an addition to bring the laws into
equilibrium! Ofcourse, those units encompassed a formula well suited
for a displacement current.
However the idea of waves versus particles exist to this very day even
when Foucualt discovered the presence of a separate current that fit
the initial addition by Maxwell and searched for so long by Einstein
before abandoning classical physics and plunged it to relativism for
the answer on the understanding that the "weak force" was part and

parcel of radiation and a subset of an existing force. He died and there is nobody left to apply authoritity to his thoughts. I can just imagine what woild have happened if Einstein extended the static law by making it a dynamic field which by its equivalent to Maxwell would have placed particles and equilibrium firmly into radiation. Just imagine Einstein having possesion of a computer program of today with optimizer that excluded planar designs in the face of an array in equilibrium. I know of nobody familiar with the present antenna programs who can explain the addition of the "'Weak force" that creats arrays in equilibrium without a hint of parallelism or planar construction. Have all the antenna computer programmers also died or do they have a quiet distrust of their work with respect to Maxwell ?
Now we have the relevalation that Neutrinos DO actually have mass obtained frtom the Sun which puts another nail in the coffin with respect to waves.
Yes, American Universities deserve their failing grade.(Read Asimov thoughts on present science teaching)
NEXT engineer scientist/rocket engineer or what ever>>>>>

Art Unwin KB9MZ....,..,.xg (uk)

5209. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 03:32:03 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <ghcrnsenj1@news.motzarella.org>
Source record: 19483
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Chuck Olson" <chuckolson01@REMOVETHIScomcast.net> wrote in message
news:ggffkevpn1@news.motzarella.org...
>
> "Rich Grise" <rich@example.net> wrote in message
> news:pan.2008.11.19.22.45.03.655469@example.net...
>> Or, does anyone have a UHF-TV log-periodic design that they'd share? :-)
>>
>> Thanks,
>> Rich
>>
> Lo and behold, here is one http://tinyurl.com/665r5a but it's a throw-back
> to a simpler time when the HP42S calculator was an engineer's prized tool.
> If you have a 42S, punch it in and use it. Otherwise, this is mainly a
> learning tool to show how simple the calculations are. I think this design
> could be put onto a Lotus123 calculating spread sheet where all the output
> data windows would suddenly by filled up upon entering the needed input
> data.
>
Sorry about the filename not working. This one should work:

http://tinyurl.com/5qxh9u

5210. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 04:29:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghcv36$l3l$1@news.albasani.net>
Source record: 19484

Art Unwin wrote:
> ... Have all the antenna computer programmers also died or
> do they have a quiet distrust of their work with respect to Maxwell ?
> Now we have the relevalation that Neutrinos DO actually have mass
> obtained frtom the Sun which puts another nail in the coffin with
> respect to waves.
> Yes, American Universities deserve their failing grade.(Read Asimov
> thoughts on present science teaching)
> NEXT engineer scientist/rocket engineer or what ever>>>>>
>
> Art Unwin KB9MZ....,..,.xg (uk)

Actually, no, general programmers fill the planet, competition for work is high ... well, perhaps better in china, india, etc. :-(

However, programmers "don't much" appreciate programs which play horseshoes. We like EXACT answers, exact measurements and routines which CONSISTENTLY return EXACT figures, dimensions, etc. ... in true math there is but one answer, artists see things in gray, programmers in black and white. When a program says, "Well, you start here, with this measurement, and prune, or lengthen", or, "You start with this capacitance (or inductance) and then adjust as necessary", I feel ill.

Example:

IF Pi X 3 = circumference ever fails (I expect it to be just as accurate for a 1 inch circle as a 1 million mile one), or returns a "figure to begin experimenting from", I will see it as only a guess also ... and requiring an artist to deduce.

Antenna design parameters are a nightmare ... indeed, since that which is not a science is an art--antenna design looks very much an art to me ... or, at least mixed fields of discipline are required.

Now, one Art should recognize another art ... <grin>

And, I am done with this whole discussion, someday we will have accurate tools to work with ... end of story.

Regards,
JS

5211. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 08:38:56 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <JAyc1iEgojOJFAuV@ifwtech.co.uk>
Source record: 19485

JP wrote:
>
>Skin depth and what cause it:
>
>http://en.wikipedia.org/wiki/Skin_depth
>

The Wikipedia treatment is not incorrect, but it may create a false impression that the skin effect is limited to some particular type or cross-section of conductor.

There is a more general derivation by Davidson that has far fewer restrictions about the assumed geometry. There is a scanned copy at: http://www.ifwtech.co.uk/g3sek/misc/skin.htm

Davidson shows much more clearly that the existence of a skin effect does not depend on any particular shape or size of conductor, or any particular type of electrical circuit. If RF current is flowing in a conductor - regardless of the reason - then the skin effect will be present.

That is a very powerful conclusion. Because we know the skin effect will be present, it helps us to trace the RF current pathways on complex shapes such as coaxial cables and shielded loops.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5212. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 12:18:50 UTC
From: Dave <noone@nowhere.com>
Message-ID: <K4u_k.132$c35.10@nwrddc02.gnilink.net>
Source record: 19486

"Peter O. Brackett" <none@no-such-domain.nul> wrote in message
news:dq-dnZXd6Y0gT6TUnZ2dnUVZ_rjinZ2d@earthlink.com...

> What would be the response of an axial mode helix antenna or say crossed
> 90 degree fed dipoles or any other "synchronous" CP antenna to such a
> non-synchronous wave produces by a rotating antenna?

the same as for a linearly polarized wave. since the rotation frequency is
much lower than the carrier frequency (unless you are considering elf
transmissions) during any time period consisting of several cycles of the
carrier it would appear stationary to the antenna.

>
> Would the response of a syncrhronous axial mode helix be less than that of
> a sympathetically rotating receiving antenna?
>

it wouldn't matter. now if there were two linearly polarized antennas
rotating such that their polarizations stayed in sync that would at least
reduce the fading caused by one rotating and the other being stationary.
but only if the path between them didn't produce any rotation or
randomization of the polarization, so essentially only for short paths with
no reflective multi-path or other effects. seems like more trouble than its
worth... what would you gain from it anyway?

5213. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 12:31:44 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Qgu_k.142$c35.73@nwrddc02.gnilink.net>
Source record: 19487

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:2cd2c48b-f9cf-4c0a-a09c-878b464a0fdd@f3g2000yqf.googlegroups.com...
On Dec 5, 8:09 pm, John Smith <assemblywiz...@gmail.com> wrote:
>I know of nobody familiar with the present antenna
>programs who can explain the addition of the "'Weak force" that creats
>arrays in equilibrium without a hint of parallelism or planar
>construction. Have all the antenna computer programmers also died or
>do they have a quiet distrust of their work with respect to Maxwell ?

nope, us programmers are perfectly happy, you on the other hand should
completely distrust any computer program modelling antennas out there...
NONE of them include the weak force, therefore they should not be trusted to
model your magical equilibrium antennas. you must go off and find a
different way to calculate your antenna patterns that does include the weak
force.

>Now we have the relevalation that Neutrinos DO actually have mass
>obtained frtom the Sun which puts another nail in the coffin with
>respect to waves.

the only place that has been revealed is to your in your delusional dreams.
go publish that in a peer reviewed scientific journal and see how many cups
of coffee it gets you.

5214. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 14:06:22 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4bbce1ec-cc79-409b-a6e1-59c0183fc66f@l39g2000yqn.googlegroups.com>
Source record: 19488

On Dec 6, 2:38 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
> JP wrote:
>
> >Skin depth and what cause it:
>
> >http://en.wikipedia.org/wiki/Skin_depth
>
> The Wikipedia treatment is not incorrect, but it may create a false
> impression that the skin effect is limited to some particular type or
> cross-section of conductor.
>
> There is a more general derivation by Davidson that has far fewer
> restrictions about the assumed geometry. There is a scanned copy
at:http://www.ifwtech.co.uk/g3sek/misc/skin.htm
>
> Davidson shows much more clearly that the existence of a skin effect
> does not depend on any particular shape or size of conductor, or any
> particular type of electrical circuit. If RF current is flowing in a
> conductor - regardless of the reason - then the skin effect will be
> present.
>
> That is a very powerful conclusion. Because we know the skin effect will
> be present, it helps us to trace the RF current pathways on complex
> shapes such as coaxial cables and shielded loops.
>
> --
>
> 73 from Ian GM3SEK 'In Practice' columnist for RadCom
(RSGB)http://www.ifwtech.co.uk/g3sek

Thank you very much for the addition supplied. I never really
understood why hams could not accept this
From my point oif view the beauty of the Foulcalt or eddy current is
without this "pealing" on the chemical adhesion effect
that a particle has on a diamagnetic surface the ejected particle
would be without spin, and as such would not be able to have straight
line
projection within a gravitational field, a necessity for radiation.
Any book on wave guides will picture this eddy current on the inside
walls
and any book on non destructive testing will also corroberate its
presence
and yet it is still rejected by this group. When Maxwell inserted the
required units to achieve equilibrium per Newton it was the

mathematics that forcast
the presence of a levitation force that would not be identified for
several decades but stil ignored because of the dominance of wave
theory.
Cheers
Art

5215. Re: FS: 10-80 SLINKY dipole antenna with coax choke balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 14:15:24 UTC
From: ltdoc@yahoo.com
Message-ID: <bec6a6eb-2a81-45bf-a768-73abe9acd65b@u14g2000yqg.googlegroups.com>
Source record: 19489

If you're desperate enough to have to use a slinky at all, then I
wouldn't worry much about that choke.
- 'Doc

5216. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 14:24:26 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <79bdc5cf-9e59-4c90-9e79-ef6bcbc089fc@s20g2000yqh.googlegroups.com>
Source record: 19490

On Dec 6, 6:31 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:2cd2c48b-f9cf-4c0a-a09c-878b464a0fdd@f3g2000yqf.googlegroups.com...
> On Dec 5, 8:09 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
> >I know of nobody familiar with the present antenna
> >programs who can explain the addition of the "'Weak force" that creats
> >arrays in equilibrium without a hint of parallelism or planar
> >construction. Have all the antenna computer programmers also died or
> >do they have a quiet distrust of their work with respect to Maxwell ?
>
> nope, us programmers are perfectly happy, you on the other hand should
> completely distrust any computer program modelling antennas out there...
> NONE of them include the weak force, therefore they should not be trusted to
> model your magical equilibrium antennas. you must go off and find a
> different way to calculate your antenna patterns that does include the weak
> force.
>
> >Now we have the relevalation that Neutrinos DO actually have mass
> >obtained frtom the Sun which puts another nail in the coffin with
> >respect to waves.
>
> the only place that has been revealed is to your in your delusional dreams.
> go publish that in a peer reviewed scientific journal and see how many cups
> of coffee it gets you.

No Siree, it has been several years that the idea of Neutrinos without
mass was squashed.
Two years ago it was again confirmed in experiments in Batavia,
Illinois. And ofcourse it gives CERN
its impetus for their current experiments in Switzerland
Pull yourself together David As for publishing academics require a
reference lists of quotes from other members of academia
and are loath to challenge prior papers and academics. Thus to be
published you must stay on the same track as others
with no going back for solid review. History shows that papers
supplied by non members of academia will never be accepted in their
life time.
That is why I say papers should be open source and open to challenge
from those outside academia.
Art

5217. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 14:47:08 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Mfw_k.154$c35.18@nwrddc02.gnilink.net>
Source record: 19491

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:79bdc5cf-9e59-4c90-9e79-ef6bcbc089fc@s20g2000yqh.googlegroups.com...
>That is why I say papers should be open source and open to challenge
>from those outside academia.

go challenge anything you want... it sounds like you don't want or need to reference any current papers since your theory goes against everything that is accepted, so just publish away. you have a web site, put something on there that is testable and see if anyone can prove it. or better yet, apply for another patent with something useful and see if anyone buys it. your magical levitating weak force neutrinos make for a good laugh now and then, but are otherwise total fantasy until you can show the equations... and not a single reputable publication will accept a paper from you without those equations.

5218. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 14:55:19 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <f1e77beb-25b0-46a6-bf0a-cabbe822fc4e@v13g2000yqm.googlegroups.com>
Source record: 19492

"Art Unwin" wrote

>Thank you very much for the addition supplied. I never really
>understood why hams could not accept this.

Not just hams, Art.

Skin depth applies to a-c energy flowing along a conductor. The same principles of physics apply no matter to which end of a conductor that a-c is applied.

That is, the a-c energy reflected from the unterminated end of a conductor will travel on its outside for the same reason it traveled on the outside of that conductor when first applied to it, at its other end. Fractional wavelength conductors and your "equilibrium" are irrelevant to this.

The center conductor of rigid coaxial transmission line used in the broadcast industry is hollow, because it can carry the same amount of a-c energy as it could if it was solid (and costs/weighs a lot less).

RF

5219. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 16:11:25 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <I--dnZ8jS92pOafUnZ2dnUVZ_hKdnZ2d@earthlink.com>
Source record: 19493

Roy:

Thanks for your well thought out responses.

See my comments below interspersed with snippings of your response.

[snip]
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:F4qdnS9YA_A6daTUnZ2dnUVZ_t3inZ2d@posted.easystreetonline...
> Peter O. Brackett wrote:
>> . . .
>> It is commonly understood that polarization of electromagnetic waves may
>> be either linear or circular.
>
> Then some education is in order. Electromagnetic waves are elliptically
> polarized. The two extreme special cases of this are linear and circular
> (with axial ratio of zero -- or infinite depending on your choice of
> definition -- and one respectively). There are an infinite number of other
> possible elliptical polarizations with different axial ratios.
[snip]

I agree. My statement was not quite precise.

I should have stated something like, "it is commonly understood that
polarization of waves may be categorized as being either linear or
elliptical, and
in the elliptical category the special case of circular polarization occurs
whenever
the major and minor axes of the elliptical polarization are equal."

[snip]
> Of course linear polarization can have any orientation, not just vertical
> or horizontal. And even those terms lose meaning when away from the Earth.
> However, it's often convenient to mathematically separate waves into two
> superposed components of horizontal and vertical polarization.
[snip]

Agreed!

[snip]
> The polarization of the dipole signal will be purely horizontal only
> directly broadside. The signal off the ends are purely vertically
> polarized, and in other directions neither horizontal nor vertical.
[snip]

Agreed! It is relatively difficult, and perhaps even impossible to arrange
the physical configuration of an antenna such that it emits (or receives)

wave of purely one category of polarization.

In practice though many antennas concentrate a major part of their emissions
in one polariztion form.

[snip]
> By "mixed" polarization, I assume you mean a single polarization which is
> neither horizontal nor vertical and can be described as a "mixture" of a
> purely horizontal and a purely vertical wave.
[snip]

No. What I meant by "mixed" was that, just as with daylight for example,
the field contains many polarization orientations. In fact usually outside
in daylight most of the light we see with our eyes contains very nearly
an equal distribution of all polariztions. An exception in the sky's light
is perpedicular to the suns rays where because of upper atmospheric
conditions light becomes slightly polarized. It is claimed that some people
can actually "see" this polarized light differently than normal light.
(Haider's
Brush) Of course many people know that reflected light, for example
from the surface of a lake, becomes highly polarized. This is the
reason that "Polaroid" sunglasses are used by sportsmen and others
to reduce perceived glare from reflective surfaces.

That said, mixed polarization, is also largely the case of HF waves
received over ionospheric paths. In other words HF waves received
over long distances will contain a wide distribution of linear
and perhaps circular polarizations. Thus rendering the use of single
polarized antennas relatively useless at HF by amateurs. Unless of
course one is prepared to pay the significant price in space and
equipment to implement a polarization diversity receiving system.

[snip]
> It's also difficult to get the polarizations of the antennas exactly
> right.
[snip]

Agreed!

[snip]
> There's no advantage at HF of having the antenna orientations the same if
> the path is via the ionosphere.
[snip]

True for a single antenna and receiver, which is the usual case for a ham,
see my remarks above.

However if one is willing to pay the price for several antennas and
synchronous
receiving systems then receiving gains can often be obtained by the
exploitation
of polarization diversity.

[snip]
> Interesting. Can you work an example for us? I'm curious as to what you
> use for theta in the "law's" equation.
[snip]

Theta is just the relative orientation of the polarization of the
transmitting
and receiving antennas, or in the case of an optical polarimeter, the
relative orientations of the polarizing and analyzing polarizer.

Theta is commonly illustrated in undergraduate optical laboratories and
science
experiment kits, using a couple of pieces of "Polaroid" film with the
polarization
angle marked on the film by a notch or other marking. When the
two films are aligned with their polariztion direction perpendicular there
is no
light propagation, i.e. theta is 90 degrees, and when they are aligned with
theta
equal to zero then light is propagated.

In the case of dipole antennas, theta is zero when two antennas are
co-linear and theta is 90 degrees when the antennas are perpendicular.

[snip]
> Only if it strikes the surface directly head-on. Otherwise you get an
> elliptically polarized wave. The axial ratio depends on the angle of
> incidence and, if the reflector isn't perfectly conducting, on the
> impedance of the surface.
[snip]

Agreed!

A very intersting optical phenomena to observe is to look at a mirror
through
an optical circular polarizer (polarizer in tandem with a 1/4 wave retarder)
which
renders the "image" of the circular polarizer to be black. i.e. the optical
circular polarizer eliminates the reflection. This technique is widely used
to eliminate reflections from information displays that must operate in high
sunlight with good sunlight readability. High quality high transmissivity
optical circular polarizers are relatively expensive, and so one does not
find such technology applied to consumer displays like computer
monitors, TV sets or IPhones, however optical circular polarizers are
widely used by the military for eliminating sunlight reflections from their
(expensive) information displays.

[snip]
>> CP propagation is often used in Satellite communications where a
>> satellite may use both RHCP and LHCP transmitting antennas on the same
>> frequency for communicating independently with two different ground
>> stations using R and L CP antennas on the same frequency. CP frequency
>> diversity doubles channel capacity!

>
> I think you mean that polarization (not frequency) diversity doubles
> channel capacity.
[snip]

Yep that's exactly what I meant, but my fingers did not type it that way.
Thanks!

[snip]
>> angular velocity of rotation is one revolution per cycle of the RF
>> carrier, or in other words one radian of circular rotation for each
>> radian of frequency transmitted. In other words most well known CP
>> antennas produce ONLY synchronous CP, where the angular velocity of
>> rotation of the E vector is synchronized exactly with the frequency of
>> the wave being transmitted.
>
> That is, in fact, the definition of circular or elliptical polarization.
[snip]

Agreed, both you and I and thousands of others know that. [smile]

[snip]
>> I believe that the well known and understood situation of purely
>> synchronous CP is NOT necessesarily the only form of CP.
>
> It's the only one which fits the definition. If you choose to rotate the
> polarization at some other rate, you should call it something else.
[snip]

Definition! Gosh where is Cecil when you need him? The only
problem with definitions is that there are so many of them!

"When I use a word, Humpty Dumpty said in a rather scornful tone,

"It means just what I chose it to mean - neither more nor less."

"The question is," said Alice, "whether you can make words mean so many
different things."

"The question is," said Humpty Dumpty, "which is to be Master - that's all."

-- Lewis Caroll, from Through the Looking Glass

--

[grin]

[snip]
> Sorry, it doesn't. An unavoidable side effect of the synchronicity change
> is that the amplitude of the E field still changes at a 1 GHz rate, going
> through a complete cycle from max to zero to max to zero to max each

> nanosecond. A circularly polarized wave doesn't change amplitude with
> time. A non-circular elliptical wave changes amplitude but not fully to
> zero each cycle.
[snip]

Here there is a bit of fuzziness...

I agree that the E field of a wave is always changing at the RF carrier frequency
since it is an AC waveform. Alternating current is always changing! And so a
1 GHz carrier will always have an E field that oscillates back and forth at the
carrier (center?) frequency when analyzed by a (linear) polarimeter.

I disagree with you that a circular polarized wave has a constant E field.

Even in the case of a purely circularly polarized the E field still oscillates
at the carrier (center?) frequency when analyzed by a linear polarizer.

i.e. if a purely CP wave is received on a linear polarized antenna the
detected E field (Volts per meter) will be observed to be oscillating
at the carrier frequency. However if received on a purely CP responding
antenna this oscillating E fileld will appear to be constant.

The E field vector can be considered to be similar to the image of a
spoke on a rolling wheel. The radius of the spoke is constant, but
it's projection on the ground over which the wheel is rolling will
always be oscillating in length.

[snip]
> Circularly polarized waves have many characteristics and particular
> relationships to linearly polarized waves. The waves you're producing
> don't have some of these characteristics, like the constant amplitude.
> Your method doesn't produce circularly polarized waves even though the
> polarization does indeed change with time.
[snip]

I beg to disagree. The waves that I am describing are exactly the same.

Consider if the mechanical motor that spins my linear antenna spins at
exactly the carrier frequency. There would be then no way to tell the
difference between the two.

[snip]
> Because a circularly polarized antenna responds equally well to all
> orientations of linear polarization, the normal helix wouldn't be aware of
> the polarization rotation -- unless the polarization rotation was fast
> enough to be nearly synchronous.
[snip]

Heh, heh... what would you consider to be "fast enough"?

Would the rate of spin have to be 99-44/100 percent of the synchronous
frequency? Or would it have to be closer than that?

At what magic spin frequency would the two be indistinguisable.

FWIW... I can propose a scheme that will electronically rotate the linear
antenna
at any desired frequency, at least up to the accuracy of modern atomic clock
standards.

[snip]
> Sorry, I didn't find it "mind-blowing".
[snip]

Roy, I don't belive you have thought about it hard enough yet, for clearly
this idea
has already "blown" your mind!

For did you not state above that a circular carrier wave has a constant
amplitude?

A radio wave with constant aplitude, indeed! Something must be blown!

At zero frequency, how would a constant wave propagate?

This assumption/view that zero frequency wave can propagate is akin to
Cecil's
view that there are no reflections at DC.

I don't mean to be facitious and I am quite serious about all of this.

Just because no one has ever considered non-synchronous circular polariztion
before
does not mean that it doesn't exist, or that it may not be useful.

Me? I have already thought of several potential uses for non-synchronous
circular
polarization. How about polariztion frequency modulation? Or... how about
polariztion phase modulation? Or...

Got you thinking yet?

Thanks again for your clearly interesting comments and feedback.

More thoughts, comments?

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5220. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 16:13:27 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <duidnULYNd4wOafUnZ2dnUVZ_umdnZ2d@earthlink.com>
Source record: 19494

Dave:

[snip]
> it wouldn't matter. now if there were two linearly polarized antennas
> rotating such that their polarizations stayed in sync that would at least
> reduce the fading caused by one rotating and the other being stationary.
> but only if the path between them didn't produce any rotation or
> randomization of the polarization, so essentially only for short paths
> with no reflective multi-path or other effects. seems like more trouble
> than its worth... what would you gain from it anyway?
[snip]

A better understanding of circular polarization?

The design of a new polariztion locked loop, akin to a phase locked loop,
but...

More?
.
.
.

Thanks!

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5221. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 16:28:04 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d8195293-802d-40be-a6f3-a27c4a7525a9@a12g2000yqm.googlegroups.com>
Source record: 19495

On Dec 6, 10:11 am, "Peter O. Brackett" <n...@no-such-domain.nul>
wrote:
> Roy:
>
> Thanks for your well thought out responses.
>
> See my comments below interspersed with snippings of your response.
>
> [snip]"Roy Lewallen" <w...@eznec.com> wrote in message
>
> news:F4qdnS9YA_A6daTUnZ2dnUVZ_t3inZ2d@posted.easystreetonline...> Peter O. Brackett
wrote:
> >> . . .
> >> It is commonly understood that polarization of electromagnetic waves may
> >> be either linear or circular.
>
> > Then some education is in order. Electromagnetic waves are elliptically
> > polarized. The two extreme special cases of this are linear and circular
> > (with axial ratio of zero -- or infinite depending on your choice of
> > definition -- and one respectively). There are an infinite number of other
> > possible elliptical polarizations with different axial ratios.
>
> [snip]
>
> I agree. My statement was not quite precise.
>
> I should have stated something like, "it is commonly understood that
> polarization of waves may be categorized as being either linear or
> elliptical, and
> in the elliptical category the special case of circular polarization occurs
> whenever
> the major and minor axes of the elliptical polarization are equal."
>
> [snip]> Of course linear polarization can have any orientation, not just vertical
> > or horizontal. And even those terms lose meaning when away from the Earth.
> > However, it's often convenient to mathematically separate waves into two
> > superposed components of horizontal and vertical polarization.
>
> [snip]
>
> Agreed!
>
> [snip]> The polarization of the dipole signal will be purely horizontal only
> > directly broadside. The signal off the ends are purely vertically

> > polarized, and in other directions neither horizontal nor vertical.
>
> [snip]
>
> Agreed! It is relatively difficult, and perhaps even impossible to arrange
> the physical configuration of an antenna such that it emits (or receives)
> wave of purely one category of polarization.
>
> In practice though many antennas concentrate a major part of their emissions
> in one polariztion form.
>
> [snip]> By "mixed" polarization, I assume you mean a single polarization which is
> > neither horizontal nor vertical and can be described as a "mixture" of a
> > purely horizontal and a purely vertical wave.
>
> [snip]
>
> No. What I meant by "mixed" was that, just as with daylight for example,
> the field contains many polarization orientations. In fact usually outside
> in daylight most of the light we see with our eyes contains very nearly
> an equal distribution of all polariztions. An exception in the sky's light
> is perpedicular to the suns rays where because of upper atmospheric
> conditions light becomes slightly polarized. It is claimed that some people
> can actually "see" this polarized light differently than normal light.
> (Haider's
> Brush) Of course many people know that reflected light, for example
> from the surface of a lake, becomes highly polarized. This is the
> reason that "Polaroid" sunglasses are used by sportsmen and others
> to reduce perceived glare from reflective surfaces.
>
> That said, mixed polarization, is also largely the case of HF waves
> received over ionospheric paths. In other words HF waves received
> over long distances will contain a wide distribution of linear
> and perhaps circular polarizations. Thus rendering the use of single
> polarized antennas relatively useless at HF by amateurs. Unless of
> course one is prepared to pay the significant price in space and
> equipment to implement a polarization diversity receiving system.
>
> [snip]> It's also difficult to get the polarizations of the antennas exactly
> > right.
>
> [snip]
>
> Agreed!
>
> [snip]> There's no advantage at HF of having the antenna orientations the same if
> > the path is via the ionosphere.
>
> [snip]
>

> True for a single antenna and receiver, which is the usual case for a ham,
> see my remarks above.
>
> However if one is willing to pay the price for several antennas and
> synchronous
> receiving systems then receiving gains can often be obtained by the
> exploitation
> of polarization diversity.
>
> [snip]> Interesting. Can you work an example for us? I'm curious as to what you
> > use for theta in the "law's" equation.
>
> [snip]
>
> Theta is just the relative orientation of the polarization of the
> transmitting
> and receiving antennas, or in the case of an optical polarimeter, the
> relative orientations of the polarizing and analyzing polarizer.
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> Theta is commonly illustrated in undergraduate optical laboratories and
> science
> experiment kits, using a couple of pieces of "Polaroid" film with the
> polarization
> angle marked on the film by a notch or other marking. When the
> two films are aligned with their polariztion direction perpendicular there
> is no
> light propagation, i.e. theta is 90 degrees, and when they are aligned with
> theta
> equal to zero then light is propagated.
>
> In the case of dipole antennas, theta is zero when two antennas are
> co-linear and theta is 90 degrees when the antennas are perpendicular.
>
> [snip]> Only if it strikes the surface directly head-on. Otherwise you get an
> > elliptically polarized wave. The axial ratio depends on the angle of
> > incidence and, if the reflector isn't perfectly conducting, on the
> > impedance of the surface.
>
> [snip]
>
> Agreed!
>
> A very intersting optical phenomena to observe is to look at a mirror
> through
> an optical circular polarizer (polarizer in tandem with a 1/4 wave retarder)
> which
> renders the "image" of the circular polarizer to be black. i.e. the optical
> circular polarizer eliminates the reflection. This technique is widely used
> to eliminate reflections from information displays that must operate in high
> sunlight with good sunlight readability. High quality high transmissivity

> optical circular polarizers are relatively expensive, and so one does not
> find such technology applied to consumer displays like computer
> monitors, TV sets or IPhones, however optical circular polarizers are
> widely used by the military for eliminating sunlight reflections from their
> (expensive) information displays.
>
> [snip]>> CP propagation is often used in Satellite communications where a
> >> satellite may use both RHCP and LHCP transmitting antennas on the same
> >> frequency for communicating independently with two different ground
> >> stations using R and L CP antennas on the same frequency. CP frequency
> >> diversity doubles channel capacity!
>
> > I think you mean that polarization (not frequency) diversity doubles
> > channel capacity.
>
> [snip]
>
> Yep that's exactly what I meant, but my fingers did not type it that way.
> Thanks!
>
> [snip]>> angular velocity of rotation is one revolution per cycle of the RF
> >> carrier, or in other words one radian of circular rotation for each
> >> radian of frequency transmitted. In other words most well known CP
> >> antennas produce ONLY synchronous CP, where the angular velocity of
> >> rotation of the E vector is synchronized exactly with the frequency of
> >> the wave being transmitted.
>
> > That is, in fact, the definition of circular or elliptical polarization.
>
> [snip]
>
> Agreed, both you and I and thousands of others know that. [smile]
>
> [snip]>> I believe that the well known and understood situation of purely
> >> synchronous CP is NOT necessesarily the only form of CP.
>
> > It's the only one which fits the definition. If you choose to rotate the
> > polarization at some other rate, you should call it something else.
>
> [snip]
>
> Definition! Gosh where is Cecil when you need him? The only
> problem with definitions is that there are so many of them!
>
> ---

>
> "When I use a word, Humpty Dumpty said in a rather scornful tone,
>
> "It means just what I chose it to mean - neither more nor less."

>
> "The question is," said Alice, "whether you can make words mean so many
> different things."
>
> "The question is," said Humpty Dumpty, "which is to be Master - that's all."
>
>   -- Lewis Caroll, from Through the Looking Glass
>
> --

>
> [grin]
>
> [snip]> Sorry, it doesn't. An unavoidable side effect of the synchronicity change
> > is that the amplitude of the E field still changes at a 1 GHz rate, going
> > through a complete cycle from max to zero to max to zero to max each
> > nanosecond. A circularly polarized wave doesn't change amplitude with
> > time. A non-circular elliptical wave changes amplitude but not fully to
> > zero each cycle.
>
> [snip]
>
> Here there is a bit of fuzziness...
>
> I agree that the E field of a wave is always changing at the RF carrier
> frequency
> since it is an AC waveform. Alternating current is always changing! And so
> a
> 1 GHz carrier will always have an E field that oscillates back and forth at
> the
> carrier (center?) frequency when analyzed by a (linear) polarimeter.
>
> I disagree with you that a circular polarized wave has a constant E field.
>
> Even in the case of a purely circularly polarized the E field still
> oscillates
> at the carrier (center?) frequency when analyzed by a linear polarizer.
>
> i.e. if a purely CP wave is received on a linear polarized antenna the
> detected E field (Volts per meter) will be observed to be oscillating
> at the carrier frequency. However if received on a purely CP responding
> antenna this oscillating E fileld will appear to be constant.
>
> The E field vector can be considered to be similar to the image of a
> spoke on a rolling wheel. The radius of the spoke is constant, but
> it's projection on the ground over which the wheel is rolling will
> always be oscillating in length.
>
> [snip]> Circularly polarized waves have many characteristics and particular
> > relationships to linearly polarized waves. The waves you're producing

> > don't have some of these characteristics, like the constant amplitude.
> > Your method doesn't produce circularly polarized waves even though the
> > polarization does indeed change with time.
>
> [snip]
>
> I beg to disagree. The waves that I am describing are exactly the same.
>
> Consider if the mechanical motor that spins my linear antenna spins at
> exactly the ...
>
> read more »

It was stated above that the purely horizontal polarisation will occur
when the dipole is broadside
This is not correct
Using an optimiser and inserting a one liner where all dimensions are
different allows for the design to conform to Maxwell
laws in their entirety, which means the inclusion of the "weak" force
required for equilibrium
Regards
Art

5222. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 16:37:40 UTC
From: Dave <noone@nowhere.com>
Message-ID: <oTx_k.158$c35.31@nwrddc02.gnilink.net>
Source record: 19496

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:d8195293-802d-40be-a6f3-a27c4a7525a9@a12g2000yqm.googlegroups.com...
>the inclusion of the "weak" force
>required for equilibrium

leave it up to art to take a perfectly good premise and insert utter idiocy
into it. next he'll be saying that since the magical levitating weak force
neutrinos are jumping off the antenna at an angle to the element that the
polarization is caused by them. how about it art, can you make your
levitating neutrinos rotate in different directions with left or right hand
circular antennas??

5223. Re: FS: 10-80 SLINKY dipole antenna with coax choke balun

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 16:38:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghe9q3$2uj$1@news.albasani.net>
Source record: 19497

ltdoc@yahoo.com wrote:
> If you're desperate enough to have to use a slinky at all, then I
> wouldn't worry much about that choke.
> - 'Doc

Well yeah. Or, it doesn't look like that damn thing will "go down the
stairs" anyway! LOL

Regards,
JS

5224. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 17:17:43 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8892c004-e557-4f75-9199-38db729fa19b@k8g2000yqn.googlegroups.com>
Source record: 19498

On Dec 6, 10:37 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:d8195293-802d-40be-a6f3-a27c4a7525a9@a12g2000yqm.googlegroups.com...
>
> >the inclusion of the "weak" force
> >required for equilibrium
>
> leave it up to art to take a perfectly good premise and insert utter idiocy
> into it. next he'll be saying that since the magical levitating weak force
> neutrinos are jumping off the antenna at an angle to the element that the
> polarization is caused by them. how about it art, can you make your
> levitating neutrinos rotate in different directions with left or right hand
> circular antennas??

You can have diversity with respect to all polarizations except
circular
where you only have the choice of one. If you believe that antenna
programs
are utter idiocy then that will be inline with your general attitude.
I am sure that some have taken up my suggestion to check for
themselves
instead of resorting to knee jerk reactions with out foundation.
One more fool like you on this newsgroup changes little
Art

5225. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 18:46:16 UTC
From: Dave <noone@nowhere.com>
Message-ID: <YLz_k.182$c35.4@nwrddc02.gnilink.net>
Source record: 19499

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:8892c004-e557-4f75-9199-38db729fa19b@k8g2000yqn.googlegroups.com...
>You can have diversity with respect to all polarizations except
>circular where you only have the choice of one.

why can't you do lhcp and rhcp diversity?

>If you believe that antenna programs
>are utter idiocy then that will be inline with your general attitude.
>I am sure that some have taken up my suggestion to check for
>themselves instead of resorting to knee jerk reactions with out foundation.

on the contrary, i believe antenna programs and understand how they work, at one time i wrote one of my own that did well on designing phased vertical arrays... and not a single reference to the weak force in it at all! nor will you find any of the existing antenna modeling programs that use the weak force. which kind of contradicts your whole rant, you say you believe in the modeling programs and that they give results that agree with your corrupted weak force model, and yet they don't use the weak force at all... never have, and never will. nor can you state where the weak force is included in Maxwell's equations, which of course all the modeling programs are based on. so that just leaves you hanging by your magical equilibrium levitating diamagnetic neutrinos... which you still haven't explained how they work with my ferromagnetic radiators.

5226. Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 19:13:07 UTC
From: MTV <volztexas355@comcast.net>
Message-ID: <n9A_k.318187$6p1.162862@en-nntp-07.dc1.easynews.com>
Source record: 19500

I'm starting to look for a 55' freestanding tower with house wall bracket. Am undecided on a lattice type or tubular. Being an old geezer I am not interested in the standard lattice type which requires climbing, but a nestable type to be raised and lowered by a crank or motor. I figure if it can be lowered I could work on it from the roof of my one story house. Main antenna would be a Cushcraft A4S 4-element or equivalent - wind area abt 4 sq ft. Not sure I could handle the huge X7 Big Thunder and its 7.9 sq ft., although that would be ideal.

Any first hand experience or recommendations?

Marv
W5MTV

5227. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 19:16:12 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <40d891e8-d8be-49ee-8825-a2df474668d0@20g2000yqt.googlegroups.com>
Source record: 19401

On Dec 5, 2:10 am, Richard Clark <kb7...@comcast.net> wrote:
> On Thu, 4 Dec 2008 21:59:34 -0800 (PST), Ginu <osheik...@gmail.com>
> wrote:
>
> >anyone?
>
> You appear to be contradicting yourself:>P_required... translates to a transmit power of
1 mW.
> ...
> >However, 1mW happens to be the maximum transmit power
>
> However?
>
> As for:> I hope my math is clear.
>
> If your conclusions for these case tests depart from rational
> expectations; then you have one of two possibilites:
>
> 1. Your math may be clear, but wholly invalid (transcription error of
> complex formulas into ascii text is a bummer);
>
> b. Your math may be clear or murky, and otherwise entirely correct,
> but you did it wrong.
>
> iii. You suffer from transcription AND "plug-n-chug" errors;
>
> four. Zigbee technology doesn't work.
>
> If this is a classroom problem, you need to resolve it yourself. If
> this is an engineering problem, what did the Zigbee help-line offer?
> There's probably a simple nomograph posted at their website or in
> their application notes.
>
> 73's
> Richard Clark, KB7QHC

This isn't a classroom problem. It is a research study that I am
conducting.

For the first case, I used a distance of 500 metres, which
corresponded to what happens to be the maximum allowed power of 1 mW.
Hence, I stated that I may be having a range issue because I was
testing the maximum distance case. That is why I provided a case for
300 metres as well.

If I'm doing something incorrectly, this is why I posted this question to the board. Stating that my math may just be wrong, doesn't really help the situation.

I will check into the Zigbee forums thank you.

5228. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 19:19:36 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <5e586653-7923-4ed6-9d94-877ae70672d5@v42g2000yqv.googlegroups.com>
Source record: 19402

On Dec 5, 6:10 am, Bob Bob <bob3b...@suddenlink.net> wrote:
> So at 5AM I may not be too sharp...
>
> The formula you used doesnt seem to allow for the required demod s/n.
> QAM64 for example (from memory) is around 30dB so this has to be "added"
> to the path loss. Differing mod/demod/FEC have differing margin
> requirmeents. Somewhere in there too you have to stipulate the bit loss
> rate "allowed".

Can you explain this further please?

> In the past I use to calculate the noise floor at b/w, apply RX noise
> figure and then add the margin.
>
> When I last did this I upset my employer by saying that their marketing
> hype was flawed. They had specified a lowest usable sensitivity that
> after applying the required demod s/n was below the calculated noise
> floor for that b/w. We were in fact consistently getting RX sensitivty
> issues during the manufacturing phase for this reason... Marketing had
> created a spec that wasnt possible!

Interesting. So these margin requirements are specified in the
standard?

> Also, I dont know about 802.15 but I do know that 802.11 has variable
> data rates (ie bandwidth) that can be advertised something like "54Mbps
> and -87dBm sensitivity". The numbers dont actually go together. At
> 54Mbps you might get -77dBm and you have to use 11Mbps to get -87dBm!

Thank you. I'll look into this!

> I'll admit I havent studied your maths in detail....
>
> The above probably not a lot of use to you... Sorry!
>
> Cheers Bob VK2YQA

Thanks a bunch. A reply to my above queries would be very helpful.

5229. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 19:31:45 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <C7mdnRr_0IwzT6fUnZ2dnUVZ_sninZ2d@earthlink.com>
Source record: 19403

"MTV" <volztexas355@comcast.net> wrote in message
news:n9A_k.318187$6p1.162862@en-nntp-07.dc1.easynews.com...
> I'm starting to look for a 55' freestanding tower with house wall bracket.
> Am undecided on a lattice type or tubular. Being an old geezer I am not
> interested in the standard lattice type which requires climbing, but a
> nestable type to be raised and lowered by a crank or motor. I figure if it
> can be lowered I could work on it from the roof of my one story house.
> Main antenna would be a Cushcraft A4S 4-element or equivalent - wind area
> abt 4 sq ft. Not sure I could handle the huge X7 Big Thunder and its 7.9
> sq ft., although that would be ideal.
>
> Any first hand experience or recommendations?
>
> Marv
> W5MTV

About all that I can recommend is nt to do it like a local ham. His tower is next to his house, but he can not put an antenna on it from the roof and has to rent a bucket truck or a one man lift to get to the antenna. Seems he put it at the side of the house and the angle of the roof is too much to get the antenna boom from the roof to the tower. He only had a 3 element triband bean and tehn replaced it with the Stepper 3 element and still has the same problem. He does have a tower that can be lowered, but it does not do him much good for that reason.

5230. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 19:50:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cpjlj45bvd4329ntiemj7mf6nu0uj3louj@4ax.com>
Source record: 19404

On Sat, 06 Dec 2008 18:46:16 GMT, "Dave" <noone@nowhere.com> wrote the
lamentations of a weak mind struggling with the high concepts of an
infinitely Byzantine theory from the laboratories of ï¿½rthur:

>on the contrary, i believe antenna programs and understand how they work, at
>one time i wrote one of my own that did well on designing phased vertical
>arrays... and not a single reference to the weak force in it at all!

It is singularly impossible for them to have not included the weak
force - whose total contribution to the resulting -um- results
registers in the 13th digit to the right of the decimal point.
Dismissing this immense revelation is like arguing that a drowning man
is immune from the effects of a drunk pissing into the ocean.

>nor
>will you find any of the existing antenna modeling programs that use the
>weak force.

op. cit.

>which kind of contradicts your whole rant,

That well may be seeing that ï¿½rthur practices a self reinforcing
argument that exhibits that quality of ï¿½quilibrium: damned if you do,
and damned if you do it again.

>you say you believe
>in the modeling programs and that they give results that agree with your
>corrupted weak force model,

A corrupted weak force, the wï¿½k force?

>and yet they don't use the weak force at all...

Of course they do (op. cit.)

>never have, and never will.

Always has and always will (I already said that didn't I? (which is
what op. cit. mï¿½ns in Lat.))

>nor can you state where the weak force is
>included in Maxwell's equations,

ï¿½rthur, while rooting in the library stacks of an ancient university
located on the banks of a great (but not grand) lake, he discovered
them in the margins (long neglected as flyspecks on the page due to
their singular characteristic out 13 places to the right). Patents
are pï¿½nding, so watch your step.

As we are taxpayers, supporting inventors on the dole, it should be
our full right to be able to examine these hidden documents, but
ï¿½rthur continues to suppress their access.

>which of course all the modeling programs
>are based on. so that just leaves you hanging by your magical equilibrium
>levitating diamagnetic neutrinos... which you still haven't explained how
>they work with my ferromagnetic radiators.

The only thing he hasn't explained is the beneficial prosperities of
the color of the color-coded wire. Just as all resistors look the
same except for the colors - and we are all perfectly aware that not
all resistors are the same - hence it is a color thing. (Lest we
diverge into the side topic of wï¿½k resistance, aka Unpedance.)

73's
Richard Clark, KB7QHC

5231. Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 20:17:20 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C5601DD000F264B8B01AD9AF@news.sf.sbcglobal.net>
Source record: 19405
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Building a small 2.4 GHz detector:

<http://www.atvinderby.co.uk/2.4Ghz_SWR_Meter.htm>

Regarding the dimensions of the wire loops:

ant: 28 mm square
reflector: 30 mm square
separation: 10mm
wire: 14ga solid (1.6mm dia)

Are these dimensions center-to-center of the conductors? Or are these dimensions the space between the conductors? With a conductor diam of 1.6mm, this is more than 10 percent of one dimension (separation), so I think it's important to get it right.

Also, is the reflector to be grounded or floating?

Thanks.

5232. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 21:05:38 UTC
From: MTV <volztexas355@comcast.net>
Message-ID: <SOB_k.306799$1p1.179132@en-nntp-08.dc1.easynews.com>
Source record: 19406

Ralph Mowery wrote:
> "MTV" <volztexas355@comcast.net> wrote in message
> news:n9A_k.318187$6p1.162862@en-nntp-07.dc1.easynews.com...
>> I'm starting to look for a 55' freestanding tower with house wall bracket.
>> Am undecided on a lattice type or tubular. Being an old geezer I am not
>> interested in the standard lattice type which requires climbing, but a
>> nestable type to be raised and lowered by a crank or motor. I figure if it
>> can be lowered I could work on it from the roof of my one story house.
>> Main antenna would be a Cushcraft A4S 4-element or equivalent - wind area
>> abt 4 sq ft. Not sure I could handle the huge X7 Big Thunder and its 7.9
>> sq ft., although that would be ideal.
>>
>> Any first hand experience or recommendations?
>>
>> Marv
>> W5MTV
>
> About all that I can recommend is nt to do it like a local ham. His tower
> is next to his house, but he can not put an antenna on it from the roof and
> has to rent a bucket truck or a one man lift to get to the antenna. Seems
> he put it at the side of the house and the angle of the roof is too much to
> get the antenna boom from the roof to the tower. He only had a 3 element
> triband bean and tehn replaced it with the Stepper 3 element and still has
> the same problem. He does have a tower that can be lowered, but it does not
> do him much good for that reason.
>
>

Thanks for the info. I notice that the tubular and lattice towers nest
at 22' & 21'. My roof hgt is abt 16' at the peak on the ends, but only
12' on long side - where I want the tower. Might have to rethink my
placement. Or use a bucket truck, or tilt the tower on the base hinge
when mounting antenna.

Marv

5233. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 21:26:08 UTC
From: dplatt@radagast.org
Message-ID: <g87r06-b4r.ln1@radagast.org>
Source record: 19407
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

><http://www.atvinderby.co.uk/2.4Ghz_SWR_Meter.htm>
>
>Regarding the dimensions of the wire loops:
>
>ant: 28 mm square
>reflector: 30 mm square
>separation: 10mm
>wire: 14ga solid (1.6mm dia)
>
>Are these dimensions center-to-center of the conductors? Or are these
>dimensions the space between the conductors? With a conductor diam of 1.6mm,
>this is more than 10 percent of one dimension (separation), so I think it's
>important to get it right.

It's probably not actually all that important. Quads are not highly
in their dimensioning. Altering the positioning between the driven
(active) element, and the reflector, will change the antenna's pattern
(gain and front-to-back radio) slightly, and will alter the feedpoint
impedance slightly. Neither of these changes is going to be
particularly significant (and quite possibly not easy to detect) in
this situation. The fact that there's a lot of additional metal in
the neighborhood of the antenna (the BNC connector, etc.) is probably
going to alter the pattern more than the spacing different will
(compared to a theoretically perfect quad in free space).

The pattern of a two-element quad is fairly broad, and the
front-to-back ratio isn't terribly high. It's not the best design for
pinpoint aiming / location of a microwave source... but that isn't
really what this device was intended for. As a field-strength meter,
it'll work fine (and probably just about equally well) with a 10mm
separation edge-to-edge or center-to-center.

>Also, is the reflector to be grounded or floating?

In a quad, it is usual for all of the elements other than the driven
one to be floating. Since the article says that the reflector is
fastened with a dollop of glue, I think it's safe to assume that it's
intended to be floating.

That detector is a slick little design - thanks for posting the link!

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will

boycott any company which has the gall to send me such ads!

5234. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 21:45:53 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <2islj4tmu2l1pc29cf5ujit8s7e6e13ili@4ax.com>
Source record: 19408

Here is how I do it. There is much more to do but it is
operational...No climbing!
http://dixienc.us/TiltOverGadget/TiltOverGadget.mht

John Ferrell W8CCW

On Sat, 06 Dec 2008 13:13:07 -0600, MTV <volztexas355@comcast.net>
wrote:

>I'm starting to look for a 55' freestanding tower with house wall
>bracket. Am undecided on a lattice type or tubular. Being an old geezer
>I am not interested in the standard lattice type which requires
>climbing, but a nestable type to be raised and lowered by a crank or
>motor. I figure if it can be lowered I could work on it from the roof of
>my one story house. Main antenna would be a Cushcraft A4S 4-element or
>equivalent - wind area abt 4 sq ft. Not sure I could handle the huge X7
>Big Thunder and its 7.9 sq ft., although that would be ideal.
>
>Any first hand experience or recommendations?
>
>Marv
>W5MTV

5235. NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 21:53:28 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <CoGdnX_SLqTDaafUnZ2dnUVZ_hednZ2d@earthlink.com>
Source record: 19409

Group:

The celebrated Numerical Electromagnetic Code (NEC) developed largely at US taxpayer expense (Let's all Salute the US Taxpayers!) and generally released to the public for free provides algorithms for numerically integrating Maxwell's celebrated partial differential equations and so enables one to obtain numerical solutions to real practical problems such as the antenna field strengths at points in space due to modelled practical transmitting antennas.

NEC codes are available for downloading from public WWW sites. The raw NEC codes however do not have modern GUI based interfaces are required to be 'driven' by Fortran style card decks and profide outputs as files and not in graphical form.

Several enterprising folks/companies have added GUE capability including data visualization to enable a more user friendly interaction with the NEC codes.

For example Roy Lewallen's (W7EL) famous EZNEC programs are one example of the widespread use of the public NEC codes that have been 'enhanced' by Roy to provide user friendly graphical (GUI) based input/output (I/O).

Apparently the outputs from the 'raw' NEC codes provide field strengths only in rectangular co-ordinates and so... one cannot directly obtain readouts of the circular components for circularly polarized antennas.

Thus it is relatively difficult for non-experts to print out or to plot field strengths in terms of right hand or left hand circular propagation co-ordinates. For example if one attempts to model a circularly polarized antenna such as an axial mode helix, NEC (EZNEC) certainly allows the modelling to occur by breaking the helix into small segments that approximate a real helix to whatever degree of accuracy is required. The difficulty comes when one attempts to plot or graph the circularily polarized fields resulting from the modelled antenna. NEC only provides rectangular (x-y-z) components for the fields and not direct circular components for the fields.

It is relatively simple to calculate the circular components from NEC's rectangular component outputs, and a simple arithmetic transformation routine can be written to quickly and easily process the NEC outputs into circular outputs so that one can then obtain solutions for circularily polarized antennas expressed in terms of right and left hand circularly polarized components.

It seems however that none of the extant GUI equipped NEC based programs such as EZNEC have implemented this (simple) transformation.

I suppose that since the use of circularly polarized antennas is only a very small fraction of the use of rectilinearly polarized antennas and so the authors of NEC must have felt that their would not be much call for those outputs. In fact the output transform from rectilinear to circular components is trivial compared to most other aspects of NEC codes! But in truth there is not much (commercial) call or market for the use of circularly polarized output plots.

Question for our own Roy Lewallen W7EL... Roy do you think that there would be much of a market for EXNEC to provide circular polarization outputs from EZNEC, and do you have any plans to implement output plots from EZNEC in terms of circular polarization?

I can supply you with references to the needed transformations. Just a few lines of Fortran or Visual Basic should do it...

Just asking? [smile]

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5236. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 22:10:39 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <itudnUWJ14_7ZafUnZ2dnUVZ_qXinZ2d@earthlink.com>
Source record: 19410

Richard:

[snip]
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:cpjlj45bvd4329ntiemj7mf6nu0uj3louj@4ax.com...
> On Sat, 06 Dec 2008 18:46:16 GMT, "Dave" <noone@nowhere.com> wrote the
> lamentations of a weak mind struggling with the high concepts of an
> infinitely Byzantine theory from the laboratories of ï¿½rthur:
>
>>on the contrary, i believe antenna programs and understand how they work,
>>at
>>one time i wrote one of my own that did well on designing phased vertical
>>arrays... and not a single reference to the weak force in it at all!
.
.
.
> 73's
> Richard Clark, KB7QHC
[snip]

Hmmmm you guys are just to sceptical of poor Art's "different" biases.

The one eyed man in the land of the blind, indeed.

Have ya'll considered that Art may not be fully occupying our own four-space and may in fact be operating in several of modern string theory's higher dimensions.

After all, modern we now know as explained by John Moffat [1], that from the view of modern Physicists unfettered by actual observation and experiment that there may be at least 11 of those dimensions available to someone of Art's calibre and that perhaps... just perhaps, we "flatladers" may not even be able to comprehend Art's machinations from our own puny four space viewpoint.

All that said... we've got to get around to viewing emag fields from the viewpoint of circular components. The universe may well be better understood when viewed by circular polarization rather than by rectilinear polarization. No?

[1] John W. Moffat, "Reinventing Gravity", HarperCollins Publishers, New York, 2008. ISBN: 978-0-06-117088-1. May be found at LC under LCC QC178.M64 2008.

Cheers!

```
-- Pete K1PO
-- Indialantic By-the-Sea, FL
```

5237. Re: NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 22:29:51 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <z1D_k.2946$yK5.1522@edtnps82>
Source record: 19411

"Peter O. Brackett" <none@no-such-domain.nul> wrote in message
news:CoGdnX_SLqTDaafUnZ2dnUVZ_hednZ2d@earthlink.com...
> Group:
>
> The celebrated Numerical Electromagnetic Code (NEC) developed largely at
> US taxpayer expense (Let's all Salute the US Taxpayers!) and generally
> released to the public for free provides algorithms for numerically
> integrating Maxwell's celebrated partial differential equations and so
> enables one to obtain numerical solutions to real practical problems such
> as the antenna field strengths at points in space due to modelled
> practical transmitting antennas.
>
> NEC codes are available for downloading from public WWW sites. The raw
> NEC codes however do not have modern GUI based interfaces are required to
> be 'driven' by Fortran style card decks and profide outputs as files and
> not in graphical form.
>
> Several enterprising folks/companies have added GUE capability including
> data visualization to enable a more user friendly interaction with the NEC
> codes.
>
> For example Roy Lewallen's (W7EL) famous EZNEC programs are one example of
> the widespread use of the public NEC codes that have been 'enhanced' by
> Roy to provide user friendly graphical (GUI) based input/output (I/O).
>
> Apparently the outputs from the 'raw' NEC codes provide field strengths
> only in rectangular co-ordinates and so... one cannot directly obtain
> readouts of the circular components for circularly polarized antennas.
>
> Thus it is relatively difficult for non-experts to print out or to plot
> field strengths in terms of right hand or left hand circular propagation
> co-ordinates. For example if one attempts to model a circularly polarized
> antenna such as an axial mode helix, NEC (EZNEC) certainly allows the
> modelling to occur by breaking the helix into small segments that
> approximate a real helix to whatever degree of accuracy is required. The
> difficulty comes when one attempts to plot or graph the circularily
> polarized fields resulting from the modelled antenna. NEC only provides
> rectangular (x-y-z) components for the fields and not direct circular
> components for the fields.
>
> It is relatively simple to calculate the circular components from NEC's
> rectangular component outputs, and a simple arithmetic transformation
> routine can be written to quickly and easily process the NEC outputs into
> circular outputs so that one can then obtain solutions for circularily

> polarized antennas expressed in terms of right and left hand circularly
> polarized components.
>
> It seems however that none of the extant GUI equipped NEC based programs
> such as EZNEC have implemented this (simple) transformation.
>
> I suppose that since the use of circularly polarized antennas is only a
> very small fraction of the use of rectilinearly polarized antennas and so
> the authors of NEC must have felt that their would not be much call for
> those outputs. In fact the output transform from rectilinear to circular
> components is trivial compared to most other aspects of NEC codes! But in
> truth there is not much (commercial) call or market for the use of
> circularly polarized output plots.
>
> Question for our own Roy Lewallen W7EL... Roy do you think that there
> would be much of a market for EXNEC to provide circular polarization
> outputs from EZNEC, and do you have any plans to implement output plots
> from EZNEC in terms of circular polarization?
>
> I can supply you with references to the needed transformations. Just a
> few lines of Fortran or Visual Basic should do it...
>
> Just asking? [smile]
>
> -- Pete K1PO
> -- Indialantic By-the-Sea, FL

The NEC output file lists axial ratio and tilt. Nittany's NecWin Pro, and GNEC plot these results.

73,

Frank

5238. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 22:38:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <klvlj41nbr9lmfqikv16q5tc9je4rvb4bf@4ax.com>
Source record: 19412

On Sat, 6 Dec 2008 17:10:39 -0500, "Peter O. Brackett"
<none@no-such-domain.nul> wrote:

>"Reinventing Gravity",

I prefer the original over ersatz.

73's
Richard Clark, KB7QHC

5239. Re: NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 22:52:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rc0mj49lvq3drs5101rjs6ff84847tqe8s@4ax.com>
Source record: 19413

On Sat, 6 Dec 2008 16:53:28 -0500, "Peter O. Brackett"
<none@no-such-domain.nul> wrote:

>I suppose that since the use of circularly polarized antennas is only a very
>small fraction of the use of rectilinearly polarized antennas and so the
>authors of NEC must have felt that their would not be much call for those
>outputs.

Take a little experience late in the evening, and in the morning you
will find this supposition will have cleared away.

73's
Richard Clark, KB7QHC

5240. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 23:49:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <D6mdndTbhq4ZkqbUnZ2dnUVZ_uudnZ2d@posted.easystreetonline>
Source record: 19414

Peter O. Brackett wrote:
> . . .
>> By "mixed" polarization, I assume you mean a single polarization which
>> is neither horizontal nor vertical and can be described as a "mixture"
>> of a purely horizontal and a purely vertical wave.
> [snip]
>
> No. What I meant by "mixed" was that, just as with daylight for example,
> the field contains many polarization orientations. In fact usually outside
> in daylight most of the light we see with our eyes contains very nearly
> an equal distribution of all polariztions. An exception in the sky's light
> is perpedicular to the suns rays where because of upper atmospheric
> conditions light becomes slightly polarized. It is claimed that some
> people
> can actually "see" this polarized light differently than normal light.
> (Haider's
> Brush) Of course many people know that reflected light, for example
> from the surface of a lake, becomes highly polarized. This is the
> reason that "Polaroid" sunglasses are used by sportsmen and others
> to reduce perceived glare from reflective surfaces.
>
> That said, mixed polarization, is also largely the case of HF waves
> received over ionospheric paths. In other words HF waves received
> over long distances will contain a wide distribution of linear
> and perhaps circular polarizations. Thus rendering the use of single
> polarized antennas relatively useless at HF by amateurs. Unless of
> course one is prepared to pay the significant price in space and
> equipment to implement a polarization diversity receiving system.

There is only one E field associated with a wave and, if linearly polarized, it has only one orientation or polarization. It's not like incoherent light, but akin to a laser. There is no "mixture" of polarizations in an EM wave.

> . . .
>
> True for a single antenna and receiver, which is the usual case for a ham,
> see my remarks above.
>
> However if one is willing to pay the price for several antennas and
> synchronous
> receiving systems then receiving gains can often be obtained by the
> exploitation
> of polarization diversity.

Actually, you don't want synchronous receivers, or else you get a single
effective polarization just as though the antennas were combined into a
phased array. For spacial or polarization diversity, you need
intentionally non-coherent receivers.

> [snip]
>> Interesting. Can you work an example for us? I'm curious as to what
>> you use for theta in the "law's" equation.
> [snip]
>
> Theta is just the relative orientation of the polarization of the
> transmitting
> and receiving antennas, or in the case of an optical polarimeter, the
> relative orientations of the polarizing and analyzing polarizer.
>
> Theta is commonly illustrated in undergraduate optical laboratories and
> science
> experiment kits, using a couple of pieces of "Polaroid" film with the
> polarization
> angle marked on the film by a notch or other marking. When the
> two films are aligned with their polariztion direction perpendicular
> there is no
> light propagation, i.e. theta is 90 degrees, and when they are aligned
> with theta
> equal to zero then light is propagated.
>
> In the case of dipole antennas, theta is zero when two antennas are
> co-linear and theta is 90 degrees when the antennas are perpendicular.

So in your equation, what are theta for RHP and LHP, since you've said
that the equation applies to circular polarization?

> . . .
>
> [snip]
>>> angular velocity of rotation is one revolution per cycle of the RF
>>> carrier, or in other words one radian of circular rotation for each
>>> radian of frequency transmitted. In other words most well known CP
>>> antennas produce ONLY synchronous CP, where the angular velocity of
>>> rotation of the E vector is synchronized exactly with the frequency
>>> of the wave being transmitted.
>>
>> That is, in fact, the definition of circular or elliptical polarization.
> [snip]
>
> Agreed, both you and I and thousands of others know that. [smile]
>

Then why are you calling your non-synchronous system "circular
polarization"?

>
> Definition! Gosh where is Cecil when you need him? The only

> problem with definitions is that there are so many of them!
>
> ---

>
>
> "When I use a word, Humpty Dumpty said in a rather scornful tone,
>
> "It means just what I chose it to mean - neither more nor less."
>
> "The question is," said Alice, "whether you can make words mean so many
> different things."
>
> "The question is," said Humpty Dumpty, "which is to be Master - that's
> all."
>
> -- Lewis Caroll, from Through the Looking Glass
>
> ---

>
>
> [grin]
>

That's a great attitude for a politician, philosopher, or biblical
scholar. But engineers and scientists depend on universally understood
technical terms in order to communicate. I'm free to say that my car
gets a gas mileage of 30 miles/hour and weighs 420 miles. But it
wouldn't be a smart thing to do if I intend to convey information.

> [snip]
>> Sorry, it doesn't. An unavoidable side effect of the synchronicity
>> change is that the amplitude of the E field still changes at a 1 GHz
>> rate, going through a complete cycle from max to zero to max to zero
>> to max each nanosecond. A circularly polarized wave doesn't change
>> amplitude with time. A non-circular elliptical wave changes amplitude
>> but not fully to zero each cycle.
> [snip]
>
> Here there is a bit of fuzziness...
>
> I agree that the E field of a wave is always changing at the RF carrier
> frequency
> since it is an AC waveform. Alternating current is always changing!
> And so a
> 1 GHz carrier will always have an E field that oscillates back and forth
> at the
> carrier (center?) frequency when analyzed by a (linear) polarimeter.
>
> I disagree with you that a circular polarized wave has a constant E field.

>
> Even in the case of a purely circularly polarized the E field still
> oscillates
> at the carrier (center?) frequency when analyzed by a linear polarizer.
>
> i.e. if a purely CP wave is received on a linear polarized antenna the
> detected E field (Volts per meter) will be observed to be oscillating
> at the carrier frequency. However if received on a purely CP responding
> antenna this oscillating E fileld will appear to be constant.
>
> The E field vector can be considered to be similar to the image of a
> spoke on a rolling wheel. The radius of the spoke is constant, but
> it's projection on the ground over which the wheel is rolling will
> always be oscillating in length.

When you receive a circularly polarized wave on a linearly polarized antenna, you're seeing only the component of the wave that's linearly polarized in the orientation of the antenna. This is exactly the same process as filtering a complex waveform. You've removed part of the field and are observing what's left after the filtering process, then drawing conclusions about the original waveform based on those observations, much like listening to a concert orchestra through a long pipe and deciding that orchestral sound is very ringy and limited in tonal range. It would benefit you to gain a bit of education about circularly polarized waves. You'll find that a circularly polarized wave can be created from (or broken into) two linearly polarized waves oriented at right angles and in phase quadrature. So each of the components has a time-varying amplitude, but the sum, which is the circularly polarized wave, has a constant amplitude but time-varying orientation. Your linear antenna filters out one of the components, leaving you to observe only the other.

> [snip]
>> Circularly polarized waves have many characteristics and particular
>> relationships to linearly polarized waves. The waves you're producing
>> don't have some of these characteristics, like the constant amplitude.
>> Your method doesn't produce circularly polarized waves even though the
>> polarization does indeed change with time.
> [snip]
>
> I beg to disagree. The waves that I am describing are exactly the same.
>
> Consider if the mechanical motor that spins my linear antenna spins at
> exactly the carrier frequency. There would be then no way to tell the
> difference between the two.

That's right, in that case you would be producing circularly polarized waves. But only with a synchronous spin speed. As soon as you separate the rotational speed from the wave's oscillation, you have something else with different characteristics, e.g., a time varying amplitude.
>

> [snip]
>> Because a circularly polarized antenna responds equally well to all
>> orientations of linear polarization, the normal helix wouldn't be
>> aware of the polarization rotation -- unless the polarization rotation
>> was fast enough to be nearly synchronous.
> [snip]
>
> Heh, heh... what would you consider to be "fast enough"?
>
> Would the rate of spin have to be 99-44/100 percent of the synchronous
> frequency? Or would it have to be closer than that?
>
> At what magic spin frequency would the two be indistinguisable.
>
> FWIW... I can propose a scheme that will electronically rotate the
> linear antenna
> at any desired frequency, at least up to the accuracy of modern atomic
> clock standards.

What you'll end up with is amplitude modulation with the modulating frequency being the beat note between your spinning speed and the wave frequency. This creates sidebands. You'll see this when the sidebands are within the bandwidth of the helix. Outside that, the helix will filter off the sidebands and you'll just see the "carrier" -- the original wave with no modulation.

>
> [snip]
>> Sorry, I didn't find it "mind-blowing".
> [snip]
>
> Roy, I don't belive you have thought about it hard enough yet, for
> clearly this idea
> has already "blown" your mind!

If you say so.

> For did you not state above that a circular carrier wave has a constant
> amplitude?

Yes, I did. Circularly polarized, that is.

> A radio wave with constant aplitude, indeed! Something must be blown!
>
> At zero frequency, how would a constant wave propagate?

Here's a really neat little trick you might want to add to your bag -- superposition. As I mentioned, you can create a circularly polarized wave from two linearly polarized waves. The linearly polarized waves are of course normally time-varying. As long as the propagation medium is linear (such as air), superposition says you can split the circularly polarized wave apart into two linearly polarized waves, study and

analyze how they propagate, then add the two components back together
again after the propagation. This is, incidentally, a very simple way to
see what happens when a circularly polarized wave reflects from a
surface -- analyze the linear components separately and add the results.

> This assumption/view that zero frequency wave can propagate is akin to
> Cecil's
> view that there are no reflections at DC.

No, it isn't.

> I don't mean to be facitious and I am quite serious about all of this.
>
> Just because no one has ever considered non-synchronous circular
> polariztion before
> does not mean that it doesn't exist, or that it may not be useful.
>
> Me? I have already thought of several potential uses for
> non-synchronous circular
> polarization. How about polariztion frequency modulation? Or... how about
> polariztion phase modulation? Or...
>
> Got you thinking yet?

Sorry, I don't recall having stopped thinking. If I have, this isn't the
way to get me started.

> Thanks again for your clearly interesting comments and feedback.
>
> More thoughts, comments?
>
> -- Pete K1PO
> -- Indialantic By-the-Sea, FL

That's about all I can do at this end. I can't make you actually pick up
a text and learn about circularly polarized waves, and until you do,
you'll have some fundamental misconceptions about them.

Guess I'm one of those folks who someone described recently as "having
the common sense educated out of me". It's served me well, since it's
enabled me able to spend a career designing a wide variety of state of
the art electronic circuits and antennas, successfully mass produced,
which work as designed. But I know it's not for everyone.

Roy Lewallen, W7EL

5241. in honor of moparholic at hotmail dot com, we post his gay lover's carck selling conviction.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-06 23:50:37 UTC
From: mopeyzakween@yahoo.com
Message-ID: <d73bff64-f1d8-4ef5-99f2-636dc9eb6122@k36g2000yqe.googlegroups.com>
Source record: 19415
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

Post some more mopar the cuckolded twatface!

READ AND LEARN OF THE CONVICTED DRUG DEALER!!! LOL!!!!
Randy's glass house got a window broken, we see!

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE

GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

5242. Re: NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 00:15:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <hZudnfA2q-AtiKbUnZ2dnUVZ_gadnZ2d@posted.easystreetonline>
Source record: 19416

Peter O. Brackett wrote:

> Question for our own Roy Lewallen W7EL... Roy do you think that there
> would be much of a market for EXNEC to provide circular polarization
> outputs from EZNEC, and do you have any plans to implement output plots
> from EZNEC in terms of circular polarization?
>
> I can supply you with references to the needed transformations. Just a
> few lines of Fortran or Visual Basic should do it...
>
> Just asking? [smile]

Plots and tabular output of circular polarization components has been a feature of EZNEC+ and EZNEC Pro programs since the introduction of v. 4.0 in May 2004. (The current version is 5.0.) This feature isn't included in the demo or standard programs. I see it's not properly indexed in the manual -- I've made a note to correct that at the next revision. It's described in Getting Started/What Was New in v. 4.0.

Roy Lewallen, W7EL

5243. Re: NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 01:12:23 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <XpF_k.227$c35.45@nwrddc02.gnilink.net>
Source record: 19417

"Peter O. Brackett" <none@no-such-domain.nul> wrote in message
news:CoGdnX_SLqTDaafUnZ2dnUVZ_hednZ2d@earthlink.com...
> Group:
>>
>>
> Question for our own Roy Lewallen W7EL... Roy do you think that there
> would be much of a market for EXNEC to provide circular polarization
> outputs from EZNEC, and do you have any plans to implement output plots
> from EZNEC in terms of circular polarization?
>
> I can supply you with references to the needed transformations. Just a
> few lines of Fortran or Visual Basic should do it...
>
> Just asking? [smile]
>
> -- Pete K1PO
> -- Indialantic By-the-Sea, FL

Hi Pete

I thought the FF Tab data in EZNEC was very informative for analyzing the circularity of the antennas i tried to analyze with EZNEC. Perhaps you know of some additional data that would assist me in better understanding the polarization of these antennas. Tell me what is left out of Roy's data in EZNEC.

Jerry KD6JDJ

5244. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 01:16:12 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <3fd0c1da-73c3-4e44-bbe5-9f8974939308@x14g2000yqk.googlegroups.com>
Source record: 19418

On Dec 6, 12:46 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:8892c004-e557-4f75-9199-38db729fa19b@k8g2000yqn.googlegroups.com...
>
> >You can have diversity with respect to all polarizations except
> >circular where you only have the choice of one.
>
> why can't you do lhcp and rhcp diversity?
>
> >If you believe that antenna programs
> >are utter idiocy then that will be inline with your general attitude.
> >I am sure that some have taken up my suggestion to check for
> >themselves instead of resorting to knee jerk reactions with out foundation.
>
> on the contrary, i believe antenna programs and understand how they work, at
> one time i wrote one of my own that did well on designing phased vertical
> arrays... and not a single reference to the weak force in it at all! nor
> will you find any of the existing antenna modeling programs that use the
> weak force. which kind of contradicts your whole rant, you say you believe
> in the modeling programs and that they give results that agree with your
> corrupted weak force model, and yet they don't use the weak force at all...
> never have, and never will. nor can you state where the weak force is
> included in Maxwell's equations, which of course all the modeling programs
> are based on. so that just leaves you hanging by your magical equilibrium
> levitating diamagnetic neutrinos... which you still haven't explained how
> they work with my ferromagnetic radiators.

I explained ferro magnetism and antennas a long time ago where the
weak force becomes swamped
You should be able to come to your own conclusions when evatuating
the effect on the Tank Circuit
With respect to the weak force action it was that addition to Maxwells
laws that provided equilibrium.
Kraus gave an example of it when he empirically created pitch angle
with respect to other parameters
without a full understanding of what created it. In this Universe
there is no such thing as a straight line tho a helicoptor can
simulate it with two rotors at right angles to create equilibrium the
same as a gyroscope or a Sedgeman.
The Universe is contained within an arbitrary border in equilibrium,
you can't get away from that.
The pitch angle that Kraus uses is a creation of the weak force which
thus forbids parallelism

in antenna arrays. If your antenna that you are bragging about
contains parallelism between elements and or the ground surface
then you are NOT obtaining maximum radiation but in fact you are
increasing your losses. You really have a long way to go with respect
to antennas
and the answers you search for are not to be found in Snakesphere that
is muddied to prevent understanding.
As far as antenna programs not using the weak force, that is stupid as
it is what is termed as the "displacement" current a guess arrived at
based on the units required
But rarely do hams use computer programs as initially designed around
Maxwell but instead use a modification of such in following Yagi and
Uda
planar design which is an aproximation. All you have to do is to
provide a one liner to a optimiser to realise you are stating a load
of crap and have reached a point where you cannot handle the truth as
it reveals exactly who and what you are. Some day a knoweledgable
person will arrive on this group and ram a computer sample down your
throat and expose you and the others as just talking heads. Most of
you are like a high school student who wondered into a post graduate
lecture room where all appeared as a torrent of babble until the time
you grew up, if you ever did.
Have a great week end
Art

5245. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 01:51:38 UTC
From: MTV <volztexas355@comcast.net>
Message-ID: <7%F_k.382975$vK2.380804@en-nntp-03.dc1.easynews.com>
Source record: 19419

Thanks for the idea, John,

Marv

John Ferrell wrote:
> Here is how I do it. There is much more to do but it is
> operational...No climbing!
> http://dixienc.us/TiltOverGadget/TiltOverGadget.mht
>
> John Ferrell W8CCW
>
> On Sat, 06 Dec 2008 13:13:07 -0600, MTV <volztexas355@comcast.net>
> wrote:
>
>> I'm starting to look for a 55' freestanding tower with house wall
>> bracket. Am undecided on a lattice type or tubular. Being an old geezer
>> I am not interested in the standard lattice type which requires
>> climbing, but a nestable type to be raised and lowered by a crank or
>> motor. I figure if it can be lowered I could work on it from the roof of
>> my one story house. Main antenna would be a Cushcraft A4S 4-element or
>> equivalent - wind area abt 4 sq ft. Not sure I could handle the huge X7
>> Big Thunder and its 7.9 sq ft., although that would be ideal.
>>
>> Any first hand experience or recommendations?
>>
>> Marv
>> W5MTV

5246. Lawsuit countdown K3VR is SoL (Statute of Limitiations) for w4nti has another 9 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 03:55:19 UTC
From: an_old_friend <kb9rqz@gmail.com>
Message-ID: <39094b7f-36e5-42aa-ae04-79f133de1d70@v4g2000yqa.googlegroups.com>
Source record: 19420
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Dec 6, 6:50 pm, mopeyzakw...@yahoo.com wrote:
> Post some more mopar the cuckolded twatface!

can the spam

5247. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 04:27:41 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <5hl_k.2837$uS1.827@newsfe19.iad>
Source record: 19421

"Ginu" <osheikh81@gmail.com> wrote in message
news:5e586653-7923-4ed6-9d94-877ae70672d5@v42g2000yqv.googlegroups.com...
> On Dec 5, 6:10 am, Bob Bob <bob3b...@suddenlink.net> wrote:
> > So at 5AM I may not be too sharp...
> >
> > The formula you used doesnt seem to allow for the required demod s/n.
> > QAM64 for example (from memory) is around 30dB so this has to be "added"
> > to the path loss. Differing mod/demod/FEC have differing margin
> > requirmeents. Somewhere in there too you have to stipulate the bit loss
> > rate "allowed".
>
> Can you explain this further please?

http://www.satsig.net/lnb/ebno-calculator.htm is one of many sites dealing with considerations of Energy Per Bit to Noise Density Ratio, which may help you.

The Eb/No -- or to some, Eb/N0 -- influences the bit error rate (BER). Let the Eb/No go too low and the link is not error-free. Generally, a BER of better than one error in ten-to-the-eighth bits is considered to be an error-free link.

Navy satellite data links of my acquaintance usually ran at 256 kbps and, if memory serves, needed an Eb/No around 8. The modem reported the Eb/No and that value was the first thing we looked at if the mux started taking hits.

5248. Re: NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 04:44:33 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <T9OdnWpzPPknyabUnZ2dnUVZ_tHinZ2d@earthlink.com>
Source record: 19423

Roy:

[snip]
> Plots and tabular output of circular polarization components has been a
> feature of EZNEC+ and EZNEC Pro programs since the introduction of v. 4.0
> in May 2004. (The current version is 5.0.) This feature isn't included in
> the demo or standard programs. I see it's not properly indexed in the
> manual -- I've made a note to correct that at the next revision. It's
> described in Getting Started/What Was New in v. 4.0.
[snip]

Oh, OK... as you likely know I am one of your customers, an EZNEC user, but my version is older. :-(

There are no circular polarization outputs available in my version.

I'll purchase a new version so that I can have that capability.

Did you add the calculations to produce the circular outputs from NEC rectilinear outputs yourself or is it/was it included in the basic NEC codes?

Keep an eye out for my order. [smile]

Thanks!

-- Pete K1PO
-- Indialantic By-the-Sea, FL

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:hZudnfA2q-AtiKbUnZ2dnUVZ_gadnZ2d@posted.easystreetonline...
> Peter O. Brackett wrote:
>
>> Question for our own Roy Lewallen W7EL... Roy do you think that there
>> would be much of a market for EXNEC to provide circular polarization
>> outputs from EZNEC, and do you have any plans to implement output plots
>> from EZNEC in terms of circular polarization?
>>
>> I can supply you with references to the needed transformations. Just a
>> few lines of Fortran or Visual Basic should do it...
>>
>> Just asking? [smile]
>
> Plots and tabular output of circular polarization components has been a
> feature of EZNEC+ and EZNEC Pro programs since the introduction of v. 4.0
> in May 2004. (The current version is 5.0.) This feature isn't included in
> the demo or standard programs. I see it's not properly indexed in the

> manual -- I've made a note to correct that at the next revision. It's
> described in Getting Started/What Was New in v. 4.0.
>
> Roy Lewallen, W7EL

5249. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 05:22:05 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <PJidnWVJ3vIYwKbUnZ2dnUVZ_sHinZ2d@earthlink.com>
Source record: 19422

Roy:

[snip]
> That's a great attitude for a politician, philosopher, or biblical
> scholar. But engineers and scientists depend on universally understood
> technical terms in order to communicate. I'm free to say that my car gets
> a gas mileage of 30 miles/hour and weighs 420 miles. But it wouldn't be a
> smart thing to do if I intend to convey information.
>
>> [snip]
>>> Sorry, it doesn't. An unavoidable side effect of the synchronicity
>>> change is that the amplitude of the E field still changes at a 1 GHz
>>> rate, going through a complete cycle from max to zero to max to zero to
>>> max each nanosecond. A circularly polarized wave doesn't change
>>> amplitude with time. A non-circular elliptical wave changes amplitude
>>> but not fully to zero each cycle.
>> [snip]
>>
>> Here there is a bit of fuzziness...
>>
>> I agree that the E field of a wave is always changing at the RF carrier
>> frequency
>> since it is an AC waveform. Alternating current is always changing! And
>> so a
>> 1 GHz carrier will always have an E field that oscillates back and forth
>> at the
>> carrier (center?) frequency when analyzed by a (linear) polarimeter.
>>
>> I disagree with you that a circular polarized wave has a constant E
>> field.
>>
>> Even in the case of a purely circularly polarized the E field still
>> oscillates
>> at the carrier (center?) frequency when analyzed by a linear polarizer.
>>
>> i.e. if a purely CP wave is received on a linear polarized antenna the
>> detected E field (Volts per meter) will be observed to be oscillating
>> at the carrier frequency. However if received on a purely CP responding
>> antenna this oscillating E fileld will appear to be constant.
>>
>> The E field vector can be considered to be similar to the image of a
>> spoke on a rolling wheel. The radius of the spoke is constant, but
>> it's projection on the ground over which the wheel is rolling will
>> always be oscillating in length.

>
> When you receive a circularly polarized wave on a linearly polarized
> antenna, you're seeing only the component of the wave that's linearly
> polarized in the orientation of the antenna. This is exactly the same
> process as filtering a complex waveform. You've removed part of the field
> and are observing what's left after the filtering process, then drawing
> conclusions about the original waveform based on those observations, much
> like listening to a concert orchestra through a long pipe and deciding
> that orchestral sound is very ringy and limited in tonal range. It would
> benefit you to gain a bit of education about circularly polarized waves.
> You'll find that a circularly polarized wave can be created from (or
> broken into) two linearly polarized waves oriented at right angles and in
> phase quadrature. So each of the components has a time-varying amplitude,
> but the sum, which is the circularly polarized wave, has a constant
> amplitude but time-varying orientation. Your linear antenna filters out
> one of the components, leaving you to observe only the other.
[snip]

Yes indeed, we must be talking at cross purposes, since we seem to
have no disagreement on any of the above. I don't see where we differ at
all!

[snip]
>> Would the rate of spin have to be 99-44/100 percent of the synchronous
>> frequency? Or would it have to be closer than that?
>>
>> At what magic spin frequency would the two be indistinguisable.
[snip]

I would repeat the above question in a slightly different way...

How much frequency, or for that matter phase, difference must there
be between the mechanical spin frequency and the carrier frequency
before you could tell the difference between your "conventionally defined"
circular polarization and my definition?

If my antenna was spining with an angular velocity within say,
0.000000000005% of the carrier frequency, would that do it?

Or perhaps my spin rate would have to be closer to the carrier
frequency than that?

If so, then how close does it have to be to qualify to be called
circular polarization under (your) traditional/conventional
definition?

[snip]
> What you'll end up with is amplitude modulation with the modulating
> frequency being the beat note between your spinning speed and the wave
> frequency. This creates sidebands. You'll see this when the sidebands are
> within the bandwidth of the helix. Outside that, the helix will filter off
> the sidebands and you'll just see the "carrier" -- the original wave with
> no modulation.

[snip]

Hmmm... Yes, I agree and that's partially correct, but some of the above paragraph is
somewhat "fuzzy" to say the least.

That helix must be a very sharp [brick wall???] filter, no?

Let's get real here, no practical implementation of any kind of physical filtering
mechanism can filter with infinitely sharp transition bands. It just doesn't happen
in nature.

[snip]
> Here's a really neat little trick you might want to add to your bag --
> superposition. As I mentioned, you can create a circularly polarized wave
> from two linearly polarized waves. The linearly polarized waves are of
> course normally time-varying. As long as the propagation medium is linear
> (such as air), superposition says you can split the circularly polarized
> wave apart into two linearly polarized waves, study and analyze how they
> propagate, then add the two components back together again after the
> propagation. This is, incidentally, a very simple way to see what happens
> when a circularly polarized wave reflects from a surface -- analyze the
> linear components separately and add the results.
[snip]

Heh, heh... Superposition is not a 'trick' it is a well known principle and
Roy, I agree with all of the above!

What's your point?

Bringing up superposition is fine, but you seem to raise the concept of
superposition simply as a digression here, not as a means of disproving my
assertion that mechanically spinning a linear antenna is tantamount to
conventional circular polarization.

[snip]
> That's about all I can do at this end. I can't make you actually pick up a
> text and learn about circularly polarized waves, and until you do, you'll
> have some fundamental misconceptions about them.
[snip]

Hmmm... that was a cheap shot! Unfortunately I agree, YOU cannot
make me pick up a text.

However, I can make myself do so myself, and... it may (or may not)
interest you to know that I have done so on many occasions.

In fact I have picked up several such texts, addressing such subject matter
authored by Physicists and Engineers ranging over subjects
as diverse as radio frequency antennas and optics.

Would it impress you if I sent you a picture of my personal library
of several hundred volumes, which contains perhaps a dozen or more
textbooks on electromagnetics. Since I have been examined on these
subjects at graduate degree levels by the faculty at several duly accredited
Universities it seems that there is some evidence that I may have read and
understood at least a few paragraphs from those texts that I "picked up"!
[smile]

[snip]
> Guess I'm one of those folks who someone described recently as "having the
> common sense educated out of me". It's served me well, since it's enabled
> me able to spend a career designing a wide variety of state of the art
> electronic circuits and antennas, successfully mass produced, which work
> as designed. But I know it's not for everyone.
[snip]

Hmmm... I too have spent (wasted?) most of several decades designing
electronic products and equipment for international markets sold in more
than 40 countries with at total sales volume exceeding $5BB dollars.

And it seems in today's world that if you combine that Engineering
experience with $2.50 you can buy a cup of coffee at Starbucks!

Now that we have suitably set the stage, lets get back to the common
sense Engineering question at hand!

All I need is a number!

Perhaps I should regurgitate the statement of Lord Kelvin about knowledge
that dear departed Reg used to quote. You know... the one about quantifying
things, the one that says you know nothing unless you can put a number to
it!

Do I really need to do that here? Reggie dear friend, are you watching from
above?

Roy, please answer the following common sense Engineering questions, just
how close must the angular velocity of my spinning antenna be to the carrier
frequency before YOU will allow it to be called circular polarization?

A simple numerical value in percentage form would do fine!

[smile]

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5250. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 07:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1228633501@panix.com>
Source record: 19424
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

5251. Re: NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 07:09:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <UtGdndehKc4866bUnZ2dnUVZ_orinZ2d@posted.easystreetonline>
Source record: 19425

Peter O. Brackett wrote:
>
> Oh, OK... as you likely know I am one of your customers, an EZNEC user,
> but my version is older. :-(
>
> There are no circular polarization outputs available in my version.
>
> I'll purchase a new version so that I can have that capability.
>
> Did you add the calculations to produce the circular outputs from NEC
> rectilinear outputs yourself or is it/was it included in the basic NEC
> codes?
>
> Keep an eye out for my order. [smile]
>
> Thanks!

They're calculated from the linearly polarized NEC fields Ephi and Etheta. As you said, NEC doesn't directly report LHP and RHP components but the calculation is trivial from the reported linearly polarized fields.

You have v. 3.0. If you don't have either of the upgrade notice I sent, drop me an email and I'll send you the Customer ID you need to get your upgrade discount price. You'll need EZNEC+ if you want the circular polarization features.

Roy Lewallen, W7EL

5252. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 07:35:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6qumj4dvb40b6r08u3abou9cnaukhl1v90@4ax.com>
Source record: 19426

On Sun, 7 Dec 2008 00:22:05 -0500, "Peter O. Brackett"
<none@no-such-domain.nul> wrote:
>On Sat, 06 Dec 2008 15:49:26 -0800, Roy Lewallen <w7el@eznec.com> wrote:
>> Guess I'm one of those folks who someone described recently as "having the
>> common sense educated out of me".

>Roy, please answer the following common sense Engineering questions,

And I thought Abbott and Costello were dead - but evidently not their
"Who's on First?" routine. :-/

73's
Richard Clark, KB7QHC

5253. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 07:44:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <Q7udnVrtL-1w46bUnZ2dnUVZ_o_inZ2d@posted.easystreetonline>
Source record: 19427

Peter O. Brackett wrote:
> . . .
> Yes indeed, we must be talking at cross purposes, since we seem to
> have no disagreement on any of the above. I don't see where we differ
> at all!

For starters, a circularly polarized wave, as universally understood, has an E field which is constant in amplitude, rotates in synchronism with the rotational frequency of the field, and has a particular relationship to constituent linearly polarized components. The field you're generating doesn't, yet you're calling it "circularly polarized".

> [snip]
>>> Would the rate of spin have to be 99-44/100 percent of the synchronous
>>> frequency? Or would it have to be closer than that?
>>>
>>> At what magic spin frequency would the two be indistinguisable.
> [snip]
>
> I would repeat the above question in a slightly different way...
>
> How much frequency, or for that matter phase, difference must there
> be between the mechanical spin frequency and the carrier frequency
> before you could tell the difference between your "conventionally defined"
> circular polarization and my definition?

Any difference at all. If there's even a tiny difference, the E field will change in amplitude with time. If it's perfectly synchronous it won't. The rate at which it changes with time is the difference between the field rotation frequency and the frequency of the generated signal. If they're synchronous, the difference is zero, and no change in amplitude with time.

> If my antenna was spining with an angular velocity within say,
> 0.000000000005% of the carrier frequency, would that do it?

If by "it" you mean make the difference non-discernible, the answer is no. See above.

> Or perhaps my spin rate would have to be closer to the carrier
> frequency than that?

See above.

> If so, then how close does it have to be to qualify to be called
> circular polarization under (your) traditional/conventional
> definition?

They have to be identical. See above.

The question you posed earlier was different, involving detection of the
difference with a particular kind of antenna. Like the linear antenna
you used in another example, it filters the signal which alters its
properties. So my answer to this new question is different.

> [snip]
>> What you'll end up with is amplitude modulation with the modulating
>> frequency being the beat note between your spinning speed and the wave
>> frequency. This creates sidebands. You'll see this when the sidebands
>> are within the bandwidth of the helix. Outside that, the helix will
>> filter off the sidebands and you'll just see the "carrier" -- the
>> original wave with no modulation.
> [snip]
>
> Hmmm... Yes, I agree and that's partially correct, but some of the above
> paragraph is
> somewhat "fuzzy" to say the least.
>
> That helix must be a very sharp [brick wall???] filter, no?

No.

> Let's get real here, no practical implementation of any kind of physical
> filtering
> mechanism can filter with infinitely sharp transition bands. It just
> doesn't happen
> in nature.

That's not required, although I see it's how you've interpreted my use
of "bandwidth". There is no such brick wall rejection region.

> [snip]
>> Here's a really neat little trick you might want to add to your bag --
>> superposition. As I mentioned, you can create a circularly polarized
>> wave from two linearly polarized waves. The linearly polarized waves
>> are of course normally time-varying. As long as the propagation medium
>> is linear (such as air), superposition says you can split the
>> circularly polarized wave apart into two linearly polarized waves,
>> study and analyze how they propagate, then add the two components back
>> together again after the propagation. This is, incidentally, a very
>> simple way to see what happens when a circularly polarized wave
>> reflects from a surface -- analyze the linear components separately
>> and add the results.
> [snip]
>
> Heh, heh... Superposition is not a 'trick' it is a well known principle and
> Roy, I agree with all of the above!
>
> What's your point?

You don't believe that a wave with constant amplitude E field can
propagate. My point is that the constant E field amplitude circularly
polarized wave can be made of the sum of two time-varying waves. Each of
these waves can propagate. If you're familiar with superposition it
should be obvious that the original wave can be split into those
components, each component and its propagation can be analyzed
separately, and the results summed at the far end of the path. That's
how a CP wave having a constant amplitude can propagate.

> Bringing up superposition is fine, but you seem to raise the concept of
> superposition simply as a digression here, not as a means of disproving my
> assertion that mechanically spinning a linear antenna is tantamount to
> conventional circular polarization.

No, it was brought up to demonstrate how a wave having a constant
amplitude E field can propagate. You had used the argument that a
circularly polarized wave can't propagate because its E field has a
constant amplitude, as support for your incorrect assertion that the
amplitude of the E field of a circularly polarized varies with time. A
circularly polarized wave has a constant amplitude E field, which can be
easily demonstrated from the equations describing it. It propagates.
Your pseudo-circularly polarized wave doesn't have a constant amplitude
E field, which is only one way it differs from a circularly polarized wave.

> [snip]
>> That's about all I can do at this end. I can't make you actually pick
>> up a text and learn about circularly polarized waves, and until you
>> do, you'll have some fundamental misconceptions about them.
> [snip]
>
> Hmmm... that was a cheap shot! Unfortunately I agree, YOU cannot
> make me pick up a text.
>
> However, I can make myself do so myself, and... it may (or may not)
> interest you to know that I have done so on many occasions.
>
> In fact I have picked up several such texts, addressing such subject matter
> authored by Physicists and Engineers ranging over subjects
> as diverse as radio frequency antennas and optics.
>
> Would it impress you if I sent you a picture of my personal library
> of several hundred volumes, which contains perhaps a dozen or more
> textbooks on electromagnetics. Since I have been examined on these
> subjects at graduate degree levels by the faculty at several duly
> accredited
> Universities it seems that there is some evidence that I may have read and
> understood at least a few paragraphs from those texts that I "picked
> up"! [smile]

I'm impressed, but it's not apparent to me why, with those resources
available, you're having trouble finding how the amplitude of the
circularly polarized wave E field varies with time, or applying

superposition to discover how it propagates. Choose one or two of your texts which has the equations for circularly polarized waves. Chances are good that I have the same text, and if you'd like I can show you how to derive the instantaneous E field amplitude from the equations. But I'm afraid you would have to pick it up to find the equations.

But if you can do that, you might be able to write the equations describing your signal, and then the differences between it and the CP equations should become obvious.

>
> [snip]
>> Guess I'm one of those folks who someone described recently as "having
>> the common sense educated out of me". It's served me well, since it's
>> enabled me able to spend a career designing a wide variety of state of
>> the art electronic circuits and antennas, successfully mass produced,
>> which work as designed. But I know it's not for everyone.
> [snip]
>
> Hmmm... I too have spent (wasted?) most of several decades designing
> electronic products and equipment for international markets sold in more
> than 40 countries with at total sales volume exceeding $5BB dollars.
>
> And it seems in today's world that if you combine that Engineering
> experience with $2.50 you can buy a cup of coffee at Starbucks!
>
> Now that we have suitably set the stage, lets get back to the common
> sense Engineering question at hand!
>
> All I need is a number!

Oh, if that's all you need, 42 is always a good choice.

> Perhaps I should regurgitate the statement of Lord Kelvin about knowledge
> that dear departed Reg used to quote. You know... the one about
> quantifying
> things, the one that says you know nothing unless you can put a number
> to it!
>
> Do I really need to do that here? Reggie dear friend, are you watching
> from above?
>
> Roy, please answer the following common sense Engineering questions, just
> how close must the angular velocity of my spinning antenna be to the
> carrier
> frequency before YOU will allow it to be called circular polarization?

It must be exactly the same.

> A simple numerical value in percentage form would do fine!

0.

I'll quit here, unless you want help with the derivation of the CP E field amplitude. Best wishes for the success of your innovative creation.

Roy Lewallen, W7EL

5254. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 08:03:47 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C560C363002469FFB01AD9AF@news.sf.sbcglobal.net>
Source record: 19428
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> It's probably not actually all that important.
> dplatt

- - -

Thanks for your comments and evaluation of the project. They are helpful to someone not skilled in the black art of wireless :-)

I plan to modify the design a bit, eliminating all coax connectors & adapters, using just 2 banana plugs (and supporting plastic block) as the connection to the meter.

Is it any more efficient to use copper foil or PCB material as the reflector rather than wire?

Thanks.

5255. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 09:35:01 UTC
From: Bill <Bill@birchnet.demon.co.uk>
Message-ID: <W2iE4gpFj5OJFweJ@birchnet.demon.co.uk>
Source record: 19429
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

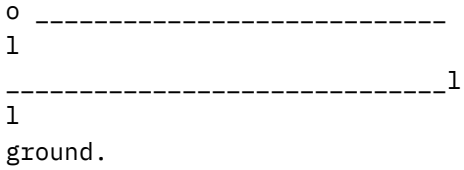
In message <0001HW.C560C363002469FFB01AD9AF@news.sf.sbcglobal.net>,
SparkyGuy <sparkyguy@mumcrank.ck> writes
>> It's probably not actually all that important.
>> dplatt
>
>- - -
>
>Thanks for your comments and evaluation of the project. They are helpful to
>someone not skilled in the black art of wireless :-)
>
>I plan to modify the design a bit, eliminating all coax connectors &
>adapters, using just 2 banana plugs (and supporting plastic block) as the
>connection to the meter.
>
>Is it any more efficient to use copper foil or PCB material as the reflector
>rather than wire?
>
>Thanks.
>

A novel bit of kit, looking at the photos it appears to be being used
with a DVM, depending on how you want to use it you may find an analogue
meter easier. It will show changes better than a DVM. How about buying
a movement and a box and building a totally dedicated unit? I'm tempted
to make something similar.
--
Bill
May God defend me from my friends; I can defend myself against my enemies.

5256. A short coax-antenna with folded dipole characteristics.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 11:02:50 UTC
From: "D. Heizinga" <nospam@post.nl>
Message-ID: <493bab9c$0$969$6d4158fb@reader.xsnews.nl>
Source record: 19430

Experience anyone with this one ? Imagine a vertical half folded dipole.
One side is grounded. Like this:



o = input

Drawn laying down but of course it stands upwards. All is a 1/4 lambda long.
But now the trick: a coaxial cable can be shorted at the end too. But the lenghts needs only be 0.66 times ! So 40 metres high becomes only 26 metres.
Don't bother the shielding, that is no obstacle for magnetic fields.

5257. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 12:30:11 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <k7ss06-g7v.ln1@p400bob.personal.cox.net>
Source record: 19431

I think Sal has answered this well enough. Suffice to say that if you start with the noise floor or amount of noise energy in the bandwidth you are going to use, you have to have a "margin" above that for the radio system to be able to transfer information. This even applies to morse code and voice transmission and thus the human brain's ability to do the filtering and demod! Morse code for example can actually be heard below the noise floor (or if you like a negative margin) because you can concentrate on the 500Hz odd tone rather than the wide band noise. Repeating the message that is sent also lowers the margin as it is a kind of forward error correction that might give you a few extra dB. Even a voice you know vs one you dont know lowers the margin. A trained brain is remarkably good and has a huge dynamic range as well.

Even something like a human shout of warning has "greater range" because it is a very narrow bandwith data stream. ie the message sent is binary (yes vs no) or very short (like "help" "fire" "911" or "000") rather than something like "There is a fire down here in the trees"

The margin required is more or less linked to the specification of the overall modulation method. I quoted QAM64. When you add FEC to QAM64 the margin becomes less at the expense of less data bandwidth (as more bits are sent) I saw an FEC calc for an amateur radio satellite telemetry of 6-7dB. I browsed sround and found 802.11a is around 12dB for a BER of 1 in 10E6. Data stuff tends to be layered. ie they have a basic radio modulation method (eg QAM, QPSK etc) and the FEC on top of that (eg Reed Solomon & Verterbi encoding) Above that you may also have resends at a higher layer. If you are running TCP/IP for example, TCP ensures that a packet is received and reassembled within a certain timeout period. If not it request the data again.

Hope this helps. apologies for the excessive analogies..

Cheers Bob W5/VK2YQA

5258. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 12:43:37 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <q0ts06-o7v.ln1@p400bob.personal.cox.net>
Source record: 19432
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

An interesting design...

Keep in mind that you are building a relative, not absolute measurement device. ie you can calibrate (or not) it anyway you like. Any piece of wire will have a voltage induced into it by a passing EM field!

The only real concern is that you may want to ensure that the directivity of the quad is reasonably unidirectional. Some quad designs have pretty bad front to back performance. This may give you erronous results if you start seeing reflections or other TX's of the back of your antenna. The easy way to overcome this is to calibrate the pattern by rotating the unit in an active 2.4GHz field and noting some values. You can then use these in later tests.

Cheers Bob

SparkyGuy wrote:
>
> Regarding the dimensions of the wire loops:
>

5259. Re: A short coax-antenna with folded dipole characteristics.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 13:56:17 UTC
From: nm5k@wt.net
Message-ID: <9786b2d0-0f0a-494f-81ff-84f0e3a95e98@z28g2000prd.googlegroups.com>
Source record: 19433

On Dec 7, 5:02 am, "D. Heizinga" <nos...@post.nl> wrote:
> Experience anyone with this one ? Imagine a vertical half folded dipole.
> One side is grounded. Like this:
>
> o _____________________________
>   l
> _______________________________l
> l
> ground.
>
> o = input
>
> Drawn laying down but of course it stands upwards. All is a 1/4 lambda long.
> But now the trick: a coaxial cable can be shorted at the end too. But the lenghts needs
> only be 0.66 times ! So 40 metres high becomes only 26 metres.
> Don't bother the shielding, that is no obstacle for magnetic fields.

Can't see much point. Makes more sense to just run a 1/4 wave to me.
Sure, the coax has a slower velocity factor than wire, but that's not
going to make a 26m antenna show the same performance as a
wire 1/4 wave. It will still be a "short" vertical vs the monopole.
I'm not sure how the current distribution would be effected.
Would need to model it.. But I'm too lazy to mess with it at the
moment. :/
BTW, there will be some extra loss in the mix using the coax vs
plain wire if you are feeding the center conductor. Much the same as
you would see using a coax dipole such as the common "bazooka".
Also, there is no advantage to using a folded vertical vs a monopole
if avoiding ground losses are the intent.
That used to be a fairly common belief that has been pretty much shot
out of the water in the last several years.
So... Where's the beef?

5260. Re: A short coax-antenna with folded dipole characteristics.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 14:51:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <BpR_k.6313$hc1.3748@flpi150.ffdc.sbc.com>
Source record: 19434

D. Heizinga wrote:
>
> Experience anyone with this one ? Imagine a vertical half folded dipole.
> One side is grounded. Like this:
>
> o _____________________________
> l
> _____________________________l
> l
> ground.
>
> o = input
>
> Drawn laying down but of course it stands upwards. All is a 1/4 lambda
> long.
> But now the trick: a coaxial cable can be shorted at the end too. But
> the lenghts needs
> only be 0.66 times ! So 40 metres high becomes only 26 metres.
> Don't bother the shielding, that is no obstacle for magnetic fields.

The antenna as drawn is a common folded monopole
configuration for VHF antennas.

What you are proposing using coax would simply be a shorted
1/4WL stub with very little common-mode current and therefore
very little radiation. Virtually all of the current would be
contained on the inside of the coax and the feedpoint impedance
of the shorted 1/4WL stub would be extremely high. If one could
succeed in shoving some current into that sky-high impedance, the
major losses would be I^2*R and dielectric with very little
energy "lost" from the system as radiation - bad idea.
--
73, Cecil http://www.w5dxp.com

5261. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 15:54:54 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <faa183b3-9b44-45de-befe-855f9e146f8b@s9g2000prg.googlegroups.com>
Source record: 19435

Peter O. Brackett wrote:
>
> Now transmit on that dipole antenna whilst mechanically spinning it
> clockwise [RHCP?] (with a mechanical motor of some kind).
>
> The dipole antenna is linear and thuse emits linear polariztion, except it
> is mechanically spinning, and so the E vector emanating from the antenna
> will be rotating with respect to its direction of travel.
>
> In this case the angular velocity of the motor that spins the linear antenna
> need not be synchronous with the frequency being radiated.
>
> For example we could mechanically spin the antenna at 330 rpm while
> transmitting a carrier of 1 GHz.
>
> This would most certainly produce circular polarization. For is not the E
> vector spinning at 330 revs!

Andy writes:

It sounds to me like you are describing the technique for generating
an aircraft VOR signal, which has been in use for well over 50 years.

The VOR band is 108 - 117 Mhz, and the antenna is a cardoid
pattern
that is rotated mechanically at a 30 hz rate. At a distant point
this
results in a 30 hz amplitude modulation of the received signal, which
is one of the components used in the signal processing for the
receiver to determine the direction to or from the ground VOR station.

Simply rotating the antenna does not result in circular
polarization, but
rather it changes the field strength of the radiated signal at a point
in
space.... The received signal is therefore modulated in amplitude as
the pattern passes a singular distant point in space.....

I just wanted to throw this in the mix, since rotating the antenna
has
been around for a long time.

Of course it can be done electronically now, but the initial
systems
were simply turned by a motor.

Andy W4OAH , ex- aircraft nav system
designer....long retired.

5262. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 16:41:57 UTC
From: JB <nospam@goofball.net>
Message-ID: <p1T_k.305$c35.211@nwrddc02.gnilink.net>
Source record: 19436

"MTV" <volztexas355@comcast.net> wrote in message
news:7%F_k.382975$vK2.380804@en-nntp-03.dc1.easynews.com...
> Thanks for the idea, John,
>
> Marv
>
> John Ferrell wrote:
> > Here is how I do it. There is much more to do but it is
> > operational...No climbing!
> > http://dixienc.us/TiltOverGadget/TiltOverGadget.mht
> >
> > John Ferrell W8CCW
> >
> > On Sat, 06 Dec 2008 13:13:07 -0600, MTV <volztexas355@comcast.net>
> > wrote:
> >
> >> I'm starting to look for a 55' freestanding tower with house wall
> >> bracket. Am undecided on a lattice type or tubular. Being an old geezer
> >> I am not interested in the standard lattice type which requires
> >> climbing, but a nestable type to be raised and lowered by a crank or
> >> motor. I figure if it can be lowered I could work on it from the roof
of
> >> my one story house. Main antenna would be a Cushcraft A4S 4-element or
> >> equivalent - wind area abt 4 sq ft. Not sure I could handle the huge X7
> >> Big Thunder and its 7.9 sq ft., although that would be ideal.
> >>
> >> Any first hand experience or recommendations?
> >>
> >> Marv
> >> W5MTV

Often helpful to just tilt it back with the antenna pointing up so that it
will almost rest on the reflector element. This way you can still reach the
driven element and do tuning and testing and feed point assembly. One of
the tower manufacturers makes an MA40 tubular (40') with crank up and tilt
over come-along arrangement and was very manageable from the ground. I.m
sure 55' is available.

5263. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 16:54:39 UTC
From: dplatt@radagast.org
Message-ID: <fnbt06-um1.ln1@radagast.org>
Source record: 19437
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

>Thanks for your comments and evaluation of the project. They are helpful to
>someone not skilled in the black art of wireless :-)
>
>I plan to modify the design a bit, eliminating all coax connectors &
>adapters, using just 2 banana plugs (and supporting plastic block) as the
>connection to the meter.

That should certainly work!

>Is it any more efficient to use copper foil or PCB material as the reflector
>rather than wire?

I believe not.

PCB material will probably be less efficient - standard FR-4
fiberglass-and-epoxy has significant losses at 2.4 GHz. Also, the
presence of the FR-4 will change the effective length/diameter of the
reflector loop... you might have to change the loop diameter to
compensate.

Foil would probably be bit less efficient than wire, assuming that the
width of the foil was the same as the diameter of the wire - less
surface area for the current to flow through, and perhaps more current
crowding to the edges of the foil due to skin effect. It'd also be
significantly less rugged.

Once again, neither of these losses of efficiency is likely to be
terribly important in this application, but why run the risk?

I'd just stick with solid copper wire of a reasonable diameter/gauge,
as it'll be electrically efficient and mechanically strong and rigid,
easy to get, and inexpensive.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5264. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 18:55:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghh674$bc5$1@news.albasani.net>
Source record: 19438
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Dave Platt wrote:

>> Is it any more efficient to use copper foil or PCB material as the reflector
>> rather than wire?
>
> I believe not.
>
> PCB material will probably be less efficient - standard FR-4
> fiberglass-and-epoxy has significant losses at 2.4 GHz. Also, the
> presence of the FR-4 will change the effective length/diameter of the
> reflector loop... you might have to change the loop diameter to
> compensate.
>

I would think so, at 2.4Ghz there is, no doubt, "only skin effect."
Although, I doubt you would notice a great change in efficiency, it
should be prove-able, at least on paper. The biquad uses a solid
reflector plate for good reason, wire is cheaper/easier to obtain. If
the foil side faces the element, I should doubt any rf gets past it to
the fiberglass-epoxy to be "lost" in efficiency.

> Foil would probably be bit less efficient than wire, assuming that the
> width of the foil was the same as the diameter of the wire - less
> surface area for the current to flow through, and perhaps more current
> crowding to the edges of the foil due to skin effect. It'd also be
> significantly less rugged.
>

My statement above applies here ... all the wire element can "see" is
reflector, with foil.

> Once again, neither of these losses of efficiency is likely to be
> terribly important in this application, but why run the risk?
>
> I'd just stick with solid copper wire of a reasonable diameter/gauge,
> as it'll be electrically efficient and mechanically strong and rigid,
> easy to get, and inexpensive.
>

Tear apart some LNA/satellite feeds to the dish, you will not see them
using wire reflectors there; I think there is good reason.

Just my opinions drawn from my readings/study, looking at commercial
equipment and hands-on ...

One thing I do totally agree with, it WILL work well with just a wire reflector.

Regards,
JS

5265. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 19:01:48 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <C4V_k.7965$4f3.1867@newsfe14.iad>
Source record: 19439

I bought a self-supporting 56' Heights tower with its clamshell
tilt-over-kit unit 8 feet up from the base. I lower the tower with a 3/8"
power drill and never leave the ground for anything.

IMHO, nested towers that leave the boom 22' feet in the air and the antenna
elements 4-to-15 feet from your reach are overrated!
--
-larry
K8UT
"MTV" <volztexas355@comcast.net> wrote in message
news:n9A_k.318187$6p1.162862@en-nntp-07.dc1.easynews.com...
> I'm starting to look for a 55' freestanding tower with house wall bracket.
> Am undecided on a lattice type or tubular. Being an old geezer I am not
> interested in the standard lattice type which requires climbing, but a
> nestable type to be raised and lowered by a crank or motor. I figure if it
> can be lowered I could work on it from the roof of my one story house.
> Main antenna would be a Cushcraft A4S 4-element or equivalent - wind area
> abt 4 sq ft. Not sure I could handle the huge X7 Big Thunder and its 7.9
> sq ft., although that would be ideal.
>
> Any first hand experience or recommendations?
>
> Marv
> W5MTV

5266. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 19:04:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghh6o8$bc5$2@news.albasani.net>
Source record: 19440
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

John Smith wrote:

> ...
> One thing I do totally agree with, it WILL work well with just a wire
> reflector.
>
> Regards,
> JS
>

I built this, actually, a while back. Toss in a director (what is one more wire?); I found that to be a worthwhile mod ...

Regards,
JS

5267. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 19:54:18 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C56169EA0026DBAEB01AD9AF@news.sf.sbcglobal.net>
Source record: 19441
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> I built this, actually, a while back. Toss in a director (what is one
> more wire?); I found that to be a worthwhile mod ...
>
> Regards,
> JS

Suggestions re. dimensions and location of a director?

Thanks.

5268. "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 20:48:14 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C561768E0029D229B01AD9AF@news.sf.sbcglobal.net>
Source record: 19442
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Halfway down this page (it's a PDF doc):

<http://www.cablesandconnectors.com/PIX/CC-040.pdf>

the TNC and BNC connectors are advertised as "dual-crimp". What does this mean? "Dual" as in center in crimp and outer shield ferrule crimp?

As opposed to what? Single-crimp? That would be connectors that use the center, solid conductor as the center pin and then crimp the shield ferrule? Or...?

Newly (did you guess?) into small coax connectors and trying to get the terminology straight...

Thanks.

5269. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 20:53:47 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <lmdoj49qi4pu7hpgrpd5kl55qvoe2i545h@4ax.com>
Source record: 19443

I have found that the older I get the easier I need things to be!
This scheme I am working with allows one to stand on the ground in the
array and do whatever. If I receive adequate warning of a coming ice
storm or hurricane it is concievable to lower it all to a position of
safety as well.
John Ferrell W8CCW

On Sun, 07 Dec 2008 16:41:57 GMT, "JB" <nospam@goofball.net> wrote:

>
>
>Often helpful to just tilt it back with the antenna pointing up so that it
>will almost rest on the reflector element. This way you can still reach the
>driven element and do tuning and testing and feed point assembly. One of
>the tower manufacturers makes an MA40 tubular (40') with crank up and tilt
>over come-along arrangement and was very manageable from the ground. I.m
>sure 55' is available.

5270. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 21:02:33 UTC
From: Anon bozo <anon@bozo.to>
Message-ID: <0001HW.C56179E9002A9B9AB01AD9AF@news.sf.sbcglobal.net>
Source record: 19444

> http://dixienc.us/TiltOverGadget/TiltOverGadget.mht

A web site that doesn't support browsers other than Explorer ain't a web site.

5271. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 21:16:03 UTC
From: Dave <dave@dave.dave>
Message-ID: <493c3d13$0$31190$bd467cd0@news.dslextreme.com>
Source record: 19445
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

SparkyGuy wrote:
> Halfway down this page (it's a PDF doc):
>
> <http://www.cablesandconnectors.com/PIX/CC-040.pdf>
>
> the TNC and BNC connectors are advertised as "dual-crimp". What does this
> mean? "Dual" as in center in crimp and outer shield ferrule crimp?
>
> As opposed to what? Single-crimp? That would be connectors that use the
> center, solid conductor as the center pin and then crimp the shield ferrule?
> Or...?
>
> Newly (did you guess?) into small coax connectors and trying to get the
> terminology straight...
>
> Thanks.
>
No soldering. You need the correct Paladin die.

5272. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 21:20:47 UTC
From: MTV <volztexas355@comcast.net>
Message-ID: <67X_k.314428$1p1.13398@en-nntp-08.dc1.easynews.com>
Source record: 19446

Larry Gauthier (K8UT) wrote:
> I bought a self-supporting 56' Heights tower with its clamshell
> tilt-over-kit unit 8 feet up from the base. I lower the tower with a 3/8"
> power drill and never leave the ground for anything.
>
> IMHO, nested towers that leave the boom 22' feet in the air and the antenna
> elements 4-to-15 feet from your reach are overrated!

I just looked over the Heights web page and am very impressed. I'm surprised an aluminum tower could handle the stress from tilt-over design. Looks like everything I'd need, and very well thought out and engineered. Might get the HD (coastal) since we had 90 mph winds from H. Ike, which crashed most antennas or towers in the area, though I am sheltered up to about 25'. After looking over my own layout think a 48' tower would be all I need, with antenna on a mast then being about 6' above tallest oak tree with clear view of horizon - have flat terrain not far from Houston, but lots of trees. Counted 40 on our 1.25 acre lot. Had heck of a time stringing 120' wire antenna.

Marv

5273. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 21:23:33 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <ofqdncHyWvtIo6HUnZ2dnUVZ_hydnZ2d@web-ster.com>
Source record: 19447
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 07 Dec 2008 12:48:14 -0800, SparkyGuy wrote:

> Halfway down this page (it's a PDF doc):
>
> <http://www.cablesandconnectors.com/PIX/CC-040.pdf>
>
> the TNC and BNC connectors are advertised as "dual-crimp". What does
> this mean? "Dual" as in center in crimp and outer shield ferrule crimp?
>
> As opposed to what? Single-crimp? That would be connectors that use the
> center, solid conductor as the center pin and then crimp the shield
> ferrule? Or...?
>
> Newly (did you guess?) into small coax connectors and trying to get the
> terminology straight...
>
> Thanks.

The common BNC "crimp" connectors have you solder the center pin to the center conductor of the cable, then assemble the outer with a crimp.

It works quite well in my experience, but I have yet to do this without distorting the center insulator and having to trim it with an X-acto knife to get it to fit, and I'm sure that in a critical application (like TNC in the GHz) that I'd be creating an unpredictable impedance bump with my hacking. This is bad enough with cables that have solid dielectric; I can only imagine the pain it would be with foam. In a production environment I'd almost certainly want to spring for the necessary crimp tool to crimp the inner, if the quality were there.

(This is opposed to BNC connectors where you thread in a plug to capture the outer conductor between the outer shell and a rubber insert. It also works well, but it is bulky and the connectors cost more. And you're still asked to solder the center pin on, with all of the accompanying center insulator distortion issues).

--
Tim Wescott
Control systems and communications consulting
http://www.wescottdesign.com

Need to learn how to apply control theory in your embedded system?
"Applied Control Theory for Embedded Systems" by Tim Wescott
Elsevier/Newnes, http://www.wescottdesign.com/actfes/actfes.html

5274. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 21:37:27 UTC
From: kb9rqz@yahoo.com
Message-ID: <mggoj4lgkf4pds4nm6urle5cotdpdsu7nr@4ax.com>
Source record: 19448
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5275. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 21:37:34 UTC
From: Clifford Heath <no@spam.please.net>
Message-ID: <493c4266$0$9582$afc38c87@news.optusnet.com.au>
Source record: 19449
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Bill wrote:
> looking at the photos it appears to be being used
> with a DVM, depending on how you want to use it you may find an analogue
> meter easier. It will show changes better than a DVM.

The author says he tried that and it didn't work as well:
"I tried connecting the antenna directly to a micro amp moving
coil meter, however there was very little meter deflection from
a Wireless LAN card."

Impedance too low, perhaps?

Clifford Heath.

5276. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 22:55:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghhk9r$sb6$1@news.albasani.net>
Source record: 19450
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

SparkyGuy wrote:
>> I built this, actually, a while back. Toss in a director (what is one
>> more wire?); I found that to be a worthwhile mod ...
>>
>> Regards,
>> JS
>
> Suggestions re. dimensions and location of a director?
>
> Thanks.
>

I believe I tried lengths of a 3% to 5% shorter length with the director, than the drive element (i.e., the one in front of the reflector), settling on a 4% shorter length ... anyway, that is common in HF parasitic arrays ... this is equiv. to a 3-element quad on HF.

I just dug it out and measured it, this is what it appears to be, alright. With a spacing between driven element and director of ~0.2 wavelength, center-to-center.

Regards,
JS

5277. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 23:11:33 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <0b4589e5-fe0a-40cb-a93a-80c13e31bb33@f20g2000yqg.googlegroups.com>
Source record: 19251

On Dec 7, 7:30 am, Bob Bob <bob3b...@suddenlink.net> wrote:
> I think Sal has answered this well enough. Suffice to say that if you
> start with the noise floor or amount of noise energy in the bandwidth
> you are going to use, you have to have a "margin" above that for the
> radio system to be able to transfer information. This even applies to
> morse code and voice transmission and thus the human brain's ability to
> do the filtering and demod! Morse code for example can actually be heard
> below the noise floor (or if you like a negative margin) because you can
> concentrate on the 500Hz odd tone rather than the wide band noise.
> Repeating the message that is sent also lowers the margin as it is a
> kind of forward error correction that might give you a few extra dB.
> Even a voice you know vs one you dont know lowers the margin. A trained
> brain is remarkably good and has a huge dynamic range as well.
>
> Even something like a human shout of warning has "greater range" because
> it is a very narrow bandwith data stream. ie the message sent is binary
> (yes vs no) or very short (like "help" "fire" "911" or "000") rather
> than something like "There is a fire down here in the trees"
>
> The margin required is more or less linked to the specification of the
> overall modulation method. I quoted QAM64. When you add FEC to QAM64 the
> margin becomes less at the expense of less data bandwidth (as more bits
> are sent) I saw an FEC calc for an amateur radio satellite telemetry of
> 6-7dB. I browsed sround and found 802.11a is around 12dB for a BER of 1
> in 10E6. Data stuff tends to be layered. ie they have a basic radio
> modulation method (eg QAM, QPSK etc) and the FEC on top of that (eg Reed
> Solomon & Verterbi encoding) Above that you may also have resends at a
> higher layer. If you are running TCP/IP for example, TCP ensures that a
> packet is received and reassembled within a certain timeout period. If
> not it request the data again.
>
> Hope this helps. apologies for the excessive analogies..
>
> Cheers Bob W5/VK2YQA

Thanks for the explanation. In your previous post you suggested that I
have to "add" the margin to the path loss. My current result doesn't
make sense because the power required to transmit at 250 kpbs for
Zigbee is less than the power required to reach the receiver at a
modest 300m away. Wouldn't adding to my path loss further deteriorate
my result? I'm trying to wrap my head around this.

5278. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 23:37:46 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <DbmdncCzqIrJw6HUnZ2dnUVZ_v_inZ2d@earthlink.com>
Source record: 19252

Andy:

Hey, thanks for your input.

I know about VOR systems and other similar systems such as TACAN. Indeed
they do use rotating antennas.

However VOR and TACAN use rotating antennas in the same way as rotating PPI
radar antennas, that is they emit linearly polarized
waves whilst rotating the direction of highest directivity/gain.

They do not emit circular polariztion as such.

Rather they emit linear polarization whilst aiming or directing the 'beam'
of linear polarized waves as they rotate.

Sort of like rotating a flashlight, or the beam of a searchlight or coastal
lighthouse.

I'm not sure that anyone yet (that includes Roy Lewalen) has fully
understood exactly what I was trying to convey.

I'm afraid that the true nature of circular polarization is not well
understood by many.

Perhaps opitical scientists understand circular polarization best, if only
because most of the important 'applications' of circular polarization are in
the field of optics rather than radio.

-- Pete K1PO
-- Indialantic, By-the-Sea, FL

"AndyS" <andysharpe@juno.com> wrote in message
news:faa183b3-9b44-45de-befe-855f9e146f8b@s9g2000prg.googlegroups.com...
>
>
> Peter O. Brackett wrote:
>>
>> Now transmit on that dipole antenna whilst mechanically spinning it
>> clockwise [RHCP?] (with a mechanical motor of some kind).
>>
>> The dipole antenna is linear and thuse emits linear polariztion, except
>> it
>> is mechanically spinning, and so the E vector emanating from the antenna
>> will be rotating with respect to its direction of travel.
>>
>> In this case the angular velocity of the motor that spins the linear
>> antenna

>> need not be synchronous with the frequency being radiated.
>>
>> For example we could mechanically spin the antenna at 330 rpm while
>> transmitting a carrier of 1 GHz.
>>
>> This would most certainly produce circular polarization. For is not the
>> E
>> vector spinning at 330 revs!
>
>
> Andy writes:
>
> It sounds to me like you are describing the technique for generating
> an aircraft VOR signal, which has been in use for well over 50 years.
>
> The VOR band is 108 - 117 Mhz, and the antenna is a cardoid
> pattern
> that is rotated mechanically at a 30 hz rate. At a distant point
> this
> results in a 30 hz amplitude modulation of the received signal, which
> is one of the components used in the signal processing for the
> receiver to determine the direction to or from the ground VOR station.
>
> Simply rotating the antenna does not result in circular
> polarization, but
> rather it changes the field strength of the radiated signal at a point
> in
> space.... The received signal is therefore modulated in amplitude as
> the pattern passes a singular distant point in space.....
>
> I just wanted to throw this in the mix, since rotating the antenna
> has
> been around for a long time.
>
> Of course it can be done electronically now, but the initial
> systems
> were simply turned by a motor.
>
> Andy W4OAH , ex- aircraft nav system
> designer....long retired.

5279. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-07 23:52:21 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <3e69dca0-879f-4d57-b413-5cfea58aee79@x8g2000yqk.googlegroups.com>
Source record: 19253
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Dec 7, 4:23 pm, Tim Wescott <t...@seemywebsite.com> wrote:
> On Sun, 07 Dec 2008 12:48:14 -0800, SparkyGuy wrote:
> > Halfway down this page (it's a PDF doc):
>
> > <http://www.cablesandconnectors.com/PIX/CC-040.pdf>
>
> > the TNC and BNC connectors are advertised as "dual-crimp". What does
> > this mean? "Dual" as in center in crimp and outer shield ferrule crimp?
>
> > As opposed to what? Single-crimp? That would be connectors that use the
> > center, solid conductor as the center pin and then crimp the shield
> > ferrule? Or...?
>
> > Newly (did you guess?) into small coax connectors and trying to get the
> > terminology straight...
>
> > Thanks.
>
> The common BNC "crimp" connectors have you solder the center pin to the
> center conductor of the cable, then assemble the outer with a crimp.
>
> It works quite well in my experience, but I have yet to do this without
> distorting the center insulator and having to trim it with an X-acto
> knife to get it to fit, and I'm sure that in a critical application (like
> TNC in the GHz) that I'd be creating an unpredictable impedance bump with
> my hacking. This is bad enough with cables that have solid dielectric; I
> can only imagine the pain it would be with foam. In a production
> environment I'd almost certainly want to spring for the necessary crimp
> tool to crimp the inner, if the quality were there.
>
> (This is opposed to BNC connectors where you thread in a plug to capture
> the outer conductor between the outer shell and a rubber insert. It also
> works well, but it is bulky and the connectors cost more. And you're
> still asked to solder the center pin on, with all of the accompanying
> center insulator distortion issues).
>
> --
> Tim Wescott
> Control systems and communications consultinghttp://www.wescottdesign.com
>
> Need to learn how to apply control theory in your embedded system?
> "Applied Control Theory for Embedded Systems" by Tim Wescott
> Elsevier/Newnes,http://www.wescottdesign.com/actfes/actfes.html- Hide quoted text -

>
> - Show quoted text -

Tim, I solder these on the N connectors all the time with no problems.
I have an old Weller soldering gun with the tip removed. I wedge the
pin between the two electodes on the gun, slide the pin over the
tinned center conductor and pull the trigger for a couple of seconds.
The pin cools almost instantly preventing deformation of the
insulation. Ive been doing this for over 20 years using the same gun.
This may take a little practice not to melt the insulation. I
remember that it wasnt to bad getting the hang of it.

Jimmie

5280. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 00:10:03 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <1a800c0a-32a7-491e-97c3-7f62bef526eb@t2g2000yqm.googlegroups.com>
Source record: 19254

Peter O. Brackett wrote:

Sort of like rotating a flashlight, or the beam of a searchlight or coastal
lighthouse.

Andy comments:

Exactly right !!! And a good analogy....

Consider this then:

A patch antenna, circularly polarized, mounted at the end of a
motor shaft, rotating in the opposite direction of the polarization...
.... at a speed equal to the frequency...

Does the polarization "unravel" and emit a linear, non-rotating
polarization ?

Is this the sort of principle that you were trying to convey ??

If this is the case, any discrepancy in the motor, say 1 hz out of
10 Mhz , would result in an Efield rotating at a 1 hz rate.... and
the
receiving antenna would have to be very very very long in order
to fully receive the polarized wave..... I think....

And if the motor shaft and the frequency were identical, the Efield
would be linear, stable, and non-rotating.....

This is getting beyond my personal antenna expertise, but I still find
it
interesting..... Please pardon my lack of understanding, ... if I
still
don't "get" it....

Andy W4OAH

5281. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 00:55:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tgroj41d1mpmb244fqsmcq1t2p8fum98tr@4ax.com>
Source record: 19255

On Sun, 7 Dec 2008 15:11:33 -0800 (PST), Ginu <osheikh81@gmail.com>
wrote:

>My current result doesn't
>make sense because the power required to transmit at 250 kpbs for
>Zigbee is less than the power required to reach the receiver at a
>modest 300m away.

This is your first and most significant clue to the failure of
analysis, and it is very "path loss" oriented (the path loss
differences for your two scenarios should be almost infinitesimal).
The disparity in your computations are due to transcription error, or
math error. You should have now been able to put that to rest.

>Wouldn't adding to my path loss further deteriorate
>my result? I'm trying to wrap my head around this.

This is your confusion factor, and it relates to transcription error
in the abstract: you are using the wrong formulas entirely regardless
of the accuracy or correctness of arithmetic results.

The greater part of discussion has focused on Shannon-Hartley issues
which have their own application to the full mix of your original
problem.

Try unwinding the thread so that you are not trying to force a
solution out of a broken premise. None of this really sounds like
finding the missing decimal point, or the corrupted divisor is going
to solve anything.

If you think this is still path loss related, and you are showing
results in actual implementation (bread-boarded hardware, on the
bench); then you have to open up the discussion beyond the limited
math to include the conventional problems of interference and
multipath.

73's
Richard Clark, KB7QHC

5282. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 01:06:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <98SdndIksOi97qHUnZ2dnUVZ_qPinZ2d@posted.easystreetonline>
Source record: 19256

Something just occurred to me. I did get to thinking.

My previous answers were wrong. Peter's spinning antenna wouldn't produce a circularly polarized wave (as universally defined) even if it was synchronous with the wave frequency. As I've said, a circularly polarized wave has constant E field amplitude; Peter's wave would have a time-varying amplitude. If it were synchronous, the nulls and peaks would always occur at the same places in the rotation cycle, so they would occur at fixed angles relative to a rotational reference point. If non-synchronous, the nulls and peaks would rotate at the beat frequency.

It seems to me that the way to mechanically generate a circularly polarized wave would be to rotate a source of *static* E field, for example, a short dipole with constant applied DC voltage at the feedpoint. That should produce a circularly polarized wave with the frequency being the rotational frequency of the dipole. At any point in space, the E field would change with time, and would propagate, and it would look exactly like a circularly polarized wave broadside to the rotation plane.

If the scheme works and radiation is occurring, then power must be going into the antenna, which in turn means it's drawing current that's in phase with the applied voltage. When stopped, no current will flow, but when rotating, it does. So how does the antenna know it's rotating? How about this -- if you instantaneously move the antenna into some position, a static E field appears there, and propagates outward at the speed of light. Closer in than the leading edge of the propagating wave, the field is static. When we rotate the dipole to a new position, it moves through the field from its previous position, which induces a current in it. Hence the current. It's fundamentally a generator, with the field being in the air.

I'd be willing to bet a moderate sum that if you did apply a DC voltage to a dipole and rotated it, you'd see an alternating current with a frequency equal to the frequency of rotation, and a circularly polarized wave broadside to the antenna. I suspect that the current and the radiated field increase in amplitude with rotational speed, so you might have to get it going really fast before you can detect the effects.

Now there's some food for thought.

Roy Lewallen, W7EL

5283. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 05:40:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghic0l$i0j$1@news.albasani.net>
Source record: 19257
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

SparkyGuy wrote:

> ...
> Suggestions re. dimensions and location of a director?
>
> Thanks.
>

Had company today, been in and out all day ... sorry I didn't offer more.

A wavelength at 2.4Ghz will be approx. 12cm, half-wave ~6cm, 1/4 wave
~3cm. (with a very thin wire 1/2 wave monopole-omni-element I find
~12.25cm works for me, element dia. will affect this, as other factors ...)

Anyway, I looked though my old emails for something a friend sent me,
thought if you were interested in the 2.4g fsm, you might be interested
in this, if nothing else, just because the dude is so complete!:

http://www.users.bigpond.com/darren.fulton/yagi/13_element_yagi_antenna_for_2.htm

You will notice, he uses a plate reflector ...

Regards,
JS

5284. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 07:23:58 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C5620B8E004CBE0BB01AD9AF@news.sf.sbcglobal.net>
Source record: 19258
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> I believe I tried lengths of a 3% to 5% shorter length with the
> director, than the drive element (i.e., the one in front of the
> reflector), settling on a 4% shorter length ...

So about 26.8mm square?

> With a spacing between driven element and director of ~0.2
> wavelength, center-to-center.

So the director should be 25 mm forward (toward the uwave source) of the
driven element? (3e8 / 2.4e9) x 0.2 = ~25mm

Do these numbers look right?

Thanks.

5285. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 07:38:07 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <d3jpj4p60dn5ltdno9qko2uisfi2ehnhgd@4ax.com>
Source record: 19259
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 07 Dec 2008 21:40:38 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>A wavelength at 2.4Ghz will be approx. 12cm, half-wave ~6cm, 1/4 wave
>~3cm. (with a very thin wire 1/2 wave monopole-omni-element I find
>~12.25cm works for me, element dia. will affect this, as other factors ...)
>
>Anyway, I looked though my old emails for something a friend sent me,
>thought if you were interested in the 2.4g fsm, you might be interested
>in this, if nothing else, just because the dude is so complete!:
>
>http://www.users.bigpond.com/darren.fulton/yagi/13_element_yagi_antenna_for_2.htm
>
>You will notice, he uses a plate reflector ...
>
>Regards,
>JS

I also noticed that he cut his elements to a precision of 0.1mm. That
would be correct if the boom were an insulator or the elements were
inserted in insulating sleeves. However, since the 10mm square boom
is metal and effectively "shorts" part of each element, the actual
element length includes part of the diameter of the boom, thus adding
approximately 5mm to each element length (not including the reflector
and driven element). A VSWR sweep test would have shown the problem.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5286. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 08:02:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghikb2pia1@news.albasani.net>
Source record: 19260
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

SparkyGuy wrote:
>> I believe I tried lengths of a 3% to 5% shorter length with the
>> director, than the drive element (i.e., the one in front of the
>> reflector), settling on a 4% shorter length ...
>
> So about 26.8mm square?
>
>> With a spacing between driven element and director of ~0.2
>> wavelength, center-to-center.
>
> So the director should be 25 mm forward (toward the uwave source) of the
> driven element? (3e8 / 2.4e9) x 0.2 = ~25mm
>
> Do these numbers look right?
>
> Thanks.
>

My elements are made from #14 bare copper wire. It is difficult to measure each side, individually, when constructing the antenna. Better to cut the wire to 1 wavelength, then make your bends forming it into a square. Of course, every attempt possible should be made to keep each side 1/4 of this length, exactly.

In measuring the one before me, which I constructed, this total length, about the quad, is ~12.5cm.

However, here is a calculator I referenced in my constructions:

It is a java application, you must have java on your computer. Let me know if you can't access it and I will give you the figures it spits out, 2.4ghz = 2400mhz. Just let me know what wifi channel you wish to center on (frequency.)

Regards,
JS

5287. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 08:04:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghikdjpia2@news.albasani.net>
Source record: 19261
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

John Smith wrote:

> ...
> However, here is a calculator I referenced in my constructions:
>
> It is a java application, you must have java on your computer. Let me
> know if you can't access it and I will give you the figures it spits
> out, 2.4ghz = 2400mhz. Just let me know what wifi channel you wish to
> center on (frequency.)
>
> Regards,
> JS

Well, da! It would help if I cut loose with the URL. <sheepish smile>

http://www.n6mrx.com/Antenna/Cubical-Quad1.htm

Regards,
JS

5288. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 08:23:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghilhhqmp1@news.albasani.net>
Source record: 19262
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jeff Liebermann wrote:

> ...
> I also noticed that he cut his elements to a precision of 0.1mm. That
> would be correct if the boom were an insulator or the elements were
> inserted in insulating sleeves. However, since the 10mm square boom
> is metal and effectively "shorts" part of each element, the actual
> element length includes part of the diameter of the boom, thus adding
> approximately 5mm to each element length (not including the reflector
> and driven element). A VSWR sweep test would have shown the problem.
>

I have always used #8 wire as a boom on ghz yagis' (constructed a 7 element once.) Since the boom is at a current antinode (voltage node), I ignored the boom.

The boom you mention is rather LARGE, give the freqs in question.

One of my next projects is a GOOD VSWR meter for ghz ... unfortuantly, on the list of priorities here, it is low on the list ... :-(

I have just tended to take the % signal readings on the chans as good enough, and trimmed my antennas accordingly. I know, this does NOT take into account the functioning/power-fluctuations/antenna(s)/etc. of the AP over these ranges ...

But, excellent point, glad you mentioned it ... but you are right, my elements end up being filed down a bit from the figures the calculator spits out ...

Warm regards,
JS

5289. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 08:33:16 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <14kpj49614u4jrjm92sg5q0pqs5qapg3rv@4ax.com>
Source record: 19263
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 08 Dec 2008 08:37:34 +1100, Clifford Heath
<no@spam.please.net> wrote:

>Bill wrote:
>> looking at the photos it appears to be being used
>> with a DVM, depending on how you want to use it you may find an analogue
>> meter easier. It will show changes better than a DVM.
>
>The author says he tried that and it didn't work as well:
>"I tried connecting the antenna directly to a micro amp moving
>coil meter, however there was very little meter deflection from
>a Wireless LAN card."
>
>Impedance too low, perhaps?
>
>Clifford Heath.

Maybe, but more likely, not enough RF to do anything useful with an
un-amplified meter.

What's missing from everyone's posting is what they plan to do with
this field strength meter.

Let's play with the numbers. The average wi-fi access point belches
about +12dBm (32 mw) RF into an antenna with perhaps 2dBi gain. The
FSM has a gain of perhaps 0dB. At a distance of about 3 meters (10ft)
the path loss at 2.4GHz is about 50dB which will deliver about -30dBm
to the diode. On the most sensitive voltage range, the DVM has an
input impedance of at least 1Mohm and can be treated like an open
circuit load to the detector.

-30dBm into 50 ohms is 0.224 vrms. Transforming linearly from 50 ohm
reference to perhaps 150 ohms loop antenna impedance yields about
600mv rms. (Note: I know this is a bad guess but it's midnight and
I'm tired). Resonating the loop probably raises the impedance even
higher, thus resulting in even more rectified voltage.

The resultant DC voltage will be about the same at about 600mv DC.
However, for wi-fi use, the xmit duty cycle is quite low, sending just
beacons, when there is no traffic moving. The 1000pf cap will need to
be paralleled with a much larger cap in order to form a usable peak
detector.

So, with a high imput impedance DVM the antenna and detector is quite
efficient and can generate quite a bit of voltage. However, when the

DVM is replaced with a non-amplified meter, the relatively low impedance of the meter shorts out the diode and signifigantly reduces the Q of the resonant loop antenna, resulting in much lower detected voltage.

I've built several transmitter hunt "sniffers" using almost exactly the same circuit, except that I use a hot carrier Schottky diode for the RF detector, and the cheapest Harbor Freight DVM (because it always gets destroyed or lost during the hunt). For 2.4GHz, I use a dish antenna, RF amplifier, step-up xformer (coax balun), diode detector, and DVM.

I also made a really ugly hack that uses a satellite TV signal meter.
<http://www.sadoun.com/Sat/Products/Accessories/Meters/SF95L-DSS-FTA-Satellite-Signal-meter.htm>
These work from about 900 to 1800MHz with a minimum detectable meter sensitivity of about -70dBm. They are comatose at 860 (cellular) and 2.4GHz but are great for 900 and 1900MHz (PCS) sniffing. The input port is connected to a 900MHz or 1.2GHz antenna of any sorts. The output goes to a 75 ohm load and a 12V battery (gel cell) through an RF choke.

--
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5290. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 08:48:46 UTC
From: msg <msg@_cybertheque.org_>
Message-ID: <SM-dnetizfzOQqHUnZ2dnUVZ_oDinZ2d@posted.cpinternet>
Source record: 19264
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

John Smith wrote:

> Jeff Liebermann wrote:
>
>> ...
>> I also noticed that he cut his elements to a precision of 0.1mm. That
>> would be correct if the boom were an insulator or the elements were
>> inserted in insulating sleeves. However, since the 10mm square boom
>> is metal and effectively "shorts" part of each element, the actual
>> element length includes part of the diameter of the boom, thus adding
>> approximately 5mm to each element length (not including the reflector
>> and driven element). A VSWR sweep test would have shown the problem.
>>
>
> I have always used #8 wire as a boom on ghz yagis' (constructed a 7
> element once.) Since the boom is at a current antinode (voltage node),
> I ignored the boom.
>
> The boom you mention is rather LARGE, give the freqs in question.
>
> One of my next projects is a GOOD VSWR meter for ghz ... unfortuantly,
> on the list of priorities here, it is low on the list ... :-(

What about surplus directional couplers and a bolometer set (various
military versions used to be quite affordable)? Used to show up at
hamfests regularly too, covered 1 to 20 GHz or so in the kit; sorry
I forget the AN number at the moment, but it came with half a dozen
directional couplers for the various bands and lots of adapters.

Michael

5291. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 08:57:58 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <i0npj4lkqhqthmvacoc41fa4h6g082vb12@4ax.com>
Source record: 19265
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 08 Dec 2008 00:23:16 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>One of my next projects is a GOOD VSWR meter for ghz ... unfortuantly,
>on the list of priorities here, it is low on the list ... :-(

<http://pe2er.nl/wifiswr/>

I've built several. They work nicely and are a very important tool.
My main inspiration was blowing up my Wiltron Model something SWR
bridge and discovering the exhorbitant cost of a repair or
replacement. The designs are sufficiently similar that I can
substitute. Of course, it's not flat over many decades of bandwidth,
but for fairly narrow bands, it's quite adequate.

>I have just tended to take the % signal readings on the chans as good
>enough, and trimmed my antennas accordingly. I know, this does NOT take
>into account the functioning/power-fluctuations/antenna(s)/etc. of the
>AP over these ranges ...

I have a handy distant reference signal for 2.4GHz. It's line of
sight and creates no Fresnel Zone issues, so it's useful for antenna
testing. I start with my "standard" gain panel antenna and take a
measurement. I then take the antenna under test, and compare. I
rarely make an absolute level measurement. It's always relative to
some other antenna of known characteristics.

The only problem is that I have to climb onto my roof to do the
measuring. I'm currently at the tail end of radiation oncology (no
big deal), which makes me kinda tired. I find myself somewhat tipsy
on the roof, so no antenna measurements for a few more weeks. One
might also suggest that it affects my math and memory, but they're
currently just as bad as always.

>But, excellent point, glad you mentioned it ... but you are right, my
>elements end up being filed down a bit from the figures the calculator
>spits out ...

Suggestion: I always build a 3 element yagi first. Just the
director, driven element, and reflector. With the antenna on the
bench (after clearing off the chain saw and bicycle repair debris), I
run a fairly wide sweep using a reflection coefficient bridge or VSWR
bridge to an oscilloscope. I then trim the various elements for
resonance. My sweeper has a marker generator, but an external
generator (or wi-fi trash generator) can also be used. Adding
additional elements does change the tuning a bit, but the really big

frequency determining elements are the first 3 elements.
<http://802.11junk.com/jeffl/pics/home/slides/lab.html>
Incidentally, don't forget the mounting bracket. I just hate it when
I prototype an antenna, and then find that the bracket, radome,
potting foam, serial number sticker, or other irrelevent hardware
detune the antenna.

Another trick that I use with wire rod type of antennas is to thread
the end of the rods. Attached to these are threaded standoffs. These
can be rotated to adjust the length of the elements. Also, don't
forget to round off or chamfer the ends of each element to improve the
bandwidth.

1AM. Time to give up before I start babbling nonsense.

>Warm regards,
>JS

Bah-Humbug (T'is the season).

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5292. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 08:59:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghinl1shf1@news.albasani.net>
Source record: 19266
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jeff Liebermann wrote:

> ...
> Maybe, but more likely, not enough RF to do anything useful with an
> un-amplified meter.
>
> What's missing from everyone's posting is what they plan to do with
> this field strength meter.
>
> Let's play with the numbers. The average wi-fi access point belches
> about +12dBm (32 mw) RF into an antenna with perhaps 2dBi gain. The

Hmmm, max power for a wifi router is 1 watt!

Here is a full power one:

http://www.wirelessnetworkproducts.com/index.asp?PageAction=VIEWPROD&ProdID=1425

The router I presently use is "belching" 500mw into a 7.5db antenna
(well, I might question the 7.5db ...)

Throw out your access point man! Get a decent one ...

Regards,
JS

5293. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 09:18:59 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <hnopj4h6727gdtsjet4qke6o1j6lu0gkqa@4ax.com>
Source record: 19267
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 08 Dec 2008 00:59:16 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>Jeff Liebermann wrote:
>
>> ...
>> Maybe, but more likely, not enough RF to do anything useful with an
>> un-amplified meter.
>>
>> What's missing from everyone's posting is what they plan to do with
>> this field strength meter.
>>
>> Let's play with the numbers. The average wi-fi access point belches
>> about +12dBm (32 mw) RF into an antenna with perhaps 2dBi gain. The

>Hmmm, max power for a wifi router is 1 watt!

I said "average wi-fi access point". 1 watt routers are relatively
rare among the common home wireless routers. Most run about 32mw.
Some Buffalo models run about 250mw. 2wire 2701 can run up to about
450mw. I think Enginius also makes one at around 1 watt.

The problem with this is what I call the "alligator" effect. An
alligator is an animal with a big mouth and small ears. Running a 1
watt access point will make the xmitter heard over a much wider area
than it can hear the responses from the clients. Unless the other end
of the link (i.e. client radios) are also running the same high power
level, the range will be limited by the clients tx power. In other
words, the system gain and power levels in both directions have to be
evenly matched to avoid turning the high power access point into what
I consider to be no better than a jamming transmitter. If you need a
slogan, you should use "only as much power as necessary" which doesn't
mean crank it up to the max. Please print this slogan on a large sign
and plaster it in front of your desk until the meaning sinks in. Also,
note that most modern communications technologies includes automatic
transmit power control (usually based on RX SNR or BER) to prevent
alligators and systems like yours from becoming a problem.

>Here is a full power one:
>http://www.wirelessnetworkproducts.com/index.asp?PageAction=VIEWPROD&ProdID=1425
>The router I presently use is "belching" 500mw into a 7.5db antenna
>(well, I might question the 7.5db ...)

Turn down the power to about 100mw. The antenna is fine because it
results in a symmetrical improvement in system gain. Also, give

yourself a slap on the wrist, repent your evil ways, and pray for
forgiveness.

>Throw out your access point man! Get a decent one ...

You haven't seen my office. I never throw anything away.

>Regards,
>JS
--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5294. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 09:51:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghiqnmaq1@news.albasani.net>
Source record: 19268
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jeff Liebermann wrote:

> ...
> Turn down the power to about 100mw. The antenna is fine because it
> results in a symmetrical improvement in system gain. Also, give
> yourself a slap on the wrist, repent your evil ways, and pray for
> forgiveness.
>
>> Throw out your access point man! Get a decent one ...
>
> You haven't seen my office. I never throw anything away.
>
>> Regards,
>> JS

Yes, my AP's software allows for power control. Indeed, the AP will,
automatically, only supply enough power to make a, almost, error free
transmission link.

Having one side of transmission link error free is MUCH superior to have
both sides error prone!

However, although I have a pocketfull of various USB dongles, my
external USB wifi "card" is the highest output I could find which is
cost effective (@ 500mw.) External USB being powered off the USB buss
must stay 500ma (@ 5v) or below, total consumption. And, would more
than allow for a 1 watt USB dongle.

Here is a USB card to match my router:

http://www.data-alliance.net/servlet/the-90/802.11g-USB-802.11b-802.11n/Detail

Try one, you'll like it, "Mikey does!" <grin>

Regards,
JS

5295. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 12:24:50 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-0812080724500001@jbw-mac.itd.nrl.navy.mil>
Source record: 19269

In article <F4qdnS9YA_A6daTUnZ2dnUVZ_t3inZ2d@posted.easystreetonline>, Roy Lewallen <w7el@eznec.com> wrote:

> Then some education is in order. Electromagnetic waves are elliptically
> polarized. The two extreme special cases of this are linear and circular
> (with axial ratio of zero -- or infinite depending on your choice of
> definition -- and one respectively). There are an infinite number of
> other possible elliptical polarizations with different axial ratios.

Hello, and that's quite correct, Roy. Having read the OP's statements and others in this thread I would like to recommend that one step back from antennas for a moment in order to examine the generation of an ellipse (representing the locus of points of a rotating E (or H) field. The parametric equations take the form x(t) = A*cos(2*pi*f*t) and y(t) = B*cos(2*pi*f*t + phi). (These equations are of the same form that generate the familiar Lissajous patterns except that for Lissajous the x and y values differ in frequeny.)

While polarization is a convenient concept in electromagnetic wave propagaion there's no reason that we couldnt just treat it as the superposition of two separate Ex (or Hx) and Ey (or Hy) waves. Of course we have to pay attention to amplitude and phase relationships.

I think investing some time with this math (it's not all that difficult) will provide one with insight into the concept of polarization and perhaps head off some misconception. If anyone is interested and has Mathcad, I've got a worksheet that allows one to vary these parameters, plots the resulting ellipse (or circle or line) and also calculates ellipticity (axial ratio) and eccentricity. Sincerely, and 73s from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

5296. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 14:44:12 UTC
From: Dave <dave@dave.dave>
Message-ID: <493d32bc$0$31172$bd467cd0@news.dslextreme.com>
Source record: 19270

J. B. Wood wrote:

> I think investing some time with this math (it's not all that difficult)
> will provide one with insight into the concept of polarization and perhaps
> head off some misconception. If anyone is interested and has Mathcad,
> I've got a worksheet that allows one to vary these parameters, plots the
> resulting ellipse (or circle or line) and also calculates ellipticity
> (axial ratio) and eccentricity. Sincerely, and 73s from N4GGO,
>
All I have to know is that Circular Polarization always helps when one
end of the path is prone to random polarizations, even with the 3 dB
power loss.

5297. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 16:12:30 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <qPqdnb02R7Du2qDUnZ2dnUVZ8j-dnZ2d@bt.com>
Source record: 19271

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:98SdndIksOi97qHUnZ2dnUVZ_qPinZ2d@posted.easystreetonline...
> Something just occurred to me. I did get to thinking.
>
> My previous answers were wrong. Peter's spinning antenna wouldn't produce
> a circularly polarized wave (as universally defined) even if it was
> synchronous with the wave frequency. As I've said, a circularly polarized
> wave has constant E field amplitude; Peter's wave would have a
> time-varying amplitude. If it were synchronous, the nulls and peaks would
> always occur at the same places in the rotation cycle, so they would occur
> at fixed angles relative to a rotational reference point. If
> non-synchronous, the nulls and peaks would rotate at the beat frequency.
>
> It seems to me that the way to mechanically generate a circularly
> polarized wave would be to rotate a source of *static* E field, for
> example, a short dipole with constant applied DC voltage at the feedpoint.
> That should produce a circularly polarized wave with the frequency being
> the rotational frequency of the dipole. At any point in space, the E field
> would change with time, and would propagate, and it would look exactly
> like a circularly polarized wave broadside to the rotation plane.
>
> If the scheme works and radiation is occurring, then power must be going
> into the antenna, which in turn means it's drawing current that's in phase
> with the applied voltage. When stopped, no current will flow, but when
> rotating, it does. So how does the antenna know it's rotating? How about
> this -- if you instantaneously move the antenna into some position, a
> static E field appears there, and propagates outward at the speed of
> light. Closer in than the leading edge of the propagating wave, the field
> is static. When we rotate the dipole to a new position, it moves through
> the field from its previous position, which induces a current in it. Hence
> the current. It's fundamentally a generator, with the field being in the
> air.
>
> I'd be willing to bet a moderate sum that if you did apply a DC voltage to
> a dipole and rotated it, you'd see an alternating current with a frequency
> equal to the frequency of rotation, and a circularly polarized wave
> broadside to the antenna. I suspect that the current and the radiated
> field increase in amplitude with rotational speed, so you might have to
> get it going really fast before you can detect the effects.
>
> Now there's some food for thought.
>
> Roy Lewallen, W7EL

A source of endless coffee-time debates where I used to work! No, the current into the rotating dipole would be DC and the means of rotation at the radio frequency would take the place of the 'transmitter'. If the current were alternating then the radiated electric field would be discontinuous but it isn't; it has constant magnitude. Between two such systems separated by many wavelengths, if there were no anisotropic material around, reciprocity would apply and a means of conveying DC by radio would be created!

However, intriguing and amusing as this analogy might be I wonder if it really has any practical value. For real mechanical rotating parts the frequency would be limited to something rather low like the tens of kHz at which Alexanderson alternators work, and then the wavelength would be so long that it would probably be impossible to construct an efficient radiator*. The quickest moving antenna I've encountered was a commutated plasma antenna, using a construction similar to a 'dekatron' tube, but even then the length of the radiator was so small that SHF would be needed to achieve worthwhile radiation efficiency* and the maximum commutation speed was limited to a few MHz by the time it takes to establish the plasma at each step in the commutation cycle.

*(Of course, the conventional principles of radiation resistance vs. loss resistance may need 'massaging' to bring them into line with the concept of creating transverse waves by rotating a dipole connected to a battery!)

Chris

5298. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 16:24:55 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C5628A57006A7532B01AD9AF@news.sf.sbcglobal.net>
Source record: 19272
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> http://www.n6mrx.com/Antenna/Cubical-Quad1.htm

Thanks for the link. The calculator works for me.

One remaining Q: how do I take into account the "pigtails" of the driven element? A nice square loop is nice, but I've got to connect it to the (relatively) big diode, and this requires a bit more wire from the loop to the diode (on the + side of the loop) and to the meter connector (on the - side). Do I include these wire lengths in the loop size calculation? Or ignore them?

Or does the 1000pF cap effectively terminate the loop (re. size)?

Thanks.

5299. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 16:39:25 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <46iqj4htrdh4a7upqlqm5kadb6oh36r5di@4ax.com>
Source record: 19273

If my budget would stand it Heights would be my first choice! My crank
up mast was purchased in about 1980 for somewhere around $400.

John Ferrell W8CCW

On Sun, 7 Dec 2008 14:01:48 -0500, "Larry Gauthier \(K8UT\)"
<MyCallsign@ARRL.NET> wrote:

>I bought a self-supporting 56' Heights tower with its clamshell
>tilt-over-kit unit 8 feet up from the base. I lower the tower with a 3/8"
>power drill and never leave the ground for anything.
>
>IMHO, nested towers that leave the boom 22' feet in the air and the antenna
>elements 4-to-15 feet from your reach are overrated!

5300. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 16:49:00 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <bfjqj4hfks6j464su0huqkt320qr1pmms6@4ax.com>
Source record: 19274

Sorry for the inconvenience. I was looking for the easiest way out
when I went to the .MHT format. What browsers do not handle .MHT's?

It is rare that anyone tells me of a problem (may be they just don't
bother?) and I want to keep things as simple as possible for all of
us.

I can go back to Front Page but it was a poor fit for me as well as a
budget breaker! It is paid for now though!

My attempt into .ASP was a lot of effort for zilch!

On Sun, 7 Dec 2008 13:02:33 -0800, Anon bozo <anon@bozo.to> wrote:

>> http://dixienc.us/TiltOverGadget/TiltOverGadget.mht
>
>A web site that doesn't support browsers other than Explorer ain't a web
>site.
John Ferrell W8CCW

5301. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:04:58 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <_sc%k.642$7I6.364@nwrddc01.gnilink.net>
Source record: 19275

"christofire" <christofire@btinternet.com> wrote in message
news:qPqdnb02R7Du2qDUnZ2dnUVZ8j-dnZ2d@bt.com...
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:98SdndIksOi97qHUnZ2dnUVZ_qPinZ2d@posted.easystreetonline...
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>> My previous answers were wrong. Peter's spinning antenna wouldn't produce
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>> wave has constant E field amplitude; Peter's wave would have a
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>> frequency being the rotational frequency of the dipole. At any point in
>> space, the E field would change with time, and would propagate, and it
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>> rotation plane.
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>> into the antenna, which in turn means it's drawing current that's in
>> phase with the applied voltage. When stopped, no current will flow, but
>> when rotating, it does. So how does the antenna know it's rotating? How
>> about this -- if you instantaneously move the antenna into some position,
>> a static E field appears there, and propagates outward at the speed of
>> light. Closer in than the leading edge of the propagating wave, the field
>> is static. When we rotate the dipole to a new position, it moves through
>> the field from its previous position, which induces a current in it.
>> Hence the current. It's fundamentally a generator, with the field being
>> in the air.
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>> to a dipole and rotated it, you'd see an alternating current with a
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>> radiated field increase in amplitude with rotational speed, so you might
>> have to get it going really fast before you can detect the effects.
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>> Roy Lewallen, W7EL
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> systems separated by many wavelengths, if there were no anisotropic
> material around, reciprocity would apply and a means of conveying DC by
> radio would be created!
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> radiator*. The quickest moving antenna I've encountered was a commutated
> plasma antenna, using a construction similar to a 'dekatron' tube, but
> even then the length of the radiator was so small that SHF would be needed
> to achieve worthwhile radiation efficiency* and the maximum commutation
> speed was limited to a few MHz by the time it takes to establish the
> plasma at each step in the commutation cycle.
>
> *(Of course, the conventional principles of radiation resistance vs. loss
> resistance may need 'massaging' to bring them into line with the concept
> of creating transverse waves by rotating a dipole connected to a battery!)
>
> Chris

Hi Chris

I am not smart enough to analyze the effects of rotating a dipole with DC applied to it, but I have doubts that it would create a "far field". Did you guys ever figure out how the "DC dipole" generates a Far Field?

Jerry KD6JDJ

5302. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:06:39 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <49jqj4lha0fn08npu3kn3va9b6l83jvl0l@4ax.com>
Source record: 19276
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 08 Dec 2008 01:51:53 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>Jeff Liebermann wrote:
>
>> ...
>> Turn down the power to about 100mw. The antenna is fine because it
>> results in a symmetrical improvement in system gain. Also, give
>> yourself a slap on the wrist, repent your evil ways, and pray for
>> forgiveness.
>>
>>> Throw out your access point man! Get a decent one ...
>>
>> You haven't seen my office. I never throw anything away.
>>
>>> Regards,
>>> JS

>Yes, my AP's software allows for power control. Indeed, the AP will,
>automatically, only supply enough power to make a, almost, error free
>transmission link.

I beg to differ. Unless I missed something in my post-midnight scan
of the specs, the wireless router's TX power is set and forget. If it
receives an extremely strong signal level report in the 802.11
management packet, the power remains the same. The ability to do
power control is there (because each device reports its RX signal
strength and SNR) but very few access points even try.

>Having one side of transmission link error free is MUCH superior to have
>both sides error prone!

I beg to differ. You're creating un-necessary interference. Let's
play with the numbers.

The commodity wireless router belches about +12dBm. Yours is
allegedly +27dBm. Range doubles for every 6dB increase in TX power.
Therefore, your TX range is:
(27 - 12) / 6 = 7.5
time more than would be with a commodity wireless router. In terms of
coverage area, that's:
7.5^2 = 56.3
times the area. Assuming a uniform density of WLAN users in your
vicinity, you're trashing 56.3 times as many users or systems as
necessary.

You're also partly wrong about asymmetrical systems being superior.
The transition between a fairly good BER or PER (packet error rate) is
rather abrupt. What happens is that the AP simply slows down the data
rate until the PER improves. Since the connection speed can be
different in each direction, you'll get very good speed in one
direction, and probably very slow speed in the other. In addition,
things go insane above 54Mbits/sec connection speed. You might have
enough signal to go faster than 54Mbits/sec in one direction, but if
it's lacking in the other direction, the AP will simply revert to
802.11g and limit the speed in the stronger direction to 54Mbits/sec.
That's not a problem as few systems can operate reliably at
54Mbits/sec beyond a few meters range and in the presence of
interference.

Meanwhile, you're operating an alligator, jamming 56 times as many
users as necessary, and polluting the airwaves with your overpowered
xmitter. It's like operating a kilowatt xmitter in the middle of the
QRP frequencies. Your stuff gets through, but nobody else's. I
suggest you do the math, repent your evil ways, offer sacrifice to the
radio gods on the hibachi, slap yourself on the wrist several times
for penitence, and stop playing with the dark side.

>However, although I have a pocketfull of various USB dongles, my
>external USB wifi "card" is the highest output I could find which is
>cost effective (@ 500mw.) External USB being powered off the USB buss
>must stay 500ma (@ 5v) or below, total consumption. And, would more
>than allow for a 1 watt USB dongle.

You would do better with a directional antenna, so as to not both
pickup and deliver interference from other systems. Antennas with
gain also improve the system gain in both directions, thus preventing
the creation of an alligator.

>Here is a USB card to match my router:
>http://www.data-alliance.net/servlet/the-90/802.11g-USB-802.11b-802.11n/Detail
>
>Try one, you'll like it, "Mikey does!" <grin>

Nope. Instead, I was instrumental in convincing at least one mesh
wi-fi vendor to reduce their poletop TX power, as they were causing
most of their own interference. Asymmetric systems suck.

>Regards,
>JS

Bah-Humbug (T'is the season).

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5303. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:24:28 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <08156e7a-1ba3-40ea-bf98-ed89a51b1f63@x8g2000yqk.googlegroups.com>
Source record: 19277
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Dec 7, 6:52 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Dec 7, 4:23 pm, Tim Wescott <t...@seemywebsite.com> wrote:
>
>
>
> > On Sun, 07 Dec 2008 12:48:14 -0800, SparkyGuy wrote:
> > > Halfway down this page (it's a PDF doc):
>
> > > <http://www.cablesandconnectors.com/PIX/CC-040.pdf>
>
> > > the TNC and BNC connectors are advertised as "dual-crimp". What does
> > > this mean? "Dual" as in center in crimp and outer shield ferrule crimp?
>
> > > As opposed to what? Single-crimp? That would be connectors that use the
> > > center, solid conductor as the center pin and then crimp the shield
> > > ferrule? Or...?
>
> > > Newly (did you guess?) into small coax connectors and trying to get the
> > > terminology straight...
>
> > > Thanks.
>
> > The common BNC "crimp" connectors have you solder the center pin to the
> > center conductor of the cable, then assemble the outer with a crimp.
>
> > It works quite well in my experience, but I have yet to do this without
> > distorting the center insulator and having to trim it with an X-acto
> > knife to get it to fit, and I'm sure that in a critical application (like
> > TNC in the GHz) that I'd be creating an unpredictable impedance bump with
> > my hacking. This is bad enough with cables that have solid dielectric; I
> > can only imagine the pain it would be with foam. In a production
> > environment I'd almost certainly want to spring for the necessary crimp
> > tool to crimp the inner, if the quality were there.
>
> > (This is opposed to BNC connectors where you thread in a plug to capture
> > the outer conductor between the outer shell and a rubber insert. It also
> > works well, but it is bulky and the connectors cost more. And you're
> > still asked to solder the center pin on, with all of the accompanying
> > center insulator distortion issues).
>
> > --
> > Tim Wescott
> > Control systems and communications consultinghttp://www.wescottdesign.com

>
> > Need to learn how to apply control theory in your embedded system?
> > "Applied Control Theory for Embedded Systems" by Tim Wescott
> > Elsevier/Newnes,http://www.wescottdesign.com/actfes/actfes.html-Hide quoted text -
>
> > - Show quoted text -
>
> Tim, I solder these on the N connectors all the time with no problems.
> I have an old Weller soldering gun with the tip removed. I wedge the
> pin between the two electodes on the gun, slide the pin over the
> tinned center conductor and pull the trigger for a couple of seconds.
> The pin cools almost instantly preventing deformation of the
> insulation. Ive been doing this for over 20 years using the same gun.
> This may take a little practice not to melt the insulation. I
> remember that it wasnt to bad getting the hang of it.
>
> Jimmie

Hey OM
What size gun did you has a 240watt? How did you get the electrodes so
close together? Isn't the center pin of an N connector really small?
Or maybe you making lots 7/8 inch of heliax cables huh? Where the
center conductor is like 3/8 in copper tubing. Where the 3/8 inch
copper tubing would conduct all the heat away from the insulation?

73 OM
n8zu

5304. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:27:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <k6idnajkq5R3xaDUnZ2dnUVZ_sPinZ2d@posted.easystreetonline>
Source record: 19278

christofire wrote:
>
> A source of endless coffee-time debates where I used to work! No, the
> current into the rotating dipole would be DC and the means of rotation at
> the radio frequency would take the place of the 'transmitter'. If the
> current were alternating then the radiated electric field would be
> discontinuous but it isn't; it has constant magnitude. Between two such
> systems separated by many wavelengths, if there were no anisotropic material
> around, reciprocity would apply and a means of conveying DC by radio would
> be created!

Now that I think about it, you're right -- the current would have to be DC, so there would be only DC power into the dipole.

Interesting that you and your co-workers thought of and debated this. I've given it less than an hour of thought since it popped into my head, so you've had a lot more time to work out the details. Sounds like it might work something like I described, then.

> However, intriguing and amusing as this analogy might be I wonder if it
> really has any practical value. For real mechanical rotating parts the
> frequency would be limited to something rather low like the tens of kHz at
> which Alexanderson alternators work, and then the wavelength would be so
> long that it would probably be impossible to construct an efficient
> radiator*. The quickest moving antenna I've encountered was a commutated
> plasma antenna, using a construction similar to a 'dekatron' tube, but even
> then the length of the radiator was so small that SHF would be needed to
> achieve worthwhile radiation efficiency* and the maximum commutation speed
> was limited to a few MHz by the time it takes to establish the plasma at
> each step in the commutation cycle.

I can't see where this could possibly be of any practical use. For me it was simply a mind exercise spurred by Peter's musings, resulting from wondering just how a mechanical system could be made to generate a CP wave.

> *(Of course, the conventional principles of radiation resistance vs. loss
> resistance may need 'massaging' to bring them into line with the concept of
> creating transverse waves by rotating a dipole connected to a battery!)

Indeed. And it seems there wouldn't be any skin effect, then, with only DC going to the wire. And what about current distribution on the dipole?

Roy Lewallen, W7EL

5305. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:30:08 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <fjlqj4pgg2m4d4ac65vsqtcmdps3i5iutd@4ax.com>
Source record: 19279
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 8 Dec 2008 08:24:55 -0800, SparkyGuy <sparkyguy@mumcrank.ck>
wrote:

>Q: how do I take into account the "pigtails" of the driven
>element? A nice square loop is nice, but I've got to connect it to the
>(relatively) big diode,

You don't need to include diode lead length in the quad antenna
calculations. The "loop" in the quad driven element is just an LC
tuned circuit. It's as bit less than one wavelength around the loop
and resonated to 2.4GHz by the tuning cap. The diode and other
components do add some capacitance, which will lower the frequency
somewhat, but the adjustment cap is substantially larger than these
capacitances. For example, the off capacitance of a Schottky diode is
about 0.5pf. You do need to keep lead length short as the added
inductance will act as an RF choke.

However, instead of the giant diode, I suggest something smaller and
better, such as a Schottky diode:
<http://www.adsemi.com/diodes/schottky_barrier_mixer_detector.shtml>
<http://www.macom.com/psc/jsp/ListParts.jsp?dataFile=mixing_detector_diodes.txt>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5306. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:33:44 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <YTc%k.643$7I6.234@nwrddc01.gnilink.net>
Source record: 19280

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:k6idnajkq5R3xaDUnZ2dnUVZ_sPinZ2d@posted.easystreetonline...
> christofire wrote:
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>> of creating transverse waves by rotating a dipole connected to a
>> battery!)
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> Indeed. And it seems there wouldn't be any skin effect, then, with only DC

> going to the wire. And what about current distribution on the dipole?
>
> Roy Lewallen, W7EL

Hi Roy

I have problems with believing there will be any current in either dipole.
What am I missing?

Jerry KD6JDJ

5307. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:35:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <a_adnQoU-bp6x6DUnZ2dnUVZ_rTinZ2d@posted.easystreetonline>
Source record: 19281

Jerry wrote:
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> applied to it, but I have doubts that it would create a "far field". Did
> you guys ever figure out how the "DC dipole" generates a Far Field?
>
> Jerry KD6JDJ

It requires energy to create a far field, since the far field is a form of energy. I explained why I thought power might be consumed by the antenna -- current would flow due to coupling with the field still present from previous positions (although I mentioned alternating current while Chris correctly pointed out that it would have to be DC). I don't see any problem with conversion of the DC into AC. It's done all the time with spinning magnets -- look at the alternator in your car for example. And in times of yore, RF was generated directly with high speed alternators. The principle is very similar to, if not exactly the same as, the scheme I described.

The whole thing is just a mental exercise to help gain a better understanding of the nature of a circularly polarized field.

Roy Lewallen, W7EL

5308. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:44:15 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C5629CEF006ED092B01AD9AF@news.sf.sbcglobal.net>
Source record: 19282
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> You don't need to include diode lead length in the quad antenna
> calculations.

Thanks, Jeff. Very much appreciated.

5309. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:49:28 UTC
From: Anon bozo <anon@bozo.to>
Message-ID: <0001HW.C5629E28006F19F3B01AD9AF@news.sf.sbcglobal.net>
Source record: 19283

> Sorry for the inconvenience. I was looking for the easiest way out
> when I went to the .MHT format. What browsers do not handle .MHT's?

Firefox. Probably #2 most popular browser.

> I can go back to Front Page but it was a poor fit for me as well as a
> budget breaker! It is paid for now though!

Isn't plain-ol' HTML sufficient?

5310. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:55:10 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngjqnru.2sb3.bit-bucket@shell.config.com>
Source record: 19284

On Mon, 08 Dec 2008 11:49:00 -0500, John Ferrell wrote:

> Sorry for the inconvenience. I was looking for the easiest way out
> when I went to the .MHT format. What browsers do not handle .MHT's?

Here: Opera, Firefox, konqueror, lynx...

5311. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 17:56:04 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <roadndGQIZwmwqDUnZ2dnUVZ8vednZ2d@bt.com>
Source record: 19285

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:a_adnQoU-bp6x6DUnZ2dnUVZ_rTinZ2d@posted.easystreetonline...
> Jerry wrote:
>>
>> I am not smart enough to analyze the effects of rotating a dipole with
>> DC applied to it, but I have doubts that it would create a "far field".
>> Did you guys ever figure out how the "DC dipole" generates a Far Field?
>>
>> Jerry KD6JDJ
>
> It requires energy to create a far field, since the far field is a form of
> energy. I explained why I thought power might be consumed by the
> antenna -- current would flow due to coupling with the field still present
> from previous positions (although I mentioned alternating current while
> Chris correctly pointed out that it would have to be DC). I don't see any
> problem with conversion of the DC into AC. It's done all the time with
> spinning magnets -- look at the alternator in your car for example. And in
> times of yore, RF was generated directly with high speed alternators. The
> principle is very similar to, if not exactly the same as, the scheme I
> described.
>
> The whole thing is just a mental exercise to help gain a better
> understanding of the nature of a circularly polarized field.
>
> Roy Lewallen, W7EL

Indeed, and I would add that the spinning dipole fed with a constant voltage appears the same as a stationary dipole fed with an alternating voltage with respect to any chosen linear polarisation.

I was once told of a method of measuring the radiation patterns of large installed antennas by 'flying' near to them a small metal rod rotating about an axis that passes perpendicularly through the middle of the length of the rod. By detecting, synchronously with rotation of the rod, changes in the terminal VSWR (or reflection co-efficient for voltage) the near-field radiation pattern could be assessed (i.e. an impression of the aperture current distribution) from which the far-field patterns could be derived by Fourier transform in the normal way (acknowledgement is due to the late Dick Manton). There is a range of 3D angles over which the axis can vary without upsetting the measurement. I don't know if this was ever implemented, e.g. to measure the patterns of a television transmitting antenna - a helicopter carrying a measuring receiver is used in the far field nowadays.

Chris

5312. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 18:03:10 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <Sq2dnemdF9v-_KDUnZ2dnUVZ8vydnZ2d@bt.com>
Source record: 19286

```
"Jerry" <jerrymartes@verizon.net> wrote in message
news:YTc%k.643$7I6.234@nwrddc01.gnilink.net...
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:k6idnajkq5R3xaDUnZ2dnUVZ_sPinZ2d@posted.easystreetonline...
>> christofire wrote:
>>>
>>> A source of endless coffee-time debates where I used to work! No, the
>>> current into the rotating dipole would be DC and the means of rotation
>>> at the radio frequency would take the place of the 'transmitter'. If
>>> the current were alternating then the radiated electric field would be
>>> discontinuous but it isn't; it has constant magnitude. Between two such
>>> systems separated by many wavelengths, if there were no anisotropic
>>> material around, reciprocity would apply and a means of conveying DC by
>>> radio would be created!
>>
>> Now that I think about it, you're right -- the current would have to be
>> DC, so there would be only DC power into the dipole.
>>
>> Interesting that you and your co-workers thought of and debated this.
>> I've given it less than an hour of thought since it popped into my head,
>> so you've had a lot more time to work out the details. Sounds like it
>> might work something like I described, then.
>>
>>> However, intriguing and amusing as this analogy might be I wonder if it
>>> really has any practical value. For real mechanical rotating parts the
>>> frequency would be limited to something rather low like the tens of kHz
>>> at which Alexanderson alternators work, and then the wavelength would be
>>> so long that it would probably be impossible to construct an efficient
>>> radiator*. The quickest moving antenna I've encountered was a
>>> commutated plasma antenna, using a construction similar to a 'dekatron'
>>> tube, but even then the length of the radiator was so small that SHF
>>> would be needed to achieve worthwhile radiation efficiency* and the
>>> maximum commutation speed was limited to a few MHz by the time it takes
>>> to establish the plasma at each step in the commutation cycle.
>>
>> I can't see where this could possibly be of any practical use. For me it
>> was simply a mind exercise spurred by Peter's musings, resulting from
>> wondering just how a mechanical system could be made to generate a CP
>> wave.
>>
>>> *(Of course, the conventional principles of radiation resistance vs.
>>> loss resistance may need 'massaging' to bring them into line with the
>>> concept of creating transverse waves by rotating a dipole connected to a
```

>>> battery!)
>>
>> Indeed. And it seems there wouldn't be any skin effect, then, with only
>> DC going to the wire. And what about current distribution on the dipole?
>>
>> Roy Lewallen, W7EL
>
> Hi Roy
>
> I have problems with believing there will be any current in either
> dipole. What am I missing?
>
> Jerry KD6JDJ

That's understandable.

Chris

5313. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 18:07:01 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ghjno5$mk1k$1@tr22n12.aset.psu.edu>
Source record: 19287

```
Art Unwin wrote:
> On Dec 5, 8:21 am, Michael Coslo <m...@psu.edu> wrote:
>> Art Unwin wrote:
>>> On Dec 4, 3:02 pm, "JB" <nos...@goofball.net> wrote:
>>>>>> So, you're a legend in your own mind. Your reactivity by the way
>>>> indicates
>>>>> No, actually not. However, as your text indicates, I "AM SOMETHING" you
>>>>> don't see in your ghetto, thanks for the "heads-up." People DO tend to
>>>>> be a product of their environment ... again, reflected in your text.
>>>>> Regards,
>>>>> JS
>>>> Environment's no excuse for bad behavior, but it is often the case. Maybe
>>>> you haven't seen any miracles in yours. They can be found even amongst
>>>> great turmoil and evil. Try to get out of your comfort zone and travel
>>>> some, even spend some time in other cultures. Jails of Mexico, Beverly
>>>> Hills, anywhere. It can be a better teacher than the classroom. I can pray
>>>> that you're eyes be opened to what you can't see.
>>> What on Earth is going on here? So you have a conflict?
>>> What do you both want of each other so this can be put aside
>>> if you so wish?
>>> The subject was that many technical people are getting laid off.
>>> This removes them from access to public university white papers.
>>> After a year or so they will be encouraged to look for a alternative
>>> career
>>> They then find that that University white papers are not open source
>>> to facilitate recomended change
>>> Universities widen the Rust Belt towards both coasts. Universities
>>> decline in services without public funds
>>> Universities react and recruit teachers from India to prevent furthur
>>> spread of the Rust Belt but efforts to late.
>>> America becomes the latest Empire to bite the dust as a Mexican
>>> becomes P=resident and encourages change
>>> over from corn to hemp and all are happy overnight. The audacity of
>>> hope fades away.
>> Phew! Stop to catch your breath Art. 8^)
>>
>> Actually, I wondered what this thread was all about.
>>
>> So I'll bite.
>>
>> Much of what is out there is free for all.
>>
>> But the source of the money for research is often from companies who
>> are using the research to enhance their companies position in the
```

>> marketplace.
>>
>> Now we can discuss how much of a public university is actually public,
>> and whether or not it should all be public or not, but the background
>> has shifted.
>>
>> Once upon a time, industry funded an amount of their assets toward
>> research. As time went on, some folks decided that that research money
>> was wasted, and was better spent giving back to the shareholders. That
>> was a smart move - if you couldn't see past the end of your nose.
>>
>> So after it was seen that wrecking your R and D department was a great
>> way to become a technological backwater, they started looking for a less
>> expensive way to get research done. The answer was the universities. So
>> here we are. We can argue about whether or not it should be all open
>> source or not, but from industries perspective, not having the research
>> open to all makes sense.
>>
>> Needless to say, a one paragraph dissertation of the situation is
>> necessarily truncated as all hell....
>>
>> Not to say one way is better than any other, although personally, I
>> kind of liked the older paradigm of company based R and D. But the new
>> method sends money to the universities.
>>
>> - 73 de Mike N3LI - da village idiot.........
>
> Mike
> My point is that IF the work of Universities is to be published it
> should be open source
> instead of giving it to a private entity. I see no point in preventing
> oversite by the public at large
> from seeing how their taxes are being spent. The fruits of our taxes
> should not be channelled off
> to prevent private institutions from going bankrupt. Private
> companies can always, and do, have their own Rand D
> if they want totally privacy for commercial reasons.

Hi Art, not saying that I disagree with your sentiments, but the
paradigm shifted, and we allowed it to happen.

Bell labs is a good (bad?) example of just what happened:

http://en.wikipedia.org/wiki/Bell_Labs

Is an interesting reference, you really should read it.

They sure came up with a lot of interesting innovations and inventions.

But what is telling is the last two sentences of the article:

Start quote

>> As of July 2008, however, only four scientists remained in physics basic research
>>according to a report by the scientific journal Nature.[4]
>>
>> On August 28, 2008, Alcatel-Lucent announced it was pulling out of basic science,
>> material physics, and semiconductor research, and it will instead focus on more
>> immediately marketable areas including networking, high-speed electronics,
>> wireless networks, nanotechnology and software.[5]

End quote

No doubt their next quarter profits will look good. Or did. They'll have
to find something for an encore to increase the profits next quarter.
But for companies that rely on innovation and invention, they are eating
their seed corn.

- 73 de Mike N3LI -

5314. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 18:35:35 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <XNd%k.654$7I6.637@nwrddc01.gnilink.net>
Source record: 19288

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:a_adnQoU-bp6x6DUnZ2dnUVZ_rTinZ2d@posted.easystreetonline...
> Jerry wrote:
>>
>> I am not smart enough to analyze the effects of rotating a dipole with
>> DC applied to it, but I have doubts that it would create a "far field".
>> Did you guys ever figure out how the "DC dipole" generates a Far Field?
>>
>> Jerry KD6JDJ
>
> It requires energy to create a far field, since the far field is a form of
> energy. I explained why I thought power might be consumed by the
> antenna -- current would flow due to coupling with the field still present
> from previous positions (although I mentioned alternating current while
> Chris correctly pointed out that it would have to be DC). I don't see any
> problem with conversion of the DC into AC. It's done all the time with
> spinning magnets -- look at the alternator in your car for example. And in
> times of yore, RF was generated directly with high speed alternators. The
> principle is very similar to, if not exactly the same as, the scheme I
> described.
>
> The whole thing is just a mental exercise to help gain a better
> understanding of the nature of a circularly polarized field.
>
> Roy Lewallen, W7EL

Hi Roy

When you write "current would flow due to coupling with the field still present from previous positions", do you submit that more power is required to rotate a dipole with no DC on it than one with DC on it?

I will respectfully submit that a car alternator doesnt so much spin a magmetic field as it Rotates the field past a conductor. A car alternator is a lumpy magnetic field that is spun past stationary coils of wire. There is no misunderstanding about inductive coupling of close by conductors. My question related to far field "radiation". I am aware that my understanding of far Field radiation is very limited, so i dont propose that i have answers. I do have question about generating a far field by spinning a DC excited dipole.

Jerry KD6JDJ

5315. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 18:42:15 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <bUd%k.656$7I6.276@nwrddc01.gnilink.net>
Source record: 19289

```
"christofire" <christofire@btinternet.com> wrote in message
news:Sq2dnemdF9v-_KDUnZ2dnUVZ8vydnZ2d@bt.com...
>
> "Jerry" <jerrymartes@verizon.net> wrote in message
> news:YTc%k.643$7I6.234@nwrddc01.gnilink.net...
>>
>> "Roy Lewallen" <w7el@eznec.com> wrote in message
>> news:k6idnajkq5R3xaDUnZ2dnUVZ_sPinZ2d@posted.easystreetonline...
>>> christofire wrote:
>>>>
>>>> A source of endless coffee-time debates where I used to work! No, the
>>>> current into the rotating dipole would be DC and the means of rotation
>>>> at the radio frequency would take the place of the 'transmitter'. If
>>>> the current were alternating then the radiated electric field would be
>>>> discontinuous but it isn't; it has constant magnitude. Between two
>>>> such systems separated by many wavelengths, if there were no
>>>> anisotropic material around, reciprocity would apply and a means of
>>>> conveying DC by radio would be created!
>>>
>>> Now that I think about it, you're right -- the current would have to be
>>> DC, so there would be only DC power into the dipole.
>>>
>>> Interesting that you and your co-workers thought of and debated this.
>>> I've given it less than an hour of thought since it popped into my head,
>>> so you've had a lot more time to work out the details. Sounds like it
>>> might work something like I described, then.
>>>
>>>> However, intriguing and amusing as this analogy might be I wonder if it
>>>> really has any practical value. For real mechanical rotating parts the
>>>> frequency would be limited to something rather low like the tens of kHz
>>>> at which Alexanderson alternators work, and then the wavelength would
>>>> be so long that it would probably be impossible to construct an
>>>> efficient radiator*. The quickest moving antenna I've encountered was
>>>> a commutated plasma antenna, using a construction similar to a
>>>> 'dekatron' tube, but even then the length of the radiator was so small
>>>> that SHF would be needed to achieve worthwhile radiation efficiency*
>>>> and the maximum commutation speed was limited to a few MHz by the time
>>>> it takes to establish the plasma at each step in the commutation cycle.
>>>
>>> I can't see where this could possibly be of any practical use. For me it
>>> was simply a mind exercise spurred by Peter's musings, resulting from
>>> wondering just how a mechanical system could be made to generate a CP
>>> wave.
>>>
```

>>>> *(Of course, the conventional principles of radiation resistance vs.
>>>> loss resistance may need 'massaging' to bring them into line with the
>>>> concept of creating transverse waves by rotating a dipole connected to
>>>> a battery!)
>>>
>>> Indeed. And it seems there wouldn't be any skin effect, then, with only
>>> DC going to the wire. And what about current distribution on the dipole?
>>>
>>> Roy Lewallen, W7EL
>>
>> Hi Roy
>>
>> I have problems with believing there will be any current in either
>> dipole. What am I missing?
>>
>> Jerry KD6JDJ
>
>
> That's understandable.
>
> Chris

Hi Chris

Tell me, did you guys ever decide that there would be a far field
generated by the spinning dipole with DC on it? I dont refer to the
inductive field.
Maybe there is no way to separate Far Field from any condition where an
inductive field is generated.

Jerry KD6JDJ

5316. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:07:34 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <6pednb2KeMTh7aDUnZ2dnUVZ8tvinZ2d@bt.com>
Source record: 19290

"Jerry" <jerrymartes@verizon.net> wrote in message
news:bUd%k.656$7I6.276@nwrddc01.gnilink.net...
>
- snip -

>>>
>>> I have problems with believing there will be any current in either
>>> dipole. What am I missing?
>>>
>>> Jerry KD6JDJ
>>
>>
>> That's understandable.
>>
>> Chris
>
> Hi Chris
>
> Tell me, did you guys ever decide that there would be a far field
> generated by the spinning dipole with DC on it? I dont refer to the
> inductive field.
> Maybe there is no way to separate Far Field from any condition where an
> inductive field is generated.
>
> Jerry KD6JDJ

Jerry,

I think you're right - in the far field there is spherical spreading of power without regard to separate magnetic and electric components that an antenna, of whatever form, might produce. Of course the radiated power incident on any surface can be represented by an equivalent value of electric or magnetic field strength but this is on strict understanding that the counterpart (magnetic or electric) component is present with the requisite field strength (E/H = Zo = 377 ohms in free space) and PFD = E2/Zo.

The answer to your first question is 'yes - hypothetically' there 'would be a far field generated by the spinning dipole with DC on it' but this shouldn't be taken as a recipe for some wacky rotating machine. As I outlined earlier, there is probably little practical application for this interesting analogy because if it were ever put into practice it would probably be hopelessly inefficient and transformation of Maxwell's equations into an inertial frame spinning at the radio frequency is hard, to say the least! As has been suggested, it's probably best to take the concept no

further than an interesting thought exercise - if you don't understand that, don't worry, you're not missing much

Chris

5317. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:10:24 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2008.12.08.19.09.36.824193@example.net>
Source record: 19291
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 05 Dec 2008 19:32:03 -0800, Chuck Olson wrote:
> "Chuck Olson" <chuckolson01@REMOVETHIScomcast.net> wrote in message
>>
>> "Rich Grise" <rich@example.net> wrote in message
>> news:pan.2008.11.19.22.45.03.655469@example.net...
>>> Or, does anyone have a UHF-TV log-periodic design that they'd share?
>>> :-)
>>
> Sorry about the filename not working. This one should work:
>
> http://tinyurl.com/5qxh9u

Too late! ;-) I've already made the "coat hanger" four-bay bowtie, but
with weld rod rather than hangers. ;-)

It was on youtube:
http://www.youtube.com/watch?v=EWQhlmJTMzw

Thanks!
Rich

5318. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:17:10 UTC
From: dplatt@radagast.org
Message-ID: <me8016-mft.ln1@radagast.org>
Source record: 19203
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <hnopj4h6727gdtsjet4qke6o1j6lu0gkqa@4ax.com>,

>The problem with this is what I call the "alligator" effect. An
>alligator is an animal with a big mouth and small ears. Running a 1
>watt access point will make the xmitter heard over a much wider area
>than it can hear the responses from the clients. Unless the other end
>of the link (i.e. client radios) are also running the same high power
>level, the range will be limited by the clients tx power. In other
>words, the system gain and power levels in both directions have to be
>evenly matched to avoid turning the high power access point into what
>I consider to be no better than a jamming transmitter.

A not-uncommon scenario, I think. I've seen APs which put out a
signal that has useful strength for blocks, and yet you have to be
within about 100 feet of them to establish contact with a typical
client system.

This same issue is significant in other bands, as well. My area's
ham-radio VHF/UHF repeater coordination group has a firm principle...
a coordinated repeater's transmit coverage and receive coverage should
be consistent. Having an ultra-high-powered transmitter simply causes
interference well outside the repeater's practical use range.

Having overly-sensitive receivers can also be a problem, albeit a
lesser one, as it means that the repeater can be "keyed up" by remote
stations too far away to hear the repeater properly. It's less of
a problem, though, as most repeaters use CTCSS tone squelch these days
and won't respond to signals intended for co-channel repeaters with a
different CTCSS tone. I don't think this is an issue for 802.11
access points at all.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5319. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:31:46 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <CCe%k.663$7I6.241@nwrddc01.gnilink.net>
Source record: 19292

```
"christofire" <christofire@btinternet.com> wrote in message
news:6pednb2KeMTh7aDUnZ2dnUVZ8tvinZ2d@bt.com...
>
> "Jerry" <jerrymartes@verizon.net> wrote in message
> news:bUd%k.656$7I6.276@nwrddc01.gnilink.net...
>>
> - snip -
>
>>>>
>>>> I have problems with believing there will be any current in either
>>>> dipole. What am I missing?
>>>>
>>>> Jerry KD6JDJ
>>>
>>>
>>> That's understandable.
>>>
>>> Chris
>>
>> Hi Chris
>>
>> Tell me, did you guys ever decide that there would be a far field
>> generated by the spinning dipole with DC on it? I dont refer to the
>> inductive field.
>> Maybe there is no way to separate Far Field from any condition where an
>> inductive field is generated.
>>
>> Jerry KD6JDJ
>
>
> Jerry,
>
> I think you're right - in the far field there is spherical spreading of
> power without regard to separate magnetic and electric components that an
> antenna, of whatever form, might produce. Of course the radiated power
> incident on any surface can be represented by an equivalent value of
> electric or magnetic field strength but this is on strict understanding
> that the counterpart (magnetic or electric) component is present with the
> requisite field strength (E/H = Zo = 377 ohms in free space) and PFD =
> E2/Zo.
>
> The answer to your first question is 'yes - hypothetically' there 'would
> be a far field generated by the spinning dipole with DC on it' but this
> shouldn't be taken as a recipe for some wacky rotating machine. As I
```

> outlined earlier, there is probably little practical application for this
> interesting analogy because if it were ever put into practice it would
> probably be hopelessly inefficient and transformation of Maxwell's
> equations into an inertial frame spinning at the radio frequency is hard,
> to say the least! As has been suggested, it's probably best to take the
> concept no further than an interesting thought exercise - if you don't
> understand that, don't worry, you're not missing much
>
> Chris

Hi Chris

Thanks for the reply.

Yeah, I never ascribed any practical use to the "CP by spinning". But,
there are some fundamentally good thoughts generated here. For instance, I
can easily see why two dipoles rotating at the same rate and rotational
direction will couple *nothing*. Thats like trying to receive RHCP with a
LHCP antenna.
I have lived a long time without understanding Poynting and Maxwell
(almost 100 years older than me), I wouldnt want to change that now.

Jerry KD6JDJ

5320. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:31:48 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ghjsn4$9k6e$1@tr22n12.aset.psu.edu>
Source record: 19293

Richard Clark wrote:

> ï¿½rthur, while rooting in the library stacks of an ancient university
> located on the banks of a great (but not grand) lake,

That would be good old Miskatonic U in Arkham?

- 73 d eMike N3LI -

5321. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:32:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghjspb$6g0$1@news.albasani.net>
Source record: 19294
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jeff Liebermann wrote:

>
> I beg to differ. Unless I missed something in my post-midnight scan
> of the specs, the wireless router's TX power is set and forget. If it
> receives an extremely strong signal level report in the 802.11
> management packet, the power remains the same. The ability to do
> power control is there (because each device reports its RX signal
> strength and SNR) but very few access points even try.
>

You are speaking of the specs on the USB card, I am speaking access point ... and actually, I have never searched for power-throttling in the USB card, I simply would not use it ... when the wife and I go out and I search for APs, I want every possible mw in action, at a clients, hotel, hospital, etc.

>> Having one side of transmission link error free is MUCH superior to have
>> both sides error prone!
>
> I beg to differ. You're creating un-necessary interference. Let's
> play with the numbers.
>

Let's not, I said what I meant, and meant what I said, one side error free is better than two sides error prone.

> The commodity wireless router belches about +12dBm. Yours is
> allegedly +27dBm. Range doubles for every 6dB increase in TX power.
> Therefore, your TX range is:
> (27 - 12) / 6 = 7.5
> time more than would be with a commodity wireless router. In terms of
> coverage area, that's:
> 7.5^2 = 56.3
> times the area. Assuming a uniform density of WLAN users in your
> vicinity, you're trashing 56.3 times as many users or systems as
> necessary.
>

No problem. I don't live in a dorm, trailer park, high-rise or apartment building ... the software will automatically adjust to find the best chan and recheck this decision, from time-to-time. If others don't have that capability, they may wish to upgrade ... like I have strongly implied, already, "If your AP is crap, toss it out!" I can't imagine anyone here who failed to read specs before purchasing, however ???

> You're also partly wrong about asymmetrical systems being superior.
> The transition between a fairly good BER or PER (packet error rate) is
> rather abrupt. What happens is that the AP simply slows down the data
> rate until the PER improves. Since the connection speed can be
> different in each direction, you'll get very good speed in one
> direction, and probably very slow speed in the other. In addition,
> things go insane above 54Mbits/sec connection speed. You might have
> enough signal to go faster than 54Mbits/sec in one direction, but if
> it's lacking in the other direction, the AP will simply revert to
> 802.11g and limit the speed in the stronger direction to 54Mbits/sec.
> That's not a problem as few systems can operate reliably at
> 54Mbits/sec beyond a few meters range and in the presence of
> interference.
>

The equip can do b/g/n (b&g for the usb card in question, multiple computers here) With a windows widget to monitor my ap/card connection (transfer rate, errors, signal strength, etc.), I see it rise and fall from time to time. Sometimes I have seen the connection renegotiate from n to g to b ... however, at this same time AirSnare has went nuts. Seems wardriving teens are to blame ... <grin> I was a teen once, so long ago, I fear I may forget ... :-(

But, I will tell you, if ever I notice a problem with the errors (just looked, 3 errors), I will remember your words.

> Meanwhile, you're operating an alligator, jamming 56 times as many
> users as necessary, and polluting the airwaves with your overpowered
> xmitter. It's like operating a kilowatt xmitter in the middle of the
> QRP frequencies. Your stuff gets through, but nobody else's. I
> suggest you do the math, repent your evil ways, offer sacrifice to the
> radio gods on the hibachi, slap yourself on the wrist several times
> for penitence, and stop playing with the dark side.
>

Although, I am sure one or two of my neighbors are savvy enough to set their routers into non-broadcast mode of the SSID, and have WPA and filter on mac addresses, I just don't see the traffic/jam you speak of. But, like I say, if I do, I shall remember your words.

>> However, although I have a pocketfull of various USB dongles, my
>> external USB wifi "card" is the highest output I could find which is
>> cost effective (@ 500mw.) External USB being powered off the USB buss
>> must stay 500ma (@ 5v) or below, total consumption. And, would more
>> than allow for a 1 watt USB dongle.
>
> You would do better with a directional antenna, so as to not both
> pickup and deliver interference from other systems. Antennas with
> gain also improve the system gain in both directions, thus preventing
> the creation of an alligator.
>

No, I would NOT. When I take my laptop and USB antenna analyzer out to
the antenna(s), I appreciate my omni. When I take my laptop and USB ODB
II out to the car (in another direction), I appreciate my omni. When
teens go by wardriving and trigger AirSnare warnings (and giving me
one-hell-of-a-kick!), I appreciate my omni. You hang around with the
old men here, beware the cynicism, it IS contagious!

>> Here is a USB card to match my router:
>> http://www.data-alliance.net/servlet/the-90/802.11g-USB-802.11b-802.11n/Detail
>>
>> Try one, you'll like it, "Mikey does!" <grin>
>
> Nope. Instead, I was instrumental in convincing at least one mesh
> wi-fi vendor to reduce their poletop TX power, as they were causing
> most of their own interference. Asymmetric systems suck.
>

Beware. Again you risk being controlled by the control freaks here.
Glad it works for you, attempt to enforce it for me, we have a battle
... you know, there is equip and hacks available to open up chans far in
excess of what is legal, I am sure some are savvy and use them ...
perhaps teenagers? <straight face> I have even heard of some flashing
their ap/cards with the foreign version of the software for them and
exceeding power/chans ... shame on them! :-|

>> Regards,
>> JS
>
> Bah-Humbug (T'is the season).
>

However, you provide good discussion, and have valid arguments, I am
sure--some will agree with and appreciate--perhaps even some which are
state-of-the-art!

Personally, I would NEVER suggest purchasing an AP/card with less than
350mw capability. And, only then if you get one-hell-of-a-buy.

Warm regards,
JS

5322. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:35:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghjstg$6g0$2@news.albasani.net>
Source record: 19295
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

John Smith wrote:

> ...
> Personally, I would NEVER suggest purchasing an AP/card with less than
> 350mw capability. And, only then if you get one-hell-of-a-buy.
>
> Warm regards,
> JS
>

Sorry to have been so verbal. I could have summed that up rather
quickly, nicely and sweetly, I choose not to ...

You see millions of cell phones; You see a LOT of problems?

Regards,
JS

5323. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:36:18 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8c8913a9-89b1-4f1c-80a9-0f4036eb2526@f13g2000yqj.googlegroups.com>
Source record: 19296

On Dec 8, 12:07 pm, Michael Coslo <m...@psu.edu> wrote:
> Art Unwin wrote:
> > On Dec 5, 8:21 am, Michael Coslo <m...@psu.edu> wrote:
> >> Art Unwin wrote:
> >>> On Dec 4, 3:02 pm, "JB" <nos...@goofball.net> wrote:
> >>>>> So, you're a legend in your own mind. Your reactivity by the way
> >>> indicates
> >>>>> No, actually not. However, as your text indicates, I "AM SOMETHING" you
> >>>>> don't see in your ghetto, thanks for the "heads-up." People DO tend to
> >>>>> be a product of their environment ... again, reflected in your text.
> >>>>> Regards,
> >>>>> JS
> >>> Environment's no excuse for bad behavior, but it is often the case. Maybe
> >>> you haven't seen any miracles in yours. They can be found even amongst
> >>> great turmoil and evil. Try to get out of your comfort zone and travel
> >>> some, even spend some time in other cultures. Jails of Mexico, Beverly
> >>> Hills, anywhere. It can be a better teacher than the classroom. I can pray
> >>> that you're eyes be opened to what you can't see.
> >> What on Earth is going on here? So you have a conflict?
> >> What do you both want of each other so this can be put aside
> >> if you so wish?
> >> The subject was that many technical people are getting laid off.
> >> This removes them from access to public university white papers.
> >> After a year or so they will be encouraged to look for a alternative
> >> career
> >> They then find that that University white papers are not open source
> >> to facilitate recomended change
> >> Universities widen the Rust Belt towards both coasts. Universities
> >> decline in services without public funds
> >> Universities react and recruit teachers from India to prevent furthur
> >> spread of the Rust Belt but efforts to late.
> >> America becomes the latest Empire to bite the dust as a Mexican
> >> becomes P=resident and encourages change
> >> over from corn to hemp and all are happy overnight. The audacity of
> >> hope fades away.
> >   Phew! Stop to catch your breath Art. 8^)
>
> >   Actually, I wondered what this thread was all about.
>
> >   So I'll bite.
>
> >   Much of what is out there is free for all.
>
> >   But the source of the money for research is often from companies who

> >> are using the research to enhance their companies position in the
> >> marketplace.
>
> >>   Now we can discuss how much of a public university is actually public,
> >> and whether or not it should all be public or not, but the background
> >> has shifted.
>
> >>   Once upon a time, industry funded an amount of their assets toward
> >> research. As time went on, some folks decided that that research money
> >> was wasted, and was better spent giving back to the shareholders. That
> >> was a smart move - if you couldn't see past the end of your nose.
>
> >>   So after it was seen that wrecking your R and D department was a great
> >> way to become a technological backwater, they started looking for a less
> >> expensive way to get research done. The answer was the universities. So
> >> here we are. We can argue about whether or not it should be all open
> >> source or not, but from industries perspective, not having the research
> >> open to all makes sense.
>
> >> Needless to say, a one paragraph dissertation of the situation is
> >> necessarily truncated as all hell....
>
> >>   Not to say one way is better than any other, although personally, I
> >> kind of liked the older paradigm of company based R and D. But the new
> >> method sends money to the universities.
>
> >>   - 73 de Mike N3LI - da village idiot.........
>
> > Mike
> > My point is that IF the work of Universities is to be published it
> > should be open source
> > instead of giving it to a private entity. I see no point in preventing
> > oversite by the public at large
> > from seeing how their taxes are being spent. The fruits of our taxes
> > should not be channelled off
> > to prevent private institutions from going bankrupt. Private
> > companies can always, and do, have their own Rand D
> > if they want totally privacy for commercial reasons.
>
> Hi Art, not saying that I disagree with your sentiments, but the
> paradigm shifted, and we allowed it to happen.
>
> Bell labs is a good (bad?) example of just what happened:
>
> http://en.wikipedia.org/wiki/Bell_Labs
>
> Is an interesting reference, you really should read it.
>
> They sure came up with a lot of interesting innovations and inventions.
>

> But what is telling is the last two sentences of the article:
>
> Start quote
>
> >> As of July 2008, however, only four scientists remained in physics basic research
> >>according to a report by the scientific journal Nature.[4]
>
> >> On August 28, 2008, Alcatel-Lucent announced it was pulling out of basic science,
> >> material physics, and semiconductor research, and it will instead focus on more
> >> immediately marketable areas including networking, high-speed electronics,
> >> wireless networks, nanotechnology and software.[5]
>
> End quote
>
> No doubt their next quarter profits will look good. Or did. They'll have
> to find something for an encore to increase the profits next quarter.
> But for companies that rely on innovation and invention, they are eating
> their seed corn.
>
>   - 73 de Mike N3LI -

Mike,
I see no end to the present trend. A few decades ago GE here in
Bloomington started moving its manufacturing products overseas
only later to sell as they moved away from manufacturing and into cash
handling businesses such as banking, tv and the like..
Bloomington had a couple of plants making vacuum cleaners, they
moved out to Mexico. Beich's candy was sold to a Swiss company
Also had a major switch yard on the railroad which is now a waste
land.Result We paid for Mitsubishi to settle here to make cars.
Insurance companies got bigger here churning money and now import
Indian software people as they state american programmers do niot come
up to
par. The city commerce department encouraged hotels to be built
together with the import of 10K mexican workerst6o keep them clean and
hospitals became larger as immigrant births ballooned as insurance
against deportation which then increased taxes for bilingual
education.
All this because we moved away from letting the existing market
decide as we went global knowing that american ingenuity was the
answer to all.
Now Universities are getting failing grades thro out the country where
their products were intended to be the savior of capatalism which has
now changed
as entrepreneurs changed the "market" instead of strengthening the
infro structure. Now the motor industry wants feed money to continue
to build cars
with high labor content that cannot compete. So the idea of let the
"market" decide has now also disapeared as we nationalise/take over
our industries.

Americas answer? Pull away from the dissemination of science and try to remold the World (market) to match our needs. Suppression of the meagre results in universities is such a small dent in the overall picture. But all knew what the total end effect would be. History shows that all that seek an empire
always over estimate their abilities to retain what their military had won such that another new empire emerges.To increase market size while decreasing
population wealth eventually only leads to total domination or widespead civil strife.
Greed is a terrible thing
Pull up the ladder Jack. To heck with the others i'm O.K. and that's the most important thing for today. Tomorrow is another day

5324. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:39:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghjt58$6no$1@news.albasani.net>
Source record: 19297
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

SparkyGuy wrote:
>> http://www.n6mrx.com/Antenna/Cubical-Quad1.htm
>
> Thanks for the link. The calculator works for me.
>
> One remaining Q: how do I take into account the "pigtails" of the driven
> element? A nice square loop is nice, but I've got to connect it to the
> (relatively) big diode, and this requires a bit more wire from the loop to
> the diode (on the + side of the loop) and to the meter connector (on the -
> side). Do I include these wire lengths in the loop size calculation? Or
> ignore them?
>
> Or does the 1000pF cap effectively terminate the loop (re. size)?
>
> Thanks.
>

You MUST take into consideration every single mm of the loops length!
Leads (apparently "pigtails") ARE the loop ...

But, nothing stops you from being creative. The guy whos'
construction(s) we are following did have about optimum parts to work
with--you will just have to be "creative" ... good-luck.

Warm regards,
JS

5325. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:40:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghjt7l$6no$2@news.albasani.net>
Source record: 19298
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jeff Liebermann wrote:

> ...
> However, instead of the giant diode, I suggest something smaller and
> better, such as a Schottky diode:
> <http://www.adsemi.com/diodes/schottky_barrier_mixer_detector.shtml>
> <http://www.macom.com/psc/jsp/ListParts.jsp?dataFile=mixing_detector_diodes.txt>
>

SMC sounds good ...

Regards,
JS

5326. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:42:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghjtaf$6no$3@news.albasani.net>
Source record: 19299
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jeff Liebermann wrote:

>
> You don't need to include diode lead length in the quad antenna
> calculations. The "loop" in the quad driven element is just an LC
> ...

Hmmm, perhaps I read him wrong, you ARE correct here ... that
clarification is appreciated.

Regards,
JS

5327. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 19:46:55 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <PQe%k.666$7I6.630@nwrddc01.gnilink.net>
Source record: 19300

```
"christofire" <christofire@btinternet.com> wrote in message
news:6pednb2KeMTh7aDUnZ2dnUVZ8tvinZ2d@bt.com...
>
> "Jerry" <jerrymartes@verizon.net> wrote in message
> news:bUd%k.656$7I6.276@nwrddc01.gnilink.net...
>>
> - snip -
>
>>>>
>>>> I have problems with believing there will be any current in either
>>>> dipole. What am I missing?
>>>>
>>>> Jerry KD6JDJ
>>>
>>>
>>> That's understandable.
>>>
>>> Chris
>>
>> Hi Chris
>>
>> Tell me, did you guys ever decide that there would be a far field
>> generated by the spinning dipole with DC on it? I dont refer to the
>> inductive field.
>> Maybe there is no way to separate Far Field from any condition where an
>> inductive field is generated.
>>
>> Jerry KD6JDJ
>
>
> Jerry,
>
> I think you're right - in the far field there is spherical spreading of
> power without regard to separate magnetic and electric components that an
> antenna, of whatever form, might produce. Of course the radiated power
> incident on any surface can be represented by an equivalent value of
> electric or magnetic field strength but this is on strict understanding
> that the counterpart (magnetic or electric) component is present with the
> requisite field strength (E/H = Zo = 377 ohms in free space) and PFD =
> E2/Zo.
>
> The answer to your first question is 'yes - hypothetically' there 'would
> be a far field generated by the spinning dipole with DC on it' but this
> shouldn't be taken as a recipe for some wacky rotating machine. As I
```

> outlined earlier, there is probably little practical application for this
> interesting analogy because if it were ever put into practice it would
> probably be hopelessly inefficient and transformation of Maxwell's
> equations into an inertial frame spinning at the radio frequency is hard,
> to say the least! As has been suggested, it's probably best to take the
> concept no further than an interesting thought exercise - if you don't
> understand that, don't worry, you're not missing much
>
> Chris

Hi Chris

I am having a block in my learning. As I understand it, this would
actually happen if it could be performed.

A spinning dipole would require more power to spin it if it had DC on it
than if it had no DC on it. And, actually, it would require no power to
keep the dipole spinning since there would be that theoritical vacuum around
it. But, once you apply the DC, power would be required to keep it
spinning. That amount of added power would be determined by the amount of
DC applied. Do you confirm that this is true?
My question relates to my ignorance about what there is in the "vacuum" to
cause "drag".

Jerry KD6JDJ

5328. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 20:01:31 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <WoadnR5fr5G84KDUnZ2dnUVZ8vudnZ2d@bt.com>
Source record: 19201

"Jerry" <jerrymartes@verizon.net> wrote in message
news:PQe%k.666$7I6.630@nwrddc01.gnilink.net...
>
- snip -
>
> I am having a block in my learning. As I understand it, this would
> actually happen if it could be performed.

Yes

>
> A spinning dipole would require more power to spin it if it had DC on it
> than if it had no DC on it.

Yes - as I said, the means of spinning the dipole would be the counterpart
to the 'transmitter'

> And, actually, it would require no power to keep the dipole spinning since
> there would be that theoritical vacuum around it.

If you say so - you're specifying a hypothetical zero-friction system which
is but one of several possible scenarios.

> But, once you apply the DC, power would be required to keep it spinning.
> That amount of added power would be determined by the amount of DC
> applied. Do you confirm that this is true?

Certainly work would need to be done to spin the dipole and create the
outgoing wave by virtue of its rotation. I suppose it follows that the
strength of the outgoing wave would be proportional to the applied voltage
but I'm not certain that a greater voltage would require more mechanical
work to spin the dipole - you may be right but I'm not certain I can confirm
this from what I think I know!

> My question relates to my ignorance about what there is in the "vacuum"
> to cause "drag".
>
> Jerry KD6JDJ

I'm afraid I had taken very little account of causes of mechanical drag. As
noted before, this was a thought experiment - the sort of thing that can
reach a useful conclusion (i.e. 'not likely' in this case!) without
requiring detailed examination of what may be 'second-order' influences.

Chris

5329. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 20:07:32 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <_tidnXe-C5AX46DUnZ2dnUVZ8jmdnZ2d@bt.com>
Source record: 19202

-almighty snip-

>> My question relates to my ignorance about what there is in the "vacuum"
>> to cause "drag".
>>
>> Jerry KD6JDJ

Just research 'solar sailing' if you want to read about a phenomenon that involves 'drag' in a vacuum on account of a flux of photons. It's used to help keep satellites 'on station' whilst saving hydrazine.

Chris

5330. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 20:11:44 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <4cf%k.551$c35.365@nwrddc02.gnilink.net>
Source record: 19204

"christofire" <christofire@btinternet.com> wrote in message
news:WoadnR5fr5G84KDUnZ2dnUVZ8vudnZ2d@bt.com...
>
> "Jerry" <jerrymartes@verizon.net> wrote in message
> news:PQe%k.666$7I6.630@nwrddc01.gnilink.net...
>>
> - snip -
>>
>> I am having a block in my learning. As I understand it, this would
>> actually happen if it could be performed.
>
> Yes
>
>>
>> A spinning dipole would require more power to spin it if it had DC on it
>> than if it had no DC on it.
>
> Yes - as I said, the means of spinning the dipole would be the counterpart
> to the 'transmitter'
>
>> And, actually, it would require no power to keep the dipole spinning
>> since there would be that theoritical vacuum around it.
>
> If you say so - you're specifying a hypothetical zero-friction system
> which is but one of several possible scenarios.
>
>> But, once you apply the DC, power would be required to keep it spinning.
>> That amount of added power would be determined by the amount of DC
>> applied. Do you confirm that this is true?
>
> Certainly work would need to be done to spin the dipole and create the
> outgoing wave by virtue of its rotation. I suppose it follows that the
> strength of the outgoing wave would be proportional to the applied voltage
> but I'm not certain that a greater voltage would require more mechanical
> work to spin the dipole - you may be right but I'm not certain I can
> confirm this from what I think I know!
>
>> My question relates to my ignorance about what there is in the "vacuum"
>> to cause "drag".
>>
>> Jerry KD6JDJ
>
> I'm afraid I had taken very little account of causes of mechanical drag.
> As noted before, this was a thought experiment - the sort of thing that

> can reach a useful conclusion (i.e. 'not likely' in this case!) without
> requiring detailed examination of what may be 'second-order' influences.
>
> Chris

Hi Chris

I accept as valid, your statement that the dipole with DC will radiate a far field when spun. I have a mental block related to questioning what makes it harder to spin when the DC is increased.
Yes, I do consider the media in which the dipole is spinning creates no friction. I do wonder what makes it harder to spin when the DC voltage is increased.

Jerry

5331. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 20:36:36 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <k40rj4puigbjmi3mcqj3mg6p8pjnj6hjbg@4ax.com>
Source record: 19205
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 08 Dec 2008 11:35:12 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>You see millions of cell phones; You see a LOT of problems?

Oh yes, I certainly do see problems. They're well hidden and
mitigated in various ways. For example, if the error rate climbs, the
adaptive tx power control cranks up the power on both the handset and
the cell site end. If it persists, you get disconnected. Rather than
have the user sound like they're talking while gargling ball bearings,
the cell site just pulls the plug. Incidentally, the tx power control
algorithm is rather messy as it has to handle different data types, at
different rates, all while doing its best not to drain the handset
battery. One the cell site end, it's no better as the power
consumption of a typical cell site is non-trivial.

Problems? Well:
<http://www.roughlydrafted.com/2008/08/28/the-inside-deets-on-iphone-202-and-dropped-calls
/>
Hmmm... power control algorithm again.

Todays typical cell phones run about 150mw max average power output
(according to the FCC ID data). Some are even less. None are
anywhere near the 600mw legal maximum. If they could, you would have
a dead battery within about an hour. (Do the math).

Back to wi-fi and your setup. Sure, you'll have fairly good
preformance with a high power setup. 14 times the usual power is
bound to do some good. However, I suspect your neighbors are not so
thrilled and will probably also be shopping for higher power hardware.
It will be like an arms race, where the biggest bomb allegedly wins.
Dealing with mutual interference is no fun, especially with only 3
available non-overlapping channels.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5332. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 21:00:04 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <uc1rj49tdhcnnhblc5gcf81sdgs1om6rl9@4ax.com>
Source record: 19206
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 8 Dec 2008 11:17:10 -0800, dplatt@radagast.org (Dave Platt)
wrote:

>A not-uncommon scenario, I think. I've seen APs which put out a
>signal that has useful strength for blocks, and yet you have to be
>within about 100 feet of them to establish contact with a typical
>client system.

About a year ago, I was trying to find the source of a very strong
2.4GHz signal in the downtown Santa Cruz mall area. Wi-Fi
communications among the various coffee shops and hot spots was
ummm.... a challenge. I eventually traced it down to a tall
residential hotel and a 2.4GHz cordless digital phone running what I
guess was a 10 watt power amplifier. Instead of a cell phone, this
person decided to provide his own cordless phone service that covered
the entire downtown area. You could see it anywhere but as is
predictable, his useful range was limited by the handset power, which
was well less than 10 watts. I'm not going to go into detail on
exactly what happened, but it should be sufficient that he's now aware
of the problem he was causing and is off the air.

Be the first in your neighborhood to dominate the airwaves:
<http://www.ssbusa.com/kunamp1.html>
Cool... 50 watt linear on 2.4GHz. Now, we're cooking.

>This same issue is significant in other bands, as well. My area's
>ham-radio VHF/UHF repeater coordination group has a firm principle...
>a coordinated repeater's transmit coverage and receive coverage should
>be consistent. Having an ultra-high-powered transmitter simply causes
>interference well outside the repeater's practical use range.

Good plan but there are problems. Most hams these daze use walkie
talkies with perhaps 1 watt of TX RF. The typical repeater is running
perhaps 10 to 40 watts out (after the duplexer). The walkie can hear
the repeater almost anywhere, but when trying to talk, they drop in
and out all the time. The mobiles, which run more power, are usually
well matched to the repeater's tx power. I've suggested adaptive tx
power control (to preserve battery power) on our 2 meter repeater, but
nobody wants it.

>Having overly-sensitive receivers can also be a problem, albeit a
>lesser one, as it means that the repeater can be "keyed up" by remote
>stations too far away to hear the repeater properly. It's less of
>a problem, though, as most repeaters use CTCSS tone squelch these days
>and won't respond to signals intended for co-channel repeaters with a

>different CTCSS tone.

We had a co-channel user that was running carrier squelch. It took only about 7 years of constantly pounding on the trustees before they would install PL. They lied on their NARCC application claiming they had a functional PL system. The experience taught me a few things, one of which is that hams generally make lousy RF neighbors.

>I don't think this is an issue for 802.11
>access points at all.

No, it's not for most home systems. There's a similar coexistence problem with mesh networks and municipal networks. Neither of these scale very well. They work ok with a small number of repeaters, but rapidly foul up as the usage, traffic, and number of repeaters increases to the point of mutual interference. Details and a rant on request.

There's also a problem with wi-fi and omnidirectional antennas. These pickup and spew inference from all direction equally well. Same with reflections and multi-path. If the main area of operation can better be covered with a directional antenna, then it should be used. It may create hidden nodes, but those can be handled by enabling flow control.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5333. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 21:13:42 UTC
From: JB <nospam@goofball.net>
Message-ID: <a6g%k.559$c35.166@nwrddc02.gnilink.net>
Source record: 19207

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:8c8913a9-89b1-4f1c-80a9-0f4036eb2526@f13g2000yqj.googlegroups.com...
On Dec 8, 12:07 pm, Michael Coslo <m...@psu.edu> wrote:
> Art Unwin wrote:
> > On Dec 5, 8:21 am, Michael Coslo <m...@psu.edu> wrote:
> >> Art Unwin wrote:
> >>> On Dec 4, 3:02 pm, "JB" <nos...@goofball.net> wrote:
> >>>> So, you're a legend in your own mind. Your reactivity by the way
> >>> indicates
> >>>> No, actually not. However, as your text indicates, I "AM SOMETHING"
you
> >>>> don't see in your ghetto, thanks for the "heads-up." People DO tend
to
> >>>> be a product of their environment ... again, reflected in your text.
> >>>> Regards,
> >>>> JS
> >>> Environment's no excuse for bad behavior, but it is often the case.
Maybe
> >>> you haven't seen any miracles in yours. They can be found even
amongst
> >>> great turmoil and evil. Try to get out of your comfort zone and
travel
> >>> some, even spend some time in other cultures. Jails of Mexico,
Beverly
> >>> Hills, anywhere. It can be a better teacher than the classroom. I can
pray
> >>> that you're eyes be opened to what you can't see.
> >> What on Earth is going on here? So you have a conflict?
> >> What do you both want of each other so this can be put aside
> >> if you so wish?
> > The subject was that many technical people are getting laid off.
> > This removes them from access to public university white papers.
> > After a year or so they will be encouraged to look for a alternative
> > career
> > They then find that that University white papers are not open source
> > to facilitate recomended change
> > Universities widen the Rust Belt towards both coasts. Universities
> > decline in services without public funds
> > Universities react and recruit teachers from India to prevent furthur
> > spread of the Rust Belt but efforts to late.
> > America becomes the latest Empire to bite the dust as a Mexican
> > becomes P=resident and encourages change
> > over from corn to hemp and all are happy overnight. The audacity of
> > hope fades away.

> >> Phew! Stop to catch your breath Art. 8^)
>
> >> Actually, I wondered what this thread was all about.
>
> >> So I'll bite.
>
> >> Much of what is out there is free for all.
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> >> But the source of the money for research is often from companies who
> >> are using the research to enhance their companies position in the
> >> marketplace.
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> >> Now we can discuss how much of a public university is actually public,
> >> and whether or not it should all be public or not, but the background
> >> has shifted.
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> >> Once upon a time, industry funded an amount of their assets toward
> >> research. As time went on, some folks decided that that research money
> >> was wasted, and was better spent giving back to the shareholders. That
> >> was a smart move - if you couldn't see past the end of your nose.
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> >> So after it was seen that wrecking your R and D department was a great
> >> way to become a technological backwater, they started looking for a
less
> >> expensive way to get research done. The answer was the universities. So
> >> here we are. We can argue about whether or not it should be all open
> >> source or not, but from industries perspective, not having the research
> >> open to all makes sense.
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> >> Not to say one way is better than any other, although personally, I
> >> kind of liked the older paradigm of company based R and D. But the new
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>
> >> - 73 de Mike N3LI - da village idiot.........
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> > Mike
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> > from seeing how their taxes are being spent. The fruits of our taxes
> > should not be channelled off
> > to prevent private institutions from going bankrupt. Private
> > companies can always, and do, have their own Rand D
> > if they want totally privacy for commercial reasons.
>
> Hi Art, not saying that I disagree with your sentiments, but the

> paradigm shifted, and we allowed it to happen.
>
> Bell labs is a good (bad?) example of just what happened:
>
> http://en.wikipedia.org/wiki/Bell_Labs
>
> Is an interesting reference, you really should read it.
>
> They sure came up with a lot of interesting innovations and inventions.
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> But what is telling is the last two sentences of the article:
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> Start quote
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basic research
> >>according to a report by the scientific journal Nature.[4]
>
> >> On August 28, 2008, Alcatel-Lucent announced it was pulling out of
basic science,
> >> material physics, and semiconductor research, and it will instead focus
on more
> >> immediately marketable areas including networking, high-speed
electronics,
> >> wireless networks, nanotechnology and software.[5]
>
> End quote
>
> No doubt their next quarter profits will look good. Or did. They'll have
> to find something for an encore to increase the profits next quarter.
> But for companies that rely on innovation and invention, they are eating
> their seed corn.
>
> - 73 de Mike N3LI -

Mike,
I see no end to the present trend. A few decades ago GE here in
Bloomington started moving its manufacturing products overseas
only later to sell as they moved away from manufacturing and into cash
handling businesses such as banking, tv and the like..
Bloomington had a couple of plants making vacuum cleaners, they
moved out to Mexico. Beich's candy was sold to a Swiss company
Also had a major switch yard on the railroad which is now a waste
land.Result We paid for Mitsubishi to settle here to make cars.
Insurance companies got bigger here churning money and now import
Indian software people as they state american programmers do niot come
up to
par. The city commerce department encouraged hotels to be built
together with the import of 10K mexican workerst6o keep them clean and
hospitals became larger as immigrant births ballooned as insurance

against deportation which then increased taxes for bilingual
education.
All this because we moved away from letting the existing market
decide as we went global knowing that american ingenuity was the
answer to all.
Now Universities are getting failing grades thro out the country where
their products were intended to be the savior of capatalism which has
now changed
as entrepreneurs changed the "market" instead of strengthening the
infro structure. Now the motor industry wants feed money to continue
to build cars
with high labor content that cannot compete. So the idea of let the
"market" decide has now also disapeared as we nationalise/take over
our industries.
Americas answer? Pull away from the dissemination of science and try
to remold the World (market) to match our needs. Suppression of the
meagre results in universities is such a small dent in the overall
picture. But all knew what the total end effect would be. History
shows that all that seek an empire
always over estimate their abilities to retain what their military had
won such that another new empire emerges.To increase market size while
decreasing
population wealth eventually only leads to total domination or
widespead civil strife.
Greed is a terrible thing
Pull up the ladder Jack. To heck with the others i'm O.K. and that's
the most important thing for today. Tomorrow is another day

For real. We continue to do this to ourselves.
Check this out:
http://www.youtube.com/watch?v=QVkjCQCTOEI

I'm not saying he's right, or that we should MAKE him right, only that this
is the perspective of someone who somehow has an interest in looking into
it.

5334. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 21:13:49 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ro2rj4ld7cokug911lal92fdh41sfdm1pb@4ax.com>
Source record: 19208
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 7 Dec 2008 15:52:21 -0800 (PST), JIMMIE
<JIMMIEDEE123@YAHOO.COM> wrote:

>Tim, I solder these on the N connectors all the time with no problems.

In past life, in a land far far away (Smog Angeles), I once worked for and later ran a comm shop. At the time, UG-21/U male N connectors were commonly available and in fashion. Our 460MHz repeater systems were full of them so I had plenty of experience in soldering, assembling, and repairing these connectors. I don't want to remember all the 25 mile joy rides up the fire road to Santiago and Mojeska Pk just to fix a problem caused by a flakey UG-21/U coax connector. Well, to be totally accurate, I had equal problems with soldered PL-259 connectors. I fought these problems for years because I assumed there was no better way.

Meanwhile, I was also involved in an avionics shop (on the business end). They were slowly switching from soldered to crimp type connectors. The owner insisted that is was worth the effort because the number of connector failures and rework had approached zero with the crimp type. I became a believer overnight.

Many years later, I designed a few marine radios for the USCG. The specs would tolerate either solder or crimp. So, I asked which they preferred. Crimp was the answer, because they never could teach the techs how to properly solder a connector, while the crimper always does it right. All our radios used crimp connectors, even on the inside.

Roll forward more years and we have 10Base2 and 10baseT ethernet. The former uses UG-21/u N connectors. The latter uses BNC. The nice yellow coax cable with the flakey connector was a constant source of headaches. The crimp type BNC's never failed (unless abused).

I'm not sure what to suggest. With skill UG-21/u can be made to work. With luck, they can even be kept working in the field. However, I'll take crimp type any day, especially after many year of experience dealing with both.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5335. Re: Towers - lattice vs. tubular?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 22:01:20 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <hd5rj4dobk2lqq24lmd79irlv778j401fo@4ax.com>
Source record: 19209

I just tried Firefox, I see what you mean. The advantage of using the .mht file is that I have everything wrapped into one file. If I lose my copy I can recover by simply download the file from the web site and us it to update. I am using Word 2007 (only use it if you have to, I receive .docx files for newsletters!) and it is pretty easy to put together a web page while thinking of other things. I have trouble keeping things sorted out with more than one site in a web space. One file for each subject works well for me.

The real clinker for an .mht one page in one file is that the source is all included in the page which requires the user to download a lot of stuff that is disregarded.

I will work on getting back to the mainstream.

Thanks for the heads up...
John Ferrell W8CCW

On Mon, 8 Dec 2008 09:49:28 -0800, Anon bozo <anon@bozo.to> wrote:

>> Sorry for the inconvenience. I was looking for the easiest way out
>> when I went to the .MHT format. What browsers do not handle .MHT's?
>
>Firefox. Probably #2 most popular browser.
>
>> I can go back to Front Page but it was a poor fit for me as well as a
>> budget breaker! It is paid for now though!
>
>Isn't plain-ol' HTML sufficient?
>

5336. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 22:18:49 UTC
From: dplatt@radagast.org
Message-ID: <93j016-nsm.ln1@radagast.org>
Source record: 19210
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <uc1rj49tdhcnnhblc5gcf81sdgs1om6rl9@4ax.com>,
Jeff Liebermann <jeffl@cruzio.com> wrote:

>Good plan but there are problems. Most hams these daze use walkie
>talkies with perhaps 1 watt of TX RF. The typical repeater is running
>perhaps 10 to 40 watts out (after the duplexer). The walkie can hear
>the repeater almost anywhere, but when trying to talk, they drop in
>and out all the time. The mobiles, which run more power, are usually
>well matched to the repeater's tx power. I've suggested adaptive tx
>power control (to preserve battery power) on our 2 meter repeater, but
>nobody wants it.

Seems to me that would introduce another set of incompatibilities.
People out on the fringe area of the repeater's coverage would be able
to hear repeated signals from weak transmitters (e.g. HTs), but if the
repeater saw a strong input signal from a mobile (or an HT near the
site) and dropped its transmitter power, the repeater coverage area
would shrink abruptly and those users out around the edges could lose
coverage. This could re-create the "hidden node" problem in a new way!

I don't think adaptive power management can work reliably in the
absense of a signal-quality feedback from each station which is
accessing the repeater/AP.

>We had a co-channel user that was running carrier squelch. It took
>only about 7 years of constantly pounding on the trustees before they
>would install PL. They lied on their NARCC application claiming they
>had a functional PL system.

Grrr. <Worf> "Romulans have *no* sense of honor." </Worf>

Our system (W6ASH, SPECS, at El Camino Hospital in Mountain View)
switched over to PL-tone-only years ago, and it helps in numerous
ways... the absence of noise-initiated kerchunking is a real blessing.
I've preserved the ability to switch the repeaters over to
carrier-sense-only in an emergency but really don't expect to ever
need to use this feature.

> The experience taught me a few things,
>one of which is that hams generally make lousy RF neighbors.

Some are lousy neighbors, lazy and self-centered. Others hold
themselves and their equipment and operation to very high standards. I
think it depends very much on the individuals involved, on their
attitudes, and on their level of prior experience in supporting a
real-world user community.

>No, it's not for most home systems. There's a similar coexistence
>problem with mesh networks and municipal networks. Neither of these
>scale very well. They work ok with a small number of repeaters, but
>rapidly foul up as the usage, traffic, and number of repeaters
>increases to the point of mutual interference. Details and a rant on
>request.

I believe you!

My impression is that a limited set of mesh repeaters, and a plentiful
set of direct backhaul links on a different (non-interfering) band,
works out rather better.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5337. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 23:24:16 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <de79c5f5-9bd8-4bae-bbe1-ff346d8c199c@f13g2000yqj.googlegroups.com>
Source record: 19211

On Dec 8, 3:13 pm, "JB" <nos...@goofball.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:8c8913a9-89b1-4f1c-80a9-0f4036eb2526@f13g2000yqj.googlegroups.com...
> On Dec 8, 12:07 pm, Michael Coslo <m...@psu.edu> wrote:
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> > >>>> great turmoil and evil. Try to get out of your comfort zone and
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> > >>> What do you both want of each other so this can be put aside
> > >>> if you so wish?
> > >>> The subject was that many technical people are getting laid off.
> > >>> This removes them from access to public university white papers.
> > >>> After a year or so they will be encouraged to look for a alternative
> > >>> career
> > >>> They then find that that University white papers are not open source
> > >>> to facilitate recomended change
> > >>> Universities widen the Rust Belt towards both coasts. Universities
> > >>> decline in services without public funds
> > >>> Universities react and recruit teachers from India to prevent furthur

> > >>> spread of the Rust Belt but efforts to late.
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> > >>> becomes P=resident and encourages change
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> > >>> hope fades away.
> > >> Phew! Stop to catch your breath Art. 8^)
>
> > >> Actually, I wondered what this thread was all about.
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> > >> So I'll bite.
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> > >> Much of what is out there is free for all.
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> > >> But the source of the money for research is often from companies who
> > >> are using the research to enhance their companies position in the
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> > >> Once upon a time, industry funded an amount of their assets toward
> > >> research. As time went on, some folks decided that that research money
> > >> was wasted, and was better spent giving back to the shareholders. That
> > >> was a smart move - if you couldn't see past the end of your nose.
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> > >> So after it was seen that wrecking your R and D department was a great
> > >> way to become a technological backwater, they started looking for a
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> > >> here we are. We can argue about whether or not it should be all open
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> > >> Not to say one way is better than any other, although personally, I
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> > >> - 73 de Mike N3LI - da village idiot.........
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> > But what is telling is the last two sentences of the article:
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> > >> immediately marketable areas including networking, high-speed
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> > No doubt their next quarter profits will look good. Or did. They'll have
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> > But for companies that rely on innovation and invention, they are eating
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> > - 73 de Mike N3LI -
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> Mike,
> I see no end to the present trend. A few decades ago GE here in
> Bloomington started moving its manufacturing products overseas
> only later to sell as they moved away from manufacturing and into cash
> handling businesses such as banking, tv and the like..
> Bloomington had a couple of plants making vacuum cleaners, they
> moved out to Mexico. Beich's candy was sold to a Swiss company
> Also had a major switch yard on the railroad which is now a waste
> land.Result We paid for Mitsubishi to settle here to make cars.
> Insurance companies got bigger here churning money and now import

> Indian software people as they state american programmers do niot come
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> Now Universities are getting failing grades thro out the country where
> their products were intended to be the savior of capatalism which has
> now changed
> as entrepreneurs changed the "market" instead of strengthening the
> infro structure. Now the motor industry wants feed money to continue
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> with high labor content that cannot compete. So the idea of let the
> "market" decide has now also disapeared as we nationalise/take over
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> Americas answer? Pull away from the dissemination of science and try
> to remold the World (market) to match our needs. Suppression of the
> meagre results in universities is such a small dent in the overall
> picture. But all knew what the total end effect would be. History
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> population wealth eventually only leads to total domination or
> widespead civil strife.
> Greed is a terrible thing
> Pull up the ladder Jack. To heck with the others i'm O.K. and that's
> the most important thing for today. Tomorrow is another day
>
> For real. We continue to do this to ourselves.
> Check this out:http://www.youtube.com/watch?v=QVkjCQCTOEI
>
> I'm not saying he's right, or that we should MAKE him right, only that this
> is the perspective of someone who somehow has an interest in looking into
> it.

Look at the bright side Mike, The majority of this group feel O.K.
with things as they are,
and they represent the smarts of the USA of the past 50 years. Where
every thing worth while was discovered
thus lessening the need for further education plus strengthening the
right to bear arms.....for wild animals ofcourse grin
The cities will have their crystal nights ofcourse as they have done
in the past in L.A. against those that hoarded the wealth,

5338. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 23:26:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghkaf9lab1@news.albasani.net>
Source record: 19212
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jeff Liebermann wrote:
> On Mon, 08 Dec 2008 11:35:12 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> You see millions of cell phones; You see a LOT of problems?
>
> Oh yes, I certainly do see problems. They're well hidden and
> mitigated in various ways. For example, if the error rate climbs, the
> adaptive tx power control cranks up the power on both the handset and
> the cell site end. If it persists, you get disconnected. Rather than
> have the user sound like they're talking while gargling ball bearings,
> the cell site just pulls the plug. Incidentally, the tx power control
> algorithm is rather messy as it has to handle different data types, at
> different rates, all while doing its best not to drain the handset
> battery. One the cell site end, it's no better as the power
> consumption of a typical cell site is non-trivial.
>

Yes, hackers (well, you may prefer programmers/software-engineers?) do a
very nice job, they have done it with wifi too, still doing it actually,
personally--I suspect viagra! LOL

> Problems? Well:
> <http://www.roughlydrafted.com/2008/08/28/the-inside-deets-on-iphone-202-and-dropped-cal
ls/>
> Hmmm... power control algorithm again.
>
> Todays typical cell phones run about 150mw max average power output
> (according to the FCC ID data). Some are even less. None are
> anywhere near the 600mw legal maximum. If they could, you would have
> a dead battery within about an hour. (Do the math).
>

Yeah, personally, I could handle a cell phone 2x to 3x the size, most of
it battery ... my cellphone is 300mw out (max, but variable, as needed,
as you state), I read those specs before purchasing, also. 4 hours max
talk time (like if your sitting right under the tower?) is no problem
for me, mine averages 2-3hrs, but I have a pocket charger, takes two AA
high output recharge-ables (you can chuck alkaline in if needed) and is
quick, chat while charging, so never without power (did I mention 2 week
standby time?), now ask the wife, you get another answer ...

> Back to wi-fi and your setup. Sure, you'll have fairly good
> preformance with a high power setup. 14 times the usual power is

> bound to do some good. However, I suspect your neighbors are not so
> thrilled and will probably also be shopping for higher power hardware.
> It will be like an arms race, where the biggest bomb allegedly wins.
> Dealing with mutual interference is no fun, especially with only 3
> available non-overlapping channels.
>

My son and I, once or twice a year, attend a game fest. There is more high power equip set up than you can shake a whatever at ... doom, heretic, diablo, etc. (you can tell, I like the old ones :-( ) nets all off separate APs, the wifi cards are simply uncountable--if you think thats nuts, attend a gaming convention in Nevada, frankly, I would have to state, from REAL hands-on, the problems you state just don't exist to a REAL degree ... if they/it did, they would be fixing that now (more chans, tighter packet packing/encryption, more-adaptable, spread spectrum, etc. Remember, networking has NOT EVEN reached its' infancy, yet!) Without a doubt, there are conflicts and lost packets--you just never notice them--now, if everyone there started, separately, watching a HD movie, most-likely no joy ... :-(

Besides, my neighbors are idiots (technical idiots, I admit, I like a couple of 'em), I doubt they do anything but email/surf and download an illegal movie/song now-and-then -- well, I suspect them of porn--but I am like that yanno? Suspicious.

But hey, if everyone agreed with me, I would NOT be here, and this would NOT be fun--did I mention it would be boring? <wink>

Warm regards,
JS

5339. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 23:31:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghkap8lni1@news.albasani.net>
Source record: 19213
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Dave Platt wrote:
> In article <hnopj4h6727gdtsjet4qke6o1j6lu0gkqa@4ax.com>,
>
>> The problem with this is what I call the "alligator" effect. An
>> alligator is an animal with a big mouth and small ears. Running a 1
>> watt access point will make the xmitter heard over a much wider area
>> than it can hear the responses from the clients. Unless the other end
>> of the link (i.e. client radios) are also running the same high power
>> level, the range will be limited by the clients tx power. In other
>> words, the system gain and power levels in both directions have to be
>> evenly matched to avoid turning the high power access point into what
>> I consider to be no better than a jamming transmitter.
>
> A not-uncommon scenario, I think. I've seen APs which put out a
> signal that has useful strength for blocks, and yet you have to be
> within about 100 feet of them to establish contact with a typical
> client system.
>
> This same issue is significant in other bands, as well. My area's
> ham-radio VHF/UHF repeater coordination group has a firm principle...
> a coordinated repeater's transmit coverage and receive coverage should
> be consistent. Having an ultra-high-powered transmitter simply causes
> interference well outside the repeater's practical use range.
>
> Having overly-sensitive receivers can also be a problem, albeit a
> lesser one, as it means that the repeater can be "keyed up" by remote
> stations too far away to hear the repeater properly. It's less of
> a problem, though, as most repeaters use CTCSS tone squelch these days
> and won't respond to signals intended for co-channel repeaters with a
> different CTCSS tone. I don't think this is an issue for 802.11
> access points at all.
>

All the problems you state would disappear with the correct algorithms
controlling the packets/encryption/compaction ... there is just not
enough interest to put together a team together to do it, and a
for-profit organization would go broke doing it ... and, you can't get
everyone to agree. The (A)ncient (R)etarded (R)adio (L)aggards) don't
see a need--you see, no brass is required ... :-(

Regards,
JS

5340. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 23:43:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghkbfr$mf0$1@news.albasani.net>
Source record: 19214

Art Unwin wrote:

> ...
> Look at the bright side Mike, The majority of this group feel O.K.
> with things as they are,
> and they represent the smarts of the USA of the past 50 years. Where
> every thing worth while was discovered
> thus lessening the need for further education plus strengthening the
> right to bear arms.....for wild animals ofcourse grin
> The cities will have their crystal nights ofcourse as they have done
> in the past in L.A. against those that hoarded the wealth,

Actually, the technical aspects and military-ization of our police has changed the terrain. Now you need the equiv or road-side-bombs used in Iraq, flame throwers to burn them in their Kevlar, armor piercing ammunition, small surface to surface missiles, etc. ... not impossible, just more difficult.

We now need a civilian group to oversee the president/government--perhaps one which is militia based would be appropriate. It certainly is time this surfaces to the realm of rational discussion ... they are no longer OUR servants! We simply have to get their attention and focus back ...

Regards,
JS

5341. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-08 23:53:43 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <a3brj4pn0p63trndql052isbclfp6k2s52@4ax.com>
Source record: 19215
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 8 Dec 2008 14:18:49 -0800, dplatt@radagast.org (Dave Platt)
wrote:

>In article <uc1rj49tdhcnnhblc5gcf81sdgs1om6rl9@4ax.com>,
>Jeff Liebermann <jeffl@cruzio.com> wrote:
>
>>Good plan but there are problems. Most hams these daze use walkie
>>talkies with perhaps 1 watt of TX RF. The typical repeater is running
>>perhaps 10 to 40 watts out (after the duplexer). The walkie can hear
>>the repeater almost anywhere, but when trying to talk, they drop in
>>and out all the time. The mobiles, which run more power, are usually
>>well matched to the repeater's tx power. I've suggested adaptive tx
>>power control (to preserve battery power) on our 2 meter repeater, but
>>nobody wants it.
>
>Seems to me that would introduce another set of incompatibilities.
>People out on the fringe area of the repeater's coverage would be able
>to hear repeated signals from weak transmitters (e.g. HTs), but if the
>repeater saw a strong input signal from a mobile (or an HT near the
>site) and dropped its transmitter power, the repeater coverage area
>would shrink abruptly and those users out around the edges could lose
>coverage. This could re-create the "hidden node" problem in a new way!

Good point, but that's not what I had in mind. I was aware of the
problem and suggested that the power control be run by a micro. The
algorithm needs to be worked out, but basically, the weakest signal
sets the power level. The range of power adjustment also will not be
huge or large enough to have much of an effect on distant stations.
Our current 60 watt amplifier might have the power output reduced to
about 20 watts or 4.5dB power reduction. That's less than one S-unit
and probably wouldn't be noticeable even by distant stations. However,
it will make a huge difference in power consumption and battery
operation run time. There are a few other economies that can be
thrown in, such as having the repeater always ID in low power. Of
course, there are complications, such as the mobiles and handhelds not
reporting their RX signal quality, which makes deciding the repeater
power output somewhat problematic when dealing with the traditional
broken radios. (Same people, same radios, same problems, same club
net, every time). Incidentally, this was suppose to be a minor
feature of a proposed repeater voting system, which is another can of
worms.

>I don't think adaptive power management can work reliably in the
>absense of a signal-quality feedback from each station which is

>accessing the repeater/AP.

Yes it can. I intentionally reduced the repeater TX power during a club net from 60 watts (before the duplexer) to about 20 watts. Nobody said anything, there were no complaints, and nobody noticed, even after I mentioned it after the close of the net. As long as I don't run the power output to near zero, it can me made to work, even if the power level is set manually with a touch tone command.

>>We had a co-channel user that was running carrier squelch. It took
>>only about 7 years of constantly pounding on the trustees before they
>>would install PL. They lied on their NARCC application claiming they
>>had a functional PL system.
>
>Grrr. <Worf> "Romulans have *no* sense of honor." </Worf>

Actually, it was far more stupid than it appears. We had several of the club politicians pounding on the alleged trustee of the repeater, who literally didn't care, didn't communicate with the rest of the organization, broke numerous promises to take it up with the board, and so on. Complaints to NARCC went to the trustee with predictable results. We were simply talking to the wrong person. One day, we caught the right person on the air working on the repeater. He was informed of the situation, after a few emails and the usual miscommunications, the PL decoder magically appeared. As would be expected, the initial transistion was slow. First there was no-PL during their club nets. Later, it became full time. There was also some work done on placing a notch in the antenna pattern in the direction of Santa Cruz. That has worked quite nicely.

>Our system (W6ASH, SPECS, at El Camino Hospital in Mountain View)
>switched over to PL-tone-only years ago, and it helps in numerous
>ways... the absence of noise-initiated kerchunking is a real blessing.
>I've preserved the ability to switch the repeaters over to
>carrier-sense-only in an emergency but really don't expect to ever
>need to use this feature.

That alleged benefit is that no PL allows visitors and hams with antique hardware to use the repeater. We have a control code that is available to anyone that will temporarily disable the PL for a specified time period. It actually does get used by some hams who apparently plan on being buried with their ancient radios and have no intention of ever selling them.

>> The experience taught me a few things,
>>one of which is that hams generally make lousy RF neighbors.
>
>Some are lousy neighbors, lazy and self-centered. Others hold
>themselves and their equipment and operation to very high standards. I
>think it depends very much on the individuals involved, on their
>attitudes, and on their level of prior experience in supporting a
>real-world user community.

It varies. I consider myself a good example of one of the lousy RF neighbors, so I know they exist.

>My impression is that a limited set of mesh repeaters, and a plentiful
>set of direct backhaul links on a different (non-interfering) band,
>works out rather better.

Sure, but that's not the way most municipal wireless networks are umm.... engineered. Most are single channel, store and forward repeaters. The problem is that if you're perhaps 3 nodes away from where it hits the wired internet, you will have 4 identical duplicated packets flying through the air. If everyone can see everyone else (as is the case with omni antennas on office rooftops), only one of those radios can be transmitting at a time. That means that you would be hogging at least 3 times the shared bandwidth (airtime is shared) to deliver one lousy packet. Add the problem of trying to create the ultimate geographic routing algorithm, and mesh networks have a propensity to fill the airtime with duplicates, retransmissions, and junk. The worst of the worst are broadcasts, noteably ARP requests, which go everywhere. I was monitoring what was coming out of Google's Mtn View network and finding about 60% of the airtime occupied by ARP requests. Of course, when the proponents of municipal wireless find that there are holes in their coverage, they just add yet another store and forward mesh repeater. Eventually, the density is high enough for the mesh repeaters to start interfering with each other. Since this is difficult to diagnose, the usual solution is to increase the TX power of the mesh node. That does the opposite of what might be expected, but until the numbers are in for availability testing, everyone just assumes that more power is more better. It took quite a bit of arguing to convince one mesh operator to reduce their power and even more to demonstrate that it worked. As an example, see the data and conclusions from the old MIT RoofNet at:
<http://pdos.csail.mit.edu/roofnet/doku.php?id=interesting>
Note the probabilies of actually delivering a packet through just one hop. Yech.

I couldn't resist and just had to rant. But, it was worth it.

Onward to another thrilling day of doing battle with QuickBooks and my traditional end of the year billing nightmare...

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

5342. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 00:35:27 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <529f1eab-7137-48dd-a42f-1b3b48e3c432@v38g2000yqb.googlegroups.com>
Source record: 19216

On Dec 8, 5:43 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > ...
> > Look at the bright side Mike, The majority of this group feel O.K.
> > with things as they are,
> > and they represent the smarts of the USA of the past 50 years. Where
> > every thing worth while was discovered
> > thus lessening the need for further education plus strengthening the
> > right to bear arms.....for wild animals ofcourse grin
> > The cities will have their crystal nights ofcourse as they have done
> > in the past in L.A. against those that hoarded the wealth,
>
> Actually, the technical aspects and military-ization of our police has
> changed the terrain. Now you need the equiv or road-side-bombs used in
> Iraq, flame throwers to burn them in their Kevlar, armor piercing
> ammunition, small surface to surface missiles, etc. ... not impossible,
> just more difficult.
>
> We now need a civilian group to oversee the
> president/government--perhaps one which is militia based would be
> appropriate. It certainly is time this surfaces to the realm of
> rational discussion ... they are no longer OUR servants! We simply have
> to get their attention and focus back ...
>
> Regards,
> JS

I suppose in the cities you have different views of the police but
without money
they then become part of the public, good or otherwise as in New
Orleans,
On the other hand gun sales are sky rocketing in the Midwest so one
can shoot deer I suppose
and I can't see Obama saying "let the public eat cake". On the other
side of the coin, if the public is
not paid enough to buy the products that they make it becomes a
question of living or dying, your choice!
Do you think that hams will come to the aid of the government in a
case of crisis?
I think we should let this thread die before we are accused of
sedition
Regards
Art

5343. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 01:13:48 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ghkgob$k0s$1@news.jpl.nasa.gov>
Source record: 19217
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jeff Liebermann wrote:
>
> Good point, but that's not what I had in mind. I was aware of the
> problem and suggested that the power control be run by a micro. The
> algorithm needs to be worked out, but basically, the weakest signal
> sets the power level. The range of power adjustment also will not be
> huge or large enough to have much of an effect on distant stations.
> Our current 60 watt amplifier might have the power output reduced to
> about 20 watts or 4.5dB power reduction. That's less than one S-unit
> and probably wouldn't be noticeable even by distant stations. However,
> it will make a huge difference in power consumption and battery
> operation run time.

Would it? A lot of amplifiers don't change their power consumption all
that much, especially if they're designed for saturated operation (i.e.
if you reduce the input drive, they either distort, or drop into linear
mode and dissipation goes up).

if you have an amplifier designed for variable power output, then what
you say might be a good idea.

5344. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 02:40:31 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <loCdnS4u8ZczR6DUnZ2dnUVZ_judnZ2d@earthlink.com>
Source record: 19218

Hmmm... never been there???

-- Pete K1PO

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:ghjsn4$9k6e$1@tr22n12.aset.psu.edu...
> Richard Clark wrote:
>
>> ï¿½rthur, while rooting in the library stacks of an ancient university
>> located on the banks of a great (but not grand) lake,
>
> That would be good old Miskatonic U in Arkham?
>
> - 73 d eMike N3LI -

5345. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 02:42:14 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <EO-dndl5fKKPRqDUnZ2dnUVZ_o3inZ2d@earthlink.com>
Source record: 19219

John:

[snip]
> I think investing some time with this math (it's not all that difficult)
[snip]

Agreed!

[snip]
> will provide one with insight into the concept of polarization and perhaps
> head off some misconception. If anyone is interested and has Mathcad,
> I've got a worksheet that allows one to vary these parameters, plots the
> resulting ellipse (or circle or line) and also calculates ellipticity
> (axial ratio) and eccentricity. Sincerely, and 73s from N4GGO,
>
> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337
[snip]

Thanks John!

-- Pete K1PO

5346. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 02:43:20 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <8t6dnRPFH-XJRqDUnZ2dnUVZ_qTinZ2d@earthlink.com>
Source record: 19220

Dave:

[snip]
"Dave" <dave@dave.dave> wrote in message
news:493d32bc$0$31172$bd467cd0@news.dslextreme.com...
> J. B. Wood wrote:
>
>> I think investing some time with this math (it's not all that difficult)
>> will provide one with insight into the concept of polarization and
>> perhaps
>> head off some misconception. If anyone is interested and has Mathcad,
>> I've got a worksheet that allows one to vary these parameters, plots the
>> resulting ellipse (or circle or line) and also calculates ellipticity
>> (axial ratio) and eccentricity. Sincerely, and 73s from N4GGO,
>>
> All I have to know is that Circular Polarization always helps when one end
> of the path is prone to random polarizations, even with the 3 dB power
> loss.
[snip]

Yep, CP is good!

No matter how it is generated...

-- Pete K1PO

5347. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 02:47:17 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <l9CdnR-YncrcQaDUnZ2dnUVZ_vOdnZ2d@earthlink.com>
Source record: 19221

[snip]
> A patch antenna, circularly polarized, mounted at the end of a
> motor shaft, rotating in the opposite direction of the polarization...
> .... at a speed equal to the frequency...
>
> Does the polarization "unravel" and emit a linear, non-rotating
> polarization ?
[snip]

Ype that's exactly what would happen!

[snip]
> Is this the sort of principle that you were trying to convey ??
[snip]

Yeah, you've got it man!

[snip]
> If this is the case, any discrepancy in the motor, say 1 hz out of
> 10 Mhz , would result in an Efield rotating at a 1 hz rate.... and
> the
> receiving antenna would have to be very very very long in order
> to fully receive the polarized wave..... I think....
>
> And if the motor shaft and the frequency were identical, the Efield
> would be linear, stable, and non-rotating.....
[snip]

I can see that you did not find that so hard to "grok". Good work man!
Thanks!

[snip]
> This is getting beyond my personal antenna expertise, but I still find
> it
> interesting..... Please pardon my lack of understanding, ... if I
[snip]

Andy! No problem you have it... there is no lack on your part.
Fortunately
you do not seem to be encumbered by convention. Your understanding is
"right on"!

-- Pete K1PO

5348. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 02:58:23 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <yZKdnagk6rVGQ6DUnZ2dnUVZ_uKdnZ2d@earthlink.com>
Source record: 19222

Roy:

[snip]
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:98SdndIksOi97qHUnZ2dnUVZ_qPinZ2d@posted.easystreetonline...
> Something just occurred to me. I did get to thinking.
>
> My previous answers were wrong.
[snip]

Yep, I thought as much...

[snip]
> Peter's spinning antenna wouldn't produce a circularly polarized wave (as
> universally defined) even if it was synchronous with the wave frequency.
> As I've said, a circularly polarized wave has constant E field amplitude;
> Peter's wave would have a time-varying amplitude. If it were synchronous,
> the nulls and peaks would always occur at the same places in the rotation
> cycle, so they would occur at fixed angles relative to a rotational
> reference point. If non-synchronous, the nulls and peaks would rotate at
> the beat frequency.
[snip]

The problem is... that most "conventional" code and theory, e.g. NEC
does not allow for antennas in motion. These theories and computer
codes/algorithms are based upon a static steady state solution of the
Maxwell/Heaviside equations... i.e. E is a "fixed" phasor rather than
an oscilating waveform.

[snip]
> It seems to me that the way to mechanically generate a circularly
> polarized wave would be to rotate a source of *static* E field, for
> example, a short dipole with constant applied DC voltage at the feedpoint.
[snip]

Hmmm... restricting that dipole to a "static" source is really far too
restrictive. This assumption likely results from the assumption
that E is a sinusoidal steady state value rather than a dynamic
(transient) wave.

[snip]
> That should produce a circularly polarized wave with the frequency being
> the rotational frequency of the dipole. At any point in space, the E field
> would change with time, and would propagate, and it would look exactly
> like a circularly polarized wave broadside to the rotation plane.
[snip]

Yes, but E is not "fixed" in time, it is the magnitude of an oscillating
phasor!

A DC phasor would not propagate. Of course!

[snip]
> If the scheme works and radiation is occurring, then power must be going
> into the antenna, which in turn means it's drawing current that's in phase
> with the applied voltage. When stopped, no current will flow, but when
> rotating, it does. So how does the antenna know it's rotating? How about
> this -- if you instantaneously move the antenna into some position, a
> static E field appears there, and propagates outward at the speed of
> light. Closer in than the leading edge of the propagating wave, the field
> is static. When we rotate the dipole to a new position, it moves through
> the field from its previous position, which induces a current in it. Hence
> the current. It's fundamentally a generator, with the field being in the
> air.
[snip]

Yes that would be the case if the rotating antenna was excited with DC,
however that is not necessarily the general case.

In general the "center" frequency or "carrier" frequency may be any
arbitrary frequency, down to and including DC. Maxwell's/Heaviside's
equations hold for all frequencies from zero (DC) to infinity.

[snip]
> I'd be willing to bet a moderate sum that if you did apply a DC voltage to
> a dipole and rotated it, you'd see an alternating current with a frequency
> equal to the frequency of rotation, and a circularly polarized wave
> broadside to the antenna.
[snip]

Wow! Roy.... you are taking a big risk here. What is the (exact) value of
that
"sum"?

[snip]
> I suspect that the current and the radiated field increase in amplitude
> with rotational speed, so you might have to get it going really fast
> before you can detect the effects.
>
> Now there's some food for thought.
>
> Roy Lewallen, W7EL
[snip]

Agreed! Hey... not many are able to "think outside the envelope", but I
do believe we are getting to the edge...

-- Pete K1PO

5349. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 03:04:30 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <J_OdnUp1xaTXfaDUnZ2dnUVZ_vGdnZ2d@earthlink.com>
Source record: 19223

[snip]
"christofire" <christofire@btinternet.com> wrote in message
news:qPqdnb02R7Du2qDUnZ2dnUVZ8j-dnZ2d@bt.com...
.
.
.
> A source of endless coffee-time debates where I used to work! No, the
> current into the rotating dipole would be DC and the means of rotation at
> the radio frequency would take the place of the 'transmitter'. If the
> current were alternating then the radiated electric field would be
> discontinuous but it isn't; it has constant magnitude. Between two such
> systems separated by many wavelengths, if there were no anisotropic
> material around, reciprocity would apply and a means of conveying DC by
> radio would be created!
[snip]

Perhaps, but.... the intersting case is when the "center" frequency is
somewhat
higher than DC.

[snip]
> However, intriguing and amusing as this analogy might be I wonder if it
> really has any practical value.
[snip]

T. J. Watson, the early CEO of IBM is reputed to have stated, "I see no real
requirement for more than 7-10 computers in this world!"

[snip]
> For real mechanical rotating parts the frequency would be limited to
> something rather low like the tens of kHz at which Alexanderson
> alternators work, and then the wavelength would be so long that it would
> probably be impossible to construct an efficient radiator*. The quickest
> moving antenna I've encountered was a commutated plasma antenna, using a
> construction similar to a 'dekatron' tube, but even then the length of the
> radiator was so small that SHF would be needed to achieve worthwhile
> radiation efficiency* and the maximum commutation speed was limited to a
> few MHz by the time it takes to establish the plasma at each step in the
> commutation cycle.
[snip]

What if you could electronically rotate antennas at any desried
(practically) high frequency?
Consider, for example phased arrays driven through elecronically controlled
phase shift
networks. Would that work?

[snip]
> *(Of course, the conventional principles of radiation resistance vs. loss
> resistance may need 'massaging' to bring them into line with the concept
> of creating transverse waves by rotating a dipole connected to a battery!)
[snip]

Rotating dipoles do not have to (only) be connected to batteries. They
could
be connected to signal generators operating at 3.765MHz, no?

-- Pete K1PO

5350. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 03:12:38 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <MN6dnbGojKivf6DUnZ2dnUVZ_hydnZ2d@earthlink.com>
Source record: 19224

[snip]
> Hi Chris
>
> I am not smart enough to analyze the effects of rotating a dipole with DC
> applied to it, but I have doubts that it would create a "far field". Did
> you guys ever figure out how the "DC dipole" generates a Far Field?
>
> Jerry KD6JDJ
[snip]

Jerry... no one on this thread, except perhaps Roy, has restricted the
"frequency" of
the signal applied to said mechanically rotating dipole to be zero, f = 0!!
In fact, in principle,
the frequency of the signal applied to the rotating dipole could be any
desired frequency
selected from the frequency range minus infiinty to plus infinity.

-- Pete K1PO

5351. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 03:15:04 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <8bidnZfJBdZZf6DUnZ2dnUVZ_tjinZ2d@earthlink.com>
Source record: 19225

Roy:

[snip]
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:a_adnQoU-bp6x6DUnZ2dnUVZ_rTinZ2d@posted.easystreetonline...
> Jerry wrote:
.
.
.
> The whole thing is just a mental exercise to help gain a better
> understanding of the nature of a circularly polarized field.
>
> Roy Lewallen, W7EL
[snip]

I agree that it is an exercise to help gain a better understanding of
circular polarization, but...

It is not just a "mental" exercise.

I believe that hhere are practical applications of this phenomena!

FWIW....

-- Pete K1PO

5352. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 03:23:25 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <5aydnYkv2eYkeaDUnZ2dnUVZ_sWdnZ2d@earthlink.com>
Source record: 19226

Jerry:

[snip]
> I will respectfully submit that a car alternator doesnt so much spin a
> magmetic field as it Rotates the field past a conductor. A car
> alternator is a lumpy magnetic field that is spun past stationary coils of
> wire. There is no misunderstanding about inductive coupling of close by
> conductors. My question related to far field "radiation". I am aware
> that my understanding of far Field radiation is very limited, so i dont
> propose that i have answers. I do have question about generating a far
> field by spinning a DC excited dipole.
>
> Jerry KD6JDJ
[snip]

There are many practical examples extant of such "rotating" fields...

Consider the rotating field generated within the stator of a "shaded pole"
electric motor, or perhaps
the roing field of a synchronous electric motor.

However the rotating electromagntic fields of AC electric motors have
conventionally been
synchronized with the frequency (60Hz in North America) of the exciting
waveform. That
commercial application does not preclude applications wherein the rotating
field of an AC
motor is not synchronous with the exciting prime mover. For example,
imagine a motor
wherein the stator magnets are rotated by a separate mechanical device,
bicycle pedals?,
that pulls the rotor around at a frequency not synchronized with the stator
prime mover
excitation. Just because there is no real commerciall application for such
a motor in
today's markets, does not mean that such is not useful for some other
purpose.

Open minds create new applications

-- Pete K1PO

5353. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 03:26:20 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <JKKdnaukctD1eKDUnZ2dnUVZ_qjinZ2d@earthlink.com>
Source record: 19227

Jerry:

[snip]
> Tell me, did you guys ever decide that there would be a far field
> generated by the spinning dipole with DC on it? I dont refer to the
> inductive field.
> Maybe there is no way to separate Far Field from any condition where an
> inductive field is generated.
>
> Jerry KD6JDJ
[snip]

If the answer for DC was no, then....

What is your answer for a spinning dipole with 0.0001Hz on it, or say 1,
000, 003.33333 Hz on it?

Food for thought?

-- Pete K1PO

5354. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 03:28:37 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <y5GdnY5rX-lseKDUnZ2dnUVZ_rLinZ2d@earthlink.com>
Source record: 19228

Jerry:

[snip]
"Jerry" <jerrymartes@verizon.net> wrote in message
news:CCe%k.663$7I6.241@nwrddc01.gnilink.net...
.
.
.
> Yeah, I never ascribed any practical use to the "CP by spinning". But,
> there are some fundamentally good thoughts generated here. For instance,
> I can easily see why two dipoles rotating at the same rate and rotational
> direction will couple *nothing*. Thats like trying to receive RHCP with
> a LHCP antenna.
> I have lived a long time without understanding Poynting and Maxwell
> (almost 100 years older than me), I wouldnt want to change that now.
>
> Jerry KD6JDJ
[snip]

Hey, the shareholders in the pony express company never ascribed any
practical use to the internal combustion engine...

-- Pete K1PO

5355. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 03:33:16 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <ytydnWSResuaeqDUnZ2dnUVZ_sWdnZ2d@earthlink.com>
Source record: 19229

Jerry:

[snip]
> A spinning dipole would require more power to spin it if it had DC on it
> than if it had no DC on it. And, actually, it would require no power to
> keep the dipole spinning since there would be that theoritical vacuum
> around it. But, once you apply the DC, power would be required to keep
> it spinning. That amount of added power would be determined by the
> amount of DC applied. Do you confirm that this is true?
> My question relates to my ignorance about what there is in the "vacuum"
> to cause "drag".
>
> Jerry KD6...
[snip]

Roy has got you guys hung up on DC!!!

What is all the magic in DC. DC is just one of a double infinity of
frequency values that
could be applied to a spinning antenna!

This direction of investigation is similar to Cecil Moore's assertion that
there are no
reflections at DC.

There is nothing special about DC, it's just another of the infinity of
excitation
frequencies available.

Hey! Maxwell's/Heaviside's equations do not restrict excitations to any
specific
frequency.

There is no special status assigned to f = 0.0, get over it!

How about f = 0.0000003333 Hz, instead of DC, what then?

-- Pete K1PO

5356. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 04:12:47 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <r-adnbrpUp6hbaDUnZ2dnUVZ_gadnZ2d@giganews.com>
Source record: 19230
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

raypsi wrote:
> Hey OM
> What size gun did you has a 240watt?
[snip]
> 73 OM
> n8zu

Weller manufactures the following of that type of solder guns:

8200 = 140/100W
D550 = 260/200W
D650 = 300/200W

See http://www.cooperhandtools.com/brands/weller/index.cfm

I have an 8200. They make plain copper and iron-clad copper tips (the iron-clad tips last longer). The beauty is that, when your only tip goes open and the local hardware store is closed and you HAVE TO solder something, 12ga solid copper wire can be formed into a tip. :)

vy 73,
Bryan WA7PRC

5357. Re: NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 04:40:35 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <X4SdnV68toJNa6DUnZ2dnUVZ_r3inZ2d@earthlink.com>
Source record: 19231

Jerry:

[snip]
"Jerry" <jerrymartes@verizon.net> wrote in message
news:XpF_k.227$c35.45@nwrddc02.gnilink.net...
.
.
.
> I thought the FF Tab data in EZNEC was very informative for analyzing the
> circularity of the antennas i tried to analyze with EZNEC. Perhaps you
> know of some additional data that would assist me in better understanding
> the polarization of these antennas. Tell me what is left out of Roy's
> data in EZNEC.
>
> Jerry KD6JDJ
[snip]

Apparently nothing!

Jerry it seems that I have an older version of EZNEC, a version that did not
support CP outputs.

I just contacted Roy todayh and ordered the latest upgrade to EZNEC +
version 5 which
Roy tells me supports CP outputs.

But... one thing about NEC is that it does not support antennas in motion.
NEC and all of the commercial
software that is derived from this (US Taxpayer supported code, God Bless
the US Taxpayer!) do not
support antennas in motion. Rather NEC supports only static antennas in
steady state excitation.

There may be some "multi-physics" programs/software out there that can
calculate radiated fields
for antennas in motion, but I am not aware of them. Of course I'm not an
expert and I have not done any
research on this topic and so I don't personally know of any programs that
can produce
CP outputs for antennas that are in motion, specifically symmetric antennas
that are rotating
at some arbitrary angular rotation velocity with respect to their axis of
symmetry.

BTW... Do you happen to know of any programs/software that can
simulate/emulate antennas in motion?

Just asking...

-- Pete K1PO
-- Indialantic, By-the-Sea, FL

5358. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 05:02:18 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <WXm%k.5708$mw2.3205@bignews4.bellsouth.net>
Source record: 19232
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I still have a dual power (500/250) model Weller gun that a friend bought while we were in the Air Force. He took it out of the package and dropped it on the floor accidentially. A tiny piece of non functional plastic busted off the top, so he threw it in the trash can (he was having a bad day). I pulled it out of the trash, plugged it in and showed him that it still worked fine. I then offered it back to him. He wanted no parts of it. I'm still using it to this day. That 500 watt heating range actually comes in handy now and then.

Ed Cregger

"Bryan" <bryan.swadenerNOSPAM@comcast.net> wrote in message
news:r-adnbrpUp6hbaDUnZ2dnUVZ_gadnZ2d@giganews.com...
> raypsi wrote:
>> Hey OM
>> What size gun did you has a 240watt?
> [snip]
>> 73 OM
>> n8zu
>
> Weller manufactures the following of that type of solder guns:
>
> 8200 = 140/100W
> D550 = 260/200W
> D650 = 300/200W
>
> See http://www.cooperhandtools.com/brands/weller/index.cfm
>
> I have an 8200. They make plain copper and iron-clad copper tips (the
> iron-clad tips last longer). The beauty is that, when your only tip goes
> open and the local hardware store is closed and you HAVE TO solder
> something, 12ga solid copper wire can be formed into a tip. :)
>
> vy 73,
> Bryan WA7PRC
>

5359. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 05:47:18 UTC
From: JB <nospam@goofball.net>
Message-ID: <GDn%k.655$c35.575@nwrddc02.gnilink.net>
Source record: 19233

>
> Actually, the technical aspects and military-ization of our police has
> changed the terrain. Now you need the equiv or road-side-bombs used in
> Iraq, flame throwers to burn them in their Kevlar, armor piercing
> ammunition, small surface to surface missiles, etc. ... not impossible,
> just more difficult.
>
> We now need a civilian group to oversee the
> president/government--perhaps one which is militia based would be
> appropriate. It certainly is time this surfaces to the realm of
> rational discussion ... they are no longer OUR servants! We simply have
> to get their attention and focus back ...
>
> Regards,
> JS

I suppose in the cities you have different views of the police but
without money
they then become part of the public, good or otherwise as in New
Orleans,
On the other hand gun sales are sky rocketing in the Midwest so one
can shoot deer I suppose
and I can't see Obama saying "let the public eat cake". On the other
side of the coin, if the public is
not paid enough to buy the products that they make it becomes a
question of living or dying, your choice!
Do you think that hams will come to the aid of the government in a
case of crisis?
I think we should let this thread die before we are accused of
sedition
Regards
Art

Toilet bombs are more surgical. Catch em where they go.

Isn't sedition what we do to get ready for an election?
But then you and I don't have the Millions and Billions
to overthrow the Government with, so at best we are just
nuisance.

Actually the cops might sooner or later realize they are just
an army dangling off the end of a phone line ready to roll for
the biggest liar and might just be doing someone else's dirty
work. What's most worrisome is the ones that decide who
gets the Gov. jobs or the media jobs in the first place.

That's where we have been underestimating the enemy.
If some people want to get together to take over something,
they can pretty much do it all over people who are trying to
be fair about things.

Violent revolutions don't happen without lots of people
running around with nothing better to do, but technology
has a way of putting people way out of reach of such
unpleasantness. This is probably the biggest reason
things never progressed to a violent revolution like China
or Vietnam and capitalism never lost it's place. A well
disciplined military probably has lots to do with that too.

Obama has been saying "let them eat cake" for a long
time. I wonder if anyone caught his Dec 2 governors
meeting on the economy where he tells them "...change
is going to come from YOU, not from Washington". I was
hoping he would at least be willing to learn but the voters
have a lot to learn for sure.

5360. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 06:00:02 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <46197b73-9cd5-4ba2-8763-f04c769fa552@l39g2000yqn.googlegroups.com>
Source record: 19234

On Dec 7, 7:55 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Sun, 7 Dec 2008 15:11:33 -0800 (PST), Ginu <osheik...@gmail.com>
> wrote:
>
> >My current result doesn't
> >make sense because the power required to transmit at 250 kpbs for
> >Zigbee is less than the power required to reach the receiver at a
> >modest 300m away.
>
> This is your first and most significant clue to the failure of
> analysis, and it is very "path loss" oriented (the path loss
> differences for your two scenarios should be almost infinitesimal).
> The disparity in your computations are due to transcription error, or
> math error. You should have now been able to put that to rest.
>
> >Wouldn't adding to my path loss further deteriorate
> >my result? I'm trying to wrap my head around this.
>
> This is your confusion factor, and it relates to transcription error
> in the abstract: you are using the wrong formulas entirely regardless
> of the accuracy or correctness of arithmetic results.
>
> The greater part of discussion has focused on Shannon-Hartley issues
> which have their own application to the full mix of your original
> problem.
>
> Try unwinding the thread so that you are not trying to force a
> solution out of a broken premise. None of this really sounds like
> finding the missing decimal point, or the corrupted divisor is going
> to solve anything.
>
> If you think this is still path loss related, and you are showing
> results in actual implementation (bread-boarded hardware, on the
> bench); then you have to open up the discussion beyond the limited
> math to include the conventional problems of interference and
> multipath.
>
> 73's
> Richard Clark, KB7QHC

It is not an arithmetic problem and I have "put to bed" transcription
or math error. I am designing a multiple technology network. The only
one causing me problems is Zigbee. Where do you get this from:

> This is your confusion factor, and it relates to transcription error
> in the abstract: you are using the wrong formulas entirely regardless
> of the accuracy or correctness of arithmetic results.

I've talked to experts who have supported my claims. Unless you can provide me with more than just random conclusions, I may be able to get to the bottom of this. Otherwise, your posts have been much less than helpful.

5361. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 06:09:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghl228$cj5$1@news.albasani.net>
Source record: 19235

Art Unwin wrote:

> ...
> I suppose in the cities you have different views of the police but
> without money
> they then become part of the public, good or otherwise as in New
> Orleans,
> On the other hand gun sales are sky rocketing in the Midwest so one
> can shoot deer I suppose
> and I can't see Obama saying "let the public eat cake". On the other
> side of the coin, if the public is
> not paid enough to buy the products that they make it becomes a
> question of living or dying, your choice!
> Do you think that hams will come to the aid of the government in a
> case of crisis?
> I think we should let this thread die before we are accused of
> sedition
> Regards
> Art

You are right, if all goes well, we stop paying the crooks and they go home ... however ... if not ...

You will need the guns, IF the government has reason to hunt you, you will need the guns for food (you may have to learn to eat government officials!)--while you live off the land ... they are good, the guns.

But, doing a "Clint Eastwood" on a swat squad? Hmmm, show me?

However, knowing how to make explosives out of obtainable materials may make a person a "technical expert", indeed, it may make one a valid guru--something I have NOT seen in ages! Knowing that perchlorates exist in common bleach and how to use them as oxidizers, this is good! Knowing how to construct a flame thrower out of an air tank off a semi-truck, some tubing, a valve and bicycle pump, and able to use any fuel may just make one a desirable friend ... ya never know, ya just never know ... your best ally? An open mind!

One question which is always valid, "Are we men, or are we mice?" (Or, are we sheep, or are we free?) My father was a man (actually, a free man--and a Freemason) ... you will have to watch me and make up your own mind--as to myself ... :-)

But then, how do you know I am not just kidding? <evil-malicious grin>

When we see American Terrorists, we WILL know change is in the wind, let it be a good change ... and let them kick those whoosie mooselims butts!

Regards,
JS

5362. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 06:15:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghl2d3cif1@news.albasani.net>
Source record: 19236

JB wrote:

> ...
> Obama has been saying "let them eat cake" for a long
> time. I wonder if anyone caught his Dec 2 governors
> meeting on the economy where he tells them "...change
> is going to come from YOU, not from Washington". I was
> hoping he would at least be willing to learn but the voters
> have a lot to learn for sure.
>

Actually, your brain has turned to jelly from lack of use ... :-(

Everything comes from you and me, it a government of the people, by the people and for the people ...

Now, let's get to work, give 'em the bums rush, and get rid of this group of crooks! If Obama assists, good enough, if not, let him begone also.

Regards,
JS

5363. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 08:08:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l16sj4p4k9gejv0f4751hqagjbvveql998@4ax.com>
Source record: 19237

On Mon, 8 Dec 2008 22:00:02 -0800 (PST), Ginu <osheikh81@gmail.com>
wrote:

>Unless you can
>provide me with more than just random conclusions, I may be able to
>get to the bottom of this. Otherwise, your posts have been much less
>than helpful.

If multipath and interference fall into the category of random
conclusions.... You were wrapped around that axle more than two
years ago.

The search term of Zigbee and Ginu (enlarged to include your alias of
Omar Fink) fairly draws a portrait of someone wandering through a fog
of 3000 threads and postings. I can see why this has mystified you
for five solid months - you are out of your element.

You've been given every extrapolatable answer from across several
dozen outlets. As I suspected earlier, the simplest answer is that
Zigbee isn't designed to do what you expect of it. Roaming the planet
asking the same question is unlikely to provide any different outcome.

73's
Richard Clark, KB7QHC

5364. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 08:49:40 UTC
From: d_musicant@yahoo.com
Message-ID: <20081209034833.746$Xg@newsreader.com>
Source record: 19238
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

DaveC <me@bogusdomain.net> wrote:
> Looking for outdoor omni "whip" antenna for 2.4 GHz.
>
> Is there any reason to not go for the greatest gain antenna, given that
> cost is not too important (within reason)?
>
> There are scads of these on the 'net. I'm looking for someone who has
> experience with one or more of them and can make a recommendation for
> one.
>
> Thanks,

This antenna works great wit my laptop and desktop:

D-Link ANT24-0700 Antenna, 7db gain
http://dealnews.com/D-Link-7-d-Bi-Omni-Directional-Indoor-Wireless-Antenna-for-15-after-rebate-free-shipping/262642.html

--
-

5365. Re: WiFi antenna recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 08:54:51 UTC
From: d_musicant@yahoo.com
Message-ID: <20081209035344.902$Lu@newsreader.com>
Source record: 19239
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.internet.wireless

"Bill Kearney" <wkearney99@hotmail.com> wrote:
> > OK, time to clarify...
>
> You still don't describe what sort of connection you're trying to make.

I have this Comet antenna mounted on my roof and it works super!

http://www.wlanparts.com/product/GP-24/GP24_24GHz_15dbi_Omni_from_Comet.htm
l

--
-

5366. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 09:38:35 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <d1d682f3-4cb8-4158-8a69-07d9a2c14e11@a12g2000yqm.googlegroups.com>
Source record: 19240
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Dec 8, 11:12 pm, "Bryan" <bryan.swadenerNOS...@comcast.net> wrote:
> raypsi wrote:
> > Hey OM
> > What size gun did you has a 240watt?
> [snip]
> > 73 OM
> > n8zu
>
> Weller manufactures the following of that type of solder guns:
>
> 8200 = 140/100W
> D550 = 260/200W
> D650 = 300/200W
>
> Seehttp://www.cooperhandtools.com/brands/weller/index.cfm
>
> I have an 8200. They make plain copper and iron-clad copper tips (the

Hey OM

But can you wedge a center pin from an N connector in between the
electrodes of your 140watt gun (without a tip in the gun) and solder
in the center conductor of a piece of coax? hmmm?

73 OM

n8zu

5367. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 13:45:02 UTC
From: Jeff <Jeff@local.host>
Message-ID: <ghlsnk$4gh$1@aioe.org>
Source record: 19241

> I've been trying to wrap my head about this problem for days and can't
> seem to figure it out.
>
> Zigbee technology allows you to transmit at 250 kbps. I'm comparing
> the required power to transmit at that rate to the required minimum
> power based on the path loss equations to reach the minimum receiver
> sensitivity of the 802.15.4 physical layer for Zigbee of roughly -94
> dBm. Simple enough right?
>
> To analyze the required power to transmit at 250 kbps for Zigbee, I've
> just re-arranged the Shannon capacity formula of Rate = w * log_2 (1 +
> (Pt * G)/(w*N + I)). Here, w is the bandwidth, Pt is the transmit
> power, Pt * G is the received signal power, N is the white Gaussian
> noise and I is the sum of interference powers.
>
> For Zigbee, these values are as follows:
> w = 5 MHz
> N (in dB) = 10*log10(k) + 10*log10(T) where k is boltzmann's constant
> of 1.23E-23 and T is the temperature in Kelvin of 300 degrees. In
> Watts, N is approximately 3.6900e-021.
>
> I've assumed no interference at this stage, so I = 0. Simple enough so
> far right?
>
> So to calculate the required transmit power to reach a rate of 250
> kbps, I've just re-arranged this equation to yield:
> Pt = [2^(250 kbps/w) - 1]*(w * N + I)/G and plugging in the above
> values gives me a reasonable transmit power of 1.6 uW.

You seem to be missing the noise figure of the receiver in the calculation,
and making assumptions about the receiver noise bandwidth that may not be
correct.

> The reason I haven't talked about G yet is that I'm addressing it
> here. G is the channel quality (path loss) and is defined as follows:
>
> G(freq,D) = GrdBi+ GtdBi- 20*log10(4*pi*freq*d0/c) -
> 10*pathLossExponent*log10(D/d0) (in dB)
>
> I'm using unity gains so GrdBi = GtdBi = 0 dBi. Other parameters are:
> freq = 2.4 GHz
> d0 = 1m as the reference distance
> c = 3.0 x 10^8
> pathLossExponent = 2, and
> D = 500 metres

>
> Hence, G (in Watts) * Pt is the received signal power. G(2.4E9, 500)
> is the path loss transmitting at 2.4 GHz a distance of 500m away. G
> (2.4E9, 500) = -94.0254 dB

-96db Seems about right for *free space* path loss.

> Now the first thing that I mentioned was the receiver sensitivity for
> Zigbee of -94 dBm, Analyzing G (in dB). The required transmit power
> considering this path loss is easily calculated as:

If you know the rx sensitivity is -94dBm at the data rate you require, why go through all of the Shannon stuff, it is not revenant. You have been told that the Rx sensitivity is -94dBm use that figure.

> -94 dBm = P_required + G(2.4E9, 500)
>
> P_required is then easily calculated as -94 dBm - G(2.4E9, 500) =
> 0.0254 dBm. This translates to a transmit power of 1 mW. This required
> power is LARGER than the maximum permissible power to transmit at 250
> kbps, which is the maximum data rate for Zigbee. So how does this make
> sense?

Perhaps because most quoted ranges for Zigbee are in the order of 50m not 500m????

So you have an rx sensitivity of -94dBm and a path loss of 94dB, so with a tx power of 0dBm you have a receiver operating at its sensitivity limit. So you will have a link with a Bit Error Rate of whatever the manufacturer quoted the -94dBm sensitivity figure at (10% BER?????).

> However, 1mW happens to be the maximum transmit power of Zigbee of
> roughly 0 dBm,

Exactly 0dBm actually

> Testing other distances, say 300m, we get a maximum transmit power Pt
> = 5.9181e-007 = 0.59 uW to transmit at 250 kbps, but a P_required =
> -4.41 dBm = 3.6211e-004, which is > our maximum transmit power Pt.

How is -4.41dBm greater than 0dBm (1mW) ?? It is about 0.362mW.

Your maths is quite simple; you have the rx sensitivity, and can work out the path loss, thats all you need to do, take one from the other and you have the required tx power.

Of course your formula only gives the free space path loss, reality is likely to be considerably worse!!!

73
Jeff

5368. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 15:52:00 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <5292332f-af39-4560-91b4-a556ba28779e@l39g2000yqn.googlegroups.com>
Source record: 19242
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Dec 8, 4:13 pm, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 7 Dec 2008 15:52:21 -0800 (PST), JIMMIE
>
> <JIMMIEDEE...@YAHOO.COM> wrote:
> >Tim, I solder these on the N connectors all the time with no problems.
>
> In past life, in a land far far away (Smog Angeles), I once worked for
> and later ran a comm shop. At the time, UG-21/U male N connectors
> were commonly available and in fashion. Our 460MHz repeater systems
> were full of them so I had plenty of experience in soldering,
> assembling, and repairing these connectors. I don't want to remember
> all the 25 mile joy rides up the fire road to Santiago and Mojeska Pk
> just to fix a problem caused by a flakey UG-21/U coax connector. Well,
> to be totally accurate, I had equal problems with soldered PL-259
> connectors. I fought these problems for years because I assumed there
> was no better way.
>
> Meanwhile, I was also involved in an avionics shop (on the business
> end). They were slowly switching from soldered to crimp type
> connectors. The owner insisted that is was worth the effort because
> the number of connector failures and rework had approached zero with
> the crimp type. I became a believer overnight.
>
> Many years later, I designed a few marine radios for the USCG. The
> specs would tolerate either solder or crimp. So, I asked which they
> preferred. Crimp was the answer, because they never could teach the
> techs how to properly solder a connector, while the crimper always
> does it right. All our radios used crimp connectors, even on the
> inside.
>
> Roll forward more years and we have 10Base2 and 10baseT ethernet. The
> former uses UG-21/u N connectors. The latter uses BNC. The nice
> yellow coax cable with the flakey connector was a constant source of
> headaches. The crimp type BNC's never failed (unless abused).
>
> I'm not sure what to suggest. With skill UG-21/u can be made to work.
> With luck, they can even be kept working in the field. However, I'll
> take crimp type any day, especially after many year of experience
> dealing with both.
>
> --
> Jeff Liebermann   je...@cruzio.com
> 150 Felker St #D   http://www.LearnByDestroying.com

> Santa Cruz CA 95060http://802.11junk.com
> Skype: JeffLiebermann   AE6KS   831-336-2558

I dont have a problem with crimp on terminals just that where I work someone has always borrowed the crimp tool just when I need it. I always have my trusty soldeing gun handy, no one wants to borrow it. For me one is as easy and works as well as the other. The biggest problem I have with the non crimp type is the shield is eventually cut from the connector. The ones at work that are disconnected weekly for preventive maintenance have only lasted about 20 years before needing the connectors replaced, BUMMER. The crimp-on type are not without their problems. I was doing an inspection after some equipment installation and was able to pull the the ends off of 20 BNC connectors. The inspection stopped at that point and the decision was made to reaccomplish all of the connectors, about 200 of them. The installer was not happy. The problem turned out to be a bad crimp tool. Like the solder-ons if done properly they are both reliable connections.

Jimmie

5369. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 16:24:56 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <ghm64p$ag44$1@tr22n12.aset.psu.edu>
Source record: 19243

Peter O. Brackett wrote:
> Jerry:
>
> [snip]
>> A spinning dipole would require more power to spin it if it had DC on
>> it than if it had no DC on it. And, actually, it would require no
>> power to keep the dipole spinning since there would be that
>> theoritical vacuum around it. But, once you apply the DC, power
>> would be required to keep it spinning. That amount of added power
>> would be determined by the amount of DC applied. Do you confirm that
>> this is true?
>> My question relates to my ignorance about what there is in the
>> "vacuum" to cause "drag".
>>
>> Jerry KD6...
> [snip]
>
> Roy has got you guys hung up on DC!!!
>
> What is all the magic in DC. DC is just one of a double infinity of
> frequency values that
> could be applied to a spinning antenna!
>
> This direction of investigation is similar to Cecil Moore's assertion
> that there are no
> reflections at DC.
>
> There is nothing special about DC, it's just another of the infinity of
> excitation
> frequencies available.
>
> Hey! Maxwell's/Heaviside's equations do not restrict excitations to any
> specific
> frequency.
>
> There is no special status assigned to f = 0.0, get over it!
>
> How about f = 0.0000003333 Hz, instead of DC, what then?
>
> -- Pete K1PO

DC is just AC with a very low frequency. After all you have to turn it
on some time and some day it will turn off.

John Passaneau W3JXP

5370. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 16:52:25 UTC
From: richardharrison@webtv.net
Message-ID: <8995-493EA249-1809@storefull-3253.bay.webtv.net>
Source record: 19244

Jeff wrote:
"- 96 db seems about right for "free space" path loss."

96 seems abour the right number for a path loss at 2400 MHz at a distance of 500 meters. To nit pick, -96 db loss is a gain.

I worked a few years with Pete Saveskie who wrote a book he called "Propagation". It contains a formula for free space loss: 23 db is lost in the first wavelength from the transmitter and after that 6 db loss is added every time the distance is doubled.

With Pete`s formula, you would lose the 23 db at a distance of 0.125 meter, and at a distance of 512 meters you would lose a total of 95 db. That`s close enough agreement for me.

Best regards, Richard Harrison, KB5WZI

5371. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 17:00:16 UTC
From: JB <nospam@goofball.net>
Message-ID: <Aux%k.848$7I6.126@nwrddc01.gnilink.net>
Source record: 19245

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ghl2d3cif1@news.albasani.net...
> JB wrote:
>
> > ...
> > Obama has been saying "let them eat cake" for a long
> > time. I wonder if anyone caught his Dec 2 governors
> > meeting on the economy where he tells them "...change
> > is going to come from YOU, not from Washington". I was
> > hoping he would at least be willing to learn but the voters
> > have a lot to learn for sure.
> >
>
> Actually, your brain has turned to jelly from lack of use ... :-(
>
> Everything comes from you and me, it a government of the people, by the
> people and for the people ...
>
> Now, let's get to work, give 'em the bums rush, and get rid of this
> group of crooks! If Obama assists, good enough, if not, let him begone
> also.
>
> Regards,
> JS

Typical red herring argument. When you don't have a answer, then proceed to insults and character assassination. Gee, wasn't Obama from Al Capones neck of the woods? I mean how do you beat up people for votes if you don't have their unions and livelihood in the palm of your hand. Oh! that's right, Obama's not a crook, he's a LAWYER! His favorite idol is Saul Alinsky (who seems to be the hero of the party since so many quote him) who actually worked for Al Capone! Then there's his "spiritual advisor" that he had to distance himself after 20 years of EXPLOITATION of race and class divisions.

Republicans keep harping about conservative "values" like personal responsibility and not killing babies for the sake of convenience. Democrats think of the little people as votes and "manure for the revolution" and that its stupid to go down with your team when you can just "throw someone under the bus" (the vernacular of ACORN).

The only difference I see is one that is shamed into following their own rules and another who simply changes the rules or the judges.

see: http://answers.yahoo.com/question/index?qid=20070903185000AAwKH7l

5372. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 17:10:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghm8pa$24d$1@news.albasani.net>
Source record: 19246

JB wrote:
...

Like I say it is a no-brainer, the forefathers gave us a heavy responsibility:

Declaration of Independence
[Adopted in Congress 4 July 1776]
The Unanimous Declaration of the Thirteen United States of America

When, in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.
...

As true Americans, we are ordered to take back and restore a sane and just government when our public servants forget their places ... end of story.

Regards,
JS

5373. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 17:22:09 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <5s8tj4p6njavr9eg05f4jhdq18f7qsnj3i@4ax.com>
Source record: 19247
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Tue, 9 Dec 2008 07:52:00 -0800 (PST), JIMMIE <jimmie68@gmail.com>
wrote:

>I dont have a problem with crimp on terminals just that where I work
>someone has always borrowed the crimp tool just when I need it.

I know the problem. Tools are expensive. However, there are a
variety of cheap replacements that seem to work well for me:
<http://802.11junk.com/jeffl/antennas/Misc/slides/crimpers.html>
I have several sets of these that cover everything from RG-188 to
LMR-400 size coax. There's also one for LMR-600 but it was being
borrowed when I took the photo. (Yes, it came back eventually). I
think I paid about $35/ea for the tools in the photo. At that price,
spares are an option.

>I
>always have my trusty soldeing gun handy, no one wants to borrow it.

When I was working on the bench, I had my soldering iron bolted to a
large block of wood to discourage the borrowers. My biggest problem
was someone trading or outright stealing my Weller solder tips. I
kept my supply locked up and hidden.

>For me one is as easy and works as well as the other.

I beg to differ. Many of my connector installs had to be done in the
field, usually at a mountain top repeater site or up on a tower. The
problem was that the wind would cool just about any soldering iron,
gun, or even a propane torch, sufficiently to cause problems. Same
with the USCG vessels, where the coax was snaked through the mast, and
the connector had to be crimped at the top in the field. The only
place where I would effectively solder a connector was inside a
building. I do recall one day on a tower, when I draped my jacket
over my head, and soldered some connector by flashlight, but I don't
recommend doing that.

>The biggest
>problem I have with the non crimp type is the shield is eventually
>cut from the connector.

Agreed. I have the problem with my test cables. A good strain relief
is a big help at immobilizing the shield. Pomona jumper cables have
molded plastic strain relief's. I use clear shrink tube (so I can see
when things are starting to come apart). In general, it's nut much of
a problem as I have far more UG-88/u BNC plugs fall apart than the
crimped variety.

>The ones at work that are disconnected weekly
>for preventive maintenance have only lasted about 20 years before
>needing the connectors replaced, BUMMER.

Weekly? 52 weeks per year times 20 years is over 1000 connector cycles. That's quite a few. I suspect the ears on the BNC jacks will also be worn. I'm not surprised that they're failing. I did some Googling and found specs for UG-88/u connectors ranging from 500-1000 mating cycles. Methinks you're at the upper limit of the lifetime.

>The crimp-on type are not
>without their problems. I was doing an inspection after some equipment
>installation and was able to pull the the ends off of 20 BNC
>connectors. The inspection stopped at that point and the decision was
>made to reaccomplish all of the connectors, about 200 of them. The
>installer was not happy. The problem turned out to be a bad crimp
>tool. Like the solder-ons if done properly they are both reliable
>connections.

Bummer. At one employer, we had an Amp-o-lectric crimping machine. Someone found that it was possible to mis-adjust the tool to produce defective crimps and proceeded to explore the possibilities. I was blessed with dozens of field failures and a recall because nobody had thought to run a pull test on the crimped connections. Everyone assumed the machine could do no wrong. However, that's the big advantage of a crimped connection... it's consistent. I can't get that kind of consistency from soldered connectors, especially those done in the field.

Incidentally, I've seen more damage done by the razor blade coax stripping tools, than by the crimping or soldering. One nick in a solid center conductor and the center pin connection falls apart inside the connector. I try to use a thermal wire stripper, but that also takes some skill.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5374. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 17:24:10 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ghm9jqfvb1@news.jpl.nasa.gov>
Source record: 19250

Richard Harrison wrote:
> Jeff wrote:
> "- 96 db seems about right for "free space" path loss."
>
> 96 seems abour the right number for a path loss at 2400 MHz at a
> distance of 500 meters. To nit pick, -96 db loss is a gain.
>
> I worked a few years with Pete Saveskie who wrote a book he called
> "Propagation". It contains a formula for free space loss: 23 db is lost
> in the first wavelength from the transmitter and after that 6 db loss is
> added every time the distance is doubled.
>
> With Pete`s formula, you would lose the 23 db at a distance of 0.125
> meter, and at a distance of 512 meters you would lose a total of 95 db.
> That`s close enough agreement for me.
>
> Best regards, Richard Harrison, KB5WZI
>

Also, a lot of published descriptions of various communications schemes (e.g. Zigbee, 802.16e) might give a maximum data rate and a maximum range, but that doesn't mean you get both at the same time. The former is often related to the system bandwidth, the latter to the minimum data rate and transmitter power.

I think you can get a ballpark feel pretty quick.. use the free space path loss (in whatever form you like). Calculate required receiver power as
-174 dBm + 10log(datarate in bps)+ 3 + receiver NF. (use 2dB for NF if you like)

Add path loss to required receiver power, and that's what you'll need for EIRP from the transmitter.

Yes, assumes isotropes, and ignores coding gains, etc. But you'll be within 10dB or so, and that's enough to know if you're even in the ballpark.

If you do the calculations and you come up with a required transmit power of +50dBm (100W), and you're thinking small battery powered, you know it ain't gonna work. If you come up with +10dBm, and battery powered is the goal, you're in the ballpark, and THEN you can start thrashing through the more detailed modeling.

5375. Re: NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 17:29:06 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ghm9t2ilb1@news.jpl.nasa.gov>
Source record: 19101

Peter O. Brackett wrote:
> Jerry:
>
> [snip]
> "Jerry" <jerrymartes@verizon.net> wrote in message
> news:XpF_k.227$c35.45@nwrddc02.gnilink.net...
> .
> .
> .
>> I thought the FF Tab data in EZNEC was very informative for analyzing
>> the circularity of the antennas i tried to analyze with EZNEC.
>> Perhaps you know of some additional data that would assist me in
>> better understanding the polarization of these antennas. Tell me
>> what is left out of Roy's data in EZNEC.
>>
>> Jerry KD6JDJ
> [snip]
>
> Apparently nothing!
>
> Jerry it seems that I have an older version of EZNEC, a version that did
> not support CP outputs.
>
> I just contacted Roy todayh and ordered the latest upgrade to EZNEC +
> version 5 which
> Roy tells me supports CP outputs.
>
> But... one thing about NEC is that it does not support antennas in
> motion. NEC and all of the commercial
> software that is derived from this (US Taxpayer supported code, God
> Bless the US Taxpayer!) do not
> support antennas in motion. Rather NEC supports only static antennas in
> steady state excitation.

And, why would this be "important"... it doesn't support arbitrary
terrain surfaces either, nor non-uniform soil properties.

Since the vast majority of "amateur radio" antennas (this is r.r.a.a,
after all) can be modeled adequately by NEC.

If you need more, fork out the bucks for a FEM code that does what you need.

>
> There may be some "multi-physics" programs/software out there that can
> calculate radiated fields

> for antennas in motion, but I am not aware of them. Of course I'm not
> an expert and I have not done any
> research on this topic and so I don't personally know of any programs
> that can produce
> CP outputs for antennas that are in motion, specifically symmetric
> antennas that are rotating
> at some arbitrary angular rotation velocity with respect to their axis
> of symmetry.

As you say, you've not researched it.

I would suggest that the need for such a thing is fairly small, but I'll bet someone somewhere has done it, just not as a "end user" software product.

Certainly, there IS a lot of modeling of EM waves from moving objects (radar reflections being of particular interest).

Depends on the relative scales, too. If you're talking waves from a meter scale object viewed from kilometers away, then using a point source approximation for the object will work nicely, and then it's just simple geometry.

5376. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 17:36:21 UTC
From: JB <nospam@goofball.net>
Message-ID: <p0y%k.711$c35.456@nwrddc02.gnilink.net>
Source record: 19248

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ghl2d3cif1@news.albasani.net...
> JB wrote:
>
> > ...
> > Obama has been saying "let them eat cake" for a long
> > time. I wonder if anyone caught his Dec 2 governors
> > meeting on the economy where he tells them "...change
> > is going to come from YOU, not from Washington". I was
> > hoping he would at least be willing to learn but the voters
> > have a lot to learn for sure.
> >

This profile makes more sense. The only problem with the definition
involves the local culture standards clause. In this sense, Hitler and Idi
Amin would have been OK! In my book, Moral Relativism is dung.
http://www.mcafee.cc/Bin/sb.html

5377. Re: Antenna dimensions?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 17:47:45 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <daatj4ldcqpfk2na5sp2m9jrjtoldbbcmv@4ax.com>
Source record: 19249
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 08 Dec 2008 17:13:48 -0800, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>Jeff Liebermann wrote:
>>
>> Good point, but that's not what I had in mind. I was aware of the
>> problem and suggested that the power control be run by a micro. The
>> algorithm needs to be worked out, but basically, the weakest signal
>> sets the power level. The range of power adjustment also will not be
>> huge or large enough to have much of an effect on distant stations.
>> Our current 60 watt amplifier might have the power output reduced to
>> about 20 watts or 4.5dB power reduction. That's less than one S-unit
>> and probably wouldn't be noticeable even by distant stations. However,
>> it will make a huge difference in power consumption and battery
>> operation run time.

>Would it? A lot of amplifiers don't change their power consumption all
>that much, especially if they're designed for saturated operation (i.e.
>if you reduce the input drive, they either distort, or drop into linear
>mode and dissipation goes up).

For FM repeater use, the amplifiers are usually Class C or overdriven
Class AB. The output devices are alternately driven into saturation
and cutoff. I have some measurements somewhere for our various
repeaters buried somewhere. As I vaguely recall, the overall system
efficiency was about 50% for VHF and about 35% for the UHF repeater.
Of course, everything is properly logged and documented:
<http://www.LearnByDestroying.com/k6bj/K6BJ%20Repeater/slides/Documentation.html>

There are a variety of methods of reducing power, but for Class C, the
easiest is to reduce the collector or drain voltage on the RF output
stages. This works well down to about 20% of rated output power, but
often causes nasty oscillations and parasitics. It also burns quite a
bit of power in the linear voltage regulator. Not ideal, but I know
it works from experience designing marine VHF radios, which were
adjustable and stable from 10-25 watts RF out.

My guess(tm) is that the VHF rack burns about 10A in transmit at
13.6VDC. The UHF box burns about 15A in transmit. The idea is to
reduce this to the absolute minimum, and still have a usable machine.
Ideally, the power control should be automatic.

You're correct that the efficiency drops badly at lower power, but
reducing the overall current consumption is the goal here. The
efficiency may be lousy at low power, but if the overall current

consumption drops proportionately, it's good enough. The idea is to
be able to run the repeater for several days, in an emergency, on
battery power:
<http://www.LearnByDestroying.com/k6bj/K6BJ%20Repeater/slides/Batteries.html>
I might setup a switching regulator to reduce the power dissipated in
the voltage regulator circuit. I've never tried this but it seems
easy enough. Power amp distortion is not an issue here as the FM
repeater doesn't have any linear components in the RF signal.

The K6BJ repeater:
<http://www.k6bj.org>
<http://www.LearnByDestroying.com/k6bj/K6BJ%20Repeater/index.html
<http://www.LearnByDestroying.com/k6bj/IRLP/index.html>

>if you have an amplifier designed for variable power output, then what
>you say might be a good idea.

Nope. None of the amps are designed to be operated that way. Few
commerical FM transmitters and power amps are designed for adjustable
power. Such details have never stopped me in the past. However, club
politics, other priorities, and my health issues have slowed me down,
thus nothing has been done.

--
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Skype: JeffLiebermann AE6KS 831-336-2558

5378. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 18:11:11 UTC
From: JB <nospam@goofball.net>
Message-ID: <3xy%k.714$c35.170@nwrddc02.gnilink.net>
Source record: 19102

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ghm8pa$24d$1@news.albasani.net...
> JB wrote:
> ...
>
> Like I say it is a no-brainer, the forefathers gave us a heavy
> responsibility:
>
> Declaration of Independence
> [Adopted in Congress 4 July 1776]
> The Unanimous Declaration of the Thirteen United States of America
>
> When, in the course of human events, it becomes necessary for one people
> to dissolve the political bands which have connected them with another,
> and to assume among the powers of the earth, the separate and equal
> station to which the laws of nature and of nature's God entitle them, a
> decent respect to the opinions of mankind requires that they should
> declare the causes which impel them to the separation.
> ...
>
> As true Americans, we are ordered to take back and restore a sane and
> just government when our public servants forget their places ... end of
> story.
>
> Regards,
> JS

Like I say, the voters have a lot to learn. They have to be more discerning
than a child in the cereal aisle.

5379. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 18:53:39 UTC
From: richardharrison@webtv.net
Message-ID: <13135-493EBEB3-1913@storefull-3251.bay.webtv.net>
Source record: 19105

Art wrote:
"When Maxwell inserted the required units to acheive equilibrium per Newton it was the mathematics that forcast the presence of a levitation force that would not be identified for several decades but still ignored because of the dominance of wave theory."

Maxwell found his equations had the form of those predicting behavior of water waves and they correctly predicted the velocity of light as previously determined.

Maxwell was a mathematician and a physicist who searched for things with practical applications. In one of Maxwell`s lectures he said: "Now, Professor Graham Bell, the inventor of the telephone, is not an electrician who found out how to make a tin plate speak, but a speaker, who to gain his private ends, has become an electrician."

Maxwell`s equations are adequate to solve all questions of radio waves at once in place of a multitude of their predecessors. Art even agrees they work as a basis for antenna programs in computers however he spells computer. Using the tried and proven until something better comes along is common sense.

From what i`ve seen, wave theory works well for large scale predictions while the particle theory seems to work at the atomic scale. Too bad Cern had an instantaneous multimillion dollar breakdown.

A.G. Bell produced the most valuable patent in history. What are the results of the Unwin patents?

Best regards, Richard Harrison, KB5WZI

5380. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 18:54:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghmesf$ag6$1@news.albasani.net>
Source record: 19103

JB wrote:

> ...
> Like I say, the voters have a lot to learn. They have to be more discerning
> than a child in the cereal aisle.
>

You think that's the problem, really?

There are many individuals I would like to see as my representatives,
even president. Do you think I will ever see them as contenders?

I think the same owners of McCain also own Obama, or shortly will ... :-(

However, this does have my attention:

http://change.gov/

But, yanno, I am suspicious? I am just that way, yanno?

Regards,
JS

5381. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 18:57:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghmf35$ag6$2@news.albasani.net>
Source record: 19104

JB wrote:
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:ghl2d3cif1@news.albasani.net...
>> JB wrote:
>>
>>> ...
>>> Obama has been saying "let them eat cake" for a long
>>> time. I wonder if anyone caught his Dec 2 governors
>>> meeting on the economy where he tells them "...change
>>> is going to come from YOU, not from Washington". I was
>>> hoping he would at least be willing to learn but the voters
>>> have a lot to learn for sure.
>>>
>
> This profile makes more sense. The only problem with the definition
> involves the local culture standards clause. In this sense, Hitler and Idi
> Amin would have been OK! In my book, Moral Relativism is dung.
> http://www.mcafee.cc/Bin/sb.html
>

Makes perfect sense to me. Government is supposed to be the people,
that is where the change MUST come from. You think those in power which
have usurped the peoples powers are the norm for True Americans? I
think not ...

Ask not what your government can do for you; Ask what you can do to
restore power to the people!

Regards,
JS

5382. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 19:26:43 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <47added2-c60c-44ac-8cc9-e3b11708d0f5@t39g2000prh.googlegroups.com>
Source record: 19106

On Dec 9, 3:08 am, Richard Clark <kb7...@comcast.net> wrote:
> On Mon, 8 Dec 2008 22:00:02 -0800 (PST), Ginu <osheik...@gmail.com>
> wrote:
>
> >Unless you can
> >provide me with more than just random conclusions, I may be able to
> >get to the bottom of this. Otherwise, your posts have been much less
> >than helpful.
>
> If multipath and interference fall into the category of random
> conclusions.... You were wrapped around that axle more than two
> years ago.
>
> The search term of Zigbee and Ginu (enlarged to include your alias of
> Omar Fink) fairly draws a portrait of someone wandering through a fog
> of 3000 threads and postings. I can see why this has mystified you
> for five solid months - you are out of your element.
>
> You've been given every extrapolatable answer from across several
> dozen outlets. As I suspected earlier, the simplest answer is that
> Zigbee isn't designed to do what you expect of it. Roaming the planet
> asking the same question is unlikely to provide any different outcome.
>
> 73's
> Richard Clark, KB7QHC

Posting in several forums where there may be experts reading at
different times and different forums is not a stretch. Physical layer
questions are out of my realm and, unfortunately, I have to model them
in my simulations.

You're trolling in my threads and, for some odd reason, appear to feel
the need to belittle my work. If you can't add anything constructive,
please don't waste my time. I would appreciate it if you refrained
from posting in my threads in the future. Thank you.

Honestly, if I needed a babysitter I would have asked for one.

5383. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 19:53:15 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <9be1eae7-4ba6-4f9f-b45a-45d5331bec1c@a37g2000pre.googlegroups.com>
Source record: 19107

Thanks Jeff for your reply. Below are my comments:

> You seem to be missing the noise figure of the receiver in the calculation,
> and making assumptions about the receiver noise bandwidth that may not be
> correct.

The overall receiver noise figure is included in the receiver
sensitivity, is it not? I'm referring to http://www.edn.com/article/CA6442439.html
where they state that:

"the receiver sensitivity S=−174 dBm/Hz+NF+10logB+SNRMIN, where −174
dBm/Hz is the thermal noise floor, NF is the overall-receiver-noise
figure in decibels, B is the overall receiver bandwidth, and SNRMIN is
the minimum SNR. If the total path loss between the transmitter and
the intended receiver is greater than the link budget, loss of data
ensues, and communications cannot take place. Therefore, it’s
important for designers developing end systems to accurately
characterize the path loss and compare it with the link budget to
obtain initial estimations of the range."

Do you have any comments on this?

> If you know the rx sensitivity is -94dBm at the data rate you require, why
> go through all of the Shannon stuff, it is not revenant. You have been told
> that the Rx sensitivity is -94dBm use that figure.

That requires a long-winded answer about my project. My study involves
optimizing a multiple technology network where each device is
optimizing their transmission. Using the Shannon theorem allows me to
perform this optimization of data rate while considering physical
layer constraints. It's something I have to work into it
unfortunately. It's functioning correctly for WiMax and ultrawideband
technology.

> > -94 dBm = P_required + G(2.4E9, 500)
>
> > P_required is then easily calculated as -94 dBm - G(2.4E9, 500) =
> > 0.0254 dBm. This translates to a transmit power of 1 mW. This required
> > power is LARGER than the maximum permissible power to transmit at 250
> > kbps, which is the maximum data rate for Zigbee. So how does this make
> > sense?
>
> Perhaps because most quoted ranges for Zigbee are in the order of 50m not
> 500m????

The approximate line-of-sight range for Zigbee is 500m. That's why I
tested both 300m and 500m in my calculations.

> > Testing other distances, say 300m, we get a maximum transmit power Pt
> > = 5.9181e-007 = 0.59 uW to transmit at 250 kbps, but a P_required =
> > -4.41 dBm = 3.6211e-004, which is > our maximum transmit power Pt.
>
> How is -4.41dBm greater than 0dBm (1mW) ?? It is about 0.362mW.

I meant that, for my example using a distance of 300m, the transmit power required to transmit at the maximum data rate of 250 kbps was 0.59 uW. The required power to reach the MIRS at the receiver 300m away was 3.6211E-4. Therefore, the amount of power required to reach the receiver (a lower bound on power) was greater than the maximum power allowed to reach the max data rate of 250 kbps (upper bound on power). Therefore, the transmission isn't possible. It wasn't for 0 dBm.

> Your maths is quite simple; you have the rx sensitivity, and can work out
> the path loss, thats all you need to do, take one from the other and you
> have the required tx power.

That's exactly what I'm doing. The NF is included in the receiver sensitivity and the transmit power required to reach the receiver sensitivity is greater than the power I'm allowed to transmit at because of the 250 kbps maximum for the technology.

Thanks Jeff. I'd be interested in hearing your response.

5384. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 20:00:59 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <a6760d10-3124-4e0d-849e-52e0ce606024@v5g2000prm.googlegroups.com>
Source record: 19108

On Dec 9, 12:24 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Richard Harrison wrote:
> > Jeff wrote:
> > "- 96 db seems about right for "free space" path loss."
>
> > 96 seems abour the right number for a path loss at 2400 MHz at a
> > distance of 500 meters. To nit pick, -96 db loss is a gain.
>
> > I worked a few years with Pete Saveskie who wrote a book he called
> > "Propagation". It contains a formula for free space loss: 23 db is lost
> > in the first wavelength from the transmitter and after that 6 db loss is
> > added every time the distance is doubled.
>
> > With Pete`s formula, you would lose the 23 db at a distance of 0.125
> > meter, and at a distance of 512 meters you would lose a total of 95 db.
> > That`s close enough agreement for me.
>
> > Best regards, Richard Harrison, KB5WZI
>
> Also, a lot of published descriptions of various communications schemes
> (e.g. Zigbee, 802.16e) might give a maximum data rate and a maximum
> range, but that doesn't mean you get both at the same time. The former
> is often related to the system bandwidth, the latter to the minimum data
> rate and transmitter power.
>
> I think you can get a ballpark feel pretty quick.. use the free space
> path loss (in whatever form you like). Calculate required receiver
> power as
> -174 dBm + 10log(datarate in bps)+ 3 + receiver NF. (use 2dB for NF if
> you like)
>
> Add path loss to required receiver power, and that's what you'll need
> for EIRP from the transmitter.
>
> Yes, assumes isotropes, and ignores coding gains, etc. But you'll be
> within 10dB or so, and that's enough to know if you're even in the ballpark.
>
> If you do the calculations and you come up with a required transmit
> power of +50dBm (100W), and you're thinking small battery powered, you
> know it ain't gonna work. If you come up with +10dBm, and battery
> powered is the goal, you're in the ballpark, and THEN you can start
> thrashing through the more detailed modeling.

I'm within 27.5 dBm

5385. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 20:30:56 UTC
From: kb9rqz@yahoo.com
Message-ID: <vbltj4tst96i3m3etghhvtuaufamel01iu@4ax.com>
Source record: 19109
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5386. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 21:39:24 UTC
From: richardharrison@webtv.net
Message-ID: <13135-493EE58C-1942@storefull-3251.bay.webtv.net>
Source record: 19110

Art wrote:
"So what exactly forces a time varying current to take an alternate route of travel from the center of the conductor when the resistance is so low compared to other routes that could be taken?"

Opposing ac current is total impedance, not just resistance.

The deepest fibers in a conductor are encircled by the largest number magnetic flux linkages. These create a reactance which generates a counter-emf opposing an imposed current. The deeper the depth inside a conductor, the greater the opposition to the imposed current.

Look for "skin effect" in any edition of Terman and you will find diagrams illustrating the various magnetic flux paths inside the conductor which cause skin effect.

Best regards, Richard Harrison, KB5WZI

5387. 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 22:11:10 UTC
From: Fred PA0FVH <fred.verburgh@orange.nl>
Message-ID: <493eecfe$0$19192$dbd4b001@news.wanadoo.nl>
Source record: 19111

Dear group,

As a temporarily solution I would like to use a cheap 5/8, 6/8 or 7/8 WL commercially available CB antenna as a non resonant vertical with elevated radials for use on 10 - 40 meters tuned by an automatic remote ATU at the base of the antenna. I used MMANA and EZNEC (demo) to calculate the expected impedance for the frequency range and found too many results for the height of the antenna. Now I am confused about what to select.
Is 5/8WL on 10meters a good height or 8 meter (22')?
What I want is a low take off angle on 20 and 30 meters with high efficiency and an impedance which my remote ATU can handle.

Fred, PA0FVH

5388. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 23:05:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cbttj4hmgo4ief7sefbea3t5mfrcu4g4gb@4ax.com>
Source record: 19112

On Tue, 9 Dec 2008 11:26:43 -0800 (PST), Ginu <osheikh81@gmail.com>
wrote:

>You're trolling in my threads and, for some odd reason, appear to feel
>the need to belittle my work. If you can't add anything constructive,
>please don't waste my time. I would appreciate it if you refrained
>from posting in my threads in the future. Thank you.

Such a tender ego, and pride of ownership is the first clue to its
easy bruising. As for trolling, your contributions have that distinct
"under the bridge" flavor. Put a notch on your keyboard and move to
the next group. Talk about wasting time.

Omar, it takes very little effort to review your trail to see you have
one foot nailed to the floor and the other on a skate. You haven't
altered your question much in 5 months (with every appearance of not
having progressed one jot), offered your heart felt thanks to all
those who "helped" you, giving you pretty much the same leads you said
you would follow up on....

And we find you at the next street corner with your hat out for more
spare change.

Hard to imagine how with so many similar responses that you haven't
gotten it yet, and more amazing you might think that the problem is
not in the question.

73's
Richard Clark, KB7QHC

5389. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 23:29:24 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ghmv0k$7ki$1@news.jpl.nasa.gov>
Source record: 19115

Fred PA0FVH wrote:
> Dear group,
>
> As a temporarily solution I would like to use a cheap 5/8, 6/8 or 7/8 WL
> commercially available CB antenna as a non resonant vertical with elevated
> radials for use on 10 - 40 meters tuned by an automatic remote ATU at the
> base of the antenna. I used MMANA and EZNEC (demo) to calculate the expected
> impedance for the frequency range and found too many results for the height
> of the antenna. Now I am confused about what to select.
> Is 5/8WL on 10meters a good height or 8 meter (22')?
> What I want is a low take off angle on 20 and 30 meters with high efficiency
> and an impedance which my remote ATU can handle.
>
> Fred, PA0FVH
>
>
To a first order, you just want to avoid lengths where it's close to a
half wavelength (assuming you're using an ATU that's designed for this
sort of application) because that's where the Z is highest and toughest
to match. The low Z points are going to be easy (a few tens of ohms, and
almost any tuner can do that).

So, the lowest frequency where this is the case is where the wavelength
is 16m... straddling the 15 and 17m bands. In practice, what you might
need to do is adjust the length of the antenna by a few tens of cm one
way or the other to find a place where your tuner is happy.

Another situation is where the antenna is a full wavelength.. but 8m is
higher than the 10m ham band, so you're probably ok.

The other problem is if the reactive component gets too far for your
tuner to handle, but without knowing the tuning range of your tuner,
that's hard to know.

5390. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 23:39:11 UTC
From: ml <m@di.net>
Message-ID: <m-9B2EA7.18391109122008@news.optonline.net>
Source record: 19113
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <0001HW.C561768E0029D229B01AD9AF@news.sf.sbcglobal.net>,
SparkyGuy <sparkyguy@mumcrank.ck> wrote:

> Halfway down this page (it's a PDF doc):
>
> <http://www.cablesandconnectors.com/PIX/CC-040.pdf>
>
> the TNC and BNC connectors are advertised as "dual-crimp". What does this
> mean? "Dual" as in center in crimp and outer shield ferrule crimp?
<<yes

>
> As opposed to what? Single-crimp? That would be connectors that use the
> center, solid conductor as the center pin
yes>>>(solder or captivated

and then crimp the shield ferrule?
> Or...? >>>yes
>
> Newly (did you guess?) into small coax connectors and trying to get the
> terminology straight...
<you did good

are you just trying to learn the terminology or do you really
need to make some connectors and seek the best/easiest? way to
do that??

if you did you got a bunch of good tips here from the others

>
> Thanks.

i'll throw in a few other simular options to connectors

there are strip tools that can cleanly and safely strip the coax
they just spin around and do a great job i've seen cost between 50
to 100bucks depending on coax

also you can get a fixed center pin whereby you don't have to
solder or crimp, the captivated connectors the outer
sheild part gets a crimp only typically a bit of glue on the
inside heavy ga heat shrink shrink goes over all

they are rated very good soare are the center pins /outer shield
that gets crimped using the right tool of course

no matter what you use skills at doing the job and
inspection/testing of the work will always remain a constant

5391. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 23:40:47 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <704c441b-838a-413b-8ac0-2006e015fbb8@o40g2000prn.googlegroups.com>
Source record: 19114

On Dec 9, 6:05 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Tue, 9 Dec 2008 11:26:43 -0800 (PST), Ginu <osheik...@gmail.com>
> wrote:
>
> >You're trolling in my threads and, for some odd reason, appear to feel
> >the need to belittle my work. If you can't add anything constructive,
> >please don't waste my time. I would appreciate it if you refrained
> >from posting in my threads in the future. Thank you.
>
> Such a tender ego, and pride of ownership is the first clue to its
> easy bruising. As for trolling, your contributions have that distinct
> "under the bridge" flavor. Put a notch on your keyboard and move to
> the next group. Talk about wasting time.
>
> Omar, it takes very little effort to review your trail to see you have
> one foot nailed to the floor and the other on a skate. You haven't
> altered your question much in 5 months (with every appearance of not
> having progressed one jot), offered your heart felt thanks to all
> those who "helped" you, giving you pretty much the same leads you said
> you would follow up on....
>
> And we find you at the next street corner with your hat out for more
> spare change.
>
> Hard to imagine how with so many similar responses that you haven't
> gotten it yet, and more amazing you might think that the problem is
> not in the question.
>
> 73's
> Richard Clark, KB7QHC

Richard, again, you are adding nothing to the discussion. Please
refrain from posting in my threads from now on. Those in this thread
have given me significant information that may lead to the solution.
Something that I have not gotten previously. Thanks again and goodbye.

5392. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-09 23:42:35 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ghmvpb$f5u$1@news.jpl.nasa.gov>
Source record: 19116

Ginu wrote:
> On Dec 9, 12:24 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>> Richard Harrison wrote:
>>> Jeff wrote:
>>> "- 96 db seems about right for "free space" path loss."
>>> 96 seems abour the right number for a path loss at 2400 MHz at a
>>> distance of 500 meters. To nit pick, -96 db loss is a gain.
>>> I worked a few years with Pete Saveskie who wrote a book he called
>>> "Propagation". It contains a formula for free space loss: 23 db is lost
>>> in the first wavelength from the transmitter and after that 6 db loss is
>>> added every time the distance is doubled.
>>> With Pete`s formula, you would lose the 23 db at a distance of 0.125
>>> meter, and at a distance of 512 meters you would lose a total of 95 db.
>>> That`s close enough agreement for me.
>>> Best regards, Richard Harrison, KB5WZI
>> Also, a lot of published descriptions of various communications schemes
>> (e.g. Zigbee, 802.16e) might give a maximum data rate and a maximum
>> range, but that doesn't mean you get both at the same time. The former
>> is often related to the system bandwidth, the latter to the minimum data
>> rate and transmitter power.
>>
>> I think you can get a ballpark feel pretty quick.. use the free space
>> path loss (in whatever form you like). Calculate required receiver
>> power as
>> -174 dBm + 10log(datarate in bps)+ 3 + receiver NF. (use 2dB for NF if
>> you like)
>>
>> Add path loss to required receiver power, and that's what you'll need
>> for EIRP from the transmitter.
>>
>> Yes, assumes isotropes, and ignores coding gains, etc. But you'll be
>> within 10dB or so, and that's enough to know if you're even in the ballpark.
>>
>> If you do the calculations and you come up with a required transmit
>> power of +50dBm (100W), and you're thinking small battery powered, you
>> know it ain't gonna work. If you come up with +10dBm, and battery
>> powered is the goal, you're in the ballpark, and THEN you can start
>> thrashing through the more detailed modeling.
>
> I'm within 27.5 dBm

As in, the back of the envelope shows you've got 28 dB of positive
margin, or the uncertainty of your estimate is 28dB, or you're 28dB
under? It's inverse square law, after all, so 10 times the distance is

a 20dB change in power.

Zigbee is IEEE 802.15.4 at the PHY.. 250kbps at ranges of 10-100 meters for the 2.4 GHz band.

Let's see.. -174 + 3 + 54 + 2 = -114 dBm received signal level needed, bare minimum. Real receivers are probably more like -100 or -95. Chipcon's CC2420 is -94dBm

The 802.15.4 only requires a sensitivity of -85dBm

Zigbee transmitters are -3dBm transmit power (minimum).. typically, 0dBm might be more common.

So, let's look at a link budget for 10 meters
32.44 + 20log(2500)+20log(0.01) = 32.44+ 68 -40 -- about 60dB path loss between isotropes 10m apart at 2.5GHz.

-60dBm receive power vs -100dBm sensitivity.. So, it should work ok at 250kbps and 10m (assuming no interference, multipath, etc.)

Now, bump to 100m.. That's a 20dB hit.
500m another 14dB.. now you're on the ragged edge. 6dB margin with a -100dBm receiver and a 0dBm transmitter. And that's assuming isotropic antennas, which may or may not be reasonable.

5393. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 00:30:11 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <13012f32-4274-48a1-a63d-5c60c68df856@v5g2000prm.googlegroups.com>
Source record: 19117

On Dec 9, 6:42 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Ginu wrote:
> > On Dec 9, 12:24 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> >> Richard Harrison wrote:
> >>> Jeff wrote:
> >>> "- 96 db seems about right for "free space" path loss."
> >>> 96 seems abour the right number for a path loss at 2400 MHz at a
> >>> distance of 500 meters. To nit pick, -96 db loss is a gain.
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> >>> That`s close enough agreement for me.
> >>> Best regards, Richard Harrison, KB5WZI
> >> Also, a lot of published descriptions of various communications schemes
> >> (e.g. Zigbee, 802.16e) might give a maximum data rate and a maximum
> >> range, but that doesn't mean you get both at the same time. The former
> >> is often related to the system bandwidth, the latter to the minimum data
> >> rate and transmitter power.
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> >> I think you can get a ballpark feel pretty quick.. use the free space
> >> path loss (in whatever form you like). Calculate required receiver
> >> power as
> >> -174 dBm + 10log(datarate in bps)+ 3 + receiver NF. (use 2dB for NF if
> >> you like)
>
> >> Add path loss to required receiver power, and that's what you'll need
> >> for EIRP from the transmitter.
>
> >> Yes, assumes isotropes, and ignores coding gains, etc. But you'll be
> >> within 10dB or so, and that's enough to know if you're even in the ballpark.
>
> >> If you do the calculations and you come up with a required transmit
> >> power of +50dBm (100W), and you're thinking small battery powered, you
> >> know it ain't gonna work. If you come up with +10dBm, and battery
> >> powered is the goal, you're in the ballpark, and THEN you can start
> >> thrashing through the more detailed modeling.
>
> > I'm within 27.5 dBm
>
> As in, the back of the envelope shows you've got 28 dB of positive
> margin, or the uncertainty of your estimate is 28dB, or you're 28dB

> under? It's inverse square law, after all, so 10 times the distance is
> a 20dB change in power.
>
> Zigbee is IEEE 802.15.4 at the PHY.. 250kbps at ranges of 10-100 meters
> for the 2.4 GHz band.
>
> Let's see.. -174 + 3 + 54 + 2 = -114 dBm received signal level needed,
> bare minimum. Real receivers are probably more like -100 or -95.
> Chipcon's CC2420 is -94dBm
>
> The 802.15.4 only requires a sensitivity of -85dBm
>
> Zigbee transmitters are -3dBm transmit power (minimum).. typically, 0dBm
> might be more common.
>
> So, let's look at a link budget for 10 meters
> 32.44 + 20log(2500)+20log(0.01) = 32.44+ 68 -40 -- about 60dB path loss
> between isotropes 10m apart at 2.5GHz.
>
> -60dBm receive power vs -100dBm sensitivity.. So, it should work ok at
> 250kbps and 10m (assuming no interference, multipath, etc.)
>
> Now, bump to 100m.. That's a 20dB hit.
> 500m another 14dB.. now you're on the ragged edge. 6dB margin with a
> -100dBm receiver and a 0dBm transmitter. And that's assuming isotropic
> antennas, which may or may not be reasonable.

My path loss results verify this too. The issue is this: if the range
is between 10-100 metres, how do we use a minimum of -3 dBm of
transmit power?

To transmit at 250 kbps on a 5 MHz bandwidth channel centered at 2.5
GHz to a receiver say 10 metres away, you only require 5.8009e-010
watts. That's the problem. This is the maximum power required. It is
far less than the -3 dBm quoted.

The 28 dBm that I stated was that my transmit power required to
transmit at 250 kbps is 28 dBm under the -4.4 dBm minimum transmit
power to reach 300m that I provided in my original post:

> Testing other distances, say 300m, we get a maximum transmit power Pt
> = 5.9181e-007 = 0.59 uW to transmit at 250 kbps, but a P_required =
> -4.41 dBm = 3.6211e-004, which is > our maximum transmit power Pt.

5.9181 mW corresponds to roughly -32 dBm, hence the 28 dBm under.

At the 10 metres that we are discussing here, the required transmit
power falls even further:
5.8E-10 watts = 5.8E-7 mW

This corresponds to 10*log10(5.8009e-7) = -62.365 dBm. So the margin
is actually 67 dBm.

The path loss model isn't the problem. And the Shannon capacity is known to be able to estimate any information channel.

This is where the confusion lies.

5394. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 00:48:07 UTC
From: Dave <noone@nowhere.com>
Message-ID: <blE%k.929$7I6.926@nwrddc01.gnilink.net>
Source record: 19118

I thought i had myself convinced that it would work, but then talked myself out of it... and went back to the books.

In my opinion, no, rotating a plane wave, even at the same frequency that it is oscillating would not create circular polarization. It would create a rotating plane wave, but it lacks half of the field components to be circular. The key is in this quote from ramo whinnery and van duzer's 'fields and waves in communications electronics': "if there is a combination of TWO uniform plane waves of the same frequency, but of different phases, magnitudes, and orientations of the field vectors, the resultant combination is said to be an elliptically polarized wave" (emphasis mine). This is of course the generalized case of the circular one that would require them to be of the same amplitude and 90 degrees out of phase as they note a few paragraphs later.

The key is the 'TWO' that I emphasized. If you trace the E field of a single rotating dipole that is rotating at the same frequency as the rf driving it you would still see the E field oscillate in amplitude at the original frequency. So as it propagated, even though the direction of the E field would follow a circular path the amplitude of it would change at the same rate, so there would be nulls in the E field every 1/2 cycle... in a true circular polarized wave the E field is a constant magnitude, it just rotates around the axis at the given frequency. you can't get that from a single dipole no matter how you rotate it since there will always be two zero crossings every cycle in the E and H fields.

i quickly scanned a bunch of the mail, i'm a bit behind in my reading so please forgive me if someone already came to this conclusion and i missed it.

Oh, and i briefly saw something about DC fields... actually i 'think' that if you put a 'dc' charge on a dipole, lets just separate two charges by some distance and start them rotating about a common center... that MAY actually create a circularly polarized wave. but i would consider this a degenerate case of the general problem. Even if you used an ELF rf signal to drive the dipole you would get zero fields every 1/2 wave which wouldn't work... with the pure dc charge you have a constant E field that is rotating, and 2 accelerated charges to make the corresponding H field. I think this works because there are 'TWO' rotating charges that each contribute to the resulting wave.

5395. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 00:54:38 UTC
From: Dave <noone@nowhere.com>
Message-ID: <irE%k.930$7I6.922@nwrddc01.gnilink.net>
Source record: 19119

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:529f1eab-7137-48dd-a42f-1b3b48e3c432@v38g2000yqb.googlegroups.com...
On Dec 8, 5:43 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:

<more drivel snipped>

want to read something interesting? go look up the latest issue of ieee
spectrum magazine and read about the 4th fundamental electrical component.
this one is a passive component that can not be built from resistors,
capacitors, and inductors, and therefore becomes a fundamentally new
electrical component. and even more fun, it has memory. or if you aren't a
pledged to silence member of this secret society who gets their publications
delivered to their doorstep by armed guards every month you can go read
about it on-line at:
http://www.spectrum.ieee.org/may08/6207
http://www.hpl.hp.com/news/2008/apr-jun/memristor.html
http://blog.wired.com/gadgets/2008/04/scientists-prov.html
http://en.wikipedia.org/wiki/Memristor
among 155k google hits for it.

hey, it does strange things with magnetic and electric fields, maybe you
could show them that its really based on your magical levitating diamagnetic
dancing neutrinos!

5396. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 01:00:11 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9B6FC14F6615VeebleFetzer@216.250.184.7>
Source record: 19120

In news:irE%k.930$7I6.922@nwrddc01.gnilink.net "Dave"
<noone@nowhere.com> wrote:

> if you aren't a pledged to silence member of this secret society who
> gets their publications delivered to their doorstep by armed guards
> every month you can go read about it on-line at:
> http://www.spectrum.ieee.org/may08/6207
>

You know what happens to people who reveal the Secrets of The Spectrum
to outsiders, don't you?

--
Bert Hyman St. Paul, MN bert@iphouse.com

5397. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 01:14:08 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <AJE%k.933$7I6.769@nwrddc01.gnilink.net>
Source record: 19121

"Fred PA0FVH" <fred.verburgh@orange.nl> wrote in message
news:493eecfe$0$19192$dbd4b001@news.wanadoo.nl...
> Dear group,
>
> As a temporarily solution I would like to use a cheap 5/8, 6/8 or 7/8 WL
> commercially available CB antenna as a non resonant vertical with elevated
> radials for use on 10 - 40 meters tuned by an automatic remote ATU at the
> base of the antenna. I used MMANA and EZNEC (demo) to calculate the
> expected impedance for the frequency range and found too many results for
> the height of the antenna. Now I am confused about what to select.
> Is 5/8WL on 10meters a good height or 8 meter (22')?
> What I want is a low take off angle on 20 and 30 meters with high
> efficiency and an impedance which my remote ATU can handle.
>
> Fred, PA0FVH
>
Hi Fred,
The first thing to understand is that for the most part the CB 5/8, 6/8, 7/8 antennas have nothing to do with the actual height. Manufacturers started claiming these lengths because the CBers believe(d) longer is better. At least for the mobile antennas the 5/8 etc referred more to the length of the wire used in the antenna- electrically, they were all 1/4 wavelength antennas.

Dale W4OP

5398. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 01:15:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghn56k$4iv$1@news.albasani.net>
Source record: 19122

Dave wrote:

> ...
> hey, it does strange things with magnetic and electric fields, maybe you
> could show them that its really based on your magical levitating diamagnetic
> dancing neutrinos!
>
>

Somehow, I believe you. It looks like that to you ... this speaks reams.

Hang around, perhaps you will pick up a clue, eventually. Like I have
told others, it doesn't matter when you get it, just that you DO get it ...

Regards,
JS

5399. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 01:27:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghn5tq$5r3$1@news.albasani.net>
Source record: 19123

Bert Hyman wrote:

> ...
> You know what happens to people who reveal the Secrets of The Spectrum
> to outsiders, don't you?
>

You guys really get me. You claim everyone is a conspiracy nut ...
perhaps you are correct--but, it would seem everyone BUT you. And,
perhaps your definition of "conspiracy nut" is something I hold in esteem.

First and formost, conspiracy is involved in most of what I do. I
conspire to raise my salary to the highest possible, I conspire to get
the benefits possible. I conspire to beat the system, legally, at every
possible turn I can. I conspire to see my family and friends served
before all others. I conspire to have the best looking resume possible.
I conspire to save every dime I can. I conspire to leverage every
possible asset I have to the maximum.

I know "conspiracy" exists "on the job", I was a union steward in my
late 20's and early 30's. If you don't think I have seen REAL
"conspiracies" on BOTH sides of the fence--then conspiracies are only in
my imagination. Perhaps Hoffas' death is only that? Perhaps the
Kennedys were not in a "conspiracy" to get Hoffa?

Now, what do you idiots do? Tell the world everything? (i.e.,
broadcast your punches?) Have no secrets? I mean, certainly, a retard
has fewer than a scholar! Could just be, I guess. This is what your
implications bring to my mind ...

Now, you, indeed, may be just as stupid as you continually shout from
the mountaintop! But, you make a very grave mistake--I think those
"like me" out number you by a good 10,000:1.

P.S. Frequently, I fall asleep working on my next "conspiracy" to get
me and mine ahead ... if that is nuts, so be it. Competition is high,
this economic disaster will only increase it; You can either play or
pay. From the market, looks many choose to pay.

Regards,
JS

5400. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 01:34:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghn6bh$64h$1@news.albasani.net>
Source record: 19124

Dale Parfitt wrote:

>> ...
> Hi Fred,
> The first thing to understand is that for the most part the CB 5/8, 6/8, 7/8
> antennas have nothing to do with the actual height. Manufacturers started
> claiming these lengths because the CBers believe(d) longer is better. At
> least for the mobile antennas the 5/8 etc referred more to the length of the
> wire used in the antenna- electrically, they were all 1/4 wavelength
> antennas.
>
> Dale W4OP

The ones you looked at, it seems, were all 1/4 wavelength physically ...
electrically?

So, in you book, you can have a 1 foot, foot -- a 2 foot, foot -- a 4
foot, foot --- etc.?

Regards,
JS

5401. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 01:57:20 UTC
From: JB <nospam@goofball.net>
Message-ID: <4mF%k.815$c35.746@nwrddc02.gnilink.net>
Source record: 19125

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ghmesf$ag6$1@news.albasani.net...
> JB wrote:
>
> > ...
> > Like I say, the voters have a lot to learn. They have to be more
discerning
> > than a child in the cereal aisle.
> >
>
> You think that's the problem, really?
>
> There are many individuals I would like to see as my representatives,
> even president. Do you think I will ever see them as contenders?
>
> I think the same owners of McCain also own Obama, or shortly will ... :-(
>
> However, this does have my attention:
>
> http://change.gov/
>
> But, yanno, I am suspicious? I am just that way, yanno?
>
> Regards,
> JS

It's a cinch we can't trust the regular media to properly cover this
administration because they even overtly promoted it, while at the same time
slamming the current administration over the war. The inability of the
previous administration to deal with it and the terrorist acts that were a
product seem to have been lost in the shuffle. Here the guy who was in the
middle of it tries to come clean:
http://www.theatlantic.com/doc/200401/pollack

Then there's the Fannie Mae/Freddie Mac impending disaster that was covered
up over and over until it finally came home to roost and has goofed up the
world economy.
http://www.youtube.com/watch?v=hN31-nKndg8&feature=related

And now they are there to clean it all up? Give me a break. Be very afraid
when people are promoted for bad behavior and bad judgment.

5402. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 01:57:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghn7me$7en$1@news.albasani.net>
Source record: 19126

Bert Hyman wrote:

> ...
> You know what happens to people who reveal the Secrets of The Spectrum
> to outsiders, don't you?
>

By the way, I do, and fairly often, claim there are/is no such thing as conspiracies.

Darn if it isn't ALWAYS right when I am in the middle of pulling one off, fear detection if the individual/corp/etc. continues "questioning" me and, I think I am rather convincing! <evil grin>

Regards,
JS

5403. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 02:00:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghn7r8$7en$2@news.albasani.net>
Source record: 19127

JB wrote:

> ...
> It's a cinch we can't trust the regular media to properly cover this
> administration because they even overtly promoted it, while at the same time
> slamming the current administration over the war. The inability of the
> previous administration to deal with it and the terrorist acts that were a
> product seem to have been lost in the shuffle. Here the guy who was in the
> middle of it tries to come clean:
> http://www.theatlantic.com/doc/200401/pollack
>
> Then there's the Fannie Mae/Freddie Mac impending disaster that was covered
> up over and over until it finally came home to roost and has goofed up the
> world economy.
> http://www.youtube.com/watch?v=hN31-nKndg8&feature=related
>
> And now they are there to clean it all up? Give me a break. Be very afraid
> when people are promoted for bad behavior and bad judgment.
>

I must differ. I think their reporting documented true failings of bush
and govt.

I also believe, their reporting depicted the true hope the "down
trodden" wish to place in Obama ... they are just sorely tired of being
sick and tired ...

Regards,
JS

5404. [Way OT] Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 02:11:02 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngju99m.nqg.bit-bucket@shell.config.com>
Source record: 19128

PLease, God. Let this thread die!

5405. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 04:41:51 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8517e983-6ef7-4e7f-9a93-fbd412a1ba16@m22g2000vbl.googlegroups.com>
Source record: 19129

On Dec 9, 12:53 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "When Maxwell inserted the required units to acheive equilibrium per
> Newton it was the mathematics that forcast the presence of a levitation
> force that would not be identified for several decades but still ignored
> because of the dominance of wave theory."
>
> Maxwell found his equations had the form of those predicting behavior of
> water waves and they correctly predicted the velocity of light as
> previously determined.
>
> Maxwell was a mathematician and a physicist who searched for things with
> practical applications. In one of Maxwell`s lectures he said: "Now,
> Professor Graham Bell, the inventor of the telephone, is not an
> electrician who found out how to make a tin plate speak, but a speaker,
> who to gain his private ends, has become an electrician."
>
> Maxwell`s equations are adequate to solve all questions of radio waves
> at once in place of a multitude of their predecessors. Art even agrees
> they work as a basis for antenna programs in computers however he spells
> computer. Using the tried and proven until something better comes along
> is common sense.
>
> From what i`ve seen, wave theory works well for large scale predictions
> while the particle theory seems to work at the atomic scale. Too bad
> Cern had an instantaneous multimillion dollar breakdown.
>
> A.G. Bell produced the most valuable patent in history. What are the
> results of the Unwin patents?
>
> Best regards, Richard Harrison, KB5WZI

5406. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 05:16:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aqjuj45c4i3nfj2b9ol19b3bei2vc2hhk1@4ax.com>
Source record: 19130

On Tue, 9 Dec 2008 23:11:10 +0100, "Fred PA0FVH"
<fred.verburgh@orange.nl> wrote:

>Dear group,
>
>As a temporarily solution I would like to use a cheap 5/8, 6/8 or 7/8 WL
>commercially available CB antenna as a non resonant vertical with elevated
>radials for use on 10 - 40 meters tuned by an automatic remote ATU at the
>base of the antenna. I used MMANA and EZNEC (demo) to calculate the expected
>impedance for the frequency range and found too many results for the height
>of the antenna. Now I am confused about what to select.
>Is 5/8WL on 10meters a good height or 8 meter (22')?
>What I want is a low take off angle on 20 and 30 meters with high efficiency
>and an impedance which my remote ATU can handle.

Hi Fred,

6/8th and 7/8th wavelength at 10M would not have the best low angle
charateristic. At the longer wavelengths it should get progressively
better (as you may tell from EZNEC demo).

7/8th wavelength at 10M may also be hard to match with your ATU, but
worth a try.

Shorter antennas for longer wavelengths may find more loss in the ATU
than you would care to have, but a 5/8ths at 10M might be the best
work-around; and the shortest you should go.

73's
Richard Clark, KB7QHC

5407. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 05:22:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <09kuj4h69qo0nurbc9d7v8ihgegmkvdv9t@4ax.com>
Source record: 19131

On Tue, 9 Dec 2008 15:40:47 -0800 (PST), Ginu <osheikh81@gmail.com>
wrote:

>Those in this thread
>have given me significant information that may lead to the solution.

You must have littered more than several dozen newsgroups with that
same proclamation - can you succinctly point out how any single
significant information advances your solution? That, too, is missing
from your identical box-car series of postings that tend to repeat
themselves for weeks into months.

What a troll.

73's
Richard Clark, KB7QHC

5408. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 05:27:05 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <0725610f-639e-4263-8efd-1c0a48838db4@a12g2000yqm.googlegroups.com>
Source record: 19132

On Dec 9, 12:53 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "When Maxwell inserted the required units to acheive equilibrium per
> Newton it was the mathematics that forcast the presence of a levitation
> force that would not be identified for several decades but still ignored
> because of the dominance of wave theory."
>
> Maxwell found his equations had the form of those predicting behavior of
> water waves and they correctly predicted the velocity of light as
> previously determined.

This seems a distortion of the facts. The addition was seen as the
forces between
current and the force between static particles which was in fact a
confirmation of the the speed of light.
My understanding of the term eddy current with respect to waves was
that it was ,made much later.
But the realization of the connection to light should have really
been recognised by Maxwell as a displacement of particles
and not waves since the presence of particles is predetermined. This
lack of understanding alsio helped the incorrect determination of
light
being a formation of waves instead of particles. This by the way also
cements the validity of changing Gauss's law of statics to a dynamic
field to equate with Maxwells laws which also confirms the presence of
particles. Another correlation to my theory is the interaction of
particles with the Earths magnetic field to produce Aurora or Northern
Lights i.e. particles bombardmentnot waves, Same goes for light
created at the center of a tornado which in itself
is the "eddy current" of a storm where againb light is seen as a
lightning strike where particles plus moisture is drawn into the
stratoshere an d then become separated. The evidence just piles up
that radio communication, radar and light itself is that which comes
from particles ala Neutrinos and NOT from the formation of magnetic or
electrical waves. And that Einstein was correct in his assertion that
radiation held the key for the Universal laws of all the sciences of
nature.Later when Foucalt discovered "Eddy current" which he
associated with water eddy currents it then came into use as a non
destructive material measurement system together with use in aluminum
sorting in scrap yards which in essence is a macro demonstration of
particle presence in radiation., again a vindication that the Maxwell
addition was wrongly assumed a wave structure.

I won't comment on your following statements as it is lost on me why
you have quoted them and the point of stating them

>
> Maxwell was a mathematician and a physicist who searched for things with
> practical applications. In one of Maxwell`s lectures he said: "Now,
> Professor Graham Bell, the inventor of the telephone, is not an
> electrician who found out how to make a tin plate speak, but a speaker,
> who to gain his private ends, has become an electrician."
>
> Maxwell`s equations are adequate to solve all questions of radio waves
> at once in place of a multitude of their predecessors. Art even agrees
> they work as a basis for antenna programs in computers however he spells
> computer. Using the tried and proven until something better comes along
> is common sense.
>
> From what i`ve seen, wave theory works well for large scale predictions
> while the particle theory seems to work at the atomic scale. Too bad
> Cern had an instantaneous multimillion dollar breakdown.
>
> A.G. Bell produced the most valuable patent in history. What are the
> results of the Unwin patents?
>
> Best regards, Richard Harrison, KB5WZI

5409. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 05:54:52 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <e1b220ce-5b1e-4771-831d-5d892b7c955e@r27g2000vbp.googlegroups.com>
Source record: 19133

On Dec 9, 3:39 pm, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "So what exactly forces a time varying current to take an alternate
> route of travel from the center of the conductor when the resistance is
> so low compared to other routes that could be taken?"
>
> Opposing ac current is total impedance, not just resistance.
I tthink you have to go back to the beginning of this thread as again
you are talking out of context.
My statement referes to the current path on a fractional waqve antenna
when it reaches the top.
My point was that the current then procedes to the INSIDE of the
radiator where the AC current cannot produce
an eddy current and thus the opposition to current flow in the centre
is just a copper loss i.e.resistance.
This statement was made in requesting a possible different current
path from the top of the radiator
that provided a lower resistive path. I.E I pointed out that the
impedance dropped linearly with respect to radiator length
and thus I wanted a mathematically demonstrated different path that
would counter my initial assertion.

>
> The deepest fibers in a conductor are encircled by the largest number
> magnetic flux linkages. These create a reactance which generates a
> counter-emf opposing an imposed current. The deeper the depth inside a
> conductor, the greater the opposition to the imposed current.

I think I have stated what skin depth is and what created it many
times so I won't respond
to the above paragraph

>
> Look for "skin effect" in any edition of Terman and you will find
> diagrams illustrating the various magnetic flux paths inside the
> conductor which cause skin effect.

I believe that the Wilkedia URL and Ian's supplied scanned page
is adequate descriptions where the initial supplied current is the sum
of the two currents in the circuit one of
which is Maxwells determination of displacement current i.e.a current
that displaces while providing an accelleration to PARTICLES (charges)
from the surface of a radiator.
If you can give an specific answer in mathematical form to the initial

question asked it would be apreciated
Other than that there is no need for continuation of this thread.

>
> Best regards, Richard Harrison, KB5WZI

5410. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 06:15:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <vn2416-07h.ln1@mail.specsol.com>
Source record: 19134

Art Unwin <ArthurUnwin@gmail.com> wrote:

> Other than that there is no need for continuation of this thread.

There was no need to start it in the first place.

--
Jim Pennino

Remove .spam.sux to reply.

5411. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 06:41:05 UTC
From: Fred PA0FVH <fred.verburgh@orange.nl>
Message-ID: <493f6482$0$50672$dbd4b001@news.wanadoo.nl>
Source record: 19135

Hi Guys,

Thanks for your good suggestions.

> The first thing to understand is that for the most part the CB 5/8, 6/8,
> 7/8
> antennas have nothing to do with the actual height. Manufacturers started
> claiming these lengths because the CBers believe(d) longer is better

The physical length of those antennas available over here are 6.5m, 9.1m and
9.5m. So any height between 6.5m and 9.5m would be possible.
It is an alternative for going to a DIY store to get aluminum tubing.

> The other problem is if the reactive component gets too far for your
> tuner to handle, but without knowing the tuning range of your tuner,
> that's hard to know.

My remote ATU (Pi matching) has an inductance range from 0 to 63uH and the
capacitance ranges from 0 to 6300pF

Fred, PA0FVH

5412. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 07:16:45 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <n_J%k.5924$M01.3679@bignews3.bellsouth.net>
Source record: 19136

"Fred PA0FVH" <fred.verburgh@orange.nl> wrote in message
news:493eecfe$0$19192$dbd4b001@news.wanadoo.nl...
> Dear group,
>
> As a temporarily solution I would like to use a cheap 5/8, 6/8 or 7/8 WL
> commercially available CB antenna as a non resonant vertical with elevated
> radials for use on 10 - 40 meters tuned by an automatic remote ATU at the
> base of the antenna. I used MMANA and EZNEC (demo) to calculate the
> expected impedance for the frequency range and found too many results for
> the height of the antenna. Now I am confused about what to select.
> Is 5/8WL on 10meters a good height or 8 meter (22')?
> What I want is a low take off angle on 20 and 30 meters with high
> efficiency and an impedance which my remote ATU can handle.
>
> Fred, PA0FVH

Obtain a Solarcon A99. It will behave exactly as you have described, even with a built-in tuner. BTDT. Put it up about 20'. It will suck on 40 meters, but it will work. 20 meters isn't the best either, but it is usable. 17 meters on up it will work very well.

With 100 watts I could work 15 & 17 meters into Europe from NJ in the USA, with headroom to spare. Yes, the bands were open, but they were crowded at the time. I worked Austria as though they were next door.

Ed, N2ECW

5413. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 08:55:58 UTC
From: Jeff <Jeff@local.host>
Message-ID: <gho05iuub1@aioe.org>
Source record: 19137

>The overall receiver noise figure is included in the receiver
>sensitivity, is it not? I'm referring to
>http://www.edn.com/article/CA6442439.html
>where they state that:
>
>"the receiver sensitivity S=−174 dBm/Hz+NF+10logB+SNRMIN, where −174
>dBm/Hz is the thermal noise floor, NF is the overall-receiver-noise
>figure in decibels, B is the overall receiver bandwidth, and SNRMIN is
>the minimum SNR. If the total path loss between the transmitter and
>the intended receiver is greater than the link budget, loss of data
>ensues, and communications cannot take place. Therefore, it's
>important for designers developing end systems to accurately
>characterize the path loss and compare it with the link budget to
>obtain initial estimations of the range."
>
>Do you have any comments on this?

Yes, the manufacturer has told you that the receiver sensitivity is -96dBm.
(no doubt for a particular BER, which aslo equates to a particular SNR).
Without knowing more about the internals of the receiver you cannot work
back to a NF unless you acuually know what SNR equates to the BER that the
manufacturer stated the -96dBm at. Using Shannon most likely give you an
unreliable optimistic answer.

>> If you know the rx sensitivity is -94dBm at the data rate you require,
>> why
>> go through all of the Shannon stuff, it is not revenant. You have been
>> told
>> that the Rx sensitivity is -94dBm use that figure.
>
>That requires a long-winded answer about my project. My study involves
>optimizing a multiple technology network where each device is
>optimizing their transmission. Using the Shannon theorem allows me to
>perform this optimization of data rate while considering physical
>layer constraints. It's something I have to work into it
>unfortunately. It's functioning correctly for WiMax and ultrawideband
>technology.

No it dosen't unless you know more about the receivers and the actual SNR
that they require for a specific BER. Shannon will not tell you that, it
will just give you the 'best possible case' for a particular bandwidth,
which may well be a long way from the truth.

> > -94 dBm = P_required + G(2.4E9, 500)
>

> > P_required is then easily calculated as -94 dBm - G(2.4E9, 500) =
> > 0.0254 dBm. This translates to a transmit power of 1 mW. This required
> > power is LARGER than the maximum permissible power to transmit at 250
> > kbps, which is the maximum data rate for Zigbee. So how does this make
> > sense?
>
> Perhaps because most quoted ranges for Zigbee are in the order of 50m not
> 500m????
>
>The approximate line-of-sight range for Zigbee is 500m. That's why I
>tested both 300m and 500m in my calculations.

Yes and you proved just that!! Path loss 96dB, rx sensitivity -96dBm, 0dBm
tx power, equals receiver operating at its sensitivity limit. So what's the
problem??

> > Testing other distances, say 300m, we get a maximum transmit power Pt
> > = 5.9181e-007 = 0.59 uW to transmit at 250 kbps, but a P_required =
> > -4.41 dBm = 3.6211e-004, which is > our maximum transmit power Pt.
>
> How is -4.41dBm greater than 0dBm (1mW) ?? It is about 0.362mW.

>I meant that, for my example using a distance of 300m, the transmit
>power required to transmit at the maximum data rate of 250 kbps was
>0.59 uW. The required power to reach the MIRS at the receiver 300m
>away was 3.6211E-4. Therefore, the amount of power required to reach
>the receiver (a lower bound on power) was greater than the maximum
>power allowed to reach the max data rate of 250 kbps (upper bound on
>power). Therefore, the transmission isn't possible. It wasn't for 0
>dBm.

I a sorry I don't understand what the hell you are on about. All you need to
know is the path loss at 300m, you aready have the rx sensitivity of -96dBm
so it is a simple subtraction to find the Tx power required (which will be
less than 0dBm).

>> Your maths is quite simple; you have the rx sensitivity, and can work out
>> the path loss, thats all you need to do, take one from the other and you
> >have the required tx power.
>
>That's exactly what I'm doing. The NF is included in the receiver
>sensitivity and the transmit power required to reach the receiver
>sensitivity is greater than the power I'm allowed to transmit at
>because of the 250 kbps maximum for the technology.
>

That is just not correct, you proved that the power required to reach
sensitivity limit at 500m was 0dBm, which is OK because that is you max tx
power.

At 300m you obviously require less tx power, so lets do the maths:

path loss at 300m, 2400MHz is 90dBm

so required tx power is 90 -96 = -6dBm which is less than your 0dBm max tx power - no problem.
-6dBm equates to 2.5e-4W or 0.25mW.

If you are trying to say that the -6dBm figure is greater than the number that you worked out using Shannon for a particular bandwidth and data rate once you take off the 90dB path loss then you have to look at the accuracy of your Shannon calculation.

You said that you Shannon Calculation produced a "reasonable transmit power of 1.6 uW", to achieve 250kB in a 5MHz BW. Now 1.6uW = 0.0016mW = -28dBm this does not seem reasonable when the manufacturers are quoting -96dBm!!! You must go back and re-consider your Shannon calculations, this time taking the actual receiver characteristics into account, such as rx NF, the real noise bandwidth, number of levels in the modulation scheme etc., etc..

Regards
Jeff

5414. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 09:44:29 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C564CF7D00F2A984B01AD9AF@news.sf.sbcglobal.net>
Source record: 19138
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> One nick in a
> solid center conductor and the center pin connection falls apart
> inside the connector.

Can you say more about this? Or point to some web discussions / photos?

Thanks.

5415. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 09:45:05 UTC
From: Anon bozo <anon@bozo.to>
Message-ID: <0001HW.C564CFA100F2B1FDB01AD9AF@news.sf.sbcglobal.net>
Source record: 19139
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> no matter what you use skills at doing the job and
> inspection/testing of the work will always remain a constant

Your spacing makes for difficult parsing and comprehension.

5416. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 10:37:50 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <C$EuaTQ+v5PJFAl6@ifwtech.co.uk>
Source record: 19140

Art Unwin wrote:
>On Dec 6, 2:38ï¿½am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
>> JP wrote:
>>
>> >Skin depth and what cause it:
>>
>> >http://en.wikipedia.org/wiki/Skin_depth
>>
>> The Wikipedia treatment is not incorrect, but it may create a false
>> impression that the skin effect is limited to some particular type or
>> cross-section of conductor.
>>
>> There is a more general derivation by Davidson that has far fewer
>> restrictions about the assumed geometry. There is a scanned copy
>>at:http://www.ifwtech.co.uk/g3sek/misc/skin.htm
>>
>> Davidson shows much more clearly that the existence of a skin effect
>> does not depend on any particular shape or size of conductor, or any
>> particular type of electrical circuit. If RF current is flowing in a
>> conductor - regardless of the reason - then the skin effect will be
>> present.
>>
>> That is a very powerful conclusion. Because we know the skin effect will
>> be present, it helps us to trace the RF current pathways on complex
>> shapes such as coaxial cables and shielded loops.
>>
>> --
>>
>> 73 from Ian GM3SEK ï¿½ ï¿½ ï¿½ ï¿½ 'In Practice' columnist for RadCom
>>(RSGB)http://www.ifwtech.co.uk/g3sek
>
>Thank you very much for the addition supplied. I never really
>understood why hams could not accept this
>From my point oif view the beauty of the Foulcalt or eddy current is
>without this "pealing" on the chemical adhesion effect
>that a particle has on a diamagnetic surface the ejected particle
>would be without spin, and as such would not be able to have straight
>line
>projection within a gravitational field, a necessity for radiation.
>Any book on wave guides will picture this eddy current on the inside
>walls
>and any book on non destructive testing will also corroberate its
>presence
>and yet it is still rejected by this group. When Maxwell inserted the

>required units to achieve equilibrium per Newton it was the
>mathematics that forcast
>the presence of a levitation force that would not be identified for
>several decades but stil ignored because of the dominance of wave
>theory.
>Cheers
>Art

I only just read this reply.

NOTHING that I have said or referenced supports Art's ideas in any way.
His ideas are totally deluded.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5417. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 12:16:49 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <RqO%k.418421$TT4.255567@attbi_s22>
Source record: 19141

> I only just read this reply.
>
> NOTHING that I have said or referenced supports Art's ideas in any way.
> His ideas are totally deluded.
>
>
> --
>
> 73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

And he's been at it for several years now. I plonked him well over a year ago. If everyone would stop paying him any attention and stop responding to his BS, it wouldn't take him a month to go bother some other newsgroup that would give him the audience he thinks he needs. We'd be far better off for it. Art's a nut case. Face it and ignore him.

PLEASE!

W4ZCB

5418. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 12:50:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hWO%k.9755$c45.2365@nlpi065.nbdc.sbc.com>
Source record: 19142

Fred PA0FVH wrote:
> Is 5/8WL on 10meters a good height or 8 meter (22')?
> What I want is a low take off angle on 20 and 30 meters with high efficiency
> and an impedance which my remote ATU can handle.

Yes, you don't want to get much longer than 5/8WL on
10m and you don't want to get much shorter than 3/16WL
on 40m. 22 feet is a good compromise length. At my
previous QTH I used a 22' monopole with the feedpoint
elevated at 22' with four 22' radials sloping down
at 45 degrees (also used as guy wires) and fed with
an SG-230. It worked like a charm for transmitting -
noisy on receive. Here's some information from
simulations:

22' Monopole with 22' elevated sloping radials:

Band: Gain: Take Off Angle: Feedpoint: ~Tuner Loss
40m: 0.53 dBi: 22 deg: 24-j229 ohms: 0.9 dB
30m: 0.94 dBi: 19 deg: 46-j31 ohms: 0.2 dB
20m: 1.47 dBi: 16 deg: 128+j233 ohms: 0.1 dB
17m: 1.91 dBi: 14 deg: 556+j583 ohms: 0.2 dB
15m: 2.47 dBi: 12 deg: 1315-j372 ohms: 0.3 dB
12m: 3.40 dBi: 13 deg: 373-j560 ohms: 0.3 dB
10m: 4.21 dBi: 11 deg: 885-j290 ohms: 0.2 dB
--
73, Cecil http://www.w5dxp.com

5419. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 14:01:40 UTC
From: Dave <dave@dave.dave>
Message-ID: <493fcbc4$0$31202$bd467cd0@news.dslextreme.com>
Source record: 19143
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

SparkyGuy wrote:
>> One nick in a
>> solid center conductor and the center pin connection falls apart
>> inside the connector.
>
> Can you say more about this? Or point to some web discussions / photos?
>
> Thanks.
>

Any time you nick a solid copper wire it will be severely weakened and
will likely break.

5420. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 14:16:03 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <LoTcv6Zj88PJFAVx@ifwtech.co.uk>
Source record: 19144

Harold E. Johnson wrote:
>
>> I only just read this reply.
>>
>> NOTHING that I have said or referenced supports Art's ideas in any way.
>> His ideas are totally deluded.
>>
>>
>> --
>>
>> 73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
>> http://www.ifwtech.co.uk/g3sek
>
>And he's been at it for several years now. I plonked him well over a year
>ago. If everyone would stop paying him any attention and stop responding to
>his BS, it wouldn't take him a month to go bother some other newsgroup that
>would give him the audience he thinks he needs. We'd be far better off for
>it. Art's a nut case. Face it and ignore him.
>
>PLEASE!

I don't normally read a single word from Art, so my original posting was
in response to someone else.

But when he claims I agree with him, that is more provocation than a man
can stand.

--

73 from Ian GM3SEK

5421. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 14:58:10 UTC
From: JB <nospam@goofball.net>
Message-ID: <6OQ%k.883$c35.89@nwrddc02.gnilink.net>
Source record: 19145
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> Any time you nick a solid copper wire it will be severely weakened and
> will likely break.

Dittos, can short internally too.

If it is anything important, the cable should be swept or at least checked for return loss at a higher frequency. Just in case the parts were mismatched out of the bag. Quality control can be a batch problem even in the high end stuff. Good help is hard to find.

5422. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 17:03:06 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <518774c6-0e14-436e-9f7b-55515992990a@g38g2000yqn.googlegroups.com>
Source record: 19146
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Dec 10, 9:58 am, "JB" <nos...@goofball.net> wrote:
> > Any time you nick a solid copper wire it will be severely weakened and
> > will likely break.
>
> Dittos, can short internally too.
>
> If it is anything important, the cable should be swept or at least checked
> for return loss at a higher frequency. Just in case the parts were
> mismatched out of the bag. Quality control can be a batch problem even in
> the high end stuff. Good help is hard to find.

I learned to make cables while assisting installation of a Doppler VOR facility . We were sweeping the pre-made cables that came with the system and finding a lot of them bad. We cut open a few of the bad cables and founnd the center conductor was not in the center of the cable. All of a couple of hundred cables had to be remade and cut for proper phase. The other grunt worker Dust Craig and I became very proficient at putting N connectors on RG-214 and using a vector voltmeter.

Jimmie

5423. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 17:06:37 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <990bdc07-0ef3-4de0-8f86-a673e9e8eaf3@v13g2000vbb.googlegroups.com>
Source record: 19147

On Dec 10, 4:37 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
> Art Unwin wrote:
> >On Dec 6, 2:38 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:
> >> JP wrote:
>
> >> >Skin depth and what cause it:
>
> >> >http://en.wikipedia.org/wiki/Skin_depth
>
> >> The Wikipedia treatment is not incorrect, but it may create a false
> >> impression that the skin effect is limited to some particular type or
> >> cross-section of conductor.
>
> >> There is a more general derivation by Davidson that has far fewer
> >> restrictions about the assumed geometry. There is a scanned copy
> >>at:http://www.ifwtech.co.uk/g3sek/misc/skin.htm
>
> >> Davidson shows much more clearly that the existence of a skin effect
> >> does not depend on any particular shape or size of conductor, or any
> >> particular type of electrical circuit. If RF current is flowing in a
> >> conductor - regardless of the reason - then the skin effect will be
> >> present.
>
> >> That is a very powerful conclusion. Because we know the skin effect will
> >> be present, it helps us to trace the RF current pathways on complex
> >> shapes such as coaxial cables and shielded loops.
>
> >> --
>
> >> 73 from Ian GM3SEK   'In Practice' columnist for RadCom
> >>(RSGB)http://www.ifwtech.co.uk/g3sek
>
> >Thank you very much for the addition supplied. I never really
> >understood why hams could not accept this
> >From my point oif view the beauty of the Foulcalt or eddy current is
> >without this "pealing" on the chemical adhesion effect
> >that a particle has on a diamagnetic surface the ejected particle
> >would be without spin, and as such would not be able to have straight
> >line
> >projection within a gravitational field, a necessity for radiation.
> >Any book on wave guides will picture this eddy current on the inside
> >walls
> >and any book on non destructive testing will also corroberate its
> >presence

> >and yet it is still rejected by this group. When Maxwell inserted the
> >required units to achieve equilibrium per Newton it was the
> >mathematics that forcast
> >the presence of a levitation force that would not be identified for
> >several decades but stil ignored because of the dominance of wave
> >theory.
> >Cheers
> >Art
>
> I only just read this reply.
>
> NOTHING that I have said or referenced supports Art's ideas in any way.
> His ideas are totally deluded.
>
> --
>
> 73 from Ian GM3SEK 'In Practice' columnist for RadCom
(RSGB)http://www.ifwtech.co.uk/g3sek

Ian
I never stated that you supported anything with respect to my ideas.
What you supplied with respect to skin effect was a coroberation of
the Wilkpedia definition which I stated WAS correct
also in the face of a statement that said otherwise. And I thanked you
for supplying it and no more. You may call me delusional as a sample
of free speech but you like the others have never
supplied an iota of evidence that shows that my ideas have zero merit
and thus are indulging in childish attacks.
I know that you posses the AO antenna computer program and feel very
comfortable with the fact that you are capable of putting in a one
liner that shows
that a radiator for maximum efficiency will be devoid of parallelism.
Unless you initially guide a antenna optimiser towards a planar design
the program will respond with a non planar design That is a fact and
is not delusional. Statements like that is no more than support for
the many talking heads.
This is a ideal place to point out once and for all a basic fact that
points to the feasability of my analysis.To deny or try to cover up
this computor fact with respect to the avoidance of a planar design
because of the addition to general laws by Maxwell is understandable
by those who do not have the means to challenge the books is
understandable but for you there is absolutely no excuse and shows a
dependence on emotion while at the same time pushing aside scientific
fact a fact that that is undeniable. A planar design is a
approximation with respect to Maxwells laws. A antenna omptimisation,
if allowed, will always respond with a NON planar design to conform
with all aspects provided by Maxwell's laws which I might add includes
the addition iof the "weak" force as suspected by Einstein.
Art Unwin KB9MZ.....XG (uk)

5424. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 17:26:43 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <stsvj4phsvib8a4f2hr3jkbvnd965o5fun@4ax.com>
Source record: 19148
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Wed, 10 Dec 2008 01:44:29 -0800, SparkyGuy <sparkyguy@mumcrank.ck>
wrote:

>> One nick in a
>> solid center conductor and the center pin connection falls apart
>> inside the connector.

>Can you say more about this? Or point to some web discussions / photos?
>Thanks.

There's not much to say or show. The usual example is the common
RG-6/u cable TV coax, that uses the solid center wire as the center
pin of the F connector. By necessity, the center wire is rather
stiff. There's also no way to immobilize the center wire as there
would be no room for the mating jack. If the rotary razor blade wire
stripper or half asleep tech with the wire cutters manages to nick the
center wire, chances are good that moving the cable around will
eventually break the center wire at the nick.

Crimp type BNC plugs are also susceptible in the same area. The
difference is that the center pin is either crimped or soldered. The
center pin is also supported by the Teflon insulator. However, if the
coax is moved constantly, as is common with test cables, any nicks in
the center wire will eventually turn into a break. This one is
particularly insidious because it occurs inside the connector, where
both ends of the break are supported in place, resulting in an
intermittent, rather than a clean break.

Big fat center wires are not immune. They just have a different
problem. When one of the heavy stranded center wires from RG-8/u
style coax breaks at a nick, it's usually perfectly positioned to
short to ground. In the common PL-259 UHF connector, the coax end of
the break is not supported, resulting in a difficult to find, and
impossible to see, intermittent.

In my limited experience, the tools that cause the most problems are
the ones with the built in razor blades:
<http://www.mytoolstore.com/ideal/ide08-07.html>
<http://www.mytoolstore.com/ideal/ide08-06.html#coax>
<http://www.mytoolstore.com/ideal/ide08-08.html>
<http://www.fab-corp.com/product.php?productid=1665&cat=281&page=1>
<http://www.hyperlinktech.com/item.aspx?id=879>
(Note the huge variation in pricing)

As long as the blades are sharp they work just fine. However, when
the blades get dull, the user tends to bend the cable to assist in the
cutting, which sometimes results in a nicked center wire. Cleaning up
the stripping job with a pair of diagonal cutters also causes
problems. Stripping is also difficult with Teflon insulated wire and
non-wicking insulation (marine coax), where the dielectric materials
are bonded to the conductors. The best way to strip these materials
and to be sure not to nick the wires is with a thermal wire stripper.
<http://www.teledyneinterconnect.com/products/wire_strippers/wirestrip.asp>
I got lucky and ended up with pile of these from some aerospace
surplus outlet. Very handy. Just take care not to breath the fumes.

However, if you're working with LMR-400, LMR-600, or larger, the
blades of the thermal stripper cannot expand wide enough to fit the
coax cable. Therefore, I suggest getting the correct Times Microwave
EZ-Strip coax stripper for these cables:
<http://www.hyperlinktech.com/item.aspx?id=881>
<http://www.hyperlinktech.com/item.aspx?id=882>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5425. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 17:39:30 UTC
From: JB <nospam@goofball.net>
Message-ID: <m9T%k.913$c35.868@nwrddc02.gnilink.net>
Source record: 19149

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ghn7r8$7en$2@news.albasani.net...
> JB wrote:
>
> > ...
> > It's a cinch we can't trust the regular media to properly cover this
> > administration because they even overtly promoted it, while at the same
time
> > slamming the current administration over the war. The inability of the
> > previous administration to deal with it and the terrorist acts that were
a
> > product seem to have been lost in the shuffle. Here the guy who was in
the
> > middle of it tries to come clean:
> > http://www.theatlantic.com/doc/200401/pollack
> >
> > Then there's the Fannie Mae/Freddie Mac impending disaster that was
covered
> > up over and over until it finally came home to roost and has goofed up
the
> > world economy.
> > http://www.youtube.com/watch?v=hN31-nKndg8&feature=related
> >
> > And now they are there to clean it all up? Give me a break. Be very
afraid
> > when people are promoted for bad behavior and bad judgment.
> >
>
> I must differ. I think their reporting documented true failings of bush
> and govt.

BTW censors who have a problem with this discussion can find a different tree. It is well established that these topics are routinely hijacked immediately. But in reality the Subject line of this thread must be a troll for political discussion since universities, the media, business, government are such targets for subversion.

Bush's failings, indeed the failings of the Republicans in general have been their dumbfounded reaction to these criminal (or ignorant) acts of democrats. The brazen point was made to regulators in the video above. He was actually complaining that democrats needed more oversight to check their own bad behavior. In reality it is hard to promote freedom and then have to take a firm hand against those who exploit it. It is a big quandary. Big government leads to corruption and domination, not big enough and it gets overrun. Without widespread moral patriotism, freedom is lost. We have

lost this to demoralization.

Case in point, Nancy Pelosi seem to have in mind that the big three should do what they are told by a dominant government overseer and be immediately profitable to her tastes while they are dis-advantaged in the marketplace by the active redistribution of wealth of the unions. Granted, management shouldn't expect golden parachutes, but the lavish retirements of union employees and high wages are a major drain on a crippled enterprise. It really sounds like a plan to pay off the employees, cover up the problem and throw jobs under the bus. Management will take the blame for the failure and all the employees who are suddenly out of work with big mortgages will hate them as they lose their mansions. I know a few right now. The real answer for all this is immediate and localized accountability at all levels. Bring back bonuses and commissions for productivity and loss for loss. Not the unmanaged situation that exists now where exploitation and failure goes unchecked at all levels, and go crying to someone for money to clean up the wreckage. People need to have expectations of them or they won't succeed. Unrealistic expectations just lead to demoralization and failure.

> I also believe, their reporting depicted the true hope the "down
> trodden" wish to place in Obama ... they are just sorely tired of being
> sick and tired

This is like the people out here who get fired by their leftist bosses and are told it's Bush's fault. Maybe if he shouts his indignation at Bush loud and hard enough, the people who smacked him down will take pity and give him his job back. This is like the battered wife hoping she can do better next time, because her husband says he loves her and he will change, although the beatings are worse every time. This is called demoralization. It is a psychological process that conditions peoples reactions so that they are unable to process fact, only react to stimuli. The next step is destabilization. How is it in our best interest to destroy the economy and throw record numbers of people out on the street? If people don't wake pretty quick, you and I both will be taking a bullet in the head, because I am a dissident and you because they won't have a need for you when you finally realize were we are going. This realization must come from Republicans and Democrats because we have been conditioned to extremes. Socialists think we need more intervention, smothering, nationalist health care and free drugs, free housing, loss of freedom and choice so we don't endanger ourselves and our children. Where does teaching them homosexuality and abortion fit in? It certainly facilitates conquest. Capitalists are taught that Greed is good and that it is OK to prey on those around us. This is where Rush Limbaugh does harm. It fans the flames of class envy. The real answer to all this would be a shift in our thinking as voters, legislators, and people at all levels in our government. In the true spirit of patriotism and moderation, a conservatism could emerge that has a healthy skepticism, a realization that no one should be trusted too much with our welfare, and that we should first count all our fingers before shaking hands in business. It is my hope that somehow enough people who are resistant to the current conditioning can transcend the bi-polar thinking of this nation before civil war breaks out.

5426. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 17:46:04 UTC
From: JB <nospam@goofball.net>
Message-ID: <wfT%k.915$c35.428@nwrddc02.gnilink.net>
Source record: 19150

> > You know what happens to people who reveal the Secrets of The Spectrum
> > to outsiders, don't you?
> >
>
> You guys really get me. You claim everyone is a conspiracy nut ...
> perhaps you are correct--but, it would seem everyone BUT you. And,
> perhaps your definition of "conspiracy nut" is something I hold in esteem.
>
> First and formost, conspiracy is involved in most of what I do. I
> conspire to raise my salary to the highest possible, I conspire to get
> the benefits possible. I conspire to beat the system, legally, at every
> possible turn I can. I conspire to see my family and friends served
> before all others. I conspire to have the best looking resume possible.
> I conspire to save every dime I can. I conspire to leverage every
> possible asset I have to the maximum.
>
> I know "conspiracy" exists "on the job", I was a union steward in my
> late 20's and early 30's. If you don't think I have seen REAL
> "conspiracies" on BOTH sides of the fence--then conspiracies are only in
> my imagination. Perhaps Hoffas' death is only that? Perhaps the
> Kennedys were not in a "conspiracy" to get Hoffa?
>
> Now, what do you idiots do? Tell the world everything? (i.e.,
> broadcast your punches?) Have no secrets? I mean, certainly, a retard
> has fewer than a scholar! Could just be, I guess. This is what your
> implications bring to my mind ...
>
> Now, you, indeed, may be just as stupid as you continually shout from
> the mountaintop! But, you make a very grave mistake--I think those
> "like me" out number you by a good 10,000:1.
>
> P.S. Frequently, I fall asleep working on my next "conspiracy" to get
> me and mine ahead ... if that is nuts, so be it. Competition is high,
> this economic disaster will only increase it; You can either play or
> pay. From the market, looks many choose to pay.
>
> Regards,
> JS

The only fault with that conspiracy is that without moral restraint, the
10,000 kill the 1 who is supporting them. Otherwise the best you can hope
for is a balance of terror.

5427. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 18:06:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <couvj4tif9a9aqnr4fcrhpfhf4odll4k5p@4ax.com>
Source record: 19151

On Wed, 10 Dec 2008 08:55:58 -0000, "Jeff" <Jeff@local.host> wrote:

>No it dosen't unless you know more about the receivers and the actual SNR
>that they require for a specific BER.

>So what's the problem??

>I a sorry I don't understand what the hell you are on about.

>That is just not correct

>you have to look at the accuracy

>You must go back and re-consider

Hi Jeff,

Talking to a wall? This is the same lid who 2 years ago wanted 25 dBi
gain from a vertical and never responded to your comments.

73's
Richard Clark, KB7QHC

5428. Re: "Dual crimp" coax connectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 18:39:03 UTC
From: JB <nospam@goofball.net>
Message-ID: <b1U%k.922$c35.84@nwrddc02.gnilink.net>
Source record: 19152
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

A lot of this would seem to be trade secrets.

5429. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 19:01:46 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <k340k4tis4eesb92ba1l3i931obflftta9@4ax.com>
Source record: 19154

FWIW, http://dixienc.us/28FtVert/28FtVertical.htm
might help you make some decisions.

Unless you already have the materials I suggest you build with ten
foot lengths of chain link top rail. The last time I priced it at the
home improvement store it was $11 per section.

If it were not for the price of the tuner it would be a cheap antenna.

Every time I tinker with it I learn a little more.

If DX is your thing, go for the low angle radiation for your favored
band. DX is of little interest to me so the high angle radiation on
some bands just gives me a different set of Hams to work.

John Ferrell W8CCW

On Tue, 9 Dec 2008 23:11:10 +0100, "Fred PA0FVH"
<fred.verburgh@orange.nl> wrote:

>Dear group,
>
>As a temporarily solution I would like to use a cheap 5/8, 6/8 or 7/8 WL
>commercially available CB antenna as a non resonant vertical with elevated
>radials for use on 10 - 40 meters tuned by an automatic remote ATU at the
>base of the antenna. I used MMANA and EZNEC (demo) to calculate the expected
>impedance for the frequency range and found too many results for the height
>of the antenna. Now I am confused about what to select.
>Is 5/8WL on 10meters a good height or 8 meter (22')?
>What I want is a low take off angle on 20 and 30 meters with high efficiency
>and an impedance which my remote ATU can handle.
>
>Fred, PA0FVH
>
>
>
>

5430. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 19:02:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghp3og$7n4$1@news.albasani.net>
Source record: 19153

JB wrote:

>> ... It is my hope that somehow enough people who are
> resistant to the current conditioning can transcend the bi-polar thinking of
> this nation before civil war breaks out.
>

It is beginning to look like the need a "Superior Grand Jury." Perhaps
a couple of reps from each state which over see the president on
down--no matter if the republicrats or the democans are in charge ...

But then, in my county, even the sheriff and city police are corrupt!
How about "drafting" them too. Each citizen does a tour in the
police/sheriff ... Or, in other words, if we can't even keep our own
house clean, how are we going to keep the countries?

Regards,
JS

5431. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 19:07:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghp41l$82t$1@news.albasani.net>
Source record: 19155

JB wrote:

> ...
> The only fault with that conspiracy is that without moral restraint, the
> 10,000 kill the 1 who is supporting them. Otherwise the best you can hope
> for is a balance of terror.
>

Sometimes, I am a bit slow on the uptake--I just don't get that thinking.

Since when is responsibility and competition a bad thing? Isn't it what drives small business AND corporations--even the largest. I mean, when I had to work for corps and pick-the-bones to survive, everyone was attempting to get someone fired--to give family, relatives or friends a shot at the job! ROFLOL Control freaks were the norm, NOT the exception!

I only thank gawd I found a path out ...

Regards,
JS

5432. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 19:29:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghp5av$9lt$1@news.albasani.net>
Source record: 19156

John Ferrell wrote:
> FWIW, http://dixienc.us/28FtVert/28FtVertical.htm
> might help you make some decisions.
>
> Unless you already have the materials I suggest you build with ten
> foot lengths of chain link top rail. The last time I priced it at the
> home improvement store it was $11 per section.
>
> If it were not for the price of the tuner it would be a cheap antenna.
>
> Every time I tinker with it I learn a little more.
>
> If DX is your thing, go for the low angle radiation for your favored
> band. DX is of little interest to me so the high angle radiation on
> some bands just gives me a different set of Hams to work.
>
> John Ferrell W8CCW
>

Hmmm, in "Kalifornia" (we tend towards actors to play the part of
governors, here) "high angle" seems to give me the east coast; While,
low angle tends to give me the Aussies ... DX isn't the east coast?

Regards,
JS

5433. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 20:05:17 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <8fdfaa30-dbb2-432e-b27f-69c6461746d2@g17g2000prg.googlegroups.com>
Source record: 19157

On Dec 10, 7:50 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Fred PA0FVH wrote:
> > Is 5/8WL on 10meters a good height or 8 meter (22')?
> > What I want is a low take off angle on 20 and 30 meters with high efficiency
> > and an impedance which my remote ATU can handle.
>
> Yes, you don't want to get much longer than 5/8WL on
> 10m and you don't want to get much shorter than 3/16WL
> on 40m. 22 feet is a good compromise length. At my
> previous QTH I used a 22' monopole with the feedpoint
> elevated at 22' with four 22' radials sloping down
> at 45 degrees (also used as guy wires) and fed with
> an SG-230. It worked like a charm for transmitting -
> noisy on receive. Here's some information from
> simulations:
>
> 22' Monopole with 22' elevated sloping radials:
>
> Band: Gain: Take Off Angle: Feedpoint: ~Tuner Loss
> 40m: 0.53 dBi: 22 deg: 24-j229 ohms: 0.9 dB
> 30m: 0.94 dBi: 19 deg: 46-j31 ohms: 0.2 dB
> 20m: 1.47 dBi: 16 deg: 128+j233 ohms: 0.1 dB
> 17m: 1.91 dBi: 14 deg: 556+j583 ohms: 0.2 dB
> 15m: 2.47 dBi: 12 deg: 1315-j372 ohms: 0.3 dB
> 12m: 3.40 dBi: 13 deg: 373-j560 ohms: 0.3 dB
> 10m: 4.21 dBi: 11 deg: 885-j290 ohms: 0.2 dB
> --
> 73, Cecil http://www.w5dxp.com

Experimenting with a too long antenna on 10M can be fun. I did a 1.25
wl antenna and got some interesting results during band openings. You
get to talk to where everyone else isnt. I felt like the band had
opened just for me. Of course this isnt the norm.

Jimmie

5434. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 22:37:05 UTC
From: Dave <noone@nowhere.com>
Message-ID: <lwX%k.952$c35.53@nwrddc02.gnilink.net>
Source record: 19158

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:RqO%k.418421$TT4.255567@attbi_s22...
>
>> I only just read this reply.
>>
>> NOTHING that I have said or referenced supports Art's ideas in any way.
>> His ideas are totally deluded.
>>
>>
>> --
>>
>> 73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
>> http://www.ifwtech.co.uk/g3sek
>
> And he's been at it for several years now. I plonked him well over a year
> ago. If everyone would stop paying him any attention and stop responding
> to his BS, it wouldn't take him a month to go bother some other newsgroup
> that would give him the audience he thinks he needs. We'd be far better
> off for it. Art's a nut case. Face it and ignore him.
>
> PLEASE!
>
> W4ZCB
>
but its so much fun to drag new details of his amazing jumping diamagnetic
neutrinos out of him!

5435. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-10 23:11:09 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <rYX%k.5885$8_3.4849@flpi147.ffdc.sbc.com>
Source record: 19159

Dave wrote:
> "Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
> news:RqO%k.418421$TT4.255567@attbi_s22...
>>> I only just read this reply.
>>>
>>> NOTHING that I have said or referenced supports Art's ideas in any way.
>>> His ideas are totally deluded.
>>>
>>>
>>> --
>>>
>>> 73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
>>> http://www.ifwtech.co.uk/g3sek
>> And he's been at it for several years now. I plonked him well over a year
>> ago. If everyone would stop paying him any attention and stop responding
>> to his BS, it wouldn't take him a month to go bother some other newsgroup
>> that would give him the audience he thinks he needs. We'd be far better
>> off for it. Art's a nut case. Face it and ignore him.
>>
>> PLEASE!
>>
>> W4ZCB
>>
> but its so much fun to drag new details of his amazing jumping diamagnetic
> neutrinos out of him!
>
>

Mocking people like Art isn't my idea of fun.
73,
Tom Donaly, KA6RUH

5436. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 01:25:18 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <2_Z%k.419217$TT4.349495@attbi_s22>
Source record: 19160

>>> And he's been at it for several years now. I plonked him well over a
>>> year
>>> ago. If everyone would stop paying him any attention and stop responding
>>> to his BS, it wouldn't take him a month to go bother some other
>>> newsgroup that would give him the audience he thinks he needs. We'd be
>>> far better off for it. Art's a nut case. Face it and ignore him.
>>>
>>> PLEASE!
>>>
>>> W4ZCB
>>>
>> but its so much fun to drag new details of his amazing jumping
>> diamagnetic neutrinos out of him!
>
> Mocking people like Art isn't my idea of fun.
> 73,
> Tom Donaly, KA6RUH

I agree wholeheartedly. Before Art, did you get your jollys pulling the
wings off flies? Or just tripping folks who were trying to get around on a
pair of crutches?

W4ZCB

5437. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 01:38:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghpqv4$2dv$1@news.albasani.net>
Source record: 19161

Tom Donaly wrote:

> ...
> Mocking people like Art isn't my idea of fun.
> 73,
> Tom Donaly, KA6RUH

You were raised well, and stand in tribute to your parents; Good man!
Very rare these days ...

Regards,
JS

5438. Re: NEC output in circular components...

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 02:26:41 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <Uv6dnWBJWOD2593UnZ2dnUVZ_tfinZ2d@earthlink.com>
Source record: 19162

Jim:

Hi, thanks for the inputs...

[snip]
> If you need more, fork out the bucks for a FEM code that does what you
> need.
[snip]

OK, I have a client who can underwrite such software, do you have a
recommendation
for a particular product?

[snip]
> As you say, you've not researched it.
>
> I would suggest that the need for such a thing is fairly small, but I'll
> bet someone somewhere has done it, just not as a "end user" software
> product.
[snip]

I agree, there are certainly several "commercial" high priced muliti-physics
software packages
available on the market that cost 10's of thousands of dollars per 'seat',
and... I'll bet that there
are a few more "in-house" packages developed within the defense industrial
community.

[snip]
> Certainly, there IS a lot of modeling of EM waves from moving objects
> (radar reflections being of particular interest).
[snip]

Yep I believe that might be so, again... do you have any specific
recommedations?

[snip]
> Depends on the relative scales, too. If you're talking waves from a meter
> scale object viewed from kilometers away, then using a point source
> approximation for the object will work nicely, and then it's just simple
> geometry.
[snip]

For the present investigation, I only need the capability to simulate
antennas that
rotate very fast...

Thanks!

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5439. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 02:28:46 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <avidnSku8Kt1593UnZ2dnUVZ_ofinZ2d@earthlink.com>
Source record: 19163

John:

[snip]
> DC is just AC with a very low frequency. After all you have to turn it
> on some time and some day it will turn off.
>
>
> John Passaneau W3JXP
[snip]

I agree, DC is nothing special... DC is 'just' another frequency!

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5440. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 03:04:36 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <ovednT8NBp3THt3UnZ2dnUVZ_gKdnZ2d@earthlink.com>
Source record: 19164

Dave:

[snip]
"Dave" <noone@nowhere.com> wrote in message
news:blE%k.929$7I6.926@nwrddc01.gnilink.net...
>I thought i had myself convinced that it would work, but then talked myself
>out of it... and went back to the books.
>
> In my opinion, no, rotating a plane wave, even at the same frequency that
> it is oscillating would not create circular polarization. It would create
> a rotating plane wave, but it lacks half of the field components to be
> circular. The key is in this quote from ramo whinnery and van duzer's
> 'fields and waves in communications electronics': "if there is a
> combination of TWO uniform plane waves of the same frequency, but of
> different phases, magnitudes, and orientations of the field vectors, the
> resultant combination is said to be an elliptically polarized wave"
> (emphasis mine). This is of course the generalized case of the circular
> one that would require them to be of the same amplitude and 90 degrees out
> of phase as they note a few paragraphs later.
[snip]

Yes! We all know that nothing is really "rotating" in circular
polarization,
rather circular polarization is merely the presence of two separate linearly
polarized waves that are differ in time phase by 90 degrees and mutually
oriented at 90 degrees (space angle) to each other.

A circularly polarized wave excites a linearly polarized antenna equally
well when oriented at any arbitrary angle. In fact a fundamental
"experimental" test to determine if a wave is circularly polarized is to
receive it (measure it) with a linearly polarized 'test' antenna while
the test antenna is rotated. If the signal strength received on the linear
test antenna is the same at all angles of orientation then the received
wave is circular.

Of course, the useful 'discrimination' property of circularly polarized
waves is most evident when they are used with circularly polarized
antennas not linearly polarized antennas. A circularly polarized
wave of a given chirality, will be received at full strength on a
circularly polarized antenna with the same chirality and will be
rejected (null signal) on a circularly polarized antenna of the
opposite chirality. This property provides the most useful
applictions of circular polarization.

[snip]
> The key is the 'TWO' that I emphasized.

[snip]

Yes!

> If you trace the E field of a single rotating dipole that is rotating at
> the same frequency as the rf driving it you would still see the E field
> oscillate in amplitude at the original frequency.
[snip]

Yes, if by 'trace' you mean measure with a linearly polarized antenna.

And you would see exactly the same with "trace' with a circularly
polarized signal.

In other words, there is no difference between the wave generated
by a circularly polarized antenna and a wave generated by a linear
antenna mechanically rotated at the signal frequency.

In each case if you placed a linear receiving antenna in the passing
wave front, and hooked and oscilloscope up to the linear receiving
antenna terminals you would observe exactly the same received signals.

[snip]
> and you would observe the same w So as it propagated, even though the
> direction of the E field would follow a circular path the amplitude of it
> would change at the same rate, so there would be nulls in the E field
> every 1/2 cycle...
[snip]

Yes!

[snip]
>in a true circular polarized wave the E field is a constant magnitude,
[snip]

NO! Unless you are referring to say the root mean square magnitude of
the E field, the actual instantaneous magnitude of the E vector oscillates.
The E field of any electromagnetic wave is never constant
it is constantly oscillating in a plane transverse to the wave direction
at the RF 'carrier' frequency.

[snip]> it just
> rotates around the axis at the given frequency.
[snip]

Yes indeed! In the case of circular polarization, there are actually two
separate phase locked linearly polarized (vector) E fields oscillating at
the same frequency but in simultaneous time phase quadrature and space
phase quadrature.

And, here is the important point...

The 'vector sum' of these two orthogonal waves adds up to give an E
vector that appears to be rotating.

Remember that any vector can be resolved into or synthesized from
the sum of other vectors. For example in two-space any vector
can be resolved into two other perpencicular vectors.

(x, y) = (a, b) + (c, d)

Now (a, b) and (c, d) may be linear, but if they are of the form
a = A cos(wt), b = B sin(wt), c = C cos(wt), d = D sin(wt) their
sum (x, y) will appear to be rotating.

Think of the 'projections' of the spoke of a rotating bicycle wheel!

[snip]
> you can't get that from a single dipole no matter how you rotate it
[snip]

Yes you can, see above.

[snip]
> Oh, and i briefly saw something about DC fields... actually i 'think' that
> if you put a 'dc' charge on a dipole, lets just separate two charges by
> some distance and start them rotating about a common center... that MAY
> actually create a circularly polarized wave.
[snip]

Yes it should, but that's not the particular/specific application or
scenario
that I was originally proposing.

[snip]
> but i would consider this a degenerate case of the general problem.
[snip]

Agreed!

My original point was that there is essentially no difference between the
wave
emitted by a conventional circularly polarized antenna (say axial mode
helix [W8JK], or a turnstyle) and a linear antenna spinning mechanically or
spinning
by electronic scanning means, with angular velocity equal to the carrier
frequency.

My claim is that here simply is no way to determine
the difference by any physical measurement. The emitted fields are exactly
the same.

We know that there are good applications for 'conventional' circular
polarization where the rate of field 'rotation' is synchronous with the
carrier frequency.

I was just wondering if there are any good applications for circular
polarization when the rate of field rotation is not synchronous
with the carrier frequency, and if so, how well one could
discriminate between such waves rotating at different angular

velocities.

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5441. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 03:58:14 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4a294625-99c4-4d6b-8995-eca1c3ef711e@x16g2000prn.googlegroups.com>
Source record: 19165

On Dec 10, 6:16 am, "Harold E. Johnson" <W4...@mchsi.com> wrote:
> > I only just read this reply.
>
> > NOTHING that I have said or referenced supports Art's ideas in any way.
> > His ideas are totally deluded.
>
> > --
>
> > 73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
> >http://www.ifwtech.co.uk/g3sek
>
> And he's been at it for several years now. I plonked him well over a year
> ago. If everyone would stop paying him any attention and stop responding to
> his BS, it wouldn't take him a month to go bother some other newsgroup that
> would give him the audience he thinks he needs. We'd be far better off for
> it. Art's a nut case. Face it and ignore him.
>
> PLEASE!
>
> W4ZCB

Harold,
Yes I do need an audience of radio hams of which a very small minority
is able
to operate a computer program for antennas with a optimizer. I may
well be a nut case as you say and delusional
as others would say but for many years I have presented the same
problem
to this group which in itself provides vindication to my thinking.
Over the years I have pointed out to this group that an optimizer
program (one of which is free on the web)
will always discard the planar design in favor of a design that is in
equilibrium. Now I am not a computer programer
sio I am not resposible for the programs that push aside planar
designs such as the Yagi, I am just pointing out a fact.
Now I am not willing to take the aproach of garbage in garbage out but
I am willing to investigate why and present my findings.
I have done that and regardles what you think of me as a person as
radio hams you should be concerned about accepted programs
on antennas putting out what you consider as garbage. Now I understand
that many are not able to tackle such a problem and in fact many
cannot even operate a computer. But this is a newsgroup for the
discussion of antennas and many feel they are competant to determine
what is garbage or not without the use of a computer. But surely some

must realize that those who one suspects is really an expert in antennas and computer programs
not one has inserted a one liner in a program to check out the info that I placed before them.It has been several years of name calling by those who are not skilled in the art but total silence from those that are skilled because they cannot provide a reason for such results and at the same time cannot aliign themselves with the naysayers. Think about it guys, you want to shut me up then why not explain the anomoly? Years ago hams were happy to accept outrageous gain figures advertized in QST and advertizers knew that hams would not question it and they were correct as the present situation shows.
You state I have been a problem for years with respect to this yet nobody as yet has stated that the programs do not take this path or tried to explain why.
It takes 5 minuits to check with a one liner and for a hero to emerge to chop me off at the knees, but not one is willing to come forward and thus lose his place in the pecking line of pseudo experts....not one. Thus those on the group of lesser abilities gain confidence in calling evrything trash while those that can do remain silent. They know the computer programs are acting this way. Their silence infers that the programs are doing something "wrong"
Harold, turning a blind eye to what i have informed others will not force me to collect coals from Newcastle as I am not going away so a few may maintain an un truth. If you are not just a talking head use the free program available on the net and find out the truth for yourself instead of being a lemming.
Art

5442. RE:"Round" quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 04:22:39 UTC
From: Harry H <harryharms@hotmail.com>
Message-ID: <jA00l.1153$cu.366@news-server.bigpond.net.au>
Source record: 19166

I am wondering if its possible to build a 6 element "round" quad antenna,
that is the elements are circular instead of square.
I want to use it for DFing and have the centre frequency of 438 mhz.
I will be mounting the elements on an insulator above the boom, will the
boom have to be non conductive?
I intend to use 1/8" alloy wire for rigidity, and make the element mounts
out of insulating material so they can be slid along the boom, will the
frequency to wire diameter ratio have any effect on the length of each
element?

73
HarryH

5443. Re: "Dual crimp" coax connectors? [Thermal Wire Strippers]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 04:37:19 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <3O00l.9828$vl1.2848@newsfe03.iad>
Source record: 19167
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:stsvj4phsvib8a4f2hr3jkbvnd965o5fun@4ax.com...

> As long as the blades are sharp they work just fine. However, when
> the blades get dull, the user tends to bend the cable to assist in the
> cutting, which sometimes results in a nicked center wire. Cleaning up
> the stripping job with a pair of diagonal cutters also causes
> problems. Stripping is also difficult with Teflon insulated wire and
> non-wicking insulation (marine coax), where the dielectric materials
> are bonded to the conductors. The best way to strip these materials
> and to be sure not to nick the wires is with a thermal wire stripper.
> <http://www.teledyneinterconnect.com/products/wire_strippers/wirestrip.asp>
> I got lucky and ended up with pile of these from some aerospace
> surplus outlet. Very handy. Just take care not to breath the fumes.

Before retirement, many of my instrument designs had to work in
high-temperature, corrosive environments, so I frequently used PTFE*
insulated wires. I purchased one of the Teledyne thermal strippers and was
VERY pleased with its operation. The next year I found one for sale at a
hamfest for $5. I snapped it up immediately for home use. If you work
with small gauge wires, and especially with PTFE insulated wires, I
strongly recommend these units.

73, Dr. Barry L. Ornitz WA4VZQ

* A later job with W. L. Gore & Associates thoroughly indoctrinated in me
that Teflon was a DuPont trademark!

5444. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 05:53:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4v91k4933no0t08qc5463bn61p17tlp4qe@4ax.com>
Source record: 19168

On Wed, 10 Dec 2008 19:58:14 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

> I may
>well be a nut case as you say and delusional
>as others would say but for many years I have presented the same
>problem
>to this group which in itself provides vindication to my thinking.

Well, if this is a defense, at least it is rational (doesn't mean it
is logical, however).

>Over the years I have pointed out to this group that an optimizer
>program (one of which is free on the web)

And one that Art will never divulge the name of - with his natural
inclination to suppress information. I could be wrong in that he
might be actually suborning the circulation of software pirated from
vendors. As his experience is limited to one package from the 1980s,
and that author has refused to market it anymore because of piracy, it
is rather hypocritical that Art suggest it can be freely obtained.

Art can immediately nullify this tarnished image of supporting
computer piracy by naming this so-called "free optimizer" - but I will
bet dollars to donuts that he would rather embrace this form of
illegality than utter that "free optimizer's" name.

>will always discard the planar design in favor of a design that is in
>equilibrium.

In fact it will NEVER discard any design for one that is inferior!

>Now I am not a computer programer
>sio I am not resposible for the programs that push aside planar
>designs such as the Yagi,

A computer user is probably more dangerous than a computer programmer
when it comes to this erroneous usage.

>I am just pointing out a fact.

Making a mistake is a fact. Publishing it as the tool's fault is
called coppin' a plea.

>Now I am not willing to take the aproach of garbage in garbage out but
>I am willing to investigate why and present my findings.

Another strange defense garroted by the fantasy of "findings."

73's
Richard Clark, KB7QHC

5445. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 10:47:56 UTC
From: Dave <noone@nowhere.com>
Message-ID: <wd60l.1018$c35.71@nwrddc02.gnilink.net>
Source record: 19169

"Peter O. Brackett" <none@no-such-domain.nul> wrote in message
news:ovednT8NBp3THt3UnZ2dnUVZ_gKdnZ2d@earthlink.com...
> Dave:
>
> [snip]
> "Dave" <noone@nowhere.com> wrote in message
> news:blE%k.929$7I6.926@nwrddc01.gnilink.net...
>>I thought i had myself convinced that it would work, but then talked
>>myself out of it... and went back to the books.
>>
>> In my opinion, no, rotating a plane wave, even at the same frequency that
>> it is oscillating would not create circular polarization. It would
>> create a rotating plane wave, but it lacks half of the field components
>> to be circular. The key is in this quote from ramo whinnery and van
>> duzer's 'fields and waves in communications electronics': "if there is a
>> combination of TWO uniform plane waves of the same frequency, but of
>> different phases, magnitudes, and orientations of the field vectors, the
>> resultant combination is said to be an elliptically polarized wave"
>> (emphasis mine). This is of course the generalized case of the circular
>> one that would require them to be of the same amplitude and 90 degrees
>> out of phase as they note a few paragraphs later.
> [snip]
>
> Yes! We all know that nothing is really "rotating" in circular
> polarization,
> rather circular polarization is merely the presence of two separate
> linearly
> polarized waves that are differ in time phase by 90 degrees and mutually
> oriented at 90 degrees (space angle) to each other.
>
> A circularly polarized wave excites a linearly polarized antenna equally
> well when oriented at any arbitrary angle. In fact a fundamental
> "experimental" test to determine if a wave is circularly polarized is to
> receive it (measure it) with a linearly polarized 'test' antenna while
> the test antenna is rotated. If the signal strength received on the
> linear
> test antenna is the same at all angles of orientation then the received
> wave is circular.
>
> Of course, the useful 'discrimination' property of circularly polarized
> waves is most evident when they are used with circularly polarized
> antennas not linearly polarized antennas. A circularly polarized
> wave of a given chirality, will be received at full strength on a
> circularly polarized antenna with the same chirality and will be

> rejected (null signal) on a circularly polarized antenna of the
> opposite chirality. This property provides the most useful
> applictions of circular polarization.
>
> [snip]
>> The key is the 'TWO' that I emphasized.
> [snip]
>
> Yes!
>
>> If you trace the E field of a single rotating dipole that is rotating at
>> the same frequency as the rf driving it you would still see the E field
>> oscillate in amplitude at the original frequency.
> [snip]
>
> Yes, if by 'trace' you mean measure with a linearly polarized antenna.
>
> And you would see exactly the same with "trace' with a circularly
> polarized signal.

no you wouldn't. with the rotating dipole the E field would have zero crossings every 1/2 wave even as the direction rotates. with a real circularly polarized wave the E field is a constant magnitude and just changes direction. if you break down the wave into 2 orthogonal linearly polarized waves the zero crossings in one line up with the peaks in the other so the resultant vector magnitude of the E field is a constant... only the direction changes.

>
> In other words, there is no difference between the wave generated
> by a circularly polarized antenna and a wave generated by a linear
> antenna mechanically rotated at the signal frequency.

yes there is, you are missing 1/2 the wave components.

>
> In each case if you placed a linear receiving antenna in the passing
> wave front, and hooked and oscilloscope up to the linear receiving
> antenna terminals you would observe exactly the same received signals.

Only at multiples of 1/2 wave distances from the transmitting antenna. When the transmitted peak E field is oriented properly for the receive antenna you would get a max receive signal. But when you orient the tx antenna so the max in the tx E field is perpendicular to the rx antenna you get a null. This pattern repeats every 1/2 wave... again, a real circular signal would have the 2nd wave component at right angles to fill in those nulls.

>
> [snip]
>> and you would observe the same w So as it propagated, even though the
>> direction of the E field would follow a circular path the amplitude of it
>> would change at the same rate, so there would be nulls in the E field

>> every 1/2 cycle...
> [snip]
>
> Yes!

Ah, so you agree here, but not above... this is the key to the difference. there are zero crossings of the E field in the rotating plane wave, but NOT in the circular wave... hence rotating plane waves have nulls every 1/2 wave.

>
> [snip]
>>in a true circular polarized wave the E field is a constant magnitude,
> [snip]
>
> NO! Unless you are referring to say the root mean square magnitude of
> the E field, the actual instantaneous magnitude of the E vector
> oscillates.
> The E field of any electromagnetic wave is never constant
> it is constantly oscillating in a plane transverse to the wave direction
> at the RF 'carrier' frequency.

no, the E field is a constant magnitude in a true circularly polarized wave, only the direction changes.

>
> [snip]> it just
>> rotates around the axis at the given frequency.
> [snip]
>
> Yes indeed! In the case of circular polarization, there are actually two
> separate phase locked linearly polarized (vector) E fields oscillating at
> the same frequency but in simultaneous time phase quadrature and space
> phase quadrature.

right, there are TWO orthogonal waves... with a rotating dipole you only have ONE wave whose polarization changes over time. put a circularly polarized wave through a polarizing filter and you still get a signal no matter what the orientation. put a polarizing filter in front of your rotating plane wave and you get a signal that depends on your distance from the antenna.

>
> And, here is the important point...
>
> The 'vector sum' of these two orthogonal waves adds up to give an E
> vector that appears to be rotating.

Right! But go back to the books and look at that vector sum in detail. the magnitude of it is a constant, only the direction changes. in a rotating plane wave both the direction and magnitude change because there is no 2nd field component to fill in the zero crossings.

>
> Remember that any vector can be resolved into or synthesized from
> the sum of other vectors. For example in two-space any vector
> can be resolved into two other perpencicular vectors.
>
> (x, y) = (a, b) + (c, d)
>
> Now (a, b) and (c, d) may be linear, but if they are of the form
> a = A cos(wt), b = B sin(wt), c = C cos(wt), d = D sin(wt) their
> sum (x, y) will appear to be rotating.
>
> Think of the 'projections' of the spoke of a rotating bicycle wheel!

RIGHT! so take your rotating dipole and look at it from even multiples of 1/4 wave away... lets assume that the max E field from the tx antenna is when it is horizontal, and min when it is vertical.... remember, the antenna rotates 90 degrees as the tx rf also goes from peak to zero crossing... so the zero crossing will always be when the antenna is vertical and the max will always be when the antenna is horizontal. So, at even multiples of 1/4 wave you see the max E field in the same orientation as when it was transmitted, horizontal. Move another 1/4 wave away, so now you are at an odd multiple of 1/4 wave. now that max E field is vertical and the minimum is horizontal so your horizontal rx antenna sees the minimum field. Without that 2nd wave at right angles you have a null in the pattern, the 2nd wave from a real circular wave would fill in that null and you would have a constant signal amplitude.

>
> [snip]
>> you can't get that from a single dipole no matter how you rotate it
> [snip]
>
> Yes you can, see above.

No you can't, and you agreed with that statement above, you just didn't know you did.

>
> [snip]
>> Oh, and i briefly saw something about DC fields... actually i 'think'
>> that if you put a 'dc' charge on a dipole, lets just separate two charges
>> by some distance and start them rotating about a common center... that
>> MAY actually create a circularly polarized wave.
> [snip]
>
> Yes it should, but that's not the particular/specific application or
> scenario
> that I was originally proposing.
>
> [snip]
>> but i would consider this a degenerate case of the general problem.
> [snip]

>
> Agreed!
>
> My original point was that there is essentially no difference between the
> wave
> emitted by a conventional circularly polarized antenna (say axial mode
> helix [W8JK], or a turnstyle) and a linear antenna spinning mechanically
> or spinning
> by electronic scanning means, with angular velocity equal to the carrier
> frequency.
>
> My claim is that here simply is no way to determine
> the difference by any physical measurement. The emitted fields are
> exactly
> the same.

yes there is. a polarizing filter or just by moving a linear rx antenna
will tell you which is which.

>
> We know that there are good applications for 'conventional' circular
> polarization where the rate of field 'rotation' is synchronous with the
> carrier frequency.
>
> I was just wondering if there are any good applications for circular
> polarization when the rate of field rotation is not synchronous
> with the carrier frequency, and if so, how well one could
> discriminate between such waves rotating at different angular
> velocities.

maybe it could be used for some kind of distance determination by rotating
at a slightly different frequency than the carrier frequency. that would
create a null when measured from a linear rx antenna that moved along the
line of sight at the difference in frequencies. it may be hard to calibrate
and measure since the tx polarization vs time would have to be known so you
could calculate how much rotation there has been at your location... and it
would of course fall apart if it wasn't line of sight and there were any
reflections.

>
> -- Pete K1PO
> -- Indialantic By-the-Sea, FL

5446. Re: skin depth (eddy current/Foucault currentO)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 11:00:10 UTC
From: Dave <noone@nowhere.com>
Message-ID: <_o60l.1019$c35.415@nwrddc02.gnilink.net>
Source record: 19170

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:4a294625-99c4-4d6b-8995-eca1c3ef711e@x16g2000prn.googlegroups.com...
>It takes 5 minuits to check with a one liner

yeah, and art thinks he is the only one who ever let an optimizer run until it went into an unrealizable super gain state. most of us have learned to constrain them properly so they give buildable results, but not art, he keeps trying to explain how they use the same well known maxwell equations, but in secret have this hidden weak force that makes them give results that only he can understand.

5447. Re: "Dual crimp" coax connectors? [Thermal Wire Strippers]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 12:48:42 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <e23eaa7a-79d8-466a-8948-315ee367d122@r13g2000vbp.googlegroups.com>
Source record: 19171
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Dec 10, 11:37 pm, "NoSPAM" <unkn...@nospam.org> wrote:
> "Jeff Liebermann" <je...@cruzio.com> wrote in message
>
> news:stsvj4phsvib8a4f2hr3jkbvnd965o5fun@4ax.com...
>
> > As long as the blades are sharp they work just fine. However, when
> > the blades get dull, the user tends to bend the cable to assist in the
> > cutting, which sometimes results in a nicked center wire. Cleaning up
> > the stripping job with a pair of diagonal cutters also causes
> > problems. Stripping is also difficult with Teflon insulated wire and
> > non-wicking insulation (marine coax), where the dielectric materials
> > are bonded to the conductors. The best way to strip these materials
> > and to be sure not to nick the wires is with a thermal wire stripper.
> > <http://www.teledyneinterconnect.com/products/wire_strippers/wirestrip...>
> > I got lucky and ended up with pile of these from some aerospace
> > surplus outlet. Very handy. Just take care not to breath the fumes.
>
> Before retirement, many of my instrument designs had to work in
> high-temperature, corrosive environments, so I frequently used PTFE*
> insulated wires. I purchased one of the Teledyne thermal strippers and was
> VERY pleased with its operation. The next year I found one for sale at a
> hamfest for $5. I snapped it up immediately for home use. If you work
> with small gauge wires, and especially with PTFE insulated wires, I
> strongly recommend these units.
>
>   73, Dr. Barry L. Ornitz WA4VZQ
>
> * A later job with W. L. Gore & Associates thoroughly indoctrinated in me
> that Teflon was a DuPont trademark!

We have a couple at work and I think they are the greatest thing since
sliced bread and I wanted one for home use but didnt have quite the
need to match the cost.

Not being lucky enough to find one for $5 I ground a notch in a hose
clamp and fastened it to my soldering iron. It works well on just
about anything except PTFE.

Jimmie

5448. Re: "Round" quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 13:00:28 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <5gf716-51c.ln1@p400bob.personal.cox.net>
Source record: 19172

Hi Harry

Many years ago scaled a quad from the RSGB handbook from 1296 to 432MHz. It used "round" elements of flat aluminium about 15mm wide for parasitic elements and a copper piece for the DE. All were directly bolted to the boom (30mm dia Aluminium pipe) with no insulator.

The DE was fed direct connect balun style with the coax shield soldered at the element/boom point, then crossing to the other side of the circle and splitting inner/shield to each side of the element.

Worked well! (Was 23 elements I think)

I would say yes to the length question, but I dont have a handle on how critical..

I also made a few circular/helix antennas which are for less critical dimension wise. That might be another option for DF mode...

Cheers Bob VK2YQA

Harry H wrote:
> I am wondering if its possible to build a 6 element "round" quad antenna,
> that is the elements are circular instead of square.
> I want to use it for DFing and have the centre frequency of 438 mhz.
> I will be mounting the elements on an insulator above the boom, will the
> boom have to be non conductive?
> I intend to use 1/8" alloy wire for rigidity, and make the element mounts
> out of insulating material so they can be slid along the boom, will the
> frequency to wire diameter ratio have any effect on the length of each
> element?
>
> 73
> HarryH
>
>

5449. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 15:07:40 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <01a0l.1044$c35.807@nwrddc02.gnilink.net>
Source record: 19173

"Dave" <noone@nowhere.com> wrote in message
news:wd60l.1018$c35.71@nwrddc02.gnilink.net...
>
> "Peter O. Brackett" <none@no-such-domain.nul> wrote in message
> news:ovednT8NBp3THt3UnZ2dnUVZ_gKdnZ2d@earthlink.com...
>> Dave:
>>
>> [snip]
>> "Dave" <noone@nowhere.com> wrote in message
>> news:blE%k.929$7I6.926@nwrddc01.gnilink.net...
>>>I thought i had myself convinced that it would work, but then talked
>>>myself out of it... and went back to the books.
>>>
>>> In my opinion, no, rotating a plane wave, even at the same frequency
>>> that it is oscillating would not create circular polarization. It would
>>> create a rotating plane wave, but it lacks half of the field components
>>> to be circular. The key is in this quote from ramo whinnery and van
>>> duzer's 'fields and waves in communications electronics': "if there is a
>>> combination of TWO uniform plane waves of the same frequency, but of
>>> different phases, magnitudes, and orientations of the field vectors, the
>>> resultant combination is said to be an elliptically polarized wave"
>>> (emphasis mine). This is of course the generalized case of the circular
>>> one that would require them to be of the same amplitude and 90 degrees
>>> out of phase as they note a few paragraphs later.
>> [snip]
>>
>> Yes! We all know that nothing is really "rotating" in circular
>> polarization,
>> rather circular polarization is merely the presence of two separate
>> linearly
>> polarized waves that are differ in time phase by 90 degrees and mutually
>> oriented at 90 degrees (space angle) to each other.
>>
>> A circularly polarized wave excites a linearly polarized antenna equally
>> well when oriented at any arbitrary angle. In fact a fundamental
>> "experimental" test to determine if a wave is circularly polarized is to
>> receive it (measure it) with a linearly polarized 'test' antenna while
>> the test antenna is rotated. If the signal strength received on the
>> linear
>> test antenna is the same at all angles of orientation then the received
>> wave is circular.
>>
>> Of course, the useful 'discrimination' property of circularly polarized
>> waves is most evident when they are used with circularly polarized

>> antennas not linearly polarized antennas. A circularly polarized
>> wave of a given chirality, will be received at full strength on a
>> circularly polarized antenna with the same chirality and will be
>> rejected (null signal) on a circularly polarized antenna of the
>> opposite chirality. This property provides the most useful
>> applictions of circular polarization.
>>
>> [snip]
>>> The key is the 'TWO' that I emphasized.
>> [snip]
>>
>> Yes!
>>
>>> If you trace the E field of a single rotating dipole that is rotating at
>>> the same frequency as the rf driving it you would still see the E field
>>> oscillate in amplitude at the original frequency.
>> [snip]
>>
>> Yes, if by 'trace' you mean measure with a linearly polarized antenna.
>>
>> And you would see exactly the same with "trace' with a circularly
>> polarized signal.
>
> no you wouldn't. with the rotating dipole the E field would have zero
> crossings every 1/2 wave even as the direction rotates. with a real
> circularly polarized wave the E field is a constant magnitude and just
> changes direction. if you break down the wave into 2 orthogonal linearly
> polarized waves the zero crossings in one line up with the peaks in the
> other so the resultant vector magnitude of the E field is a constant...
> only the direction changes.
>
>>
>> In other words, there is no difference between the wave generated
>> by a circularly polarized antenna and a wave generated by a linear
>> antenna mechanically rotated at the signal frequency.
>
> yes there is, you are missing 1/2 the wave components.
>
>>
>> In each case if you placed a linear receiving antenna in the passing
>> wave front, and hooked and oscilloscope up to the linear receiving
>> antenna terminals you would observe exactly the same received signals.
>
> Only at multiples of 1/2 wave distances from the transmitting antenna.
> When the transmitted peak E field is oriented properly for the receive
> antenna you would get a max receive signal. But when you orient the tx
> antenna so the max in the tx E field is perpendicular to the rx antenna
> you get a null. This pattern repeats every 1/2 wave... again, a real
> circular signal would have the 2nd wave component at right angles to fill
> in those nulls.

>
>>
>> [snip]
>>> and you would observe the same w So as it propagated, even though the
>>> direction of the E field would follow a circular path the amplitude of
>>> it would change at the same rate, so there would be nulls in the E field
>>> every 1/2 cycle...
>> [snip]
>>
>> Yes!
>
> Ah, so you agree here, but not above... this is the key to the difference.
> there are zero crossings of the E field in the rotating plane wave, but
> NOT in the circular wave... hence rotating plane waves have nulls every
> 1/2 wave.
>
>
>>
>> [snip]
>>>in a true circular polarized wave the E field is a constant magnitude,
>> [snip]
>>
>> NO! Unless you are referring to say the root mean square magnitude of
>> the E field, the actual instantaneous magnitude of the E vector
>> oscillates.
>> The E field of any electromagnetic wave is never constant
>> it is constantly oscillating in a plane transverse to the wave direction
>> at the RF 'carrier' frequency.
>
> no, the E field is a constant magnitude in a true circularly polarized
> wave, only the direction changes.
>
>>
>> [snip]> it just
>>> rotates around the axis at the given frequency.
>> [snip]
>>
>> Yes indeed! In the case of circular polarization, there are actually two
>> separate phase locked linearly polarized (vector) E fields oscillating at
>> the same frequency but in simultaneous time phase quadrature and space
>> phase quadrature.
>
> right, there are TWO orthogonal waves... with a rotating dipole you only
> have ONE wave whose polarization changes over time. put a circularly
> polarized wave through a polarizing filter and you still get a signal no
> matter what the orientation. put a polarizing filter in front of your
> rotating plane wave and you get a signal that depends on your distance
> from the antenna.
>
>>

>> And, here is the important point...
>>
>> The 'vector sum' of these two orthogonal waves adds up to give an E
>> vector that appears to be rotating.
>
> Right! But go back to the books and look at that vector sum in detail.
> the magnitude of it is a constant, only the direction changes. in a
> rotating plane wave both the direction and magnitude change because there
> is no 2nd field component to fill in the zero crossings.
>
>>
>> Remember that any vector can be resolved into or synthesized from
>> the sum of other vectors. For example in two-space any vector
>> can be resolved into two other perpencicular vectors.
>>
>> (x, y) = (a, b) + (c, d)
>>
>> Now (a, b) and (c, d) may be linear, but if they are of the form
>> a = A cos(wt), b = B sin(wt), c = C cos(wt), d = D sin(wt) their
>> sum (x, y) will appear to be rotating.
>>
>> Think of the 'projections' of the spoke of a rotating bicycle wheel!
>
> RIGHT! so take your rotating dipole and look at it from even multiples of
> 1/4 wave away... lets assume that the max E field from the tx antenna is
> when it is horizontal, and min when it is vertical.... remember, the
> antenna rotates 90 degrees as the tx rf also goes from peak to zero
> crossing... so the zero crossing will always be when the antenna is
> vertical and the max will always be when the antenna is horizontal. So,
> at even multiples of 1/4 wave you see the max E field in the same
> orientation as when it was transmitted, horizontal. Move another 1/4 wave
> away, so now you are at an odd multiple of 1/4 wave. now that max E field
> is vertical and the minimum is horizontal so your horizontal rx antenna
> sees the minimum field. Without that 2nd wave at right angles you have a
> null in the pattern, the 2nd wave from a real circular wave would fill in
> that null and you would have a constant signal amplitude.
>
>>
>> [snip]
>>> you can't get that from a single dipole no matter how you rotate it
>> [snip]
>>
>> Yes you can, see above.
>
> No you can't, and you agreed with that statement above, you just didn't
> know you did.
>
>>
>> [snip]
>>> Oh, and i briefly saw something about DC fields... actually i 'think'

>>> that if you put a 'dc' charge on a dipole, lets just separate two
>>> charges by some distance and start them rotating about a common
>>> center... that MAY actually create a circularly polarized wave.
>> [snip]
>>
>> Yes it should, but that's not the particular/specific application or
>> scenario
>> that I was originally proposing.
>>
>> [snip]
>>> but i would consider this a degenerate case of the general problem.
>> [snip]
>>
>> Agreed!
>>
>> My original point was that there is essentially no difference between the
>> wave
>> emitted by a conventional circularly polarized antenna (say axial mode
>> helix [W8JK], or a turnstyle) and a linear antenna spinning mechanically
>> or spinning
>> by electronic scanning means, with angular velocity equal to the carrier
>> frequency.
>>
>> My claim is that here simply is no way to determine
>> the difference by any physical measurement. The emitted fields are
>> exactly
>> the same.
>
> yes there is. a polarizing filter or just by moving a linear rx antenna
> will tell you which is which.
>
>>
>> We know that there are good applications for 'conventional' circular
>> polarization where the rate of field 'rotation' is synchronous with the
>> carrier frequency.
>>
>> I was just wondering if there are any good applications for circular
>> polarization when the rate of field rotation is not synchronous
>> with the carrier frequency, and if so, how well one could
>> discriminate between such waves rotating at different angular
>> velocities.
>
> maybe it could be used for some kind of distance determination by rotating
> at a slightly different frequency than the carrier frequency. that would
> create a null when measured from a linear rx antenna that moved along the
> line of sight at the difference in frequencies. it may be hard to
> calibrate and measure since the tx polarization vs time would have to be
> known so you could calculate how much rotation there has been at your
> location... and it would of course fall apart if it wasn't line of sight
> and there were any reflections.

>
>>
>> -- Pete K1PO
>> -- Indialantic By-the-Sea, FL

Hi Pete

I dont think a rotating dipole with DC on it will generats a field that propogates. Your post reads as though you dont think the rotating DC dipole will producing a propogating Far Field. I read other posts that seem to indicate that others assume the DC spinning dipole will generate a propogating "far field". It is sad that I am so lazy that I cannot express myself using Cross Products. But, I submit that it takes more than rotating a dipole to produce a propogating far field.

I dont understand where the "Cross H" is generated by a rotating DC dipole, as required for propogation.

I dont understand why it requires more power to rotate a DC dipole with increased voltage on it, as required to account for the increased power.

Jerry KD6JDJ

5450. Re: "Round" quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 15:22:07 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <g+NO6ICfATQJFwpt@b-howie.demon.co.uk>
Source record: 19174

In message <jA00l.1153$cu.366@news-server.bigpond.net.au>, Harry H
<harryharms@hotmail.com> writes
>I am wondering if its possible to build a 6 element "round" quad antenna,
>that is the elements are circular instead of square.
>I want to use it for DFing and have the centre frequency of 438 mhz.
>I will be mounting the elements on an insulator above the boom, will the
>boom have to be non conductive?
>I intend to use 1/8" alloy wire for rigidity, and make the element mounts
>out of insulating material so they can be slid along the boom, will the
>frequency to wire diameter ratio have any effect on the length of each
>element?

Here's a pair of 27 Quad -loops I built for contesting. They were scaled
from the G3JVL 23cm design. They worked really well. Gain of each is
19dBi measured on sun-noise.

Http://www.b-howie.demon.co.uk/70cm%20ant.jpg.

An antenna programme like MMANA will handle Octagonal loops (which is
close enough) if you want to optimise before building. I've got an MMANA
model for the 27ele , however the antennas are constructed out of strip
elements, so I had to guess it a bit.

The boom can be conductive as long as the insulation is at least half
the boom diameter. Mine are bolted to the boom ; it's a low voltage
point. Driven element is copper strip fed by flexi-rigid cable at the
top and fed through the bottom on a bush. Matching is done by making
the DE slightly oval by squashing it then soldering the flexi-rigid at
the boom

Brian GM4DIJ
--
Brian Howie

5451. Re: "Dual crimp" coax connectors? [Thermal Wire Strippers]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 17:36:05 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C5668F8500278D9CB01AD9AF@news.sf.sbcglobal.net>
Source record: 19175
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

> Not being lucky enough to find one for $5 I ground a notch in a hose
> clamp and fastened it to my soldering iron.

Can't quite picture this. Got a photo?

5452. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 17:43:05 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ghrjfbpfl1@news.jpl.nasa.gov>
Source record: 19176

Ginu wrote:
> On Dec 9, 6:42 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>
>>
>> So, let's look at a link budget for 10 meters
>> 32.44 + 20log(2500)+20log(0.01) = 32.44+ 68 -40 -- about 60dB path loss
>> between isotropes 10m apart at 2.5GHz.
>>
>> -60dBm receive power vs -100dBm sensitivity.. So, it should work ok at
>> 250kbps and 10m (assuming no interference, multipath, etc.)
>>
>> Now, bump to 100m.. That's a 20dB hit.
>> 500m another 14dB.. now you're on the ragged edge. 6dB margin with a
>> -100dBm receiver and a 0dBm transmitter. And that's assuming isotropic
>> antennas, which may or may not be reasonable.
>
> My path loss results verify this too. The issue is this: if the range
> is between 10-100 metres, how do we use a minimum of -3 dBm of
> transmit power?
>
> To transmit at 250 kbps on a 5 MHz bandwidth channel centered at 2.5
> GHz to a receiver say 10 metres away, you only require 5.8009e-010
> watts. That's the problem. This is the maximum power required. It is
> far less than the -3 dBm quoted.

A question you need to ask is what's the receiver bandwidth. The
information might only be 250 kHz wide, but if the receiver is 5MHz
wide, it's seeing 13dB more noise, and it might not be able to "acquire"
the narrow band signal.

60dB path loss, 250kHz BW is 54dBHz, so kTB noise floor is -120dBm, for
a "real" receiver and cabling, probably 5dB worse, call it -115dBm. Add
the 60dB, and you need an EIRP of -55dBm.. (You calculated 6E-10W,
-62dBm.. that's reasonably close)

But, if the receiver is seeing the full 5MHz (or more) BW, then you'll
need more.. 13dB at least (-100dBm at the receiver.. Obviously, most
receivers don't do this well, or they're counting some S/N margin, to
get a spec of -94dBm)

Then, you'd need -34dBm (with the same 60dB path loss)

But I'll bet you actually need more...

Non-ideal antennas
Losses in cabling

Mismatch (the Tx may put out 0dBm, but if the antenna presents a 2:1 mismatch, it's not radiating 0dBm, etc.

And, the "acquisition" threshold might be different than the "communicate" threshold.

5453. Re: "Dual crimp" coax connectors? [Thermal Wire Strippers]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 18:03:57 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <anj2k49t0epdc8ift0v8colsfa2st0dpeo@4ax.com>
Source record: 19177
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Wed, 10 Dec 2008 23:37:19 -0500, "NoSPAM" <unknown@nospam.org>
wrote:

>"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
>news:stsvj4phsvib8a4f2hr3jkbvnd965o5fun@4ax.com...
>
>> As long as the blades are sharp they work just fine. However, when
>> the blades get dull, the user tends to bend the cable to assist in the
>> cutting, which sometimes results in a nicked center wire. Cleaning up
>> the stripping job with a pair of diagonal cutters also causes
>> problems. Stripping is also difficult with Teflon insulated wire and
>> non-wicking insulation (marine coax), where the dielectric materials
>> are bonded to the conductors. The best way to strip these materials
>> and to be sure not to nick the wires is with a thermal wire stripper.
>> <http://www.teledyneinterconnect.com/products/wire_strippers/wirestrip.asp>
>> I got lucky and ended up with pile of these from some aerospace
>> surplus outlet. Very handy. Just take care not to breath the fumes.
>
>Before retirement, many of my instrument designs had to work in
>high-temperature, corrosive environments, so I frequently used PTFE*
>insulated wires. I purchased one of the Teledyne thermal strippers and was
>VERY pleased with its operation. The next year I found one for sale at a
>hamfest for $5. I snapped it up immediately for home use. If you work
>with small gauge wires, and especially with PTFE insulated wires, I
>strongly recommend these units.
>
> 73, Dr. Barry L. Ornitz WA4VZQ
>
>* A later job with W. L. Gore & Associates thoroughly indoctrinated in me
>that Teflon was a DuPont trademark!

Thanks much. I checked my email this morning and found one person
asking me to sell them one of these strippers, and two more asking
questions about their operation. Apparently, there's some interest so
I'll post my answers.

1. You can find various thermal wire strippers on eBay, usually for
peanuts. For example:
<http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=320323912948>
The problem is this style of stripper is only suitable for small
diameter wires and small diameter coax cables. RG-6/u can be done,
but it's tricky. Make sure you get the long jaws if you want
something fairly universal. The problem is not getting the jaws wide
enough. It's preventing the end of the coax cable from getting jammed

into the narrow part of the jaws.

2. Teledyne does make the TW-6 model, that's made specifically for coax cable.
<http://www.teledyneinterconnect.com/products/stripall/models.asp>
I have several of these. We used these in a production environment to strip RG-188/u with PTFE wrap insulation and dielectric. We tried using blades, but thermal stripping was far superior.

3. Note that most models come with various forms of power control. This is not mandatory, as I have become quite proficient at timing the push button for temperature control. However, if you want to avoid overheating, burned out tips, and meltdowns, make sure you get the temperature control. If the tips glow red, it's far too hot. Adjust the operating point with an infra-red optical thermometer,

4. You can make your own thermal strippers from a length of nichrome resistance heater wire and a small soldering iron. Remove the copper tip and replace with a piece of nichrome. I've also seen a production machine made from a plastic bag cutter/sealer and another from a foam cutter. A low voltage filament transformer and a variac can also be made to work. Obviously, some experimentation will be required, but it will get warm and eventually work. Nichrome wire is available at most hardware stores for repairing heaters, toasters, and telescope condensation prevention heaters. You will need to supply some spring tension as the wire stretches when it gets warm.

The problem with using wire is that it doesn't last very long. The large heating tips of the Teledyne strippers are sufficiently massive to survive for years of constant production line operation. I can't say the same for using wire.

I suspect that one of the handheld battery operated soldering irons, could be morphed into a thermal wire stripper by replacing the heating tip with a nichrome wire.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5454. Re: "Dual crimp" coax connectors? [Thermal Wire Strippers]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 18:12:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ghrl5nvih1@news.albasani.net>
Source record: 19178
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jeff Liebermann wrote:

[...]

Not being in the industry, I have never seen them.

However, I am having visions (sometimes I do that, yanno', must be the 60's or sumthin'? <grin>) I see myself grabbing a small brad in a pair of needle nose, heating it red hot and running it about the diameter of a wire--in a pinch.

Replacing the high tech brad as necessary ... <straight face>

Regards,
JS

5455. Re: "Round" quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 18:18:01 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <vhl2k493i2fb9dkokgmmvlhouvsq0ocefr@4ax.com>
Source record: 19179

On Thu, 11 Dec 2008 04:22:39 GMT, "Harry H" <harryharms@hotmail.com>
wrote:

>I am wondering if its possible to build a 6 element "round" quad antenna,
>that is the elements are circular instead of square.

Yes. It's called a "disc yagi". It was commonly used for various
wireless TV schemes in the 1970's.
<http://www.supernec.com/diskyagi.htm>
<http://www.idealantenas.com.br/produto/yagi%20disc19/yagidisc19_ing.htm>

>I want to use it for DFing and have the centre frequency of 438 mhz.
>I will be mounting the elements on an insulator above the boom, will the
>boom have to be non conductive?

It should be non-conductive. You'll have plenty of entertainment
value figuring out how to run the feed line. I suggest a triangular
mounting contrivance rather than a stright pole. It keeps the coax
mostly out of the way, but also is more rigid than a stright pole. If
you're only going to have 6 elements, you can mount it by the
reflector end. However, methinks you'll want or need more than 6
elements in order to do direction finding. The big problem is
reflections off buildings and hills, You need good resolution to
identify and seperate these with a rotating antenna direction finder.
That means a narrow 3dB antenna beamwidth.

>I intend to use 1/8" alloy wire for rigidity, and make the element mounts
>out of insulating material so they can be slid along the boom, will the
>frequency to wire diameter ratio have any effect on the length of each
>element?

Ideally, the center boom should be an insulator but could also be
metal if sufficiently small diameter. A disk yagi doesn't use any
wire (except for the driven element).

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5456. Re: RE:"Round" quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 18:36:05 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <p4d0l.1079$c35.973@nwrddc02.gnilink.net>
Source record: 19180

"Harry H" <harryharms@hotmail.com> wrote in message
news:jA00l.1153$cu.366@news-server.bigpond.net.au...
>I am wondering if its possible to build a 6 element "round" quad antenna,
>that is the elements are circular instead of square.
> I want to use it for DFing and have the centre frequency of 438 mhz.
> I will be mounting the elements on an insulator above the boom, will the
> boom have to be non conductive?
> I intend to use 1/8" alloy wire for rigidity, and make the element mounts
> out of insulating material so they can be slid along the boom, will the
> frequency to wire diameter ratio have any effect on the length of each
> element?
>
> 73
> HarryH

Hi Harry

Your post seems to refer to making an antenna from wire or tube. Would you consider using an antenna modeling program, like EZNEC? Roy has a program that allows you to make loops of any size and shape with any spacing. It would be very easy to model any configuration you desire.

Jerry KD6JDJ

5457. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 18:36:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jpm2k4da7ajqb3nn2k3jsbu39cdulud258@4ax.com>
Source record: 19182

On Thu, 11 Dec 2008 09:43:05 -0800, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>> To transmit at 250 kbps on a 5 MHz bandwidth channel centered at 2.5
>> GHz to a receiver say 10 metres away, you only require 5.8009e-010
>> watts. That's the problem. This is the maximum power required. It is
>> far less than the -3 dBm quoted.
>
>A question you need to ask is what's the receiver bandwidth. The
>information might only be 250 kHz wide, but if the receiver is 5MHz
>wide, it's seeing 13dB more noise, and it might not be able to "acquire"
>the narrow band signal.
>

Really Jim,

Do you think the vendor would specify a bit rate capacity and then
fail to supply the needed bandwith?

Omar has a peculiar habit (much like our own home-grown trolls) of
focusing on issues that have been solved, and complaining (through the
veil of supposing "what-if") about the math behind them creating
confusion.

Part of this veil is Omar holds all the cards while revealing nothing
(another trolling technique). Simply consult:
http://focus.ti.com/docs/prod/folders/print/cc2431.html
and take any of the several links to specifications, applications,
block diagrams, schematics; and it becomes painfully obvious that any
confusion that Omar suffers, is that advice already posted in
abundance devolves to rather simpler issues than Nyquist, Shannon,
Hartley, or more exotic sources.

73's
Richard Clark, KB7QHC

5458. Re: "Dual crimp" coax connectors? [Thermal Wire Strippers]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 18:37:19 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <cqm2k453i9br4q9d0t3dc2ta9dnb9qluoi@4ax.com>
Source record: 19181
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 11 Dec 2008 10:12:09 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>Jeff Liebermann wrote:
>
>[...]
>
>Not being in the industry, I have never seen them.

That's because everyone in the industry steals them, takes them home,
and uses them for the rest of their life. They're hard to find.

>However, I am having visions (sometimes I do that, yanno', must be the
>60's or sumthin'? <grin>) I see myself grabbing a small brad in a pair
>of needle nose, heating it red hot and running it about the diameter of
>a wire--in a pinch.

Won't work. There's not enough thermal mass in your hot brad to do
the job. The hot brad will need to hit the coax braid, or wire center
conductor, in order to thermally cut through the insulation. Copper
is a very good thermal conductor. As soon as the hot brad touches the
copper, the heat gets sucked out of the brad rather rapidly. It might
work if you're careful or very fast, but methinks it's not very
practical.

Of course, you can use a large block of hot aluminum or copper with a
cutting edge, but that would be potentially dangerous and certainly
rather messy if you mishandled it. Of course, you're welcome to try
it. Have burn grease, Band-Aids, and a fire extinguisher ready.

>Replacing the high tech brad as necessary ... <straight face>

Incidentally, I got my experience with hot wire cutters (and burned
fingers) at my father's lingerie factory in Smog Angeles. We made our
own as the commercial versions were seriously overpriced. My
childhood wasn't totally wasted.

--
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5459. Re: Log-Periodic Antenna Design

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 19:12:34 UTC
From: T <kd1s.nospam@cox.nospam.net>
Message-ID: <MPG.23ab301278a6878c9897fb@reader.motzarella.org>
Source record: 19183
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <pan.2008.12.08.19.09.36.824193@example.net>,
rich@example.net says...
> On Fri, 05 Dec 2008 19:32:03 -0800, Chuck Olson wrote:
> > "Chuck Olson" <chuckolson01@REMOVETHIScomcast.net> wrote in message
> >>
> >> "Rich Grise" <rich@example.net> wrote in message
> >> news:pan.2008.11.19.22.45.03.655469@example.net...
> >>> Or, does anyone have a UHF-TV log-periodic design that they'd share?
> >>> :-)
> >>
> > Sorry about the filename not working. This one should work:
> >
> > http://tinyurl.com/5qxh9u
>
> Too late! ;-) I've already made the "coat hanger" four-bay bowtie, but
> with weld rod rather than hangers. ;-)
>
> It was on youtube:
> http://www.youtube.com/watch?v=EWQhlmJTMzw
>
> Thanks!
> Rich
>
>

Yep, it's all about the antenna. Hell, even a dipole tuned to the
midpopint of the band used for HD would get better performance.

5460. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 19:57:35 UTC
From: Fred PA0FVH <fred.verburgh@orange.nl>
Message-ID: <494170af$0$39799$dbd4d001@news.wanadoo.nl>
Source record: 19184

> Yes, you don't want to get much longer than 5/8WL on
> 10m and you don't want to get much shorter than 3/16WL
> on 40m.

Cecil: I compared your simulation against what I found and the results are simular. I'll use your tips about the height and simulate some more lenghts based on the materials I can get.

> Unless you already have the materials I suggest you build with ten
> foot lengths of chain link top rail. The last time I priced it at the
> home improvement store it was $11 per section.

John: I had to use google to figure out the "chain link top rail" but it is clear to me now. I'll check the DIY stores over here on garden and fences stuff.

> Experimenting with a too long antenna on 10M can be fun. I did a 1.25
> wl antenna and got some interesting results during band openings.

Jimmie: My thoughts too, get good 10m performance and as a bonus the other bands

Thanks to all for your helpful reply's.
73's Fred

got and
"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:hWO%k.9755$c45.2365@nlpi065.nbdc.sbc.com...
> Fred PA0FVH wrote:
>> Is 5/8WL on 10meters a good height or 8 meter (22')?
>> What I want is a low take off angle on 20 and 30 meters with high
>> efficiency and an impedance which my remote ATU can handle.
>
22 feet is a good compromise length. At my
> previous QTH I used a 22' monopole with the feedpoint
> elevated at 22' with four 22' radials sloping down
> at 45 degrees (also used as guy wires) and fed with
> an SG-230. It worked like a charm for transmitting -
> noisy on receive. Here's some information from
> simulations:
>
> 22' Monopole with 22' elevated sloping radials:
>
> Band: Gain: Take Off Angle: Feedpoint: ~Tuner Loss
> 40m: 0.53 dBi: 22 deg: 24-j229 ohms: 0.9 dB
> 30m: 0.94 dBi: 19 deg: 46-j31 ohms: 0.2 dB

> 20m: 1.47 dBi: 16 deg: 128+j233 ohms: 0.1 dB
> 17m: 1.91 dBi: 14 deg: 556+j583 ohms: 0.2 dB
> 15m: 2.47 dBi: 12 deg: 1315-j372 ohms: 0.3 dB
> 12m: 3.40 dBi: 13 deg: 373-j560 ohms: 0.3 dB
> 10m: 4.21 dBi: 11 deg: 885-j290 ohms: 0.2 dB
> --
> 73, Cecil http://www.w5dxp.com

5461. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 20:37:39 UTC
From: JB <nospam@goofball.net>
Message-ID: <nSe0l.1097$c35.509@nwrddc02.gnilink.net>
Source record: 19185

"John Smith" <assemblywizard@gmail.com> wrote in message
news:ghp3og$7n4$1@news.albasani.net...
> JB wrote:
>
> >> ... It is my hope that somehow enough people who are
> > resistant to the current conditioning can transcend the bi-polar
thinking of
> > this nation before civil war breaks out.
> >
>
> It is beginning to look like the need a "Superior Grand Jury." Perhaps
> a couple of reps from each state which over see the president on
> down--no matter if the republicrats or the democans are in charge ...
>
> But then, in my county, even the sheriff and city police are corrupt!
> How about "drafting" them too. Each citizen does a tour in the
> police/sheriff ... Or, in other words, if we can't even keep our own
> house clean, how are we going to keep the countries?
>
> Regards,
> JS

Actually nothing works unless most people's attitudes are more level headed. Any overseers are subject to the same pressures the causes the ones in place to fail. I've known people that did ride-along only to wind up in prison or loony bins because they were nothing but bullet stoppers/sitting ducks and all the dope people knew about it. Somebody got to 'em. And too often the cops and court system are completely ignorant about WHY a crime scene, and just edit the how and who to what brings them a perceived victory. Even the cops you know have an abbreviated philosophy geared to survival. Although they are OK with you, the ones you don't know, automatically place you in the "subject" class of probable criminals. They are no longer required to support and defend the Constitution or the keep the peace, but to give everybody a bad day at their own discretion.

It's just like the Dope War. There is big money in it. Do you think people will let it go so easily? As long as people are stoned and dependent, they will tend to seek that even if is self-destructive. If you want to see what peer pressure can accomplish, google Jim Jones.

I still find this 1985 interview to be profound. The Psychology of it is most profound. It shows how gullible we are to suggestion and how easily and cheaply that can be exploited.
http://www.dailymotion.com/video/x32cxf_yuri-bezmenov
I couldn't tell you if they still seek our destruction, but after at least 2

generations of programming it has certainly gone on automatic.

This is the problem with utilizing a scorched earth plan. It's like a wildfire. Once you light it, you lose control of it until it burns out. It only cost $2 for a box of matches and $100 million in fire fighting cost and 500 homes destroyed and 20 deaths before it is at least contained. Then 20 more deaths and 50 homes lost to flash floods and mud slides.

Indeed if you study Russia's own propaganda, they paint a picture of the US as a crazy first strike threat, in order to feed the military/political priority in their lives as a matter of survival.

My only answer to all this is for conservative people (not reactionary) to establish their own media. All that is required is a challenge to unthinking mantras to wake people's thought processes. Just as the doper needs at least 6 months of rehab before the can even have a clear mind, and at least another 6 months of rehab to learn the basic mechanics of using it (or what's left of it). I would hope they lose their driving privilege and voting right for that much time too. It is my thought that the drug problem wasn't conceived by the Russians, but that they easily exploited our own compromise (decadence) and loss of common sense.

5462. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 20:42:29 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ghrtvl$3gm$1@news.jpl.nasa.gov>
Source record: 19186

Richard Clark wrote:
> On Thu, 11 Dec 2008 09:43:05 -0800, Jim Lux <james.p.lux@jpl.nasa.gov>
> wrote:
>
>>> To transmit at 250 kbps on a 5 MHz bandwidth channel centered at 2.5
>>> GHz to a receiver say 10 metres away, you only require 5.8009e-010
>>> watts. That's the problem. This is the maximum power required. It is
>>> far less than the -3 dBm quoted.
>> A question you need to ask is what's the receiver bandwidth. The
>> information might only be 250 kHz wide, but if the receiver is 5MHz
>> wide, it's seeing 13dB more noise, and it might not be able to "acquire"
>> the narrow band signal.
>>
>
> Really Jim,
>
> Do you think the vendor would specify a bit rate capacity and then
> fail to supply the needed bandwith?

Sure.. it's the other way around though.. they might have a wideopen front end or IF (e.g. 5 MHz wide) and be looking for a narrow band signal in that big band.

Particularly if you have a system that supports multiple rates, and you want a single hardware design without adjustable bandwidth, your hardware has to support the widest band.

You're left with two design choices:
1) have a "minimum detectable signal" threshold that corresponds to the higher noise floor
or
2) Have a narrow(er) band detector (implemented in software or hardware).

the first is cheaper, and can be overcome by marketing

>
> Part of this veil is Omar holds all the cards while revealing nothing
> (another trolling technique). Simply consult:
> http://focus.ti.com/docs/prod/folders/print/cc2431.html
> and take any of the several links to specifications, applications,
> block diagrams, schematics; and it becomes painfully obvious that any
> confusion that Omar suffers, is that advice already posted in
> abundance devolves to rather simpler issues than Nyquist, Shannon,
> Hartley, or more exotic sources.

Well, this IS true.

The whole thing is quite well documented, although if one just reads the ad copy, it is confusing. Worse, if your manager asks why you can't do the high rate and max distance at the same time, and you have to resort to "laws of physics" arguments.

5463. Lawsuit countdown K3VR is SoL (Statute of Limitiations) for w4nti has another 4 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 21:18:43 UTC
From: kb9rqz@yahoo.com
Message-ID: <7p03k4lbulo8n0rfps08vpj36pemdleaqa@4ax.com>
Source record: 19187
Cross-posted to: rec.radio.cb,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 5 Dec 2008 03:13:03 -0800 (PST), mopeyzakween@yahoo.com wrote:

>READ AND LEARN OF THE CONVICTED DRUG DEALER!!! LOL!!!!
>Randy's glass house got a window broken, we see!
>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5464. Lawsuit countdown K3VR is SoL (Statute of Limitiations) for w4nti has another 4 days after that

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 21:18:44 UTC
From: kb9rqz@yahoo.com
Message-ID: <qs03k41kp7ds7vut9n7hpo0viol3jk06ti@4ax.com>
Source record: 19188
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Sun, 30 Nov 2008 19:59:10 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>On Nov 29, 10:45ï¿½pm, Steve <moparho...@hotmail.com> wrote:
>> Lelnad see scott.
>>
>> --
>> ï¿½ ï¿½ ï¿½ ï¿½ ï¿½ ï¿½ ï¿½ ï¿½ ï¿½http://NewsReader.Com/
>
>http://nimbusters.org/hams/read.php?board=1&id=14088

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5465. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-11 21:25:57 UTC
From: kb9rqz@yahoo.com
Message-ID: <3b13k4daac3scb7v9g9nq91k06mbs6v9le@4ax.com>
Source record: 19189
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5466. Amateur Radio Exam Prep Apps for iPhone/iPod touch

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-12 07:06:58 UTC
From: Daryl Herkin <dherkin@hotmail.com>
Message-ID: <Xns9B7215872D78EKNbg8Rd3fLvE5T4DsEwC@69.16.186.8>
Source record: 19190
Cross-posted to: alt.radio.amateur,alt.binaries.radio.misc,alt.ham-radio.marketplace,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

Search on "amateur radio" in iTunes App Store.

5467. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-12 16:46:47 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <c4-dnbKtOZwbCN_UnZ2dnUVZ_g6dnZ2d@earthlink.com>
Source record: 19191

Jerry:

[snip]
> I dont think a rotating dipole with DC on it will generats a field that
> propogates. Your post reads as though you dont think the rotating DC
> dipole will producing a propogating Far Field. I read other posts that
> seem to indicate that others assume the DC spinning dipole will generate a
> propogating "far field". It is sad that I am so lazy that I cannot express
> myself using Cross Products. But, I submit that it takes more than
> rotating a dipole to produce a propogating far field.
>
> I dont understand where the "Cross H" is generated by a rotating DC
> dipole, as required for propogation.
>
> I dont understand why it requires more power to rotate a DC dipole with
> increased voltage on it, as required to account for the increased power.
>
> Jerry KD6JDJ
[snip]

What is required to generate electromagnetic radiation is any movement of electric charge such that there exists a rate of change of the positional acceleration
of electric charge. This can be derived from first principles from the Maxwell/Heaviside
equations. There is a section in the volume of Feynman's Lectures on Physics that
discusses this, and I believe that the previous editor of QEX magazine wrote an
article outlining a derivation of this a year or so ago.

In physics and dynamics the rate of change of acceleration is termed "jerk".

In terms of simple differential calculus, there is position ("x"), there is velocity
("v = dx/dt") the rate of change of position, there is acceleration ("a = dv/dt")
the rate of change of velocity, and there is jerk ("j = da/dt") the rate of change of acceleration. Expressing it in these terms, it can be said that it
it can be shown from the Maxwell/Heaviside partial differential equations that govern all of electromagnetics, that radiation occurs when ever electric
charge is "jerked". i.e. whenever the rate of acceleration of charges changes

either up or down.

Now in sinusoidal realms, where all the signals are assumed to be of sine wave shapes, we know from simple differential calculus that differentiating sine waves results in more sine waves. In other words a sine wave current comprises electric charges changing position according to a sine waveform, and so perforce is the velocity, acceleration and jerk of those charges. Hence
whenever electric current motion follows a sine-like wave there will be radiation caused by the sinusoidal 'jerk'.

Now there are more forms of acceleration than just sine wave motion.

For example when things have angular motion, there is centrifugal acceleration, and when things move on a rotating frame there is coriolis acceleration, etc... and so in general whenever electric charges are put in motion, the exception being simple motions where the third derivative of motion is zero, there will be radiation caused by that motion.

All of the above details are well known to most physicists who study electromagnetics, from first principles (Maxwell/Heaviside), these 'facts' are less well known to most (modern) electrical Engineers.

Consequently I find it easy to believe that the mechanical motion of any body with electric charge on it, be that charge DC or AC is highly likely to radiate electromagnetic waves.

All of this is difficult, actually impossible, to simulate with NEC codes like Roy's EZNEC since those analysis codes all assume a simple steady state fixed sinusoidal regime for the framework in which the Maxwell/Heaviside equations are solved. NEC does not provide for the simulation of antennas in motion! And so...

It is beyond the capability of NEC in general or EZNEC in particular to generate field patterns for rotating dipoles!

Othewise someone (Cecil maybe?) would already have run a simultation on EZNEC to refute my claims to being able to generate circular polarization by mechanical rotation.

In other posts in these threads on CP I have asked if anyone knows of any simulation software (generally would be in the category called "multi-physics packages" that can adequately simulate/calculate the fields for rapidly rotating dipoles driven by sinewaves at arbitrary frequencies. If so I'd like to know. And I'd like to simulate some of my "theories" just to prove my assertions.

Actually it may be easier to emulate (i.e. prototype) such a spinning dipole. In fact one does not have to mechanically spin a dipole to do this. One can generate the same fields as a spinning dipole by applying the "right" signals to two

orthogonal linear dipoles. i.e. a synthetic or phased array
beam former, that emits circularly polarized beams of
arbitrary rotation velocity.

Phased arrays can be elctronically scanned or rotated,
this is in fact how most modern STAP radars work, e.g.
Aegis, etc... and so one can electronically rotate emitted
waves in the same way. It's not cheap, but it can be done.

My curiosity is along the lines of if you could find a cheap
way of rapidly spinning an emitting dipole, what new
applications might arise from that.

As far as I can determine, no one has yet done the experiments
that I have been discussing here in these threads.

And so my suggestions/theories are met with comments
like, "It's never been done before, why would you want to do it,
etc, etc... ?

Why do I ask such questions?

Just curious or perhaps I'm just plain stupid!

But no one has yet been able to categorically refute my assertion.

Whenever charge is jerked there is radiation!

Food for thought.

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5468. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-12 18:15:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8aa5k4ph6336clo13ibspnmoe8g8aq5961@4ax.com>
Source record: 19192

On Fri, 12 Dec 2008 11:46:47 -0500, "Peter O. Brackett"
<none@no-such-domain.nul> wrote:

>What is required to generate electromagnetic radiation is any movement of
>electric charge such that there exists a rate of change of the positional
>acceleration
>of electric charge.

What a lot of bafflegab. For one sentence movement is named,
described, AND inferred three times; and charge tied to two of them.

Peter, when the ladies say NO to you, they probably have to have it
annotated, indexed, and footnoted before you get it.

73's
Richard Clark, KB7QHC

5469. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-12 20:36:45 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B734D708A9E8nonenowhere@61.9.191.5>
Source record: 19193

Fred,

You may find my article "An unloaded elevated vertical as a multi-band HF antenna" a source of some ideas.

The article is at http://www.vk1od.net/multibandunloadedvertical/13mEV.htm .

Owen

5470. Re: 10m - 40m non resonant vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-12 22:20:46 UTC
From: Fred PA0FVH <fred.verburgh@orange.nl>
Message-ID: <4942e3c0$0$91167$dbd43001@news.wanadoo.nl>
Source record: 19194

Owen,

Your article was of good help. I will start with half the size (6.5m) for
10-40m.

Thanks,
Fred

5471. Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 01:56:27 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B7383A459525nonenowhere@61.9.191.5>
Source record: 19195

All,

I refer to the diagram at http://www.vk1od.net/lost/Fig6.png which is from an article by the then VK2ZAB (now VK3EJ) on stacking Yagis.

I have highlighted two of the diagrams with a yellow background, and seek opinions on them.

Referring firstly to the left hand one:

I suggest that the figure is in error because the scenario is not ALWAYS wrong.

My contention is that at a single frequency, the phase inversion as a result of the left to right swap of one driven element (DE) wrt the other can be fully compensated for by ensuring that low loss feedline to one DE is an odd number of electrical half waves longer than to the other.

Where the low loss feedline to one DE is an odd number of electrical half waves longer than to the other, the Yagis are driven in phase.

The outcome being that the pattern at that frequency is approximately the same as if equal length feedline branches were used.

Referring now to the right hand one:

I suggest that the figure is in error because the scenario is not ALWAYS wrong.

My contention is that at a single frequency, that where the low loss feedline to one DE is an integral number of electrical full waves longer than to the other, the Yagis are driven in phase.

The outcome being that the pattern at that frequency is approximately the same as if equal length feedline branches were used.

Note that I am not trying to excite a purist discussion about branch vs distributed feed arrangements for phased arrays.

Am I on the wrong track?

Owen

5472. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 02:13:27 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngk66i7.2uj6.bit-bucket@shell.config.com>
Source record: 19196

On Sat, 13 Dec 2008 01:56:27 GMT, Owen Duffy wrote:
>
> I refer to the diagram at http://www.vk1od.net/lost/Fig6.png which is
> from an article by the then VK2ZAB (now VK3EJ) on stacking Yagis.

I see nothing in that diagram that describes the physical/electrical
spacing _between_ the driven elements.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
* Killfiling google & XXXXbanter.com: jonz.net/ng.htm

5473. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 02:22:43 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B7388188F205nonenowhere@61.9.191.5>
Source record: 19197

Allodoxaphobia <bit-bucket@config.com> wrote in news:slrngk66i7.2uj6.bit-bucket@shell.config.com:

> On Sat, 13 Dec 2008 01:56:27 GMT, Owen Duffy wrote:
>>
>> I refer to the diagram at http://www.vk1od.net/lost/Fig6.png which is
>> from an article by the then VK2ZAB (now VK3EJ) on stacking Yagis.
>
> I see nothing in that diagram that describes the physical/electrical
> spacing _between_ the driven elements.

It is discussed elsewhere in Gordon's paper, but it is not directly relevant to the question that I posed.

Owen

5474. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 03:09:59 UTC
From: JB <nospam@goofball.net>
Message-ID: <bIF0l.1317$c35.818@nwrddc02.gnilink.net>
Source record: 19198

> > The only fault with that conspiracy is that without moral restraint, the
> > 10,000 kill the 1 who is supporting them. Otherwise the best you can
hope
> > for is a balance of terror.

> Sometimes, I am a bit slow on the uptake--I just don't get that thinking.
>
Actually, a general quip about killing the goose that lays the golden egg.
I notice that UAW rejected the package for the BIG3 Bailout. Who knows
where that's going. I see unions as a part of doing business, but when so
many people are out of work that they do volunteer work, we're screwed.

> Since when is responsibility and competition a bad thing? Isn't it what
> drives small business AND corporations--even the largest. I mean, when
> I had to work for corps and pick-the-bones to survive, everyone was
> attempting to get someone fired--to give family, relatives or friends a
> shot at the job! ROFLOL Control freaks were the norm, NOT the exception!
>
> I only thank gawd I found a path out ...

It's even worse when things are downsizing and cannibalism sets in. I rode
a few right to the end.

5475. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 08:34:24 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <xewySatQO3QJFAYa@ifwtech.co.uk>
Source record: 19199

Owen Duffy wrote:
>Referring firstly to the left hand one:
>
>I suggest that the figure is in error because the scenario is not
>ALWAYS wrong.
>
>My contention is that at a single frequency, the phase inversion as a
>result of the left to right swap of one driven element (DE) wrt the
>other can be fully compensated for by ensuring that low loss feedline
>to one DE is an odd number of electrical half waves longer than to the
>other.
>
>Where the low loss feedline to one DE is an odd number of electrical
>half waves longer than to the other, the Yagis are driven in phase.
>
>The outcome being that the pattern at that frequency is approximately
>the same as if equal length feedline branches were used.
>
>Referring now to the right hand one:
>
>I suggest that the figure is in error because the scenario is not
>ALWAYS wrong.
>
>My contention is that at a single frequency, that where the low loss
>feedline to one DE is an integral number of electrical full waves
>longer than to the other, the Yagis are driven in phase.
>

In fairness, Gordon did say: "Departures from these rules are possible
for special applications outside the scope of this discussion." The
exceptions identified above would be exactly what he had in mind.

Reversed connections and/or unequal feeder lengths certainly can be
used, but they are advanced techniques requiring clear intent and
careful engineering. In all other cases they will be "WRONG" as Gordon
says.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5476. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 10:03:40 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B73D63F4E531nonenowhere@61.9.191.5>
Source record: 19200

Hello Ian,

Ian White GM3SEK <gm3sek@ifwtech.co.uk> wrote in
news:xewySatQO3QJFAYa@ifwtech.co.uk:

...
> In fairness, Gordon did say: "Departures from these rules are possible
> for special applications outside the scope of this discussion." The
> exceptions identified above would be exactly what he had in mind.

Yes, he does make that statement. I focussed on the diagram.

I guess his "WRONG!" means "possibly wrong (see text)".

>
> Reversed connections and/or unequal feeder lengths certainly can be
> used, but they are advanced techniques requiring clear intent and
> careful engineering. In all other cases they will be "WRONG" as Gordon
> says.

I received comment on my antenna described at
http://www.vk1od.net/4over4/ as follows: 'It "doesn't" work because you
have inserted a half-wave time delay in the feed to one antenna (in your
case it appears to be the upper antenna) which tilts the beam up or down
a bit (in your antenna, it will tilt upwards)' and in following
discussion it is asserted that although the feed to one antenna is
transposed, it does not correct the additional half wave phase shift of
the longer branch.

Gordon's paper was offered as support for that position.

I think my design is sound, the rationale is set out in the article. I am
a little flattered if it is considered an advanced technique, but it
seems to me fairly elementary.

Actually, since posting the original article, I followed up on Gordon's
reference to the ARRL Antenna Handbook. It has a diagram that shows
pretty much what I did, it is (c) at http://www.vk1od.net/lost/Fig7.png .
(The difference in my case is that the stacking distance was chosen for
optimal pattern by trial and error with an NEC model, and the coax has a
velocity factor around 0.82.)

Owen

5477. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 14:41:46 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <ttudnaW3IbEhVN7UnZ2dnUVZ_sninZ2d@earthlink.com>
Source record: 19051

Richard:

[snip]
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:8aa5k4ph6336clo13ibspnmoe8g8aq5961@4ax.com...
> On Fri, 12 Dec 2008 11:46:47 -0500, "Peter O. Brackett"
> <none@no-such-domain.nul> wrote:
.
.
.
> Peter, when the ladies say NO to you, they probably have to have it
> annotated, indexed, and footnoted before you get it.
>
> 73's
> Richard Clark, KB7QHC
[snip]

Richard, hey, clearly you have never met me in person. In person I am even more persuasive than in my often
ill prepared USENET postings, it has been my experience that the ladies NEVER SAY NO to me!

Heh, heh...

I was an only son, raised in a large family of sisters by my mother who was often alone since my father was a seagoing
sailor. And so... at a very early age I learned to "convince" the ladies of the veracity of my assertions and requests.

Long since grown into a man, I'll turn 67 next week, I have polished my approach to the point that the ladies always
accept everything I say. Heh, heh... Whenever I ask the ladies a question or state an assertion in my own inimitiable way their
responses are always along the lines of...

"I'll bet you say that to all the ladies" and they invariably end with,
"sure you may, it would be my pleasure, you are such a smooth talker".
[grin]

Smooth talker, sweet talker, what ever works, I say!

On that particular subject there was a "cute" but interesting, entertaining and amusing two page piece in last month's Esquire magazine
entitled something like, "The Smooth Talker" or "How to be a Smooth Talker". It was really quite an amusing piece, and apropos to
the current thread.

If you don't get Esquire take the time to look up that piece at your local library, I'm sure that you will get a laugh or two, I did.

OK, enough of this 'aside', let's get back to the real technical discussion at hand.

None of the guru's lurking around this particular newsgroup (r.r.a.a) will deny that whenever electrical charge is "jerked" that photons are emitted. And... none of the gurus hanging hereabouts will deny that photons can have 'spin'.

The only question remaining is that of the relative quantities of left and right hand 'spin' of photons in any specific situation where photons have been 'jerked' lose from the electrical charge and whether the 'spin' is quantized or continuous.

Comments, thoughts?

-- Pete K1PO
-- Indialantic By-the-Sea, FL

PS: Gosh, I've missed this group.... Cecil is fine, but it's just not been the same since dear Reggie passed. I miss Reg, especially at this time of year. At least one could easily understand the King's English as written by dear Reg, and Cecil's English is not that bad for an "Aggie", but Richard, since your purple prose takes English expression to a completely different level, you certainly help keep this group entertained. Thanks for what you do for us all!

5478. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 14:47:11 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <nuf3uVCvr8QJFAIH@ifwtech.co.uk>
Source record: 19052

Owen Duffy wrote:
>>
>> Reversed connections and/or unequal feeder lengths certainly can be
>> used, but they are advanced techniques requiring clear intent and
>> careful engineering. In all other cases they will be "WRONG" as Gordon
>> says.
>
>I received comment on my antenna described at
>http://www.vk1od.net/4over4/ as follows: 'It "doesn't" work because you
>have inserted a half-wave time delay in the feed to one antenna (in
>your case it appears to be the upper antenna) which tilts the beam up
>or down a bit (in your antenna, it will tilt upwards)' and in following
>discussion it is asserted that although the feed to one antenna is
>transposed, it does not correct the additional half wave phase shift of
>the longer branch.
>
>Gordon's paper was offered as support for that position.
>
Your version of the 4/4 is phased correctly as shown. The extra
electrical half-wave compensates for the gamma match being on the
opposite side, as both are equivalent to a 180deg phase shift.

Gordon's paper does not deal with situations where the use of different
lengths of feedline is deliberate.

>I think my design is sound, the rationale is set out in the article. I
>am a little flattered if it is considered an advanced technique, but it
>seems to me fairly elementary.
>
It cannot be done without *first* knowing how to make two lengths of
feedline exactly equal, so that's got to be "more advanced"... er,
right?

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

5479. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 15:06:52 UTC
From: Dave <dave@dave.dave>
Message-ID: <4943cf8c$0$31175$bd467cd0@news.dslextreme.com>
Source record: 19053

Peter O. Brackett wrote:
> Jerry:
>
> [snip]
>> I dont think a rotating dipole with DC on it will generats a field
>> that propogates. Your post reads as though you dont think the
>> rotating DC dipole will producing a propogating Far Field. I read
>> other posts that seem to indicate that others assume the DC spinning
>> dipole will generate a propogating "far field". It is sad that I am so
>> lazy that I cannot express myself using Cross Products. But, I submit
>> that it takes more than rotating a dipole to produce a propogating far
>> field.
>>
>> I dont understand where the "Cross H" is generated by a rotating DC
>> dipole, as required for propogation.
>>
>> I dont understand why it requires more power to rotate a DC dipole
>> with increased voltage on it, as required to account for the increased
>> power.
>>
>> Jerry KD6JDJ
> [snip]
>
> What is required to generate electromagnetic radiation is any movement of
> electric charge such that there exists a rate of change of the
> positional acceleration
> of electric charge. This can be derived from first principles from the
> Maxwell/Heaviside
> equations. There is a section in the volume of Feynman's Lectures on
> Physics that
> discusses this, and I believe that the previous editor of QEX magazine
> wrote an
> article outlining a derivation of this a year or so ago.
>
> In physics and dynamics the rate of change of acceleration is termed
> "jerk".
>
> In terms of simple differential calculus, there is position ("x"), there
> is velocity
> ("v = dx/dt") the rate of change of position, there is acceleration ("a
> = dv/dt")
> the rate of change of velocity, and there is jerk ("j = da/dt") the rate of
> change of acceleration. Expressing it in these terms, it can be said
> that it

> it can be shown from the Maxwell/Heaviside partial differential equations
> that govern all of electromagnetics, that radiation occurs when ever
> electric
> charge is "jerked". i.e. whenever the rate of acceleration of charges
> changes
> either up or down.
>
> Now in sinusoidal realms, where all the signals are assumed to be of sine
> wave shapes, we know from simple differential calculus that differentiating
> sine waves results in more sine waves. In other words a sine wave current
> comprises electric charges changing position according to a sine waveform,
> and so perforce is the velocity, acceleration and jerk of those charges.
> Hence
> whenever electric current motion follows a sine-like wave there will be
> radiation caused by the sinusoidal 'jerk'.
>
> Now there are more forms of acceleration than just sine wave motion.
>
> For example when things have angular motion, there is centrifugal
> acceleration, and when things move on a rotating frame there
> is coriolis acceleration, etc... and so in general whenever electric
> charges are put in motion, the exception being simple motions where
> the third derivative of motion is zero, there will be radiation caused
> by that motion.
>
> All of the above details are well known to most physicists who study
> electromagnetics, from first principles (Maxwell/Heaviside), these 'facts'
> are less well known to most (modern) electrical Engineers.
>
> Consequently I find it easy to believe that the mechanical motion of
> any body with electric charge on it, be that charge DC or AC is highly
> likely to radiate electromagnetic waves.
>
> All of this is difficult, actually impossible, to simulate with NEC codes
> like Roy's EZNEC since those analysis codes all assume a simple
> steady state fixed sinusoidal regime for the framework in which
> the Maxwell/Heaviside equations are solved. NEC does not
> provide for the simulation of antennas in motion! And so...
>
> It is beyond the capability of NEC in general or EZNEC in
> particular to generate field patterns for rotating dipoles!
>
> Othewise someone (Cecil maybe?) would already have run
> a simultation on EZNEC to refute my claims to being able
> to generate circular polarization by mechanical rotation.
>
> In other posts in these threads on CP I have asked if anyone
> knows of any simulation software (generally would be in the
> category called "multi-physics packages" that can adequately
> simulate/calculate the fields for rapidly rotating dipoles driven

> by sinewaves at arbitrary frequencies. If so I'd like to know.
> And I'd like to simulate some of my "theories" just to prove
> my assertions.
>
> Actually it may be easier to emulate (i.e. prototype) such
> a spinning dipole. In fact one does not have to mechanically
> spin a dipole to do this. One can generate the same fields
> as a spinning dipole by applying the "right" signals to two
> orthogonal linear dipoles. i.e. a synthetic or phased array
> beam former, that emits circularly polarized beams of
> arbitrary rotation velocity.
>
> Phased arrays can be elctronically scanned or rotated,
> this is in fact how most modern STAP radars work, e.g.
> Aegis, etc... and so one can electronically rotate emitted
> waves in the same way. It's not cheap, but it can be done.
>
> My curiosity is along the lines of if you could find a cheap
> way of rapidly spinning an emitting dipole, what new
> applications might arise from that.
>
> As far as I can determine, no one has yet done the experiments
> that I have been discussing here in these threads.
>
> And so my suggestions/theories are met with comments
> like, "It's never been done before, why would you want to do it,
> etc, etc... ?
>
> Why do I ask such questions?
>
> Just curious or perhaps I'm just plain stupid!
>
> But no one has yet been able to categorically refute my assertion.
>
> Whenever charge is jerked there is radiation!
>
> Food for thought.
>
> -- Pete K1PO
> -- Indialantic By-the-Sea, FL

Do you have any hobbies?

5480. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 16:01:03 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <1ImdnbGPb-rMQd7UnZ2dnUVZ_sTinZ2d@earthlink.com>
Source record: 19054

Dave:

[snip]
> Do you have any hobbies?
[snip]

Technical hobbies, or social hobbies?

Other than kibitzing on r.r.a.a?

Would you believe that I'm a salsa dancing champion? Actually my wife Kathy (who is a dance genius) and I do a lot of dancing which might be described as a "hobby" of sorts.

Let me tell you about one of our recent dance escapades.

About three weeks ago my wife and I were in Paris, France, returning from three weeks in Italy where, among other things, we hiked to the top of Vesuvius. But that's another story!

All this to say that we stopped over for a night in Paris on our way back to Indialantic from Naples. We took the opportunity to take in dinner and a show at the celebrated Moulin Rouge near Pigalle in Paris.

Ouch! That was an expensive evening! It didn't look too bad in Euros, but when the bill showed up on my Visa statement in US$ it was heart stopping!

Front row seats at the Moulin Rouge, right up against that venerable125 year old stage, and the multi-course meal with a magnum of champagne was great and as you will note from the rest of my "story" it turned out to be a memorable evening!

Kathy and I took the train from CDG airport into the Gare du Nord, and then we took the Paris Metro over to the Pigalle station leaving time to get lost at least three times before we got there. Pigalle as you know is in the center of the "red light district" of Paris. The Moulin Rouge is in the middle of that district on Monmatre, the dandy's, Princes and Princesses do not walk along Pigalle to get to the Moulin Rouge like Kathy and I did, rather they arrive right in front of the door in long black Mercedes limousines.

Well... at the Moulin Rouge they serve a first class dinner before the show if you elect to take the dinner and show rather than just the show.

During dinner, a small elegant music ensemble is fronted by a talented duet of singers, who are sort of the Parisian equivalent of
Edye Gorme and Steve Lawrence, except they sing in French, such songs as "Chanson d'Amour", etc. as enteratinment for the diners.

During dinner that part of the main stage that later becomes elevated during the main show is kept at ground level so that people can dance if they wish, during dinner, and before the main show.

The Moulin Rouge was packed the night we were there and, as usual whenever there are lots of "observers", there were not many dancers on the floor! Only a couple of pairs, who had consumed all of their champagne by that time got up to dance staggered through a few 'slow dance' steps, and so the floor of the Moulin Rouge looked downright barren.

My wife Kathy suggested that WE get up and dance. As a dance instructor, you can well imagine that Kathy is not shy about that kind of thing. My athy always likes
to be the first one out on the dance floor.

Well the small ensemble and the two singers got round to a number with a certain beat (NC2S) that my wife and
I like and so Kathy suggested that we get up on the Moulin Rouge dance floor in front of the whole audience that night
and do the Night Club Two Step.

Now for those of you who don't know, the NC2S is a modern dance that was "invented" by and American,
Buddy Schwimmer of Costa Mesa, CA a few years ago. NC2S is a very elegant dance done to slower music and is very elegant and quite
unique.

Aside: NC2S is known in the USA but likely not well known in Europe. In case you are not a dancer, you should know that Buddy Schwimmer
happens to be the father of Benji Schwimmer who won the "So You Think You Can Dance" show two years ago, and he is also the father of Lacey
Schwimmer who was partnered with Lance Bass on the "Dancing with the Stars" show this past fall. Lacey and Lance
came in second on the show this year, after that graceful "Brooke Burke" and her partner Derek Hough.

And so... "there we were", my wife Kathy and I dancing the elegant Night Club Two Step all alone on the dance floor of the Moulin
Rouge in Paris, in front of an International audience of several hundred people.

Well... we were surprised! As we danced together to that beautiful slow and sexy music, all of the dinner "chatter" stopped and all eyes
in that famous 125 year old theatre, were on us as I showcased Kathy's wonderful dance skills (as the dance partner/leader).

The highlight came as the music ended and we walked back to our dinner table.

The audience at the Moulin Rouge favored us with a standing ovation!

Apparently they had never seen the Night Club Two Step before!

Unfortunately no one recorded the happenings at the Moulin Rouge that night, but... for those of you who might be interested to see what the NC2S looks

like
as it is danced, you see an example on You Tube, just click on...

http://www.youtube.com/watch?v=VoyxrEbZpSw

BTW... the Moulin Rouge show after dinner and dancing was spectacular and well worth the $$$$$.

I suppose that if it were not a 125 year old tradition in Paris that the Moulin Rouge show mighty be described by Americans as a "high end" Las Vegas show,
except that... Las Vegas, NV was not even in existence when the Moulin Rouge started its run 125 years ago!

I'd say that one should really describe Las Vegas shows as pale imitations of the Moulin Rouge show! [smile]

Guys who are reading this will be pleased to know that not only is the whole show spectacular, but the show girls at Moulin Rouge are spectacular as well.

All this to say, Dave.... yes I do have hobbies!

And... I am often "asked to dance"...

BTW.... I highly recommed dance to any man/boy who wants to be closely asociated with women!

Dave, I'd challenge you to name a hobby for a man that is as exciting as a hobby where the man gets to hold attractive girls in his arms and run his hands all over thier bodies for 3-5 minutes at a time and the girls thank him when it's over and asks him if they could do it again soon?

Ciao!

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5481. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 16:06:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi0mi6$et2$1@news.albasani.net>
Source record: 19055

JB wrote:

>> ...
> Actually, a general quip about killing the goose that lays the golden egg.
> I notice that UAW rejected the package for the BIG3 Bailout. Who knows
> where that's going. I see unions as a part of doing business, but when so
> many people are out of work that they do volunteer work, we're screwed.
>

Was teamster in a previous life (well, a younger one), I have nothing
bad to say of unions. I can remember stopping by the pub and being
given a "bad time" by non-union workers in my industry. I started more
than one fight by simply telling them, "I work for over two times as
much as you. I have complete medical, dental and prescriptions. My
retirement goes into a fund which is g-u-a-r-a-n-t-e-e-d. I don't sweat
a few bucks in union dues." -- For some reason, that was all it took!
<grin>

> It's even worse when things are downsizing and cannibalism sets in. I rode
> a few right to the end.
>

Been there, done that (shudder!)

Regards,
JS

5482. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 17:28:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gur7k4dpo2qcurlskogt0t1ucohc9imtn3@4ax.com>
Source record: 19056

On Sat, 13 Dec 2008 09:41:46 -0500, "Peter O. Brackett"
<none@no-such-domain.nul> wrote:

>None of the guru's lurking around this particular newsgroup (r.r.a.a) will
>deny that whenever electrical charge is "jerked" that photons are emitted.

At the risk of being so identified with that villified group, I will
deny that statement (for what it is worth).

>And... none of the gurus hanging hereabouts will deny that photons can have
>'spin'.

That is a fairly short list of what is "not" denied. Why don't you go
further like Gurus refuse to deny:
1. They hate their parents;
2. They stopped beating their wives;
3. The earth is perfectly round;
4. Gussian arrays are the perfect metaphor for radiation;
...
n. and on and on and -heh heh- on.

73's
Richard Clark, KB7QHC

5483. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 18:25:16 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <l2v7k41bfk0o7fn5crsk0kc47h3666hi82@4ax.com>
Source record: 19057

On Tue, 02 Dec 2008 13:58:37 +0000, Dave <dave@dave.dave> wrote:

>JosephKK wrote:
>> On Mon, 01 Dec 2008 14:13:23 +0000, Dave <dave@dave.dave> wrote:
>>
>>> JosephKK wrote:
>>>> On Sun, 30 Nov 2008 22:52:16 +0000, Dave <dave@dave.dave> wrote:
>>>>
>>>>> JosephKK wrote:
>>>>>> Which make and model / series? There are dozens of variations.
>>>>>>
>>>>> These are the standard CTCSS freqs:
>>>>>
>>>>> http://www.batnet.com/~mfwright/ht220plcodes.html
>>>>>
>>>>> http://en.wikipedia.org/wiki/CTCSS
>>>> Have you read your own references?
>>>>
>>>> Bottom line, most any tunable tone decoder.
>>>>
>>> If a vibrating reed can be considered a "decoder" then you are correct.
>>>
>>> However, there are not "dozens of variations".
>>
>> Sure can. Collins Radio used mechanical resonators in an HF radio ISB
>> diversity 2240 baud modems. Then they used a switched capacitor meta
>> resonator. Then they used DDS synchronous comparison. And of course
>> there are various narrow band filter methods. And of course whatever
>> internal method the 8870 DTMF decoder uses. Who knows what methods
>> can be implemented in fast UC or small DSP or even an FPGA, except it
>> will not be a mechanical resonator. I suppose a mathematical model of
>> a mechanical resonator though.
>>
>Damn, you overthink things. The subject is PL, as generally used in
>2-way mobile and hand-held radios and base stations. There are a few
>variations, as a handful of tones have been added to the original group.
>
>The receiver looks for a tone in the audio of an incoming signal. If
>that tone is heard, that part of the squelch system unmutes the audio.
>
>I have no idea how you got from that to Collins HF Modems, but I'm sure
>it was a lovely trip for someone.

You wanted a tone detector. Then you asked if a vibrating reed
(mechanical resonator) can be one. Then you said that there was not

many methods, so i named some that even did more complex things. You asked for the discussion and received it.
Moreover, the tone squelch system does some other complex things as well. Particularly when multiple users (groups) are on a single channel in a single locale.

5484. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 20:19:21 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <7568k4dh8n7kssb5028451mq8dkk3iqo04@4ax.com>
Source record: 19058

On Tue, 2 Dec 2008 15:12:25 -0500, "Douglas W. \"Popeye\" Frederick"
<Popeye@finalprotectivefire.com> wrote:

>"richard" <member@newsguy.com> wrote in message
>news:cpqaj45pnt8bn7ao582pgkfekau4nmqsm9@4ax.com...
>
>> Ya gots to understand with whom you are trying to communicate.
>> "Top" is the master know it all who has absolutely no background in
>> electronics. He just drives a truck and thinks that gives him the
>> knowledge. You've heard of "Billy Big Rigger"? You just met the dude.
>> Top just goes along with what other truckers have said over the years.
>>
>> I have the actual working experience to back me up with.
>> The only thing Top knows about CB is how to yack on it.
>
> Wow.
>
> Acer laptop: $600
>
> 20" monitor: $225
>
> Verizon data card: $50
>
> Watching Richtard stick his pecker in the outlet, -again-,
>
> Priceless.

Is he two prong or three prong?

CNR

5485. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 21:24:44 UTC
From: JB <nospam@goofball.net>
Message-ID: <wKV0l.1663$7I6.178@nwrddc01.gnilink.net>
Source record: 19059

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gi0mi6$et2$1@news.albasani.net...
> JB wrote:
>
> >> ...
> > Actually, a general quip about killing the goose that lays the golden
egg.
> > I notice that UAW rejected the package for the BIG3 Bailout. Who knows
> > where that's going. I see unions as a part of doing business, but when
so
> > many people are out of work that they do volunteer work, we're screwed.
> >
>
> Was teamster in a previous life (well, a younger one), I have nothing
> bad to say of unions. I can remember stopping by the pub and being
> given a "bad time" by non-union workers in my industry. I started more
> than one fight by simply telling them, "I work for over two times as
> much as you. I have complete medical, dental and prescriptions. My
> retirement goes into a fund which is g-u-a-r-a-n-t-e-e-d. I don't sweat
> a few bucks in union dues." -- For some reason, that was all it took!
> <grin>
>
>
> > It's even worse when things are downsizing and cannibalism sets in. I
rode
> > a few right to the end.
> >
>
> Been there, done that (shudder!)
>
> Regards,
> JS

In order for a union to work, there has to be money there that you can
squeeze out of the company. And you have to have a bargaining position. If
what you do prevents the company from having working capital or market
changes force the company into bankruptcy, where is your bargaining
position? If the company and it's industry is indeed viable, go for it.
Corporations have unions but they call them cartels. There has to be a
struggle against the causes of exploitation. You don't want to see
situations like two-tier for employees or CTA voting pay cuts across the
board so they don't lose members who pay dues. Even though they have
hostages. My dad was a teamster for several years, but the pay stunk anyway
so he went to insurance sales during a strike so we wouldn't have to live on

macaroni and cheese. I never cross picket lines, I buy American made products only or go to the thrift store. OK, I admit it I have bought new stuff made in China probably by slave or prison labor because you can't even get some products that are American made anymore. I drive an American car. This is where it all breaks down, because if you are fighting to get food on the table and decent wages, there are 10,000 more going out and buying products made with slave labor and doing volunteer work while living on pensions. If UAW can't get dues, who will guarantee the pensions? Ponzi?

My other peeve is tons of money out of the retirement fund (PERS) to the Dems, who have so many other agendas that they conflict. Like selling out to Chi-comms. They got kicked out of Washington and Oregon, so the Dems shut down and leased them Long Beach Naval Shipyard to bring in Megatons of cheap crap into the country. Like gun control. Remember Matewan.
Abortion. Any one who is OK with taking away peoples Constitutional rights and killing people who don't have a voice might not care about you or me either. And what's with this gay crap. If people want to do stuff like that, I certainly don't want it forced on me or my kids.

The Fannie May/Freddie Mac bad loans were guaranteed and forced on the banks by gov't. mandate and Barney Frank has been saying since 2004 that there was nothing wrong, even while another Dem was saying it was the regulator's fault for allowing it (ie we need more cops). I guess that makes Barney some kind of expert.
http://www.youtube.com/watch?v=_MGT_cSi7Rs&NR=1
BTW there is a lot of this pro and con in related YouTubes.

Nothing wrong with having a heart, you gotta care about the consequences though. And fighting greed with greed gets you more greed.

5486. Re: Trucker antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 22:25:01 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <c9d8k4d535ipsju7qnbmqic5l436bjam2j@4ax.com>
Source record: 19060

On Mon, 1 Dec 2008 21:12:53 -0700, "The Honorable Dr. Rocky Roads
Presiding Judge" <wookiee@att.net> wrote:

>Phuck off you scumbag loser. Nobody and I mean nobody is a better trucker
>than I.
>

Well you might be, then again you might be a mediocre trucker who also
thinks way too much of yourself. Those who are really good just do
the doing, the mediocre boast.

5487. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 22:47:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi1e22bhp1@news.albasani.net>
Source record: 19061

JB wrote:

> ...
> Nothing wrong with having a heart, you gotta care about the consequences
> though. And fighting greed with greed gets you more greed.
>

As I implied in my previous post, it can be hard to convince people that they need to responsible and realize that the only way they can get what they want, need and be prepared for illness and old age, is with their own hands and job (or, start their own business) ... there still exists the myth that they can work for cheap with no benefits or retirement, GUARANTEED, funds and it "will all just work out", or "someone will provide for them."

If you are working for a company, or in your own business or contracting and the result is less than satisfactory, quit and go elsewhere. The crash of the stock market and the future coming times shows the folly of a "positive attitude", based on irrational grounds.

There seems to be a "myth" going around that "it will all just work out." And, one can work at a poverty wage and "get ahead."

Like I pointed out, many are ready to fight rather than come to their senses. My wifes parents worked hard their whole lives. Somehow they were sold the dream that all it took was hard work and they would be rewarded--they now are attempting to exist on social security, needless to say, it ain't workin'! If my father-in-law was a retired UAW worker, he would have a much different story!

It is fine all these companies run about not providing well for their workers--but, just let them pay the welfare-funds/medical/drug/etc. needs of their workers in their old age--NOT ME, my family, or my friends!

Regards,
JS

5488. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 23:21:10 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <iKSdnbrNnrTr3tnUnZ2dnUVZ_gidnZ2d@earthlink.com>
Source record: 19062

Richard:

[snip]
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:gur7k4dpo2qcurlskogt0t1ucohc9imtn3@4ax.com...
> On Sat, 13 Dec 2008 09:41:46 -0500, "Peter O. Brackett"
> <none@no-such-domain.nul> wrote:
>
>>None of the guru's lurking around this particular newsgroup (r.r.a.a) will
>>deny that whenever electrical charge is "jerked" that photons are emitted.
>
> At the risk of being so identified with that villified group, I will
> deny that statement (for what it is worth).
[snip]

Your denial is not worth to much simply because, as The Bard had one of his
thespian protagonists quote,
"methinks he doth protest too much".

And, so... well, I am afraid to admit that... I don't really know which of
the honored denziens of this
group (r.r.a.a) are the select members of the secret clique of lurkers known
as "The Gurus".

It seems from what you have written above that you deny being one of The
Gurus.

I believe it was Groucho Marx who said, "I wouldn't want to be a member of
any club that would accept
me as a member", and so...

Me?

Hmmm... I not only deny membership in The Gurus, but I actually know that I
am not a member.

Now, if my recollection is correct, Reg Edwards may have known the names on
that secretive list of gurus, but
since Reg has now passed to his reward and, although we have evidence of
Reg's own electromagnetic expertise
in the form of the many programs and web site information he graciously left
for us gratis, there is no evidence
that Reg ever belonged to The Gurus. In fact, I recall Reg indirectly
denying his own membership on many
occasions by referring difficult and sometimes rhetorical questions to "The
Gurus", often answering those
questions himself after much newsgroup discussion.

Apparently Art Unwin has definite knowledge of who The Gurus are, since he often challenges and castigates
them at the same time. Unfortunately Art would condemn the poor IEEE because of corrupt behavior, and
so I am not sure that Art is really connected in the electromagnetic world.

All this musing to note that... USENET is a great tool for scientific discussion, that adheres to the most basic
tennets of "The Scientific Method".

Why, anyone... from freely identified persons, to anonymous posters, may make whatever assertions and pose
whatever theories they care to, and everyone knows that eventually the truth will be revealed as those assertions
are examined in the brilliant light of the scientific cross examination that occurs in these r.r.a.a threads!

Hey! Where's Art when you need him? Art... I've created your opening, now its your turn...

It's saturday night and I gotta go dancing, the girls are waiting... :-)

-- Pete K1PO
-- Indialantic By-the-Sea, FL
care to and

5489. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-13 23:52:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nph8k4tkmcusmdoc94jpqe12euodnjltou@4ax.com>
Source record: 19063

On Sat, 13 Dec 2008 18:21:10 -0500, "Peter O. Brackett"
<none@no-such-domain.nul> wrote:

>>>None of the guru's lurking around this particular newsgroup (r.r.a.a) will
>>>deny that whenever electrical charge is "jerked" that photons are emitted.
>>
>> At the risk of being so identified with that villified group, I will
>> deny that statement (for what it is worth).
>Your denial is not worth to much simply because, as The Bard had one of his
>thespian protagonists quote,
>"methinks he doth protest too much".

I didn't think the question had any legs either. D.O.A.

>Apparently Art Unwin has definite knowledge of who The Gurus are, since he
>often challenges and castigates them at the same time.

He is like Septimus who awaits the death of his six brothers before
ascending to the crown.

>Art... I've created your opening, now its your turn...

Stand back then, because you'll find him spitting at you in the chance
of catching me in the backwash.

73's
Richard Clark, KB7QHC

5490. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 01:11:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7ad519c6-5e43-4bc5-be90-30c5433c3ce2@x16g2000prn.googlegroups.com>
Source record: 19064

On Dec 13, 5:21 pm, "Peter O. Brackett" <n...@no-such-domain.nul>
wrote:
> Richard:
>
> [snip]"Richard Clark" <kb7...@comcast.net> wrote in message
>
> news:gur7k4dpo2qcurlskogt0t1ucohc9imtn3@4ax.com...> On Sat, 13 Dec 2008 09:41:46 -0500,
"Peter O. Brackett"
> > <n...@no-such-domain.nul> wrote:
>
> >>None of the guru's lurking around this particular newsgroup (r.r.a.a) will
> >>deny that whenever electrical charge is "jerked" that photons are emitted.
>
> > At the risk of being so identified with that villified group, I will
> > deny that statement (for what it is worth).
>
> [snip]
>
> Your denial is not worth to much simply because, as The Bard had one of his
> thespian protagonists quote,
> "methinks he doth protest too much".
>
> And, so... well, I am afraid to admit that... I don't really know which of
> the honored denziens of this
> group (r.r.a.a) are the select members of the secret clique of lurkers known
> as "The Gurus".
>
> It seems from what you have written above that you deny being one of The
> Gurus.
>
> I believe it was Groucho Marx who said, "I wouldn't want to be a member of
> any club that would accept
> me as a member", and so...
>
> Me?
>
> Hmmm... I not only deny membership in The Gurus, but I actually know that I
> am not a member.
>
> Now, if my recollection is correct, Reg Edwards may have known the names on
> that secretive list of gurus, but
> since Reg has now passed to his reward and, although we have evidence of
> Reg's own electromagnetic expertise
> in the form of the many programs and web site information he graciously left

> for us gratis, there is no evidence
> that Reg ever belonged to The Gurus. In fact, I recall Reg indirectly
> denying his own membership on many
> occasions by referring difficult and sometimes rhetorical questions to "The
> Gurus", often answering those
> questions himself after much newsgroup discussion.
>
> Apparently Art Unwin has definite knowledge of who The Gurus are, since he
> often challenges and castigates
> them at the same time. Unfortunately Art would condemn the poor IEEE
> because of corrupt behavior, and
> so I am not sure that Art is really connected in the electromagnetic world.
>
> All this musing to note that... USENET is a great tool for scientific
> discussion, that adheres to the most basic
> tennets of "The Scientific Method".
>
> Why, anyone... from freely identified persons, to anonymous posters, may
> make whatever assertions and pose
> whatever theories they care to, and everyone knows that eventually the truth
> will be revealed as those assertions
> are examined in the brilliant light of the scientific cross examination that
> occurs in these r.r.a.a threads!
>
> Hey! Where's Art when you need him? Art... I've created your opening, now
> its your turn...
>
> It's saturday night and I gotta go dancing, the girls are waiting... :-)
>
> -- Pete K1PO
> -- Indialantic By-the-Sea, FL
> care to and

Peter, there are no gurus on this newsgroup period
When I extended the Gaussian law of statics by making it a dynamic
field
I proved beyond doubt that radiation was via particles and not waves.
David and others denied that you could even bring in the subject of
statics
when discussing radiation even tho it is known that the force between
particles
is part and parcel of Maxwells laws. I might add that many joined him
in this thinking
like lemings. Since that time all of this group have sunk lower and
lower with respect to radio.
All have demanded a definition of equilibrium no less so all are
lacking in science.
They have all denied that mathematically my extension of Gauss results
in the same mathematics
that were arrived at by Maxwell. When I point out that eddy current

(really a field) is the weak
force that Einstein was looking for as he was convinced that
radiation held the clue he was looking for.
Yup they howled at that one too. Ofcourse it was Maxwell who found out
that one of the existing laws by the masters
was not in equilibrium which he then corrected by adding the
displacement current which describes the
action of the eddy current field in lifting and applying spin to a
charged particle. Howls again from all
as this could not be found in any books. Ofcourse this operation in a
macro scale is used daily in scrap
yards for sorting out materials as well as non destructive testing but
again the howls rose again.
So I then told them that maxwell based computor programs account for
all the forces used in radiation
which they could find out for themselves with a optimizer program as
long as the input was not slanted towards a planar design so that it
may be discarded
But then they are self perceived gurus thus don't need to use a
computer as all is already known, ala their books that are more than
50 years old.
I then informed them that one naval base had tipped all their
verticles for better performance by incorporating the weak fork which
also can be confirmed using Maxwells laws. Now I am being considered
and idiot no less. So I then posed the question as to where the
current goes when reaching the top
of a fractional wave antenna and the answers I got was that a closed
circuit is not required for radiation. And this thinking goes on and
on but at no time
has anybody come forward to refute my analysis in anyway, mathematics,
computor programs or what ever.
This whole story reminds me of the Yagi invention that was dismissed
totally by the Japanese intelligensia but embrace by the rest of the
world such that the Japanese never used the Yagi design thru out the
length of the war which was their loss. Peter, all of the above has
been pointed out to this group of self perceived gurus over the past
few years but all has been denied as it is no where in the books to be
read.
When I joined this group more than a decade ago Roy W7EL said he was
going to expose all the old wives tales that floated around including
all the newly touted sciences that were being tossed around but his
silence has been defining while at the same time Snakespere has been
prancing around in his fishnet pants while talking in tongues. Ian is
still demon strating how to solder a connector on coax while the Naval
instructor Woods in Washington
is in total belief that the US navy is using tilted antennas for
superior performance. No Peter, there are no gurus on this newsgroup
as I have one time or another proved that they are nothing more than
talking heads beyond doubt.
As an aside Peter on another subject I have no bone to pick with the

professional societies only the Universities for giving away
information provided by tax payers money and thus was not theirs to
remove from publics eyes
Best regards
Art Unwin.......KB9MZ.......xg (uk)

5491. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 01:25:56 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <9faa936a-610e-451f-92cf-0c48d3eb0196@y1g2000pra.googlegroups.com>
Source record: 19065

On Dec 13, 4:47 pm, John Smith <assemblywiz...@gmail.com> wrote:
> JB wrote:
> > ...
> > Nothing wrong with having a heart, you gotta care about the consequences
> > though. And fighting greed with greed gets you more greed.
>
> As I implied in my previous post, it can be hard to convince people that
> they need to responsible and realize that the only way they can get what
> they want, need and be prepared for illness and old age, is with their
> own hands and job (or, start their own business) ... there still exists
> the myth that they can work for cheap with no benefits or retirement,
> GUARANTEED, funds and it "will all just work out", or "someone will
> provide for them."
>
> If you are working for a company, or in your own business or contracting
> and the result is less than satisfactory, quit and go elsewhere. The
> crash of the stock market and the future coming times shows the folly of
> a "positive attitude", based on irrational grounds.
>
> There seems to be a "myth" going around that "it will all just work
> out." And, one can work at a poverty wage and "get ahead."
>
> Like I pointed out, many are ready to fight rather than come to their
> senses. My wifes parents worked hard their whole lives. Somehow they
> were sold the dream that all it took was hard work and they would be
> rewarded--they now are attempting to exist on social security, needless
> to say, it ain't workin'! If my father-in-law was a retired UAW worker,
> he would have a much different story!
>
> It is fine all these companies run about not providing well for their
> workers--but, just let them pay the welfare-funds/medical/drug/etc.
> needs of their workers in their old age--NOT ME, my family, or my friends!
>
> Regards,
> JS

John, some years back the Government aproved the removal of a
percentage of pensioin funds
for their own use as long as the pensions were not in jeopody. In
other words if the funds earned more money than expected
then the company could use that money. So the majority of pension
funds were kept at the prescibed minimum level.
Now pension funds have turned south and the businesses have also
turned south such that they cannot replace the funds removed.

This little pot has started to simmer but has yet to get to the
boiling point. As Yogi Bear said i9t aint over until it is over!
Everything was OK when we let the market decide but then greed changed
the metric of the market.
Art

5492. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 01:26:22 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <2hZ0l.1697$7I6.557@nwrddc01.gnilink.net>
Source record: 19066

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B73D63F4E531nonenowhere@61.9.191.5...
> Hello Ian,
>
> Ian White GM3SEK <gm3sek@ifwtech.co.uk> wrote in
> news:xewySatQO3QJFAYa@ifwtech.co.uk:
>
> ...
>> In fairness, Gordon did say: "Departures from these rules are possible
>> for special applications outside the scope of this discussion." The
>> exceptions identified above would be exactly what he had in mind.
>
> Yes, he does make that statement. I focussed on the diagram.
>
> I guess his "WRONG!" means "possibly wrong (see text)".
>
>>
>> Reversed connections and/or unequal feeder lengths certainly can be
>> used, but they are advanced techniques requiring clear intent and
>> careful engineering. In all other cases they will be "WRONG" as Gordon
>> says.
>
> I received comment on my antenna described at
> http://www.vk1od.net/4over4/ as follows: 'It "doesn't" work because you
> have inserted a half-wave time delay in the feed to one antenna (in your
> case it appears to be the upper antenna) which tilts the beam up or down
> a bit (in your antenna, it will tilt upwards)' and in following
> discussion it is asserted that although the feed to one antenna is
> transposed, it does not correct the additional half wave phase shift of
> the longer branch.
>
> Gordon's paper was offered as support for that position.
>
> I think my design is sound, the rationale is set out in the article. I am
> a little flattered if it is considered an advanced technique, but it
> seems to me fairly elementary.
>
> Actually, since posting the original article, I followed up on Gordon's
> reference to the ARRL Antenna Handbook. It has a diagram that shows
> pretty much what I did, it is (c) at http://www.vk1od.net/lost/Fig7.png .
> (The difference in my case is that the stacking distance was chosen for
> optimal pattern by trial and error with an NEC model, and the coax has a
> velocity factor around 0.82.)
>

> Owen

Hi Owen

Richard Clark once told me how to combine 4 antennas in an array. He got me to feed 4 antennas, 50 ohms each with 50 ohm coax with no dividers. I just fed each antenna with 50 ohm coax. At the point where the 4 coaxes get combined, I connected two coaxes in series and the other two also in series. Then parallel them to get back to 50 ohms. The result is two 50 ohm loads in series to make 100 ohms and with the other 100 ohms in parallel, the combination is a good 50 ohm load. You can see a sketch in the Feb 2008 QST. It works pretty slick when the antennas are 50 or 70 ohms where it is easy to get the right coax impedance.

Jerry KD6JDJ

5493. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 01:32:54 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B747FA693B8Cnonenowhere@61.9.191.5>
Source record: 19067

"Jerry" <jerrymartes@verizon.net> wrote in
news:2hZ0l.1697$7I6.557@nwrddc01.gnilink.net:

...
> Hi Owen
>
> Richard Clark once told me how to combine 4 antennas in an array.
> He got
> me to feed 4 antennas, 50 ohms each with 50 ohm coax with no dividers.
> I just fed each antenna with 50 ohm coax. At the point where the 4
> coaxes get combined, I connected two coaxes in series and the other

Can you explain in more detail what you mean by "I connected two coaxes in
series"?

> two also in series. Then parallel them to get back to 50 ohms. The
> result is two 50 ohm loads in series to make 100 ohms and with the
> other 100 ohms in parallel, the combination is a good 50 ohm load.
> You can see a sketch in the Feb 2008 QST. It works pretty slick when
> the antennas are 50 or 70 ohms where it is easy to get the right coax
> impedance.

Owen

5494. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 02:23:27 UTC
From: Dave <joe@somewhere.com>
Message-ID: <HqGdnbyKNNCC89nUnZ2dnUVZ_qDinZ2d@earthlink.com>
Source record: 19068

On Sat, 13 Dec 2008 10:25:16 -0800, JosephKK wrote:

>
> You wanted a tone detector. Then you asked if a vibrating reed
> (mechanical resonator) can be one. Then you said that there was not
> many methods, so i named some that even did more complex things. You
> asked for the discussion and received it. Moreover, the tone squelch
> system does some other complex things as well. Particularly when
> multiple users (groups) are on a single channel in a single locale.

I've administered business band radio systems. CTCSS is similar to a 3
tumbler keylock.

5495. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 03:38:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi1v4b$s53$1@news.albasani.net>
Source record: 19069

Art Unwin wrote:

>> ...
> I proved beyond doubt that radiation was via particles and not waves.
>> ...

> Best regards
> Art Unwin.......KB9MZ.......xg (uk)

Actually, that is false ... you could not prove such a thing, unless you
force us to disbelieve our own eyes! To proceed claiming such is only
to invite us to think you daft!

http://www.newscientist.com/article/dn14172?DCMP=ILC-hmts&nsref=news1_head_dn14172

The best you can now argue is that light is composed of a type(s) of
particle(s) which travels as a wave(s); And, still, it seems to possess
both qualities--i.e., behaving both as particles AND waves ... but then,
we already knew that.

Regards,
JS

5496. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 03:56:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi205gsqa1@news.albasani.net>
Source record: 19070

Art Unwin wrote:

> ...
> John, some years back the Government aproved the removal of a
> percentage of pensioin funds
> for their own use as long as the pensions were not in jeopody. In
> other words if the funds earned more money than expected
> then the company could use that money. So the majority of pension
> funds were kept at the prescibed minimum level.
> Now pension funds have turned south and the businesses have also
> turned south such that they cannot replace the funds removed.
> This little pot has started to simmer but has yet to get to the
> boiling point. As Yogi Bear said i9t aint over until it is over!
> Everything was OK when we let the market decide but then greed changed
> the metric of the market.
> Art

YES! Indeed, it is much worse than that, the gov't has also used SSI funds by "tossing them into "general funds", questionable-investing-of-these-funds, etc." Now, they attempt to "resell" us our SSI with increased taxes and "increased fees." (just another name for "tax(s.)")

Ever notice how they end up taking library and other public service funds, tossing 'em into a general fund, then reselling us the services, again-and-again-and-again-... well, most DON'T seem to! I just brought this up at a board of supes meeting in my city, and was threated with removal from the room ... (well, I did get a bit "hot", seems hot enough to get a few others to take a verbal stance) Anyway, we convinced "them" NOT to shorten library hours--at least.

It is time for investigative reporting, FBI/congressional investigations and criminal proceedings against the guilty parties.

Instead, we are getting "bailouts" which reward the very crooks and powers-which-be which are responsible for this fine mess! And, NOT one word of closing the "loopholes." (DEFINITION: loophole = sanctioned criminal activity!)

Regards,
JS

5497. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 04:00:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi20cmsqa2@news.albasani.net>
Source record: 19071

Art Unwin wrote:

> ...
> John, some years back the Government aproved the removal of a
> percentage of pensioin funds
> for their own use as long as the pensions were not in jeopody. In
> other words if the funds earned more money than expected
> then the company could use that money. So the majority of pension
> funds were kept at the prescibed minimum level.
> Now pension funds have turned south and the businesses have also
> turned south such that they cannot replace the funds removed.
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> boiling point. As Yogi Bear said i9t aint over until it is over!
> Everything was OK when we let the market decide but then greed changed
> the metric of the market.
> Art

YES! Indeed, it is much worse than that, the gov't has also used SSI funds by "tossing them into "general funds", questionable-investing-of-these-funds, etc." Now, they attempt to "resell" us our SSI with increased taxes and "increased fees." (just another name for "tax(s.)")

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It is time for investigative reporting, FBI/congressional investigations and criminal proceedings against the guilty parties.

Instead, we are getting "bailouts" which reward the very crooks and powers-which-be which are responsible for this fine mess! And, NOT one word of closing the "loopholes." (DEFINITION: loophole = sanctioned criminal activity!)

Regards,
JS

5498. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 04:12:27 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <LI%0l.1522$c35.284@nwrddc02.gnilink.net>
Source record: 19072

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B747FA693B8Cnonenowhere@61.9.191.5...
> "Jerry" <jerrymartes@verizon.net> wrote in
> news:2hZ0l.1697$7I6.557@nwrddc01.gnilink.net:
>
> ...
>> Hi Owen
>>
>> Richard Clark once told me how to combine 4 antennas in an array.
>> He got
>> me to feed 4 antennas, 50 ohms each with 50 ohm coax with no dividers.
>> I just fed each antenna with 50 ohm coax. At the point where the 4
>> coaxes get combined, I connected two coaxes in series and the other
>
> Can you explain in more detail what you mean by "I connected two coaxes in
> series"?
>
>> two also in series. Then parallel them to get back to 50 ohms. The
>> result is two 50 ohm loads in series to make 100 ohms and with the
>> other 100 ohms in parallel, the combination is a good 50 ohm load.
>> You can see a sketch in the Feb 2008 QST. It works pretty slick when
>> the antennas are 50 or 70 ohms where it is easy to get the right coax
>> impedance.
>
> Owen

Hi Owen

I dont know how to include pictures in this text.

I would draw two touching circles to represent the outer conductors. The
generator is fed between to the inner conductors. Hence, two 50 ohm loads
on the coaxes will look like a 100 ohm load to the generator.

Jerry

5499. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 04:19:32 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B749BE6A1964nonenowhere@61.9.191.5>
Source record: 19073

"Jerry" <jerrymartes@verizon.net> wrote in
news:LI%0l.1522$c35.284@nwrddc02.gnilink.net:

>
> "Owen Duffy" <none@no.where> wrote in message
> news:Xns9B747FA693B8Cnonenowhere@61.9.191.5...
>> "Jerry" <jerrymartes@verizon.net> wrote in
>> news:2hZ0l.1697$7I6.557@nwrddc01.gnilink.net:
>>
>> ...
>>> Hi Owen
>>>
>>> Richard Clark once told me how to combine 4 antennas in an array.
>>> He got
>>> me to feed 4 antennas, 50 ohms each with 50 ohm coax with no
>>> dividers.
>>> I just fed each antenna with 50 ohm coax. At the point where the
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>>> coaxes get combined, I connected two coaxes in series and the other
>>
>> Can you explain in more detail what you mean by "I connected two
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>>
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>>> The result is two 50 ohm loads in series to make 100 ohms and with
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>>> load. You can see a sketch in the Feb 2008 QST. It works pretty
>>> slick when the antennas are 50 or 70 ohms where it is easy to get
>>> the right coax impedance.
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>> Owen
>
> Hi Owen
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> I would draw two touching circles to represent the outer conductors.
> The
> generator is fed between to the inner conductors. Hence, two 50 ohm
> loads on the coaxes will look like a 100 ohm load to the generator.
>
> Jerry

Ok, I understand, you the two inner conductors with a 100 ohm load
between them.

You have another pair like that from the other two arrays.

How do you connect them to the main feedline.

Owen

5500. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 05:15:03 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <rD01l.1736$7I6.1150@nwrddc01.gnilink.net>
Source record: 19074

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B749BE6A1964nonenowhere@61.9.191.5...
> "Jerry" <jerrymartes@verizon.net> wrote in
> news:LI%0l.1522$c35.284@nwrddc02.gnilink.net:
>
>>
>> "Owen Duffy" <none@no.where> wrote in message
>> news:Xns9B747FA693B8Cnonenowhere@61.9.191.5...
>>> "Jerry" <jerrymartes@verizon.net> wrote in
>>> news:2hZ0l.1697$7I6.557@nwrddc01.gnilink.net:
>>>
>>> ...
>>>> Hi Owen
>>>>
>>>> Richard Clark once told me how to combine 4 antennas in an array.
>>>> He got
>>>> me to feed 4 antennas, 50 ohms each with 50 ohm coax with no
>>>> dividers.
>>>> I just fed each antenna with 50 ohm coax. At the point where the
>>>> 4
>>>> coaxes get combined, I connected two coaxes in series and the other
>>>
>>> Can you explain in more detail what you mean by "I connected two
>>> coaxes in series"?
>>>
>>>> two also in series. Then parallel them to get back to 50 ohms.
>>>> The result is two 50 ohm loads in series to make 100 ohms and with
>>>> the other 100 ohms in parallel, the combination is a good 50 ohm
>>>> load. You can see a sketch in the Feb 2008 QST. It works pretty
>>>> slick when the antennas are 50 or 70 ohms where it is easy to get
>>>> the right coax impedance.
>>>
>>> Owen
>>
>> Hi Owen
>>
>> I dont know how to include pictures in this text.
>>
>> I would draw two touching circles to represent the outer conductors.
>> The
>> generator is fed between to the inner conductors. Hence, two 50 ohm
>> loads on the coaxes will look like a 100 ohm load to the generator.
>>
>> Jerry

>
> Ok, I understand, you the two inner conductors with a 100 ohm load
> between them.
>
> You have another pair like that from the other two arrays.
>
> How do you connect them to the main feedline.
>
>
> Owen

Hi Owen

The two 100 ohm loads in parallel give a 50 ohm load to the 50 ohm coax
main feed line. I used a ferrite "balun" where the unbalanced 50 ohm
main feed line connects to the center conductors that are connected to be
a 50 ohm load. .

Jerry KD6JDJ

5501. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 05:34:10 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <054e816f-a4c0-4849-a576-cb97b4821054@r10g2000prf.googlegroups.com>
Source record: 19075

On Dec 13, 9:38 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
>
> >> ...> I proved beyond doubt that radiation was via particles and not waves.
>
> >> ...
>
> > Best regards
> > Art Unwin.......KB9MZ.......xg (uk)
>
> Actually, that is false ... you could not prove such a thing, unless you
> force us to disbelieve our own eyes! To proceed claiming such is only
> to invite us to think you daft!
>
> http://www.newscientist.com/article/dn14172?DCMP=ILC-hmts&nsref=news1...
>
> The best you can now argue is that light is composed of a type(s) of
> particle(s) which travels as a wave(s); And, still, it seems to possess
> both qualities--i.e., behaving both as particles AND waves ... but then,
> we already knew that.
>
> Regards,
> JS

John I am confident about my analysis. Scientists have not been able
to explain
anything in radio that procedes at the or near the speed of light or
explain how communication is resolved.
I have provided an explanation that is duplicated in many ways every
day and vindicated by Maxwells equations.
Reviewing the URL you supplied. The photograph is not a simple proof
that it appears to be. Camera pictures are notorious
in fooling people into falible interpretatations. However you can
believe what you want. I would point out that I have melded many
things and aproaches
such that all mesh in a single conclusion None of these separate
aproaches have had any errors pointed out whether it be mathematics or
otherwise.
I am not a programmer so there is no way I could have injected such a
complicated scenario into all the programs now available. Nor could I
have invented the weak force that Einstein was convinced resided in
the analysis of radiation. On the other hand there are many
photographs available of the Lock Ness monster, alien space craft and
alabaster statues with tears coming from the eyes. By the way, compare

different aproaches of resolving radiation analysis and check which form provides the minimum losses and you will find that planar antennas just don't measure up versus antennas in equilibrium. On the other hand if the field of an eddy current is not the weak force that Einstein forcast or predicted then where and what is this force that propels a wave, presumably without spin that knocks out what I have suggested? At the same time does it fit exactgly the jigsaw pussle that Maxwell left us with the puzzle turned over so the picture could not be pre determined? And as a finale I see particles occilating possibly in tandem form that gives the impression that the particles arenot interconnected in string form but a series of interactions between particles that operate in their own right als
H2O in molecular but unbound form as with mass
Best regards..... good effort but no cigar. I would aim for best results at the computer programs or finding the true weak force, or determining how a electrical wave travels with intelligence or the center of all proove that the mathematics as applied to gaussian boundary that is made dynamic under a time varying field DOES NOT equate with the mathematical laws of Maxwell and last of all that the term equilibrium has NO PLACE in the laws devised by the masters with respect to the Universe. I left out the part that a radiater must be straight as expoused by some pseudo experts in the radio field as well as to how the addition that Maxwells made to his laws provide the mathematics for the tilting action on a radiator for minimum lossand the many other things I have pointed out
My very best regards and best wishes in any endeavor that you wish to undertake in an effort to proove me in error. There will be some talking in tongues by the group but I am absolutely positive there will be no fresh revalations other than just words provided over the years which have meant nothing
other than the intent to hurt. Goodnight
Art Unwin KB9MZ.....XG....(UK)

5502. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 05:38:58 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B74A95E6B296nonenowhere@61.9.191.5>
Source record: 19076

"Jerry" <jerrymartes@verizon.net> wrote in
news:rD01l.1736$7I6.1150@nwrddc01.gnilink.net:

...
> The two 100 ohm loads in parallel give a 50 ohm load to the 50 ohm
> coax
> main feed line. I used a ferrite "balun" where the unbalanced 50
> ohm *main feed line* connects to the center conductors that are
> connected to be a 50 ohm load. .

You didn't mention the balun in your fist posting. Without an effective balun, the system would be quite poor.

In each pair of antenna side coax lines where the shields are tied together and the inners are used for a 100 ohm connection point, you drive one coax in opposite phase to the other. Your description did not note that there is particular phasing requirement for the coax lines to the antennas, and polarity of connection of the DEs.

BTW, you have constructed a type of power divider. There are a lot of different ways to do it.

Owen

5503. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 09:50:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi2ku4$ie8$1@news.albasani.net>
Source record: 19077

Art Unwin wrote:
> On Dec 13, 9:38 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> Art Unwin wrote:
>>
>> >> ...> I proved beyond doubt that radiation was via particles and not waves.
>>
>> >> ...
>>
>>> Best regards
>>> Art Unwin.......KB9MZ.......xg (uk)
>> Actually, that is false ... you could not prove such a thing, unless you
>> force us to disbelieve our own eyes! To proceed claiming such is only
>> to invite us to think you daft!
>>
>> http://www.newscientist.com/article/dn14172?DCMP=ILC-hmts&nsref=news1...

>> ...
> Reviewing the URL you supplied. The photograph is not a simple proof
> that it appears to be. Camera pictures are notorious
> in fooling people into falible interpretatations. However you can
> believe what you want. I would point out that I have melded many
> things and aproaches
>> ...
> Art Unwin KB9MZ..........XG....(UK)

Well, that is simple enough then. You are to have us disbelieve our own
eyes ... good enough, we have that cleared up.

Regards,
JS

5504. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 16:00:47 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4e9b7435-f64d-4bcf-b673-e393df6f30d9@x16g2000prn.googlegroups.com>
Source record: 19078

On Dec 14, 3:50 am, John Smith <assemblywiz...@gmail.com> wrote:
> Art Unwin wrote:
> > On Dec 13, 9:38 pm, John Smith <assemblywiz...@gmail.com> wrote:
> >> Art Unwin wrote:
>
> >> >> ...> I proved beyond doubt that radiation was via particles and not waves.
>
> >> >> ...
>
> >>> Best regards
> >>> Art Unwin.......KB9MZ.......xg (uk)
> >> Actually, that is false ... you could not prove such a thing, unless you
> >> force us to disbelieve our own eyes! To proceed claiming such is only
> >> to invite us to think you daft!
>
> >>http://www.newscientist.com/article/dn14172?DCMP=ILC-hmts&nsref=news1...
>
> >> ...
>
> > Reviewing the URL you supplied. The photograph is not a simple proof
> > that it appears to be. Camera pictures are notorious
> > in fooling people into falible interpretatations. However you can
> > believe what you want. I would point out that I have melded many
> > things and aproaches
> >> ...
> > Art Unwin KB9MZ.........XG....(UK)
>
> Well, that is simple enough then. You are to have us disbelieve our own
> eyes ... good enough, we have that cleared up.
>
> Regards,
> JS

John you can interprete what you want. For me I will await for
somebody
to prove me wrong in the many areas that I have espoused and allow
those that
just want to make nasty remarks go ahead with their agenda. Sooner or
later reason will prevail
and Snakesphere talking in tongues will fade away.. I look forward to
the time that a real guru on radiation
appears on the group to discuss what is salient to the subject
Very best regards
Art Unwin.......KB9MZ........xg (uk)

5505. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 17:07:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi3egk$l4b$1@news.albasani.net>
Source record: 19079

Art Unwin wrote:

> ...
> John you can interprete what you want. For me I will await for
> somebody
> to prove me wrong in the many areas that I have espoused and allow
> those that
> just want to make nasty remarks go ahead with their agenda. Sooner or
> later reason will prevail
> and Snakesphere talking in tongues will fade away.. I look forward to
> the time that a real guru on radiation
> appears on the group to discuss what is salient to the subject
> Very best regards
> Art Unwin.......KB9MZ........xg (uk)

Now, we approach that time of risking way too much verbiage on way too little.

Yes, I do trust my eyes. The research done to get that picture was done by a university; I don't believe the lady, who was head, was out to reinforce any preconceived ideas/theories. And, I don't believe New Scientist is a nutter-rag-on-the-fringe; It does push-the-evelope.

THAT is my interpretation; I fear it the only one possible, at this time. Light and, most-probably, EM (no picture, yet) behaves with properties BOTH resembling particles and waves. (Thank gawd, at least something gives us valid reason for argument!)

You can wait for the cows-to-come-home; that research stands; the picture is NOT a fraud--IMHO. I have no reason to "be nasty"; I simply believe it to be as it appears ...

I am at a loss for what Shakespeares' stance would be; As you say, may reason prevail.

My very definition of the meaning of "guru" is "clueless" (in the context which I have used the word here); Now, you wish to wait for one of "them?" <scratches-head>

Salient? Change that to logical and I will "look forward" with you ... now, please, don't "be nasty" ... end-of-story.

Regards,
JS

5506. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 17:14:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi3etulkg1@news.albasani.net>
Source record: 19080

Art Unwin wrote:

>> ...
> Very best regards
> Art Unwin.......KB9MZ........xg (uk)

By-the-way, a sine wave (such as is seemingly depicted in that picture)
is nothing less than a circle (360 degrees)--"traveling." I don't
believe you were "lost" on that point, but stated here just to make sure ...

Regards,
JS

5507. NEC2 model of 40m loaded cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 17:16:08 UTC
From: Scott M <mcclements@gmail.com>
Message-ID: <c0e0dd18-fe2a-475b-bd96-be0afa2dc797@e10g2000vbe.googlegroups.com>
Source record: 19081

Hi - I am trying to play around with modeling a loaded 40 meter cubical quad. To start I made a single loop the size I wanted (about 2/3 full size) - I then looked at the impedance on 7.1Mhz. I added a load (inductance) to bring the loop to resonance on 7.1Mhz. I then created some parasitic elements - a director and reflector. I used the same value load for these elements. Now, can I just adjust the lengths of the wires to tune the feedpoint impedance and directivity and leave the value of the load alone? Or is there some reason I will need to adjust those values too? I placed the load opposite the feedpoint, FYI.

-Scott, WU2X

5508. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 17:16:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi3f0tlkg2@news.albasani.net>
Source record: 19082

Art Unwin wrote:

>> ...
> Very best regards
> Art Unwin.......KB9MZ........xg (uk)

By-the-way, a sine wave (such as is seemingly depicted in that picture) is nothing less than a circle (360 degrees)--"traveling." I don't believe you were "lost" on that point, but stated here just to make sure ... or, simply, "a traveling circle."

Regards,
JS

5509. N8WWM

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 18:11:35 UTC
From: Anonymous <cripto@ecn.org>
Message-ID: <20081214181135.7CFCB1A782D@isole>
Source record: 19083

http://i38.tinypic.com/2vluxee.jpg

5510. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 21:05:37 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ehsak4hkrf7c33vrohot9dis937s68o2hr@4ax.com>
Source record: 19084

On Sun, 14 Dec 2008 09:07:23 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>Art Unwin wrote:
>> Sooner or
>> later reason will prevail
>> and Snakesphere talking in tongues will fade away.

>I am at a loss for what Shakespeares' stance would be; As you say, may
>reason prevail.

Shakespeare will have little to say about it. The term "speaking in
tongues" comes from the New Testament:
<http://www.bible.org/page.php?page_id=393>

Also, reason has rarely prevailed. It's usually rationalization,
seduction, politix, or main force that carries the argument. None of
these show any indication of fading away.

How I create circular polarization or simulate a rotating antenna
direction finder. Pretend I'm holding an antenna:
<http://www.LearnByDestroying.com/panorama/jeffl.htm>
When it's done loading, move the mouse around the picture.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5511. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 21:34:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi3u4l$9ot$1@news.albasani.net>
Source record: 19085

Jeff Liebermann wrote:

> ...
> How I create circular polarization or simulate a rotating antenna
> direction finder. Pretend I'm holding an antenna:
> <http://www.LearnByDestroying.com/panorama/jeffl.htm>
> When it's done loading, move the mouse around the picture.

ROFLOL!!!

Great! Best laugh I have had on here in quite awhile ...

Thanks,
warm regards,
JS

5512. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 21:39:09 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <3gtak453q47ko5m1ouv696nui7tkfsdspc@4ax.com>
Source record: 19086

On Sun, 14 Dec 2008 08:00:47 -0800 (PST), Art Unwin
<ArthurUnwin@gmail.com> wrote:

>I look forward to
>the time that a real guru on radiation
>appears on the group to discuss what is salient to the subject

Sorry, but the messiah is busy trying to save the multitudes from,
moral debauchery, religious damnation, economic meltdown, global
warming, and the evil oil cartels. Antenna design and theory will
have to wait until all the other evils are dealt with.

Also, guru means "teacher". There are several current and former
teachers that post high quality answers here fairly regularly. If all
you want is a guru, they're readily available. All you have to do is
read, listen, and understand.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5513. Re: HF Diversity reception ?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 21:50:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Rcf1l.1649$c35.89@nwrddc02.gnilink.net>
Source record: 19087

```
"Dave" <joe@somewhere.com> wrote in message
news:HqGdnbyKNNCC89nUnZ2dnUVZ_qDinZ2d@earthlink.com...
> On Sat, 13 Dec 2008 10:25:16 -0800, JosephKK wrote:
>
>>
>> You wanted a tone detector. Then you asked if a vibrating reed
>> (mechanical resonator) can be one. Then you said that there was not
>> many methods, so i named some that even did more complex things. You
>> asked for the discussion and received it. Moreover, the tone squelch
>> system does some other complex things as well. Particularly when
>> multiple users (groups) are on a single channel in a single locale.
>
> I've administered business band radio systems. CTCSS is similar to a 3
> tumbler keylock.
>

more like a single tumbler combination lock.
```

5514. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 21:54:45 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Fgf1l.1651$c35.346@nwrddc02.gnilink.net>
Source record: 19088

"Owen Duffy" <none@no.where> wrote in message
news:Xns9B74A95E6B296nonenowhere@61.9.191.5...
> "Jerry" <jerrymartes@verizon.net> wrote in
> news:rD01l.1736$7I6.1150@nwrddc01.gnilink.net:
>
> ...
>> The two 100 ohm loads in parallel give a 50 ohm load to the 50 ohm
>> coax
>> main feed line. I used a ferrite "balun" where the unbalanced 50
>> ohm *main feed line* connects to the center conductors that are
>> connected to be a 50 ohm load. .
>
> You didn't mention the balun in your fist posting. Without an effective
> balun, the system would be quite poor.
>
> In each pair of antenna side coax lines where the shields are tied
> together
> and the inners are used for a 100 ohm connection point, you drive one coax
> in opposite phase to the other. Your description did not note that there
> is
> particular phasing requirement for the coax lines to the antennas, and
> polarity of connection of the DEs.
>
> BTW, you have constructed a type of power divider. There are a lot of
> different ways to do it.
>
> Owen

the simpler way is to just parallel all 4 of the 50 ohm loads which gives
you a 12 ohm load at the common point, then parallel 2 pieces of 50 ohm coax
1/4 wave long to form a 25 ohm matching section, that will get you back to a
50 ohm common point with no need for a balun.

5515. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 22:21:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1m1bk4l2lit1jigisbiq8592p1b18iqjr6@4ax.com>
Source record: 19089

On Sun, 14 Dec 2008 21:54:45 GMT, "Dave" <noone@nowhere.com> wrote:

>> BTW, you have constructed a type of power divider. There are a lot of
>> different ways to do it.
>>
>> Owen
>
>the simpler way is to just parallel all 4 of the 50 ohm loads which gives
>you a 12 ohm load at the common point, then parallel 2 pieces of 50 ohm coax
>1/4 wave long to form a 25 ohm matching section, that will get you back to a
>50 ohm common point with no need for a balun.

Unfortunately, this would be a common mode nightmare.

73's
Richard Clark, KB7QHC

5516. Re: NEC2 model of 40m loaded cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 22:23:46 UTC
From: jgboyles@aol.com
Message-ID: <3162695c-4687-456d-9923-c11ed205c1b3@a29g2000pra.googlegroups.com>
Source record: 19090

On Dec 14, 11:16 am, Scott M <mccleme...@gmail.com> wrote:
> Hi - I am trying to play around with modeling a loaded 40 meter
> cubical quad. To start I made a single loop the size I wanted (about
> 2/3 full size) - I then looked at the impedance on 7.1Mhz. I added a
> load (inductance) to bring the loop to resonance on 7.1Mhz. I then
> created some parasitic elements - a director and reflector. I used the
> same value load for these elements. Now, can I just adjust the lengths
> of the wires to tune the feedpoint impedance and directivity and leave
> the value of the load alone? Or is there some reason I will need to
> adjust those values too? I placed the load opposite the feedpoint,
> FYI.
>
> -Scott, WU2X

Hi Scott, Seems to me since this is a quad that your goal is maximum gain or F/B. As such, I would adjust the loads and element spacing keeping the element lengths constant, until you have the current distribution in the elements optimum for your goal. Then check the source impedance, and if it is not too bad, devise a way to match. Suggest that instead of a single load opposite the source, use two loads, should help with current distribution. Good luck.

Gary N4AST

5517. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 22:39:03 UTC
From: kb9rqz <kb9rqz@home>
Message-ID: <3-Gdnfz-LI4eF9jUnZ2dnUVZ_hednZ2d@got.net>
Source record: 19091
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

<kb9rqz@yahoo.com> wrote in message
news:vbltj4tst96i3m3etghhvtuaufamel01iu@4ax.com...
> On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>K4YZ wrote:
>>> Nope.
>>>
>>> The IP Address and servers are complete proof that I do NOT share
>>> any annonymous character's "address".
>>>
>>> Sounds like Lennie, to me....
>>>
>>> Steve, K4YZ
>>>
>>
>>To anyone with even an elementary understanding of anonymous proxies,
>>anonymous remailers, zombie backdoors, etc., the ability to change ones
>>IP address and header details is simplistic, indeed, with little time
>>spent anyone can appear to be "coming" from anywhere in the world.
>>
>>You waste my time. Worse, you think us all idiots here. You remind me
>>of the "street smart" prosecutors and defense attorneys who stack jurys
>>with members of little or no technical knowledge and then call in
>>"expert witnesses" and propose arguments of technical details to boggle
>>their minds.
>>
>>You have only proven that you, yourself are either ignorant to such
>>technical details, or else you are indeed street smart, I favor the
>>latter in this case (however, if you in the dark about such things, 15
>>minutes on google will enlighten you.)
>>
>>JS
>
> "one useless man is disgrace 2 become a law firm 3 or more become a
> congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
> altopia is never used by KB9RQZ
> nor is Konstans@hotmail.com ever

> btw i can be found at
> 17366 N River Rd
> Chassel Mi
>
> but the cowards asking lack the gut to act

5518. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 23:20:10 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <h7ednX8Tc54sCdjUnZ2dnUVZ8omdnZ2d@bt.com>
Source record: 19092

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:1m1bk4l2lit1jigisbiq8592p1b18iqjr6@4ax.com...
> On Sun, 14 Dec 2008 21:54:45 GMT, "Dave" <noone@nowhere.com> wrote:
>
>>> BTW, you have constructed a type of power divider. There are a lot of
>>> different ways to do it.
>>>
>>> Owen
>>
>>the simpler way is to just parallel all 4 of the 50 ohm loads which gives
>>you a 12 ohm load at the common point, then parallel 2 pieces of 50 ohm
>>coax
>>1/4 wave long to form a 25 ohm matching section, that will get you back to
>>a
>>50 ohm common point with no need for a balun.
>
> Unfortunately, this would be a common mode nightmare.
>
> 73's
> Richard Clark, KB7QHC

... why? It's a way it's done for broadcasting antennas. There's little
reason why the screen of the feeder can run continuously into the screens of
the transformer sections and on into the screens of the cables that feed the
individual Yagis. If the drive-points of the Yagis are equipped with
adequate baluns then there should be no more common-mode current on the
outside of the continuous screen than for the case of a single Yagi.

Chris

5519. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-14 23:21:55 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <doadnTWcS6uHCNjUnZ2dnUVZ8rSdnZ2d@bt.com>
Source record: 19093

"christofire" <christofire@btinternet.com> wrote in message
news:h7ednX8Tc54sCdjUnZ2dnUVZ8omdnZ2d@bt.com...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:1m1bk4l2lit1jigisbiq8592p1b18iqjr6@4ax.com...
>> On Sun, 14 Dec 2008 21:54:45 GMT, "Dave" <noone@nowhere.com> wrote:
>>
>>>> BTW, you have constructed a type of power divider. There are a lot of
>>>> different ways to do it.
>>>>
>>>> Owen
>>>
>>>the simpler way is to just parallel all 4 of the 50 ohm loads which gives
>>>you a 12 ohm load at the common point, then parallel 2 pieces of 50 ohm
>>>coax
>>>1/4 wave long to form a 25 ohm matching section, that will get you back
>>>to a
>>>50 ohm common point with no need for a balun.
>>
>> Unfortunately, this would be a common mode nightmare.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>
> ... why? It's a way it's done for broadcasting antennas. There's little
> reason why the screen of the feeder can run continuously into the screens
> of the transformer sections and on into the screens of the cables that
> feed the individual Yagis. If the drive-points of the Yagis are equipped
> with adequate baluns then there should be no more common-mode current on
> the outside of the continuous screen than for the case of a single Yagi.
>
> Chris

Of course I meant to type 'why the screen of the feeder can't run
continuously into ...'

5520. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 00:06:28 UTC
From: Jim-NN7K
Message-ID: <9ch1l.9958$yr3.334@nlpi068.nbdc.sbc.com>
Source record: 19094

Owen Duffy wrote:
More likely, 2 - 1/4 wave (with velocity factor)50 ohm coax's to a
"Tee" fitting-- Each end also to a "Tee" fitting . (all 50 ohm coax)
(power devider)

2x50 -----------------

2X Quarter wave> | "T" fitting > source 50 Ohm

2x50 -----------------

IF this is clear enough-- Jim NN7K

>> Jerry
>
> Ok, I understand, you the two inner conductors with a 100 ohm load
> between them.
>
> You have another pair like that from the other two arrays.
>
> How do you connect them to the main feedline.
>
>
> Owen

5521. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 01:01:58 UTC
From: JB <nospam@goofball.net>
Message-ID: <a0i1l.1687$c35.443@nwrddc02.gnilink.net>
Source record: 19095

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gi20cmsqa2@news.albasani.net...
> Art Unwin wrote:
>
> > ...
> > John, some years back the Government aproved the removal of a
> > percentage of pensioin funds
> > for their own use as long as the pensions were not in jeopody. In
> > other words if the funds earned more money than expected
> > then the company could use that money. So the majority of pension
> > funds were kept at the prescibed minimum level.
> > Now pension funds have turned south and the businesses have also
> > turned south such that they cannot replace the funds removed.
> > This little pot has started to simmer but has yet to get to the
> > boiling point. As Yogi Bear said i9t aint over until it is over!
> > Everything was OK when we let the market decide but then greed changed
> > the metric of the market.
> > Art
>
> YES! Indeed, it is much worse than that, the gov't has also used SSI
> funds by "tossing them into "general funds",
> questionable-investing-of-these-funds, etc." Now, they attempt to
> "resell" us our SSI with increased taxes and "increased fees." (just
> another name for "tax(s.)")
>
> Ever notice how they end up taking library and other public service
> funds, tossing 'em into a general fund, then reselling us the services,
> again-and-again-and-again-... well, most DON'T seem to! I just brought
> this up at a board of supes meeting in my city, and was threatened with
> removal from the room ... (well, I did get a bit "hot", seems hot
> enough to get a few others to take a verbal stance) Anyway, we
> convinced "them" NOT to shorten library hours--at least.
>
> It is time for investigative reporting, FBI/congressional investigations
> and criminal proceedings against the guilty parties.
>
> Instead, we are getting "bailouts" which reward the very crooks and
> powers-which-be which are responsible for this fine mess! And, NOT one
> word of closing the "loopholes." (DEFINITION: loophole = sanctioned
> criminal activity!)
>
> Regards,
> JS

It still all goes back to accountability. The majority of voters have turned into children and allowed these things to flourish. The stupidest people are the ones who sign petitions at grocery stores. No time to read it or even evaluate the claims. Even the press that we all thought would be a vanguard of freedom have turned into shills or are yes men (women) who say it is OK to report on "what somebody said" even if it's a crock.

I have been to city council meetings too. Not long ago the idiots outvoted the only sane one of em to "get in on" a abandon vehicle abatement tax of $1 on the vehicle license fees of which 50 cents would go back to the city. When they found there were further requirements to get the money, they wound up passing new ordinances to prohibit storage of vehicles in the driveway or on your own property so that they could tow away enough vehicles for carbon credits or some such nonsense. Since then I have vowed to vote no on any legislation that isn't concise.

Another definition of loophole: The product of deceptive legislation that through obfuscation, nullifies itself so that it may be perceived as "doing good" while opponents are vilified.

5522. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 01:02:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <02bbk4dvdiq4jl76a1skn1c88c3br2omdr@4ax.com>
Source record: 19096

On Sun, 14 Dec 2008 23:20:10 -0000, "christofire"
<christofire@btinternet.com> wrote:

>>>50 ohm common point with no need for a balun.
>If the drive-points of the Yagis are equipped with adequate baluns

And your question is about....?

73's
Richard Clark, KB7QHC

5523. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 01:41:14 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <I_adnWk02bhRKNjUnZ2dnUVZ_sfinZ2d@earthlink.com>
Source record: 19097

Jeff:

> How I create circular polarization or simulate a rotating antenna
> direction finder. Pretend I'm holding an antenna:
> <http://www.LearnByDestroying.com/panorama/jeffl.htm>
> When it's done loading, move the mouse around the picture.

Cool!

Finally someone with an open mind, good on you...

Lurkers will note that... Jeff is circularly polarized!

Been a while since I was in Santa Cruz. Been a while since I ran SCO...

Thanks Jeff.

-- Pete K1PO
-- Indialantic By-the-Sea, FL

5524. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 01:49:55 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <4d403275-23a5-45c5-af77-949c40923c55@d36g2000prf.googlegroups.com>
Source record: 19098

On Dec 5, 8:17 pm, "Peter O. Brackett" <n...@no-such-domain.nul>
wrote:
> Group:
>
> Warning... this could be mind blowing!
>
> Conventionally electromagnetic wave 'polarization' refers to the relative
> physical spatial orientation of the electric field vector (E) of an
> electromagnetic wave.
>
> It is commonly understood that polarization of electromagnetic waves may be
> either linear or circular.
>
> Linear Polarization (LP):
>
> Of course waves that are linearly polarized may have any arbitrary
> orientation angle (theta) with respect to a reference frame such as the
> earth's surface. For example most common linear amateur antennas produce
> and/or respond to waves of linear polarization, and these antennas produce
> either either horizonally or vertically polarized waves depending upon the
> orientation of the (linear) antenna with respect to the earth's surface
> (ground).
>
> As examples; a 1/2 wave length dipole for 10 meters hung at 30 feet between
> two trees of equal height produces a largely horizonally polarized wave and,
> a 2 meter 1/4 wave dipole mounted in the center of the roof of an automobile
> produces a largely vertically polarized wave.
>
> Of course as electromagnetic waves are propagated throughout an environment
> are never purely orientated and usually contain an ensemble of many
> orientations, because the waves are reflected from the ground, trees,
> buildings, mountains, bridges, moving vehicles, and sometimes propogated
> through moving and anisotropic media such as the ionosphere, etc... and so
> the multiple reflection surfaces at various angles to the earth's surface
> and/or refractions and Faraday rotations will conspire to "mix up" the
> original orientation of the E vector of a purely linear transmitted wave and
> usually produces a quite mixed polarization at distance from an emitting
> antenna.
>
> Malus' Law {I = Io [cos(theta)]^^2} describes the response of a linearly
> polarized receiving antenna to waves arriving at a polarization angle theta
> relative to the receiving antenna's preferred orientation. i.e a
> horizontally polarized antenna will produce maximum response to horizontally
> polarized waves and a minimum response (zero) to a vertically polarized wave

> and vice versa.
>
> Of course in practice, because of the multipath reflections and refractions
> the 'cross response' is never exactly zero or maximum as predicted by Malus
> Law.
>
> Just the same it is preferable to have the orientation of a receiving
> antenna 'aligned' with that of a particular transmitting antenna. In the HF
> region it is difficult for hams to "rotate" the orientation of their
> receiving antennas to maximize signal pickup based upon polarization, and so
> most hams are forced to take whatever response their relatively fixed
> antennas produce to the relatively unknown orientation of received waves.
>
> In military or commercial installations, where money and space may not be an
> issue, either electronically or mechanically derived spatial antenna
> polarization diversity can be utilized to maximize received signal strength
> based upon arriving polarization. Polarization diversity receivers...
>
> Circular Polarization (CP):
>
> Circular polarization describes the condition when an electromagnetic wave
> is spinning or rotating with around its direction of transmission. That is
> the electric vector (E) of a circularly polarized electromagnetic wave is
> rotating with an angular velocity as the wave travels through space. This
> is in contrast to the E vector of a linearly polarized wave which merely
> oscillates in one linear direction.
>
> Just as with linear polarization (horizontal and vertical) there are two
> different distinctly possible orientations for circularily polarized waves,
> these are known as Right Hand Circular Polarization (RHCP) and Left Hand
> Circular Polarization (LHCP).   There are actually two well known
> conventions used to label R and L CP depending upon the community of
> interest, namely physics/optics and electrical/electronics. Usually
> electronics folks refer the direction of rotation to the rotation of the E
> vector around the direction of travel from a transmitting antenna, whilst
> the optical physicists refer the rotation of E around the direction of
> travel towards a receiving lens. It's the same as the definition of up and
> down, it's all in the eye of the beholder. Regardless there are two
> orientations for CP
>
> Apparently circular polarization is less commonly known and understood than
> linear (horizontal/vertical) polarization especially among hams.
>
> There exist RHCP antennas and there are LHCP antennas. Perhaps one of the
> easiest forms of CP antennas for hams to understand are the axial mode helix
> antennas first discovered/studied by the great radio astronomer/ham John
> Kraus W8JK. Axial mode helix antennas may be "wound" with either a right
> hand thread or a left hand thread.
>
> Again Malus Law applies, in an easily applied modified form and so... RHCP

> receiving antennas respond to RHCP waves and LHCP receiving antennas
> respond to LHCP waves. A purely RHCP antenna will produce zero response to
> an LHCP wave, etc...
>
> An interesting effect happens upon reflection of CP waves. An RHCP wave
> reflected from a perfectly reflecting surface returns (is echoed) as a LHCP
> wave!
>
> CP propagation is often used in Satellite communications where a satellite
> may use both RHCP and LHCP transmitting antennas on the same frequency for
> communicating independently with two different ground stations using R and L
> CP antennas on the same frequency. CP frequency diversity doubles channel
> capacity!
>
> Yet another common form of CP antenna uses crossed linear antennas fed with
> a 90 degree (Pi/2) phase difference excitation.
>
> As far as I know all currently known CP antennas such as axial mode helixes
> and crossed 90 degree linear arrays produce CP waves where the angular
> velocity of rotation is one revolution per cycle of the RF carrier, or in
> other words one radian of circular rotation for each radian of frequency
> transmitted. In other words most well known CP antennas produce ONLY
> synchronous CP, where the angular velocity of rotation of the E vector is
> synchronized exactly with the frequency of the wave being transmitted.
>
> I believe that the well known and understood situation of purely synchronous
> CP is NOT necessesarily the only form of CP.
>
> Warning... The following may be an invention!
>
> Consider the case of a linear antenna, say a dipole, fed from a feed line
> over rotating slip rings, such that the antenna can be rotated while it is
> transmitting.
>
> Now transmit on that dipole antenna whilst mechanically spinning it
> clockwise [RHCP?] (with a mechanical motor of some kind).
>
> The dipole antenna is linear and thuse emits linear polariztion, except it
> is mechanically spinning, and so the E vector emanating from the antenna
> will be rotating with respect to its direction of travel.
>
> In this case the angular velocity of the motor that spins the linear antenna
> need not be synchronous with the frequency being radiated.
>
> For example we could mechanically spin the antenna at 330 rpm while
> transmitting a carrier of 1 GHz.
>
> This would most certainly produce circular polarization. For is not the E
> vector spinning at 330 revs!
>

> In fact the astute newsreader may note that we need not use a motor to
> rotate the antenna. In fact, I can propose several ways of "electronically"
> rotating the linear antenna at any arbitrary angular velocity, not
> necessarily synchronous with the transmitted frequency and so produce a
> so-called non-synchronous CP at any desired rate of rotation.
>
> Clearly, according to Malus Law, the maximum response to the non-synchronous
> CP received waves from this 'rotating' antenna contraption would be from a
> similarily rotating receiving antenna!
>
> Question?
>
> What would be the response of an axial mode helix antenna or say crossed 90
> degree fed dipoles or any other "synchronous" CP antenna to such a
> non-synchronous wave produces by a rotating antenna?
>
> Would the response of a syncrhronous axial mode helix be less than that of a
> sympathetically rotating receiving antenna?
>
> What?
>
> Thoughts, comments?
>
> -- Pete K1PO
> -- Indialantic By-the-Sea, FL
Pete Said,
"Circular polarization describes the condition when an electromagnetic
wave
is spinning or rotating with around its direction of transmission.
That is
the electric vector (E) of a circularly polarized electromagnetic wave
is
rotating with an angular velocity as the wave travels through space.
This
is in contrast to the E vector of a linearly polarized wave which
merely
oscillates in one linear direction."

Pete, I believe this is your error in thinking,instead of a a
spinning field perhaps it would be better just to few it as a coil
moving towards you with no rotation.

Jimmie

5525. Re: NEC2 model of 40m loaded cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 04:03:49 UTC
From: Scott M <mcclements@gmail.com>
Message-ID: <25123646-07ad-4506-880f-2171905014b7@t3g2000yqa.googlegroups.com>
Source record: 19099

Gary,

I wrote some code to automate the optimization of the quad for my
goals - but my code only deals with element length, so I am hoping
that I don't need to add more code to manipulate the value of the load
too.

-Scott, WU2X

On Dec 14, 5:23 pm, jgboy...@aol.com wrote:
> On Dec 14, 11:16 am, Scott M <mccleme...@gmail.com> wrote:
>
> > Hi - I am trying to play around with modeling a loaded 40 meter
> > cubical quad. To start I made a single loop the size I wanted (about
> > 2/3 full size) - I then looked at the impedance on 7.1Mhz. I added a
> > load (inductance) to bring the loop to resonance on 7.1Mhz. I then
> > created some parasitic elements - a director and reflector. I used the
> > same value load for these elements. Now, can I just adjust the lengths
> > of the wires to tune the feedpoint impedance and directivity and leave
> > the value of the load alone? Or is there some reason I will need to
> > adjust those values too? I placed the load opposite the feedpoint,
> > FYI.
>
> > -Scott, WU2X
>
> Hi Scott, Seems to me since this is a quad that your goal is maximum
> gain or F/B. As such, I would adjust the loads and element spacing
> keeping the element lengths constant, until you have the current
> distribution in the elements optimum for your goal. Then check the
> source impedance, and if it is not too bad, devise a way to match.
> Suggest that instead of a single load opposite the source, use two
> loads, should help with current distribution. Good luck.
>
> Gary N4AST

5526. Seeing is believing True or otherwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 04:47:00 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a7d56181-092f-414c-80c3-0dad6e6a1ddd@e1g2000pra.googlegroups.com>
Source record: 19100

In the old days it was commonly thought that a mirror image of an
assailant was in the eyes of the dead
This ofcourse is not true since the eye does not see what the brain
interpretes what they see.
A pair of glasses was made that inverted the image of what apparently
seen by the wearer, such
that other people was seen as being upside down. Within a day the
brain correctly interprets the inversion and from then on the wearer
saw people in an upright position even tho he was wearing glasses that
inverted the vision.
This brings home the point that the brain sees an image in some form
based on electrical pulses recieved from the eye and with its
inherrent brain power interpretes what is seen in term as to what it
should be seeing.
Thus seeing is just a reflection of what the brain states you should
be seeing based on past experiences.
So... seeing is not believing!
Regards
Art

5527. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 05:28:19 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B75A7900DE30nonenowhere@61.9.191.5>
Source record: 19001

Jim-NN7K <nn7kexk7zfg@noway.net.> wrote in news:9ch1l.9958$yr3.334
@nlpi068.nbdc.sbc.com:

> Owen Duffy wrote:

Firstly, I didn't write the following, Jim did.

> More likely, 2 - 1/4 wave (with velocity factor)50 ohm coax's to a
> "Tee" fitting-- Each end also to a "Tee" fitting . (all 50 ohm coax)
> (power devider)
>
> 2x50 -----------------
>
> 2X Quarter wave> | "T" fitting > source 50 Ohm
>
> 2x50 -----------------
>
> IF this is clear enough-- Jim NN7K
>

Jim, are you introducing another scheme, or were you trying to explain Jerry's scheme. We sorted Jerry's scheme, he just overlooked some vital details in his first description. (I haven't said it to date, but I dislike Jerry's scheme, principally over its use of the balun.)

Yours is another scheme.

There are a lot of ways to do it.

The original question was over an article's diagram that stated that unequal lines are "WRONG!".

Yours and Jerry's responses have not dealt with the original posting, but if anything offered alternatives that might be seen to suggest the original configuration is flawed.

Owen

5528. Re: Seeing is believing True or otherwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 06:01:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi4rt0$8f1$1@news.albasani.net>
Source record: 19002

Art Unwin wrote:

>> ...
> Thus seeing is just a reflection of what the brain states you should
> be seeing based on past experiences.
> So... seeing is not believing!
> Regards
> Art

Yes, we already had that out, didn't we? You would have us NOT to believe our eyes (actually, scientific experiment/observation with the aid of visual rendering devices and very short bursts of light.)

And, you do seem to be suppling proof of what you claim, "... inherrent brain power interpretes what is seen in term as to what it should be seeing." Or, in other words, "defective functioning by the processor--i.e., "the brain", is non-productive. Or, simply put, you see what most would consider proof, as fraud ... interesting, but you have demonstrated this previously ... and, there are indeed conspiracies--however, I don't gage this to be one of them; And, I am suspicious, yanno'?

And, your statement, "In the old days it was commonly thought that a mirror image of an assailant was in the eyes of the dead ..." would now be known as, "The memory of past visions, at least some of them, remain recorded on the brains "hardware" until erased by decay/degradation." But, you either fail or attempt to hide, "they" had it right; It is NOT unfathomable that these images may one day be viewed for some purpose (find a murderer, etc.) Yeah, they made a lucky guess ...

Now, I warned you, to pursue your present path invites us to think you daft. However, I was wrong; Rather, it is now approaching the point where you demand we think you daft! If there is purpose here, like leading us "down the path" to a BIG WHAMMIE (or, in other words, a point where an undeniable truth lies at the bottom and so, causes us to re-think what we think we know)--then get on with it, my attention span grows short ...

When there are errors in the logic which you attempt to use as supporting evidence/proof/parable to prove yet another point, of yours, which has been found to be in error--you do yourself NO favors. :-(

Once again, we have reached the end-of-another-story. But then, no one enjoys a surprise more than me, go ahead--if you can.

Regards,
JS

5529. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 06:12:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi4sfq$8f1$2@news.albasani.net>
Source record: 19003

JB wrote:

> ...
> Another definition of loophole: The product of deceptive legislation that
> through obfuscation, nullifies itself so that it may be perceived as "doing
> good" while opponents are vilified.
>

JB:

That is simply brilliant! Right on!

Yanno', I kinda like ya'! Scary, huh? lol

Warm regards,
JS

5530. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 14:19:28 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <rIWdnb7zmNrq-tvUnZ2dneKdnZydnZ2d@bt.com>
Source record: 19004

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:02bbk4dvdiq4jl76a1skn1c88c3br2omdr@4ax.com...
> On Sun, 14 Dec 2008 23:20:10 -0000, "christofire"
> <christofire@btinternet.com> wrote:
>
>>>>50 ohm common point with no need for a balun.
>>If the drive-points of the Yagis are equipped with adequate baluns
>
> And your question is about....?
>
> 73's
> Richard Clark, KB7QHC

Is this a quiz?

I simply questioned your statement that the very common arrangement of star-point and transformer, implemented in co-axial line, should be 'a common mode nightmare' as you put it. The middle portion of the diagram (http://www.vk1od.net:80/lost/Fig6.png) posted at the beginning of this thread shows baluns on the drive points of the dipoles and nowadays Yagi antennas for amateur as well as professional use appear to be sold more often with integral baluns. Co-axial feeders always interact to some extent on account of their outer conductors being in the vicinity of the antenna(s) but there are simple steps that can be taken to minimise this.

However, I concede there may be some reason to want to combine/power-split using balanced line but ultimately it will need to be connected to a co-axial line - if the intention is to achieve this without use of a balun then I wonder if this would be more of a 'nightmare'.

Chris

5531. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 14:52:12 UTC
From: Dave <dave@dave.dave>
Message-ID: <49466f1e$0$31151$bd467cd0@news.dslextreme.com>
Source record: 19005

JIMMIE wrote:

> oscillates in one linear direction."
>
> Pete, I believe this is your error in thinking,instead of a a
> spinning field perhaps it would be better just to few it as a coil
> moving towards you with no rotation.
>
> Jimmie

Two colocated matched antennas 90 degrees apart electrically, one at a
right angle to the other, will make very nice CP.

5532. Re: Seeing is believing True or otherwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 14:56:18 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9B755AEE3AA9DVeebleFetzer@216.250.184.7>
Source record: 19006

In news:a7d56181-092f-414c-80c3-0dad6e6a1ddd@e1g2000pra.googlegroups.com
Art Unwin <ArthurUnwin@gmail.com> wrote:

> So... seeing is not believing!

Presumably, you're using evidence from the very senses you say you can't
believe to support your argument.

So why should anybody believe you?

--
Bert Hyman St. Paul, MN bert@iphouse.com

5533. Re: NEC2 model of 40m loaded cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 15:04:09 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <86zlixpjiu.fsf@qmc.ph.msstate.edu>
Source record: 19007

It will be much easier to make the two elements exactly the same
in terms of wire lengths, and just increase the load for the
reflector element.

Tor
N4OGW

5534. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 16:25:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5h0dk4l3i00rv9tir3ppbro5ej9dqf8ir7@4ax.com>
Source record: 19008

On Mon, 15 Dec 2008 14:19:28 -0000, "christofire"
<christofire@btinternet.com> wrote:

>Is this a quiz?
And then you allow:
>However, I concede there may be some reason to want to combine/power-split
>using balanced line but ultimately it will need to be connected to a
>co-axial line - if the intention is to achieve this without use of a balun
>then I wonder if this would be more of a 'nightmare'.

It must be a quiz - when I point out that Dave does not call out for
isolation (*ferrite* BalUns as have been identified through Jerry's
and Owen's correspondence) and as you do as an aside - then what is it
that you find debatable about my commonplace observation?

Common Mode doesn't disappear into the VHF/UHF. Common Mode creates a
complex impedance product that is generally unaccounted for (ignored),
and would certainly disturb phase relationships where phase
relationships are of primary importance.

The only other alternative is consuming transmission line in coils to
the same purpose. That hasn't been offered as a choice until now.

73's
Richard Clark, KB7QHC

5535. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 19:54:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <80adk49ar8vtfn3fm4f62kio38kc68c637@4ax.com>
Source record: 19009

On Sat, 13 Dec 2008 01:56:27 GMT, Owen Duffy <none@no.where> wrote:

>I refer to the diagram at http://www.vk1od.net/lost/Fig6.png which is
>from an article by the then VK2ZAB (now VK3EJ) on stacking Yagis.

Hi Owen,

This illustration seems to serve other commentary as it is filled with odd eccentricities that are not very germane to the issue you raise below. Eccentricities aside for the moment, I have to make a lot of presumptions about an odd arrangement of 12 radiators. Some of them are symmetrical by groups, but not all of them are symmetrical in toto. I presume the groups are significant; but initially, what they are significant of escapes me.

The + and - markings in the top tier four group, along with the commentary, is suggestive; and I have to supply experience in the matter to know that not ALL +s are connected together (and neither are all -s connected together). I presume this top tier is a 4-Bay, but there is nothing to support this except the graphical allusion.

Also from experience, I would presume that connections are not horizontally placed, nor diagonally. The impression of incompleteness is accruing.

>I have highlighted two of the diagrams with a yellow background, and seek
>opinions on them.

This implies (by your statement of "two" diagrams) that along this middle tier of radiators, we have broken away from what might be a 4-Bay; and we are examining three pairs as choices put to an unstated problem. Here, the eccentricity of what looks like an appendix hanging from the folded element is further disturbed by what I can only imagine to be an abstraction for a coax feedline. Incompleteness is compounding.

If I am to pursue my forced presumptions, I would have to say that this middle tier lacks many more alternatives in connections and length variations. Incompleteness has reached saturation - which is what I think you are responding to.

>Referring firstly to the left hand one:
>
>I suggest that the figure is in error because the scenario is not ALWAYS
>wrong.
>
>My contention is that at a single frequency, the phase inversion as a

>result of the left to right swap of one driven element (DE) wrt the other
>can be fully compensated for by ensuring that low loss feedline to one DE
>is an odd number of electrical half waves longer than to the other.
>
>Where the low loss feedline to one DE is an odd number of electrical half
>waves longer than to the other, the Yagis are driven in phase.
>
>The outcome being that the pattern at that frequency is approximately the
>same as if equal length feedline branches were used.

Well, the original author does neglect to specify length, leaving it
to the reader's imagination to "presume" (have to say it) equal feed
lengths judged by eye. Unfortunately, the third example explicitly
offers this option, but only to those connections where phasing dots
are matched. Like I said, there are many missing alternatives.

Your imposition of an extra half wavelength in one feed may be
technically accurate, but it fights with the importance of their
length - which is to be found in the lost commentary, no doubt. I can
well guess, but that same commentary may illuminate these limited
choices and explain the eccentricities. I wouldn't want to slog
through that commentary, however.

>Referring now to the right hand one:
>
>I suggest that the figure is in error because the scenario is not ALWAYS
>wrong.
>
>My contention is that at a single frequency, that where the low loss
>feedline to one DE is an integral number of electrical full waves longer
>than to the other, the Yagis are driven in phase.

This would be a stretch of the imagination where application has
fallen into the ditch to serve argument. If the lengths drive
frequency to match to cable proportions in wavelength that do not
serve their loads, then such solutions are hardly useful.

>The outcome being that the pattern at that frequency is approximately the
>same as if equal length feedline branches were used.
>
>Note that I am not trying to excite a purist discussion about branch vs
>distributed feed arrangements for phased arrays.
>
>Am I on the wrong track?

I am wondering why you are trying to resurrect this train wreck.

73's
Richard Clark, KB7QHC

5536. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 21:50:04 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B7659DEE2C94nonenowhere@61.9.191.5>
Source record: 19010

Richard Clark <kb7qhc@comcast.net> wrote in
news:80adk49ar8vtfn3fm4f62kio38kc68c637@4ax.com:

> I am wondering why you are trying to resurrect this train wreck.

I was seeking comment on the issue of asymetric branch feed topology.

It was put to me that accounting for the phase shift due to the different branch lengths does not fully account for the time lag. My contention is that in transforming the problem to the frequency domain, conversion of time lag to phase lag fully and properly accounts for the different branch lengths.

Gordon's paper was offered as evidence that my feed was "WRONG!".

Yesterday, I note that Kraus has a clear diagram of branch vs distributed feed, and the technique of transposition to offset a half wave phase delay.

I also note the ARRL agrees with me (http://www.vk1od.net/lost/Fig7.png (c)), but that isn't a bullet proof recommendation!

I am now confident my critic was wrong.

Owen

5537. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 23:30:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <31ldk4p1ppup1srff2jmod0f0hrc4i7dip@4ax.com>
Source record: 19011

On Mon, 15 Dec 2008 21:50:04 GMT, Owen Duffy <none@no.where> wrote:

>Richard Clark <kb7qhc@comcast.net> wrote in
>news:80adk49ar8vtfn3fm4f62kio38kc68c637@4ax.com:
>
>> I am wondering why you are trying to resurrect this train wreck.
>
>I was seeking comment on the issue of asymetric branch feed topology.

Hi Owen,

That seemed to be a strain based on the illustration offered as it
wanders the field.

>It was put to me that accounting for the phase shift due to the different
>branch lengths does not fully account for the time lag. My contention is
>that in transforming the problem to the frequency domain, conversion of
>time lag to phase lag fully and properly accounts for the different
>branch lengths.

Too many conversions going on there in your statement. I don't see
any transformation (conversion?) to OR from the frequency domain; and
I don't see what that would offer. Distance, "polarity," phase and
time are all hands on the same watch. Their conversion is trivial -
as you appear to be rebutting to your critic.

>Gordon's paper was offered as evidence that my feed was "WRONG!".

The offeror left it you to sort it out rather than arguing their own
case, hmm?

>Yesterday, I note that Kraus has a clear diagram of branch vs distributed
>feed, and the technique of transposition to offset a half wave phase
>delay.
>
>I also note the ARRL agrees with me (http://www.vk1od.net/lost/Fig7.png
>(c)), but that isn't a bullet proof recommendation!

True.

>I am now confident my critic was wrong.

If the criticism is, as you offer above about accounting for "time
lag," as if that fell into some special category, then your confidence
is well grounded.

When I examine your other correspondence to piece together the story,
then both sides of the argument have valid points. Yours, being more

general, is more conclusive.

The second take-home here seems to be, if you wish to teach someone how to perform a task, or build a project, you shouldn't do it with negative examples without being encyclopedic to completion (which invites boredom).

A proof with the free version of EZNEC was easily achieved with some minor elaborations for the NBS Yagi. That is the beauty of modeling, it encompasses ALL the ways to fail or succeed.

73's
Richard Clark, KB7QHC

5538. Re: NEC2 model of 40m loaded cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 23:52:23 UTC
From: jgboyles@aol.com
Message-ID: <ff547965-0787-4fa7-a6c8-97faab0ce2ce@u18g2000pro.googlegroups.com>
Source record: 19012

On Dec 14, 10:03 pm, Scott M <mccleme...@gmail.com> wrote:
> Gary,
>
> I wrote some code to automate the optimization of the quad for my
> goals - but my code only deals with element length, so I am hoping
> that I don't need to add more code to manipulate the value of the load
> too.
>
> -Scott, WU2X
> - Show quoted text -

OK, for modelling purposes, you can keep the load constant, and vary the element lengths. From a practical standpoint, if you have this beast up in the air, tuning is easier with a tapped inductor.

Other factors that will effect the gain and F/B are the element spacing, and how high you can get the thing. Practically, these are not things you can change easily.

I just did a quick 2 element 66% (reflector) quad in a diamond configuration with 17' spacing on EZNEC, and got a 10.25 dbi gain at 35 degrees. F/B about 13 db. Feedpoint impedance was 44+j0 with a 678pf shunt capacitor. The element lengths were the same on both, varied loads to get max gain and best match. The center of the diamond was 50' up.

Gary N4AST

5539. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-15 23:57:39 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <T9C1I.2076$7I6.12@nwrddc01.gnilink.net>
Source record: 19013

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:31ldk4p1ppup1srff2jmod0f0hrc4i7dip@4ax.com...
> On Mon, 15 Dec 2008 21:50:04 GMT, Owen Duffy <none@no.where> wrote:
>
>>Richard Clark <kb7qhc@comcast.net> wrote in
>>news:80adk49ar8vtfn3fm4f62kio38kc68c637@4ax.com:
>>
>>> I am wondering why you are trying to resurrect this train wreck.
>>
>>I was seeking comment on the issue of asymetric branch feed topology.
>
> Hi Owen,
>
> That seemed to be a strain based on the illustration offered as it
> wanders the field.
>
>>It was put to me that accounting for the phase shift due to the different
>>branch lengths does not fully account for the time lag. My contention is
>>that in transforming the problem to the frequency domain, conversion of
>>time lag to phase lag fully and properly accounts for the different
>>branch lengths.
>
> Too many conversions going on there in your statement. I don't see
> any transformation (conversion?) to OR from the frequency domain; and
> I don't see what that would offer. Distance, "polarity," phase and
> time are all hands on the same watch. Their conversion is trivial -
> as you appear to be rebutting to your critic.
>
>>Gordon's paper was offered as evidence that my feed was "WRONG!".
>
> The offeror left it you to sort it out rather than arguing their own
> case, hmm?
>
>>Yesterday, I note that Kraus has a clear diagram of branch vs distributed
>>feed, and the technique of transposition to offset a half wave phase
>>delay.
>>
>>I also note the ARRL agrees with me (http://www.vk1od.net/lost/Fig7.png
>>(c)), but that isn't a bullet proof recommendation!
>
> True.
>
>>I am now confident my critic was wrong.
>

> If the criticism is, as you offer above about accounting for "time
> lag," as if that fell into some special category, then your confidence
> is well grounded.
>
> When I examine your other correspondence to piece together the story,
> then both sides of the argument have valid points. Yours, being more
> general, is more conclusive.
>
> The second take-home here seems to be, if you wish to teach someone
> how to perform a task, or build a project, you shouldn't do it with
> negative examples without being encyclopedic to completion (which
> invites boredom).
>
> A proof with the free version of EZNEC was easily achieved with some
> minor elaborations for the NBS Yagi. That is the beauty of modeling,
> it encompasses ALL the ways to fail or succeed.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard

What is the reasoning used to indicate 300 ohm line is used in (B) of the referenced http://www.vk1od.net/lost/Fig7.png .?

Jerry

5540. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-16 00:18:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cssdk45jrpddl9vkpe47j57q3652f0e5vo@4ax.com>
Source record: 19014

On Mon, 15 Dec 2008 23:57:39 GMT, "Jerry" <jerrymartes@verizon.net>
wrote:

> Hi Richard
>
> What is the reasoning used to indicate 300 ohm line is used in (B) of the
>referenced http://www.vk1od.net/lost/Fig7.png .?

Hi Jerry,

It should follow the rule of being the square root of the product of
the source and load Z.

73's
Richard Clark, KB7QHC

5541. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-16 00:38:48 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <sMC1I.2091$7I6.1522@nwrddc01.gnilink.net>
Source record: 19015

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:cssdk45jrpddl9vkpe47j57q3652f0e5vo@4ax.com...
> On Mon, 15 Dec 2008 23:57:39 GMT, "Jerry" <jerrymartes@verizon.net>
> wrote:
>
>> Hi Richard
>>
>> What is the reasoning used to indicate 300 ohm line is used in (B) of
>> the
>>referenced http://www.vk1od.net/lost/Fig7.png .?
>
> Hi Jerry,
>
> It should follow the rule of being the square root of the product of
> the source and load Z.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard

OK, on the geometric mean, but, the author surely realized *that*. I got the feeling that I was missing something of value when it wasnt obvious to me why 300 ohm line was used.

Jerry KD6JDJ

5542. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-16 01:15:25 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B767CAF9CA1nonenowhere@61.9.191.5>
Source record: 19016

"Jerry" <jerrymartes@verizon.net> wrote in
news:T9C1l.2076$7I6.12@nwrddc01.gnilink.net:

...
> What is the reasoning used to indicate 300 ohm line is used in (B)
> of the
> referenced http://www.vk1od.net/lost/Fig7.png .?

The figure is is from the ARRL Antenna Handbook.

In (b), the numbers are rounded. A nominal 280 ohm dipole via 1/4 wave of
400 ohm line gives 570 ohms at the tee. Two such branches are paralleled
for 285 ohms, which on 300 ohm main feed line line results in a VSWR of
1.05... should be acceptable.

Does that help?

Owen

5543. Re: Circular polarization... does it have to be synchronous??

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-16 01:18:48 UTC
From: Dave <noone@nowhere.com>
Message-ID: <YID1l.1870$c35.1593@nwrddc02.gnilink.net>
Source record: 19017

"Peter O. Brackett" <none@no-such-domain.nul> wrote in message
news:I_adnWk02bhRKNjUnZ2dnUVZ_sfinZ2d@earthlink.com...
> Jeff:
>> How I create circular polarization or simulate a rotating antenna
>> direction finder. Pretend I'm holding an antenna:
>> <http://www.LearnByDestroying.com/panorama/jeffl.htm>
>> When it's done loading, move the mouse around the picture.
>
> Cool!
> Finally someone with an open mind, good on you...
> Lurkers will note that... Jeff is circularly polarized!

he may be twisted, but hardly circularly polarized!

5544. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-16 01:26:27 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9B767E8E756E5nonenowhere@61.9.191.5>
Source record: 19018

Richard Clark <kb7qhc@comcast.net> wrote in
news:31ldk4p1ppup1srff2jmod0f0hrc4i7dip@4ax.com:

...
> The second take-home here seems to be, if you wish to teach someone
> how to perform a task, or build a project, you shouldn't do it with
> negative examples without being encyclopedic to completion (which
> invites boredom).

Richard,

That same thought occurred to me on first reading it. Teaching what not to do has its place, but it 'dumbs down' the learner.

Explaining the concepts, and how to use them imparts empowering knowledge more than rote learning of negative Rules of Thumb.

Still, people keep telling me that that is all old world thinking, today you train (instead of educate) people to specific and narrow tasks, and competency for immediate tasks (train to the need) is more important than knowledge of principles and concepts.

I have quals to opearate a fork lift. One of the questions I was asked for assessment was "name six places that you should not park a fork lift". Of course, one cannot just nominate any 6 places that would be inappropriate, it MUST be THE six places on the assessor's list. One of them is "on a railway track". So, rather than training people to identify hazards, and not park the fork lift in a hazardous place or way, "competent people" know the rule to not park the fork lift on a railway track. No doubt accident / incident driven training... a negative driver. (I will leave you to think about 5 other stupid places to park a fork lift!)

Owen

5545. Re: Phasing of stacked Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-16 02:01:15 UTC
From: Jim-NN7K
Message-ID: <KZD1l.10031$yr3.5403@nlpi068.nbdc.sbc.com>
Source record: 19019

Keeping in mind simplicity, and , using equal length of 50 0hm
to this power splitter- all antennas should be in phase (all
Left elements , to properly phase), and that it gives 4-50 ohm loads
for one 50 ohm source. Why reinvent the wheel?? Jim NN7K

Owen Duffy wrote:
> Jim-NN7K <nn7kexk7zfg@noway.net.> wrote in news:9ch1l.9958$yr3.334
> @nlpi068.nbdc.sbc.com:
>
>> Owen Duffy wrote:
>
> Firstly, I didn't write the following, Jim did.
>
>> More likely, 2 - 1/4 wave (with velocity factor)50 ohm coax's to a
>> "Tee" fitting-- Each end also to a "Tee" fitting . (all 50 ohm coax)
>> (power devider)
>>
>> 2x50 -----------------
>>
>> 2X Quarter wave> | "T" fitting > source 50 Ohm
>>
>> 2x50 -----------------
>>
>> IF this is clear enough-- Jim NN7K
>>
>
> Jim, are you introducing another scheme, or were you trying to explain
> Jerry's scheme. We sorted Jerry's scheme, he just overlooked some vital
> details in his first description. (I haven't said it to date, but I
> dislike Jerry's scheme, principally over its use of the balun.)
>
> Yours is another scheme.
>
> There are a lot of ways to do it.
>
> The original question was over an article's diagram that stated that
> unequal lines are "WRONG!".
>
> Yours and Jerry's responses have not dealt with the original posting, but
> if anything offered alternatives that might be seen to suggest the
> original configuration is flawed.
>
> Owen
>

5546. Re: N8WWM

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-16 19:16:18 UTC
From: mopeyzakween@yahoo.com
Message-ID: <97667c34-5f39-44d5-b7b0-8e38f5d30e79@w1g2000prk.googlegroups.com>
Source record: 19020

On Dec 14, 1:11 pm, Anonymous <cri...@ecn.org> wrote:
> http://i38.tinypic.com/2vluxee.jpg

HAHAHA....look at the fagboy squirm...lol...the canine cuckolded
coprophage is reduced to hiding cuz all his nyms have been banned! lol!

5547. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-16 21:26:01 UTC
From: "Mr. Mentor" <not_necessary@thanks.com>
Message-ID: <J1V1l.167$oJ4.4078711@petpeeve.ziplink.net>
Source record: 19021
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

JS..

Regarding:
"Worse, you think us all idiots here."

"You remind me of the "street smart" prosecutors and defense
attorneys who stack jurys..."
"jurys?"

Consider, http://www.thefreedictionary.com/jury
n. pl. ju&#65533;ries

Someone needs to consider a course in English 101!

Cheers,
Mr. Mentor

<kb9rqz@yahoo.com> wrote in message
news:crlmi4t3n1q7onmgl5hbriba2bf3de3678@4ax.com...
| On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
| <assemblywizard@gmail.com> wrote:
|
| >K4YZ wrote:
| >> Nope.
| >>
| >> The IP Address and servers are complete proof that I do
NOT share
| >> any annonymous character's "address".
| >>
| >> Sounds like Lennie, to me....
| >>
| >> Steve, K4YZ
| >>
| >
| >To anyone with even an elementary understanding of anonymous
proxies,
| >anonymous remailers, zombie backdoors, etc., the ability to
change ones
| >IP address and header details is simplistic, indeed, with
little time
| >spent anyone can appear to be "coming" from anywhere in the
world.
| >
| >You waste my time. Worse, you think us all idiots here. You
remind me

| >of the "street smart" prosecutors and defense attorneys who
stack jurys
| >with members of little or no technical knowledge and then call
in
| >"expert witnesses" and propose arguments of technical details
to boggle
| >their minds.
| >
| >You have only proven that you, yourself are either ignorant to
such
| >technical details, or else you are indeed street smart, I
favor the
| >latter in this case (however, if you in the dark about such
things, 15
| >minutes on google will enlighten you.)
| >
| >JS
|
| "one useless man is disgrace 2 become a law firm 3 or more
become a congress"
| adams
|
| woger you are a Congress all in your own head
|
| http://kb9rqz.bravejournal.com/
| altopia is never used by KB9RQZ
| nor is Konstans@hotmail.com ever
| btw i can be found at
| 17366 N River Rd
| Chassel Mi
|
| but the cowards asking lack the gut to act

5548. Re: N8WWM STEAMED

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-16 22:14:15 UTC
From: mike hunt <mhui998@hotmail.com>
Message-ID: <gi997vunm1@solani.org>
Source record: 19022
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave

"Syfo-Dyas" <Syfo-Dyas@nomail.com> wrote in message
news:5plak41m8jlbh9b7odlmsjitp6v96j1t8n@4ax.com...
> On Sun, 14 Dec 2008 04:48:25 -0800 (PST), mopeyzakween@yahoo.com
> wrote:
>
>>
>>a keyclown complaining about something illegal...turn in you CB amp
>>then you will be a bit more credible. In the meantime you are just a
>>bunch of cyber fart and noise.
>
> I think I will go key down my amp today since it has been a while.
> Will that make doug's cock hard?
>
>
This says him and his skank are at the glory hole party and it's not even
tax season yet..
http://www.radiobanter.com/showthread.php?t=136954

5549. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 00:23:10 UTC
From: an_old_friend <kb9rqz@gmail.com>
Message-ID: <b2d03300-b5c2-404d-aa8b-944ab85cab80@f13g2000yqj.googlegroups.com>
Source record: 19023
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Dec 16, 4:26 pm, "Mr. Mentor" <not_necess...@thanks.com> wrote:
> JS..
>
> Regarding:
> "Worse, you think us all idiots here."
>
> "You remind me of the "street smart" prosecutors and defense
> attorneys who stack jurys..."
> "jurys?"
your point?

5550. Re: N8WWM STEAMED

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 03:17:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gi9qvk$9mi$1@news.albasani.net>
Source record: 19024
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.shortwave

mike hunt wrote:
> "Syfo-Dyas" <Syfo-Dyas@nomail.com> wrote in message
> news:5plak41m8jlbh9b7odlmsjitp6v96j1t8n@4ax.com...
>> On Sun, 14 Dec 2008 04:48:25 -0800 (PST), mopeyzakween@yahoo.com
>> wrote:
>>
>>> a keyclown complaining about something illegal...turn in you CB amp
>>> then you will be a bit more credible. In the meantime you are just a
>>> bunch of cyber fart and noise.
>> I think I will go key down my amp today since it has been a while.
>> Will that make doug's cock hard?
>>
>>
> This says him and his skank are at the glory hole party and it's not even
> tax season yet..
> http://www.radiobanter.com/showthread.php?t=136954
>
>

Thunderbird ... right-click-ignore...

Bye idiot ...

JS

5551. Re: confusion about path loss calculation for zigbee

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 04:05:53 UTC
From: Ginu <osheikh81@gmail.com>
Message-ID: <c5868e79-e62d-4baa-b159-53b3cd1b2e7f@s36g2000vbp.googlegroups.com>
Source record: 19025

On Dec 4, 1:15 pm, Ginu <osheik...@gmail.com> wrote:
> Hello,
>
> I've been trying to wrap my head about this problem for days and can't
> seem to figure it out.
>
> Zigbee technology allows you to transmit at 250 kbps. I'm comparing
> the required power to transmit at that rate to the required minimum
> power based on the path loss equations to reach the minimum receiver
> sensitivity of the 802.15.4 physical layer for Zigbee of roughly -94
> dBm. Simple enough right?
>
> To analyze the required power to transmit at 250 kbps for Zigbee, I've
> just re-arranged the Shannon capacity formula of Rate = w * log_2 (1 +
> (Pt * G)/(w*N + I)). Here, w is the bandwidth, Pt is the transmit
> power, Pt * G is the received signal power, N is the white Gaussian
> noise and I is the sum of interference powers.
>
> For Zigbee, these values are as follows:
> w = 5 MHz
> N (in dB) = 10*log10(k) + 10*log10(T) where k is boltzmann's constant
> of 1.23E-23 and T is the temperature in Kelvin of 300 degrees. In
> Watts, N is approximately 3.6900e-021.
>
> I've assumed no interference at this stage, so I = 0. Simple enough so
> far right?
>
> So to calculate the required transmit power to reach a rate of 250
> kbps, I've just re-arranged this equation to yield:
> Pt = [2^(250 kbps/w) - 1]*(w * N + I)/G and plugging in the above
> values gives me a reasonable transmit power of 1.6 uW.
>
> The reason I haven't talked about G yet is that I'm addressing it
> here. G is the channel quality (path loss) and is defined as follows:
>
> G(freq,D) = GrdBi+ GtdBi- 20*log10(4*pi*freq*d0/c) -
> 10*pathLossExponent*log10(D/d0) (in dB)
>
> I'm using unity gains so GrdBi = GtdBi = 0 dBi. Other parameters are:
> freq = 2.4 GHz
> d0 = 1m as the reference distance
> c = 3.0 x 10^8
> pathLossExponent = 2, and
> D = 500 metres

>
> Hence, G (in Watts) * Pt is the received signal power. G(2.4E9, 500)
> is the path loss transmitting at 2.4 GHz a distance of 500m away. G
> (2.4E9, 500) = -94.0254 dB
>
> Now the first thing that I mentioned was the receiver sensitivity for
> Zigbee of -94 dBm, Analyzing G (in dB). The required transmit power
> considering this path loss is easily calculated as:
>
> -94 dBm = P_required + G(2.4E9, 500)
>
> P_required is then easily calculated as -94 dBm - G(2.4E9, 500) =
> 0.0254 dBm. This translates to a transmit power of 1 mW. This required
> power is LARGER than the maximum permissible power to transmit at 250
> kbps, which is the maximum data rate for Zigbee. So how does this make
> sense?
>
> However, 1mW happens to be the maximum transmit power of Zigbee of
> roughly 0 dBm, so there may be a range problem here.
>
> Testing other distances, say 300m, we get a maximum transmit power Pt
> = 5.9181e-007 = 0.59 uW to transmit at 250 kbps, but a P_required =
> -4.41 dBm = 3.6211e-004, which is > our maximum transmit power Pt.
>
> So again, we run into the same problem at 300m. It just doesn't make
> sense to me. Can anybody shed some light on this? I hope my math is
> clear. Thanks in advance.

Thanks everyone! With your feedback I was able to fix the problem.
Thanks a lot for your clarification and advice :)

Omar

5552. Re: Seeing is believing True or otherwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 18:29:34 UTC
From: JB <nospam@goofball.net>
Message-ID: <iyb2l.271$P5.193@nwrddc02.gnilink.net>
Source record: 19026

There is usually sufficient reliable input to recalibrate. However, it does leave open the possibility that we can be fooled or exploited by something resembling what we think we know.

5553. Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 18:56:33 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <dUb2l.9046$M01.4767@bignews3.bellsouth.net>
Source record: 19027

I want to put up the smallest outdoor antenna that would cover all TV Broadcast Freqs being used after Feb 2009. The log-periodicals are too "un-stealthy" to go unnoticed by the XYL, but I think a little discone with some black paint might escape her inspection as long as I do the installation while she's out shopping.
Question is - have any of you used one for TV - and if so, how did it perform? would it cover the TV broadcast freqs ? (I'm aware of its lack of gain - I'm within 5 miles of most local stations, and within 20 miles of a couple more.)
Thanks
Hal W4PMJ

5554. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 19:24:00 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <Njc2l.9309$mw2.6385@bignews4.bellsouth.net>
Source record: 19028

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:dUb2l.9046$M01.4767@bignews3.bellsouth.net...
>I want to put up the smallest outdoor antenna that would cover all TV
>Broadcast Freqs being used after Feb 2009. The log-periodicals are too
>"un-stealthy" to go unnoticed by the XYL, but I think a little discone with
>some black paint might escape her inspection as long as I do the
>installation while she's out shopping.
> Question is - have any of you used one for TV - and if so, how did it
> perform? would it cover the TV broadcast freqs ? (I'm aware of its lack
> of gain - I'm within 5 miles of most local stations, and within 20 miles
> of a couple more.)
> Thanks
> Hal W4PMJ

It should work just fine, barring multipath. Multipath with digital signals does not produce ghosting, just signal degradation, although it can be so bad as to make viewing spotty with dropouts. I'd give it a go if I already had the antenna.

Ed, N2ECW

5555. Re: information suppression by universities

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 19:50:27 UTC
From: JB <nospam@goofball.net>
Message-ID: <7Kc2l.288$P5.45@nwrddc02.gnilink.net>
Source record: 19029

Although no law can truly nulify itself since it can always be used as a tool for the next more powerfull and ruthless regime.

5556. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 20:06:03 UTC
From: JB <nospam@goofball.net>
Message-ID: <LYc2l.290$P5.173@nwrddc02.gnilink.net>
Source record: 19030

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:dUb2l.9046$M01.4767@bignews3.bellsouth.net...
> I want to put up the smallest outdoor antenna that would cover all TV
> Broadcast Freqs being used after Feb 2009. The log-periodicals are too
> "un-stealthy" to go unnoticed by the XYL, but I think a little discone
with
> some black paint might escape her inspection as long as I do the
> installation while she's out shopping.
> Question is - have any of you used one for TV - and if so, how did it
> perform? would it cover the TV broadcast freqs ? (I'm aware of its lack
of
> gain - I'm within 5 miles of most local stations, and within 20 miles of a
> couple more.)
> Thanks
> Hal W4PMJ
>
Discone is vertically polarized and TV is horizontal. Results in a 15db or
more loss in signal.

5557. Re: Numerical integration and MS Excel "data table" function problem

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 20:38:29 UTC
From: Wimpie <wimabctel@tetech.nl>
Message-ID: <0483151e-9b1f-4ba1-8e8d-e49c3fee0244@v5g2000prm.googlegroups.com>
Source record: 19031
Cross-posted to: sci.physics.electromag,rec.radio.amateur.antenna

On 28 nov, 22:28, Wimpie <wimabc...@tetech.nl> wrote:
> Hello,
>
> I made an excel sheet to simulate Fresnel diffraction patterns. I used
> a 2 way data table to generate the "infinitesimal" contributions from
> the EM field. After summation of the contributions in the 2D tables,
> a have one result cell (that holds |E|) and three input cells
> (variables) for x-, y-, and z- coordinate for the observation point.
> When I change the coordinates manually, the results seem OK.
>
> The idea was to use another table (one way table) to plot |E| versus
> one of the input cells. However, I cannot get the table working. I
> tried "scenarios" (filling in each scenario by hand), but Excel stores
> the individual worksheets, so I ran out of the EXCEL 2000 internal
> memory limit (I think of about 60MB). I also tried the offset
> function, in combination with a one-way table. This also didn't work.
>
> It seems that once you use a data table that uses one (or two) of your
> variables, you cannot use another table to manipulate a third variable
> (parameter).
>
> Does somebody know a solution for this (I do not prefer a VB one)?
>
> Best regards,
>
> Wim
> PA3DJSwww.tetech.nl
> The PM is valid when you don't forget to take out abc.

Hello contributors to my Excel problem,

Though I am not an SW guy, I solved my Fresnel diffraction problem
with Turbo Pascal 5.5. After playing with some basic Pascal things,
it took limited time to write the routines. The speed of the
calculations surprised me. I think they did a really good job at that
time.

For the time being, I use MS excel for the graphing part.

Thanks for the help!

Best regards,

Wim
PA3DJS

www.tetech.nl
When leaving out abc, you have a valid PM.

5558. Re: Seeing is believing True or otherwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 20:43:19 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <d27c7b73-b44e-4262-be13-c2601e633276@o40g2000yqb.googlegroups.com>
Source record: 19032

On Dec 17, 1:29 pm, "JB" <nos...@goofball.net> wrote:
> There is usually sufficient reliable input to recalibrate. However, it does
> leave open the possibility that we can be fooled or exploited by something
> resembling what we think we know.

Happens every day.

Jimmie

5559. Re: Seeing is believing True or otherwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 20:46:03 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <461ed2a7-b921-47e8-962b-a454d07929e8@s1g2000prg.googlegroups.com>
Source record: 19033

On Dec 14, 11:47 pm, Art Unwin <ArthurUn...@gmail.com> wrote:
> In the old days it was commonly thought that a mirror image of an
> assailant was in the eyes of the dead
> This ofcourse is not true since the eye does not see what the brain
> interpretes what they see.
> A pair of glasses was made that inverted the image of what apparently
> seen by the wearer, such
> that other people was seen as being upside down. Within a day the
> brain correctly interprets the inversion and from then on the wearer
> saw people in an upright position even tho he was wearing glasses that
> inverted the vision.
> This brings home the point that the brain sees an image in some form
> based on electrical pulses recieved from the eye and with its
> inherrent brain power interpretes what is seen in term as to what it
> should be seeing.
> Thus seeing is just a reflection of what the brain states you should
> be seeing based on past experiences.
> So... seeing is not believing!
> Regards
> Art

Yes there are a lot of people who only see what they want to see.

Jimmie

5560. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 21:05:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <fQd2l.9062$as4.8379@nlpi069.nbdc.sbc.com>
Source record: 19034

JB wrote:
> Discone is vertically polarized and TV is horizontal. Results in a 15db or
> more loss in signal.

How about a dual-discone mounted horizontally?
--
73, Cecil http://www.w5dxp.com

5561. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 21:24:34 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <0eb69ec0-0ee4-463c-8b80-975b53def7b6@v4g2000vbb.googlegroups.com>
Source record: 19035

On Dec 17, 4:05 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> JB wrote:
> > Discone is vertically polarized and TV is horizontal. Results in a 15db or
> > more loss in signal.
>
> How about a dual-discone mounted horizontally?
> --
> 73, Cecil http://www.w5dxp.com

At five miles an old coat hanger would probably work well. Years ago I
lived in a townhouse apartment that had cable but you bought it
through the apartment at a premium rate compared to the cable company.
I put a coat hangar dipole in the attic and connected it to there
wiring. I got ABC, CBS,NBC 3 PBS stations and a couple of local non
affiliated stations. Way more TV than I wanted.

5562. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 22:09:25 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <UcidnR3P2uaG5dTUnZ2dnUVZ_uudnZ2d@earthlink.com>
Source record: 19036

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:dUb2l.9046$M01.4767@bignews3.bellsouth.net...
>I want to put up the smallest outdoor antenna that would cover all TV
>Broadcast Freqs being used after Feb 2009. The log-periodicals are too
>"un-stealthy" to go unnoticed by the XYL, but I think a little discone with
>some black paint might escape her inspection as long as I do the
>installation while she's out shopping.
> Question is - have any of you used one for TV - and if so, how did it
> perform? would it cover the TV broadcast freqs ? (I'm aware of its lack
> of gain - I'm within 5 miles of most local stations, and within 20 miles
> of a couple more.)
> Thanks
> Hal W4PMJ
>

It probably won't take too much antenna of anykind to get the digital
signals. I bought a converter for an old set and hooked it to a 432 antenna
about 20 feet off the ground and got about 20 stations. Then hooked it to
a M2 9 element 2 meter horizontal beam at 60 feet and got 29 stations on
autotune. I am probably 20 miles or more from the nearest station . More
like 30 or 40 miles from most.

5563. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-17 23:45:12 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gic2u7$jk4$2@news.jpl.nasa.gov>
Source record: 19037

Cecil Moore wrote:
> JB wrote:
>> Discone is vertically polarized and TV is horizontal. Results in a
>> 15db or
>> more loss in signal.
>
> How about a dual-discone mounted horizontally?

AKA a Bi-Conical..

That's basically what a George Brown Super Turnstile uses.. Fan dipoles
which approximate a biconical.

5564. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 00:25:50 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B77A72609A5FHuckleberrybigvalley@198.186.192.196>
Source record: 19038

>>
>> How about a dual-discone mounted horizontally?
>
> AKA a Bi-Conical..
>

Seems like a waste of a perfectly good pair of communications discones,
to me. If the original poster is looking for a low visual antenna in place
of the sometimes large TV Yagi's, he might take a look at antennas made
for the RV industry.

Personally, I'd homebrew something out of brass welding rods.....
perhaps a few stacked horizontal loops......

Ed K7AAT

5565. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 01:50:45 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <GWh2l.9435$nD1.6864@bignews5.bellsouth.net>
Source record: 19039

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:fQd2l.9062$as4.8379@nlpi069.nbdc.sbc.com...
> JB wrote:
>> Discone is vertically polarized and TV is horizontal. Results in a 15db
>> or
>> more loss in signal.
>
> How about a dual-discone mounted horizontally?
> --
> 73, Cecil http://www.w5dxp.com

If I did that, the omi-directionality (if that's a word) would go away and
so would most of the compactness needed foe stealthiness.
So - does anyone know of an omni directional horizontally polarized wide
band antenna?

5566. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 01:57:12 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <J0i2l.9440$nD1.1835@bignews5.bellsouth.net>
Source record: 19040

>
> Personally, I'd homebrew something out of brass welding rods.....
> perhaps a few stacked horizontal loops......
>
>
> Ed K7AAT

I like making my own also - so would a few 'nested loop' antennas cover the
tv broadcast band? But there goes the stealth.

5567. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 02:12:58 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B77B9502EBD1Huckleberrybigvalley@198.186.192.196>
Source record: 19041

> I like making my own also - so would a few 'nested loop' antennas
> cover the tv broadcast band? But there goes the stealth.

Huh? You think a couple brass welding rods in loops are more
noticable than a couple discone antennas mounted base to base? ! And if
you painted them black, they'd be invisible.

Ed

5568. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 02:20:17 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B77BA8DD1B26Huckleberrybigvalley@198.186.192.196>
Source record: 19042

> So - does anyone know of an omni directional horizontally polarized
> wide band antenna?

Had something like that on the roof of my RV. A Wineguard Roadstar
2000 omnidirectional antenna ought to be just what you're looking for.
Paint it black, if you want even more stealth.

such as at: http://www.amazon.com/Canon-Winegard-Roadstar-2000-
Antenna/dp/B000R2YB0G

Ed

5569. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 02:36:49 UTC
From: dplatt@radagast.org
Message-ID: <1jpo16-sh9.ln1@radagast.org>
Source record: 19043

In article <GWh2l.9435$nD1.6864@bignews5.bellsouth.net>,
Hal Rosser <hmrosser@bellsouth.net> wrote:

>If I did that, the omi-directionality (if that's a word) would go away and
>so would most of the compactness needed foe stealthiness.

>So - does anyone know of an omni directional horizontally polarized wide
>band antenna?

If you want a truly-omnidirectional (or close to it) antenna, with no significant pattern variation or serious sensitivity variation in frequency over the TV band, horizontally polarized, with no requirement for electronic switching of elements and no mechanical rotator... I sure don't. I skimmed through the antenna designs given in Bailey's "Television and other Receiving Antennas" book a few days ago, and didn't see any which come close to this.

I think you're going to have to "give" on at least one of the above issues in order to get something realizable.

There are probably a number of approaches:

- Use a wideband, rotatable dipole. At least one of the "saucer radome" antennas comes with an internal rotator, control box, and IR remote. You program in the bearing to each station you want, hit a button on the remote, and the rotator swings the (inside-the-radome) elements into line. See the HDMS9100 antenna at the top of the page:

http://www.starkelectronic.com/allomni.htm

In this approach you give up on "no rotator". Doesn't work terribly well with DVRs, since the DVR may have a scheduled recording to make and can't push the button to rotate the antenna.

- Use a wideband dipole (e.g. several dipoles of different lengths, mounted in the same plane, with a common feedpoint), and simply align it in a way which gives you acceptable signal quality for all of the stations you care about. The null off the end of a dipole isn't all that wide, and you may find that you may be able to "aim" these two nulls in a direction which doesn't place any of the transmitters into a substantial null. There may be one or more "compromise" settings in which you get a plenty-good signal on all of the stations.

In this approach you give up on true omnidirectionality.

I think that the Channel Master 3000A (listed further down on the page above) is of this general sort. If I recall correctly, it has a single folded dipole element internally, with the ends of the dipole swept into an "S" shape in side the radome - this lessens the depth of the null off the end and (I think) makes the direction of the actual null somewhat frequency-sensitive.

- Install two such broadband dipoles at 90-degree angles, with a remotely operated switch/relay, and select one or the other depending on channel.

Not truly omnidirectional , requires manual switching.

- Install two or more dipoles of different lengths, at different angles, with a common feedpoint, with each dipole cut to the frequency of a specific station and aligned broadside to that station's transmitter. The resulting pattern will no doubt have lobes and cancellations, but (if the channels are far apart enough in frequency) will probably work reasonably well.

Not truly omnidirectional at any single frequency; needs to be designed for your specific location and frequency considerations.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

5570. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 02:38:34 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <uDi2l.9452$nD1.7036@bignews5.bellsouth.net>
Source record: 19044

>> I like making my own also - so would a few 'nested loop' antennas
>> cover the tv broadcast band? But there goes the stealth.
>
>
> Huh? You think a couple brass welding rods in loops are more
> noticable than a couple discone antennas mounted base to base? ! And if
> you painted them black, they'd be invisible.
>
> Ed

Huh back to you - I never said anything about a 'couple' of discones - my original post was asking whether a discone would be a viable tv antenna. and I mentioned that I wanted to preserve some degree of stealth as well. Your suggestion sounds good - just trying to picture it.
That RV antenna is starting to sound good too.

5571. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 03:01:21 UTC
From: Dave <dave@dave.dave>
Message-ID: <4949bd01$0$31143$bd467cd0@news.dslextreme.com>
Source record: 19045

Ed wrote:
>> So - does anyone know of an omni directional horizontally polarized
>> wide band antenna?
>
>
> Had something like that on the roof of my RV. A Wineguard Roadstar
> 2000 omnidirectional antenna ought to be just what you're looking for.
> Paint it black, if you want even more stealth.
>
> such as at: http://www.amazon.com/Canon-Winegard-Roadstar-2000-
> Antenna/dp/B000R2YB0G
>
> Ed
>
>
This is a phased array and can be steered electrically:

http://sadoun.com/Sat/Products/Winegard/DTA3500DX-Antenna-Active-Amplified-Multi-Direction
al.htm

5572. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 04:54:16 UTC
From: Dave <dave@dave.dave>
Message-ID: <4949d778$0$31146$bd467cd0@news.dslextreme.com>
Source record: 19046

Dave wrote:
> Ed wrote:
>>> So - does anyone know of an omni directional horizontally polarized
>>> wide band antenna?
>>
>>
>> Had something like that on the roof of my RV. A Wineguard
>> Roadstar 2000 omnidirectional antenna ought to be just what you're
>> looking for. Paint it black, if you want even more stealth.
>>
>> such as at: http://www.amazon.com/Canon-Winegard-Roadstar-2000-
>> Antenna/dp/B000R2YB0G
>>
>> Ed
>>
>>
> This is a phased array and can be steered electrically:
>
> http://sadoun.com/Sat/Products/Winegard/DTA3500DX-Antenna-Active-Amplified-Multi-Directional.htm
>
Here's a bunch of cheapies:

http://www.summitsource.com/outdoor-antennas-multi-directional-uhf-vhf-tv-antennas-c-47_57_65.html

5573. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 06:36:47 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <tmrjk4pbvvblg54qtgm6opp4fgsn5tkvar@4ax.com>
Source record: 19047

On Wed, 17 Dec 2008 20:06:03 GMT, "JB" <nospam@goofball.net> wrote:

>Discone is vertically polarized and TV is horizontal. Results in a 15db or
>more loss in signal.

Usually true. However, a few DTV stations have a vertical component
intended to improve mobile TV reception, where a telescoping vertical
whip antenna is commonly used. See:
<http://www.tvtechnology.com/article/article/67946>

--
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Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5574. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 06:47:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m3rjk4tuheis8q5r2h9rgrc91pr05tnnmh@4ax.com>
Source record: 19048

On Wed, 17 Dec 2008 18:36:49 -0800, dplatt@radagast.org (Dave Platt) wrote:

>If you want a truly-omnidirectional (or close to it) antenna, with no
>significant pattern variation or serious sensitivity variation in
>frequency over the TV band, horizontally polarized, with no
>requirement for electronic switching of elements and no mechanical
>rotator... I sure don't. I skimmed through the antenna designs given
>in Bailey's "Television and other Receiving Antennas" book a few days
>ago, and didn't see any which come close to this.

A closer reading (skimming) would reveal:
Data sheet 10-15 Biconical Full Wave Antenna
Data sheet 10-30 Crossed Dipoles (Turnstile)
Data sheet 10-32 Slot Antenna
Data sheet 10-33 Slotted Cylinder Antenna

Basically, the take-home for widebandedness is a thick antenna (or its skeletal equivalent). Many are vertical designs, but you simply build the mirrored half and turn the assembly 90 degrees.

Although not the widest of designs (but wider than most), I would add the Inverted F, example to be found at:
http://www.qsl.net/kb7qhc/antenna/Inverted%20F/index.htm
Make it thicker to make it wider (or fan out the segments). This is a very low profile antenna by the way.

As for Ed's repeated advice for paint it black (Rolling Stones?), no. Paint it off-white or a paler shade of blue (Procol Harumish). In experiments during WWII, they discovered that lighting targets against the sky made them disappear - not darkening them which offered contrast. Oxidized aluminum is probably the best coloration.

73's
Richard Clark, KB7QHC

5575. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 14:08:33 UTC
From: Dave <dave@dave.dave>
Message-ID: <494a5961$0$31195$bd467cd0@news.dslextreme.com>
Source record: 19049

Bart Bailey wrote:
> In Message-ID:<uDi2l.9452$nD1.7036@bignews5.bellsouth.net> posted on
> Wed, 17 Dec 2008 21:38:34 -0500, Hal Rosser wrote: Begin
>
>> my
>> original post was asking whether a discone would be a viable tv antenna.
>
> Being an omni, you're going to pick up any ghosts arriving at your
> location, unlike a directional that can attempt to null them out.

ATSC ignores much multipath.

5576. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 16:57:58 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gidvek$kd2$1@news.jpl.nasa.gov>
Source record: 19050

Hal Rosser wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:fQd2l.9062$as4.8379@nlpi069.nbdc.sbc.com...
>> JB wrote:
>>> Discone is vertically polarized and TV is horizontal. Results in a 15db
>>> or
>>> more loss in signal.
>> How about a dual-discone mounted horizontally?
>> --
>> 73, Cecil http://www.w5dxp.com
>
> If I did that, the omi-directionality (if that's a word) would go away and
> so would most of the compactness needed foe stealthiness.
> So - does anyone know of an omni directional horizontally polarized wide
> band antenna?
>
>

Somewhat tricky..

Two crossed dipoles fed with the correct phasing is very close to that.

Check out "Lindenblad" or "turnstile"

5577. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 16:58:28 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gidvfi$kd2$2@news.jpl.nasa.gov>
Source record: 18951

Hal Rosser wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:fQd2l.9062$as4.8379@nlpi069.nbdc.sbc.com...
>> JB wrote:
>>> Discone is vertically polarized and TV is horizontal. Results in a 15db
>>> or
>>> more loss in signal.
>> How about a dual-discone mounted horizontally?
>> --
>> 73, Cecil http://www.w5dxp.com
>
> If I did that, the omi-directionality (if that's a word) would go away and
> so would most of the compactness needed foe stealthiness.
> So - does anyone know of an omni directional horizontally polarized wide
> band antenna?
>
>

A "big wheel" is omni and horizontal, but not especially broadband.

5578. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 17:31:13 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9B7860D98A5ADHuckleberrybigvalley@198.186.192.196>
Source record: 18952

> As for Ed's repeated advice for paint it black (Rolling Stones?), no.
> Paint it off-white or a paler shade of blue (Procol Harumish). In
> experiments during WWII, they discovered that lighting targets against
> the sky made them disappear - not darkening them which offered
> contrast. Oxidized aluminum is probably the best coloration.

No, not Rolling Stones.... never was a fan. And I stand corrected. I know better, but here in Oregon, most of my outside stuff has a "dark Green" folage background and I was thinking of that instead of the sky.

Ed K7AAT

5579. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 18:20:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Avw2l.10951$c45.7673@nlpi065.nbdc.sbc.com>
Source record: 18953

Bart Bailey wrote:
> Being an omni, you're going to pick up any ghosts arriving at your
> location, unlike a directional that can attempt to null them out.

"Ghosting" on a digital TV screen?
--
73, Cecil http://www.w5dxp.com

5580. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 18:49:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gie5vhjds1@news.albasani.net>
Source record: 18954

Cecil Moore wrote:

> ...
> "Ghosting" on a digital TV screen?

Well, heck yes!

I see dead people (ghosts) on my TV screen all the time, don't you? If not, get some old reruns of Gunsmoke on, you'll see 'em! :-|

Regards,
JS

5581. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 20:42:24 UTC
From: dplatt@radagast.org
Message-ID: <g6pq16-lda.ln1@radagast.org>
Source record: 18956

In article <gidvek$kd2$1@news.jpl.nasa.gov>,
Jim Lux <james.p.lux@jpl.nasa.gov> wrote:

>Somewhat tricky..
>
>Two crossed dipoles fed with the correct phasing is very close to that.

The tricky part, I believe, is maintaining the correct phasing between
dipoles over a sufficiently wide frequency range.

For narrow-band applications, using an additional quarter-wavelength
feedline phasing section would do.

For somewhat wider-band applications (say, 2:1 frequency range) a
broadband 90-degree hybrid ought to work... Minicircuits sells some
such.

I'm not at all sure how to do this for an antenna intended to cover
everything from VHF low-band up to the 700 MHz end of the new UHF
channel range. This is more than a full decade of frequencies... is
there a single broadband 90-degree hybrid that can do the job?

It feels like it might be necessary to split the signals into multiple
bands (VHF / UHF at least, possibly VHF-low / VHF-high / UHF) and then
do the phase shifting on each band individually and then recombine.
Pretty complex...

Or is there an approach I've missed?

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5582. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 21:00:08 UTC
From: kb9rqz@yahoo.com
Message-ID: <leelk45fphlqigui05iira0n2fqhueempf@4ax.com>
Source record: 18955
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5583. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 21:09:39 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <K9OdnTAV7eCFIdfUnZ2dnUVZ8uSdnZ2d@bt.com>
Source record: 18957

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:gidvek$kd2$1@news.jpl.nasa.gov...
> Hal Rosser wrote:
>> "Cecil Moore" <nospam@w5dxp.com> wrote in message
>> news:fQd2l.9062$as4.8379@nlpi069.nbdc.sbc.com...
>>> JB wrote:
>>>> Discone is vertically polarized and TV is horizontal. Results in a
>>>> 15db or
>>>> more loss in signal.
>>> How about a dual-discone mounted horizontally?
>>> --
>>> 73, Cecil http://www.w5dxp.com
>>
>> If I did that, the omi-directionality (if that's a word) would go away
>> and so would most of the compactness needed foe stealthiness.
>> So - does anyone know of an omni directional horizontally polarized wide
>> band antenna?
>
> Somewhat tricky..
>
> Two crossed dipoles fed with the correct phasing is very close to that.
>
> Check out "Lindenblad" or "turnstile"

A Lindenblad array (e.g. http://www.bbc.co.uk/rd/pubs/reports/1991-15.pdf
Page 9) can provide good circular polarisation over much of a sphere and is
a relatively complicated antenna to design if it is to match properly -
probably over the top for the stated application. But the turnstile, and
the Alford loop
(http://books.google.co.uk/books?id=1KLTUWLz8jcC&pg=PA123&lpg=PA123&dq=alford+loop&source=
web&ots=6hiP0dgh2_&sig=uiCwYvutcxk6lW9AnpXZDHI2ZpA&hl=en&sa=X&oi=book_result&resnum=2&ct=r
esult#PPA123,M1
as used at DVOR stations), are simpler and can provide good omni patterns in
the horizontal plane and thereabouts for horizontal polarisation.

Chris

5584. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-18 21:22:53 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <gieevd$ig4e$1@tr22n12.aset.psu.edu>
Source record: 18958

John Smith wrote:
> Cecil Moore wrote:
>
>> ...
>> "Ghosting" on a digital TV screen?
>
> Well, heck yes!
>
> I see dead people (ghosts) on my TV screen all the time, don't you? If
> not, get some old reruns of Gunsmoke on, you'll see 'em! :-|

Ahh, Gunsmoke's Amanda Blake was one of my favorite "mature babes".
rowwwwrr.

- 73 de Mike N3LI -

5585. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 03:49:35 UTC
From: JB <nospam@goofball.net>
Message-ID: <jRE2l.2691$7I6.48@nwrddc01.gnilink.net>
Source record: 18959

> How about a dual-discone mounted horizontally?
> --
> 73, Cecil http://www.w5dxp.com

A biconcal dipole. I thought you wanted stealth.

5586. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 04:04:01 UTC
From: JB <nospam@goofball.net>
Message-ID: <R2F2l.2692$7l6.2209@nwrddc01.gnilink.net>
Source record: 18960

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:dUb2l.9046$M01.4767@bignews3.bellsouth.net...
> I want to put up the smallest outdoor antenna that would cover all TV
> Broadcast Freqs being used after Feb 2009. The log-periodicals are too
> "un-stealthy" to go unnoticed by the XYL, but I think a little discone
with
> some black paint might escape her inspection as long as I do the
> installation while she's out shopping.
> Question is - have any of you used one for TV - and if so, how did it
> perform? would it cover the TV broadcast freqs ? (I'm aware of its lack
of
> gain - I'm within 5 miles of most local stations, and within 20 miles of a
> couple more.)
> Thanks
> Hal W4PMJ
>
Why not just put a normal antenna up in the garage or the attic? A small
yagi should do it. You can remove the UHF reflectors if there is plenty of
signal. Even cut half of the UHF directors without much loss. Bring it up
in the rafters and spread it out. Not near as good as on the roof but you
can always put it up normally when she finds out about it anyway.

5587. NIKE AIR JORDAN FORCE FUSION SHOES AJF 5 V JORDANs 5 FUSION NIKE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 05:44:24 UTC
From: salewholeshu@163.com
Message-ID: <17000ea9-63e6-49d8-bc0e-bf7749e5f232@z6g2000pre.googlegroups.com>
Source record: 18961

shoes on
AIR Jordan 1 (paypal payment)(www.king-trade.cn)
AIR Jordan 2
AIR Jordan 3
AIR Jordan 4
AIR Jordan 5 (paypal payment)(www.king-trade.cn)
AIR Jordan 6 Rings
AIR Jordan 6
AIR Jordan 7
AIR Jordan 8
AIR Jordan 9 (paypal payment)(www.king-trade.cn)
AIR Jordan 10
AIR Jordan 11
AIR Jordan 12
AIR Jordan 13 (paypal payment)(www.king-trade.cn)
AIR Jordan 14
AIR Jordan 15
AIR Jordan 16
AIR Jordan 17
AIR Jordan 18
AIR Jordan 19
AIR Jordan 20 (paypal payment)(www.king-trade.cn)
AIR Jordan 21
AIR Jordan 22
AIR Jordan 23 (paypal payment)(www.king-trade.cn)
AIR Jordan 3.5
AIR AIR Jordan 4.5
AIR Jordan 7.5
AIR Jordan 9.5
AIR Jordan 12.5 (paypal payment)(www.king-trade.cn)
AIR Jordan 15.5
AIR Jordan 19.5
AIR Jordan 21.5
AIR Jordan Large Size Jordan
AIR Jordan Size 14 Jordan
AIR Jordan Size 15 shoes
AIR Jordan DMP
Nike air force one, air force 1, air force one low cut, air force one high cut, air force one release date
Air force one, air foce one 25TH, af 1, af 1 25TH, Nike air force one new releases, limited version
Air Force One (paypal payment)(www.king-trade.cn)
Air Force one 25TH

AF 1
AF 1 25TH (paypal payment)(www.king-trade.cn)
Dunk sb nike sb dunk nike dunk sb dunk sb high dunk sb low dunk sb woman
Nike sb dunk Nike Dunk High SB nike dunk low premuim sb Nike SB Dunk High Shimizu
Nike SB Dunk Pro Nike SB Dunk Dunk SB
Nike Dunk shoes
Dunk shoes for woman (paypal payment)(www.king-trade.cn)
Dunk low cut
Dunk high cut

AIR Jordans Fusion 1 Jordan 2 Fusion AIR Jordan 3 Nike Jordan Fusion 4
Jordan 5 shoes Nike Air Jordan 6 VI Force 1 Jordan Fusion AJF 6 AJF6 AJ6F Jordan 6 Rings Jordan 6 fusion (paypal payment)(www.king-trade.cn)

AIR Jordan Fusions 13 NIKE Jordan Fusion 14 AIR Jordans 15Nike Jordan 16 Fusion Jordan 17 shoes Nike Air Jordans 18 XVIII Force 1 Jordan Fusion AJF18 AJF18 AJ18F Jordan 18 fusions
(paypal payment)(www.king-trade.cn)

AIR Jordan Fusions 7 NIKE Jordan Fusion 8 AIR Jordans 9 Nikes Jordan Fusion 10 Jordan 11 shoes Nike Air Jordan 12 XII Force 1 Jordan Fusion AJF 12 AJF12 AJ12F Jordans 12 fusions
(paypal payment)(www.king-trade.cn)

NIKE AIR JORDAN FORCE FUSION SHOES AJF 5 V JORDANs 5 FUSION NIKE JORDAN 5 FUSION SHOES AJF5 Nike Air Jordan XXIII 23 Force 1 Jordan Fusion AJF 23 AJF23 AJ23F
(paypal payment)(www.king-trade.cn)

Nike Jordans Fusion 23 AIR Jordan 22 Jordan Fusions 21 AIR Jordans Fusion 20 Jordan 19 shoes Air Jordan Force Fusion VIII (8), AJF 8 Nike (paypal payment)(www.king-trade.cn)
Air Jordan 17 XVII Force 1 Jordan Fusions AJF 17 AJF17 AJ17F Jordan
our website : www.king-trade.cn

cccccc

5588. Nike Jordans Fusion 23 AIR Jordan 22 Jordan Fusions 21 AIR Jordans

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 05:44:53 UTC
From: salewholeshu@163.com
Message-ID: <d664469f-479c-4bd2-b4ab-59edeebaed64@d42g2000prb.googlegroups.com>
Source record: 18962

NIKE AIR JORDAN FORCE FUSION SHOES AJF 5 V JORDANs 5 FUSION NIKE
JORDAN 5 FUSION SHOES AJF5 Nike Air Jordan XXIII 23 Force 1 Jordan
Fusion AJF 23 AJF23 AJ23F
(paypal payment)(www.king-trade.cn)

Nike Jordans Fusion 23 AIR Jordan 22 Jordan Fusions 21 AIR Jordans
Fusion 20 Jordan 19 shoes Air Jordan Force Fusion VIII (8), AJF 8
Nike (paypal payment)(www.king-trade.cn)
Air Jordan 17 XVII Force 1 Jordan Fusions AJF 17 AJF17 AJ17F Jordan
our website : www.king-trade.cn

ccccccNIKE AIR JORDAN FORCE FUSION SHOES AJF 5 V JORDANs 5 FUSION
NIKE
JORDAN 5 FUSION SHOES AJF5 Nike Air Jordan XXIII 23 Force 1 Jordan
Fusion AJF 23 AJF23 AJ23F
(paypal payment)(www.king-trade.cn)

Nike Jordans Fusion 23 AIR Jordan 22 Jordan Fusions 21 AIR Jordans
Fusion 20 Jordan 19 shoes Air Jordan Force Fusion VIII (8), AJF 8
Nike (paypal payment)(www.king-trade.cn)
Air Jordan 17 XVII Force 1 Jordan Fusions AJF 17 AJF17 AJ17F Jordan
our website : www.king-trade.cn

cccccc

5589. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 13:34:39 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <gig7te$3bt$1@news.albasani.net>
Source record: 18963

```
"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:GWh2l.9435$nD1.6864@bignews5.bellsouth.net...
>
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:fQd2l.9062$as4.8379@nlpi069.nbdc.sbc.com...
>> JB wrote:
>>> Discone is vertically polarized and TV is horizontal. Results in a 15db
>>> or
>>> more loss in signal.
>>
>> How about a dual-discone mounted horizontally?
>> --
>> 73, Cecil http://www.w5dxp.com
>
> If I did that, the omi-directionality (if that's a word) would go away and
> so would most of the compactness needed foe stealthiness.
> So - does anyone know of an omni directional horizontally polarized wide
> band antenna?
>

As close as you are to them, anything will work and you don't need to worry
about the loss due to polarization.
```

5590. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 14:13:14 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <giga5q$ig24$1@tr22n12.aset.psu.edu>
Source record: 18964

JB wrote:
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in message
> news:dUb2l.9046$M01.4767@bignews3.bellsouth.net...
>> I want to put up the smallest outdoor antenna that would cover all TV
>> Broadcast Freqs being used after Feb 2009. The log-periodicals are too
>> "un-stealthy" to go unnoticed by the XYL, but I think a little discone
> with
>> some black paint might escape her inspection as long as I do the
>> installation while she's out shopping.
>> Question is - have any of you used one for TV - and if so, how did it
>> perform? would it cover the TV broadcast freqs ? (I'm aware of its lack
> of
>> gain - I'm within 5 miles of most local stations, and within 20 miles of a
>> couple more.)
>> Thanks
>> Hal W4PMJ
>>
> Why not just put a normal antenna up in the garage or the attic? A small
> yagi should do it. You can remove the UHF reflectors if there is plenty of
> signal. Even cut half of the UHF directors without much loss. Bring it up
> in the rafters and spread it out. Not near as good as on the roof but you
> can always put it up normally when she finds out about it anyway.

That last sentence is the point here. She'll find out anyhow.

Hal, it might be time for the "talk". My XYL hates antennas. When I wanted to put up my dipole and vertical, she groused a lot about it. My reply was that I keep the yard beautiful, put in lots of landscaping, and a pond. Now I would like to have a couple antennas for my hobby that are pretty unobtrusive. Maybe I'm in the wrong hobby? Maybe I should take up going out to bars, and hanging out with loose women. At least with radio, you know where I am every night.

The antennas went up.

- 73 de Mike N3LI -

5591. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 21:22:23 UTC
From: kb9rqz@yahoo.com
Message-ID: <d44ok41sln1e9to71es7gcftek8mu4e22e@4ax.com>
Source record: 18965
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5592. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 21:51:13 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <181413ba-b6e4-446a-9ce0-62800da8cab4@k36g2000pri.googlegroups.com>
Source record: 18966

On Dec 19, 9:13 am, Michael Coslo <m...@psu.edu> wrote:
> JB wrote:
> > "Hal Rosser" <hmros...@bellsouth.net> wrote in message
> >news:dUb2l.9046$M01.4767@bignews3.bellsouth.net...
> >> I want to put up the smallest outdoor antenna that would cover all TV
> >> Broadcast Freqs being used after Feb 2009. The log-periodicals are too
> >> "un-stealthy" to go unnoticed by the XYL, but I think a little discone
> > > with
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> >> installation while she's out shopping.
> >>   Question is - have any of you used one for TV - and if so, how did it
> >> perform? would it cover the TV broadcast freqs ? (I'm aware of its lack
> > > of
> >> gain - I'm within 5 miles of most local stations, and within 20 miles of a
> >> couple more.)
> >> Thanks
> >> Hal W4PMJ
>
> > Why not just put a normal antenna up in the garage or the attic? A small
> > yagi should do it. You can remove the UHF reflectors if there is plenty of
> > signal. Even cut half of the UHF directors without much loss. Bring it up
> > in the rafters and spread it out. Not near as good as on the roof but you
> > can always put it up normally when she finds out about it anyway.
>
> That last sentence is the point here. She'll find out anyhow.
>
> Hal, it might be time for the "talk". My XYL hates antennas. When I
> wanted to put up my dipole and vertical, she groused a lot about it. My
> reply was that I keep the yard beautiful, put in lots of landscaping,
> and a pond. Now I would like to have a couple antennas for my hobby that
> are pretty unobtrusive. Maybe I'm in the wrong hobby? Maybe I should
> take up going out to bars, and hanging out with loose women. At least
> with radio, you know where I am every night.
>
> The antennas went up.
>
>   - 73 de Mike N3LI -

LOL, SAME STORY HERE.

Jimmie

5593. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 22:39:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gih7rs$5u3$1@news.albasani.net>
Source record: 18967

JIMMIE wrote:
> On Dec 19, 9:13 am, Michael Coslo <m...@psu.edu> wrote:
>> JB wrote:
>>> "Hal Rosser" <hmros...@bellsouth.net> wrote in message
>>> news:dUb2l.9046$M01.4767@bignews3.bellsouth.net...
>>>> I want to put up the smallest outdoor antenna that would cover all TV
>>>> Broadcast Freqs being used after Feb 2009. The log-periodicals are too
>>>> "un-stealthy" to go unnoticed by the XYL, but I think a little discone
>>> with
>>>> some black paint might escape her inspection as long as I do the
>>>> installation while she's out shopping.
>>>> Question is - have any of you used one for TV - and if so, how did it
>>>> perform? would it cover the TV broadcast freqs ? (I'm aware of its lack
>>> of
>>>> gain - I'm within 5 miles of most local stations, and within 20 miles of a
>>>> couple more.)
>>>> Thanks
>>>> Hal W4PMJ
>>> Why not just put a normal antenna up in the garage or the attic? A small
>>> yagi should do it. You can remove the UHF reflectors if there is plenty of
>>> signal. Even cut half of the UHF directors without much loss. Bring it up
>>> in the rafters and spread it out. Not near as good as on the roof but you
>>> can always put it up normally when she finds out about it anyway.
>> That last sentence is the point here. She'll find out anyhow.
>>
>> Hal, it might be time for the "talk". My XYL hates antennas. When I
>> wanted to put up my dipole and vertical, she groused a lot about it. My
>> reply was that I keep the yard beautiful, put in lots of landscaping,
>> and a pond. Now I would like to have a couple antennas for my hobby that
>> are pretty unobtrusive. Maybe I'm in the wrong hobby? Maybe I should
>> take up going out to bars, and hanging out with loose women. At least
>> with radio, you know where I am every night.
>>
>> The antennas went up.
>>
>> - 73 de Mike N3LI -
>
> LOL, SAME STORY HERE.
>
>
> Jimmie

Amen brothers. If not for decent women and antenna arguments, we'd all
be in trouble!

Regards,
JS

5594. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 22:57:44 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <IFV2l.9223$as4.9095@nlpi069.nbdc.sbc.com>
Source record: 18968

John Smith wrote:
> Amen brothers. If not for decent women and antenna arguments, we'd all
> be in trouble!

I guess I should get married - know any decent women?
--
73, Cecil http://www.w5dxp.com

5595. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-19 23:15:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gih9u3$8sp$1@news.albasani.net>
Source record: 18969

Cecil Moore wrote:
> John Smith wrote:
>> Amen brothers. If not for decent women and antenna arguments, we'd
>> all be in trouble!
>
> I guess I should get married - know any decent women?

Got the last one!

However, every once-in-awhile, one is "traded in" (low milage, only one owner, good paint, etc.) and becomes available ... I'll keep my eyes open for ya'.

However, I got a "model/make" from Texas. Couldn't find a decent "model" made in California! (complete! with authentic Texas accent. :-))

Regards,
JS

5596. Vertical Monopole Radiation Characteristics

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-20 00:02:08 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <16a67e23-cc66-4620-8c7d-63b167b86b66@a26g2000prf.googlegroups.com>
Source record: 18970

Below is a recent post to another server, which also should be of interest here.

The "SOMEBODY" identified below is well known in the amateur radio community.

RF

++++

“SOMEBODY” wrote: \\ As long as we are screwing up a perfectly good thread about VHF antennas with nonsense about BC antennas, let's try to understand why a 5/8th wave has fading on the fringe.

The reason is the ground losses are so high the skywave lobe is dominant. The skywave is dominant even though the skywave path is significantly longer and the ionosphere has a great deal of attenuation. //

Not wanting to hijack this thread, but also not wanting to let stand the incorrect information posted here by “SOMEBODY”...

Probably most people will acknowledge that the _received_ daytime skywave of a MW AM broadcast station is insignificant in the coverage area of the groundwave of that station, regardless of the frequency and propagation path losses for that groundwave.

The distance to a given AM BCB groundwave field intensity over a given terrestrial path is very nearly the same, day and night. In the daytime that groundwave signal can be received usefully for more than 100 miles from the tx site, for some stations.

At night, the outermost part of the groundwave coverage area also receives a skywave signal from that radiator, which can cause interference to the groundwave (fading) if the two signals have comparable magnitudes, and are not co-phased.

The figure at the URL below was taken from Terman's Radio Engineers Handbook, 1st edition.

http://i62.photobucket.com/albums/h85/rfry-100/TermanFig55.jpg

Note that the single-hop radiation from a monopole that serves distances beyond about 500 miles leaves the monopole at elevation angles of less than about 12 degrees.

Yet a NEC analysis of all monopoles of 5/8-wave AND LESS at an infinite distance over real ground shows very little radiation in this elevation sector. This causes a lot of misunderstanding to those who believe that this NEC pattern is the pattern actually launched by that monopole over real ground.

But it _definitely_ is not. If such monopoles actually launched radiation patterns such as shown by NEC for an infinite distance over real earth, then daytime AM BCB service would be impossible.

There is a nighttime zone where the skywave and groundwave from a given radiator have nearly equal values. The distance to, and the width of that zone are dependent on:

1) Frequency
2) Earth conductivity
3) Radiator height in electrical wavelengths
4) Applied r-f power
5) Ionospheric conditions, and possibly,
6) Earth curvature

(“SOMEBODY” wrote) \\ This is because, even at a distance of a kilometer or less, even the best soil and at a frequency in the broadcast band where the soil is less lossy the earth still has significant attenuation to ground wave signals. //

Here are the field intensity values using the FCC's MW propagation curves for a 1 km groundwave path over a real earth of 8 mS/m, for 1 kW of power on 1,000 kHz, radiated by the stated monopoles:

1/4-wave = 295 mV/m
5/8-wave = 415 mV/m

The groundwave field from the 5/8-wave is about 40% greater than from the 1/4-wave. The field of the 5/8-wave is NOT redirected from in and near the horizontal plane to some high elevation angle as stated by “SOMEBODY”.

Note that both of these values are less than 6% below the inverse distance field for these conditions, over a perfect ground plane. Probably not enough of a loss (0.54 dB) to be called very "significant. "

Also note that my example is for rather average conditions, and not for the "best soil and at a frequency in the broadcast band where the soil is less lossy..." as in “SOMEBODY” ’s description above.

RF (ex-WJR, Detroit)

5597. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-20 04:56:41 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <fW_2l.10474$x%.1256@nlpi070.nbdc.sbc.com>
Source record: 18971

Cecil Moore wrote:
> John Smith wrote:
>> Amen brothers. If not for decent women and antenna arguments, we'd
>> all be in trouble!
>
> I guess I should get married - know any decent women?

Why would anyone on earth want a "decent" woman when there are
so many bad women available?
73,
Tom Donaly, KA6RUH

5598. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-20 08:27:08 UTC
From: kb9rqz@yahoo.com
Message-ID: <j2bpk4l5ksr3rh4qqrqun2mnue1qajr566@4ax.com>
Source record: 18972
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5599. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-20 15:48:08 UTC
From: Ralph E Lindberg <n7bsn@callsign.net>
Message-ID: <n7bsn-AE11D6.07480820122008@individual.net>
Source record: 18973

In article <R2F2l.2692$7I6.2209@nwrddc01.gnilink.net>,
"JB" <nospam@goofball.net> wrote:

> "Hal Rosser" <hmrosser@bellsouth.net> wrote in message
> news:dUb2l.9046$M01.4767@bignews3.bellsouth.net...
> > I want to put up the smallest outdoor antenna that would cover all TV
> > Broadcast Freqs being used after Feb 2009. The log-periodicals are too
> > "un-stealthy" to go unnoticed by the XYL, but I think a little discone
> with
> > some black paint might escape her inspection as long as I do the
> > installation while she's out shopping.
> > Question is - have any of you used one for TV - and if so, how did it
> > perform? would it cover the TV broadcast freqs ? (I'm aware of its lack
> of
> > gain - I'm within 5 miles of most local stations, and within 20 miles of a
> > couple more.)
> > Thanks
> > Hal W4PMJ
> >
> Why not just put a normal antenna up in the garage or the attic? A small
> yagi should do it. You can remove the UHF reflectors if there is plenty of
> signal. Even cut half of the UHF directors without much loss. Bring it up
> in the rafters and spread it out. Not near as good as on the roof but you
> can always put it up normally when she finds out about it anyway.

You are aware that many of the DTV signal are UHF band? Right?

--

Personal e-mail is the n7bsn but at amsat.org
This posting address is a spam-trap and seldom read
RV and Camping FAQ can be found at
http://www.ralphandellen.us/rv

5600. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-20 15:50:39 UTC
From: Ralph E Lindberg <n7bsn@callsign.net>
Message-ID: <n7bsn-B5DF49.07503920122008@individual.net>
Source record: 18974

In article <dUb2l.9046$M01.4767@bignews3.bellsouth.net>,
"Hal Rosser" <hmrosser@bellsouth.net> wrote:

> I want to put up the smallest outdoor antenna that would cover all TV
> Broadcast Freqs being used after Feb 2009. The log-periodicals are too
> "un-stealthy" to go unnoticed by the XYL, but I think a little discone with
> some black paint might escape her inspection as long as I do the
> installation while she's out shopping.
> Question is - have any of you used one for TV - and if so, how did it
> perform? would it cover the TV broadcast freqs ? (I'm aware of its lack of
> gain - I'm within 5 miles of most local stations, and within 20 miles of a
> couple more.)
> Thanks
> Hal W4PMJ

Tell her she can't watch her favorite showss, during a storm, without a
good antenna....

--

Personal e-mail is the n7bsn but at amsat.org
This posting address is a spam-trap and seldom read
RV and Camping FAQ can be found at
http://www.ralphandellen.us/rv

5601. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-20 20:35:57 UTC
From: Dave <noone@nowhere.com>
Message-ID: <NGc3l.199$Es4.43@nwrddc01.gnilink.net>
Source record: 18975

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:1de21ee7-161a-44d2-98be-0c87f24b6fdf@z1g2000yqn.googlegroups.com...
> Since we are at the low sun cycle I shoose
> 1" hexigon poultry wire for the mash on my 3 metre dish
> At what frequency will there be a noticable effect on aperture
> starting with top band?
> Many thanks
> Art KB9MZ...,XG

where did art go??? i need a good laugh!

5602. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-20 22:30:00 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <8p7026-sfc.ln1@mail.specsol.com>
Source record: 18976

```
Dave <noone@nowhere.com> wrote:
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:1de21ee7-161a-44d2-98be-0c87f24b6fdf@z1g2000yqn.googlegroups.com...
>> Since we are at the low sun cycle I shoose
>> 1" hexigon poultry wire for the mash on my 3 metre dish
>> At what frequency will there be a noticable effect on aperture
>> starting with top band?
>> Many thanks
>> Art KB9MZ...,XG
>
> where did art go??? i need a good laugh!
>

Hopefully for treatment.

--
Jim Pennino

Remove .spam.sux to reply.
```

5603. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-20 22:42:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gijsd4hbn1@news.albasani.net>
Source record: 18977

Ralph E Lindberg wrote:

> ...
> You are aware that many of the DTV signal are UHF band? Right?
>

This:
"Are DTV signals broadcast on special frequencies?

No. DTV broadcasts use exactly the same channels as regular analog
television. While many DTV stations are now occupying UHF broadcast
channels, broadcasters are allowed to move back to their original VHF or
UHF TV channel once the transition to DTV is complete.

The only caveat is that TV channels 51 through 69 will be auctioned off
for other uses at the end of the transition to digital TV. Stations who
originally had analog channels in this band will have to move, no matter
what.

One potential problem with re-using low VHF (2-6) TV channels for DTV is
the possibility of interference from other signals during certain times
of the year. "Skip" may bring in distant broadcasts on the same channel
and create interference. Impulse noise is also a problem on low VHF
channels. Whatï¿½s more, the physical size of low VHF and high VHF
antennas is much larger than that of a UHF antenna.

Tests so far seem to indicate that high VHF channels (7-13) are quite
well suited for DTV broadcasts, and many broadcasters plan to move back
to their high VHF channels at the end of the transition. VHF
transmitters also cost much less money to operate than UHF transmitters."

From here:
http://www.avsforum.com/hdtvfaq/HDTV-FAQ.htm#Are%20DTV%20signals%20broadcast%20on%20special%20frequencies?

Regards,
JS

5604. Merry Christmas to Randy Chapman, KB5URP...convicted crack dealer!!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 00:33:53 UTC
From: mopeyzakween@yahoo.com
Message-ID: <a328473f-36a2-4ad3-b19c-0b3245bb808a@z27g2000prd.googlegroups.com>
Source record: 18978
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

READ AND LEARN OF THE CONVICTED DRUG DEALER!!! LOL!!!!
Merry Christmas you dork slurper!

Batch Search Summary
SEARCH ID SEARCH CRITERIA IDENTIFIER STATUS
3930206 Chapman,Randall CCH/NBF/SOR [9 results.] VIEW DETAILS

RESULTS FOR 'CHAPMAN,RANDALL '
Search ID 3930206 Back to Top
NAME DPS NUMBER SEX RACE DATE OF BIRTH CCH SOR NBF
CHAPMAN,RANDOLPH WILLARD 05388013 MALE WHITE 03/22/1961 VIEW

CHAPMAN,RANDOLPH WILLARD (SID: 05388013)
SEX RACE ETHNICITY HEIGHT WEIGHT EYES HAIR COLOR DL NUMBER FBI# DLU
MALE WHITE 508 195 BROWN Brown 10/26/1995
NAMES CHAPMAN,RANDOLPH WILLARD (Primary)
CHAPMAN,RANDY

BIRTHDATES 03/22/1961 (Primary)

Arrest Summary (TRN)
DATE OF ARREST SEQUENCE CODE TRACKING NUMBER AGENCY DESCRIPTION
01/16/1995 A 0007369727 TEXAS CITY PD View

Arrest Date: 01/16/1995 Arrest Summary

DATE OF ARREST 01/16/1995
SEQUENCE CODE A
TRACKING NUMBER 0007369727
AGENCY DESCRIPTION TX0840900 (TEXAS CITY PD)
CHARGE
TRACKING SUFFIX A001
OFFENSE DETAIL
INTERNAL AGENCY PERSON NUMBER 020130
INTERNAL AGENCY CASE NUMBER 95633
ARREST OFFENSE 35990014 (POSS CS PG 1 < 1G)
ARREST OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE OF OFFENSE FS (FELONY - STATE JAIL FELONY)
DATE OF OFFENSE 01/16/1995
ARREST DISPOSITION 205 (HELD)
ARREST DISPOSITION DATE 01/16/1995
PROSECUTOR ORI REFERRED TO TX084015A (DISTRICT ATTORNEYS OFFICE
GALVESTON)
PROSECUTION DETAIL
AGENCY DESCRIPTION TX084015A (DISTRICT ATTORNEYS OFFICE

GALVESTON)
PROSECUTOR ACTION FIELD A (PROSECUTOR ACCEPTS THE CHARGE)
PROSECUTOR OFFENSE 35990014 (POSS CS PG 1 < 1G)
PROSECUTOR OFFENSE CITATION 481.115(b)
LEVEL AND DEGREE PROSECUTED FS (FELONY - STATE JAIL FELONY)
COURT STATUS
COURT SEQUENCE a
AGENCY DESCRIPTION TX084035J (122ND DISTRICT COURT GALVESTON)
COURT OFFENSE 35990014 (POSS CS PG 1 < 1G)
CITATION 481.115(b)
LEVEL AND DEGREE OFFENSE FS (FELONY - STATE JAIL FELONY)
COURT DISPOSITION 312 (DEFERRED)
COURT DISPOSITION DATE 09/21/1995
DATE OF SENTENCE/STATUS 09/21/1995
CAUSE NUMBER 95CR0800
FINAL PLEADING G (GUILTY)
COURT PROBATION 4Y
COURT FINE 200
COURT COSTS 157
AGENCY RECEIVING CUSTODY GCCSCD

5605. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 16:12:18 UTC
From: JB <nospam@goofball.net>
Message-ID: <CVt3l.318$Es4.271@nwrddc01.gnilink.net>
Source record: 18979

"Tom Donaly" <dtdonaly@sbcglobal.net> wrote in message
news:fW_2l.10474$x%.1256@nlpi070.nbdc.sbc.com...
> Cecil Moore wrote:
> > John Smith wrote:
> >> Amen brothers. If not for decent women and antenna arguments, we'd
> >> all be in trouble!
> >
> > I guess I should get married - know any decent women?
>
> Why would anyone on earth want a "decent" woman when there are
> so many bad women available?
> 73,
> Tom Donaly, KA6RUH

Because the bad women get you into fights, jail, divorce court and strip you of your wealth so you wind up paying for their parties while they line up new suckers and try to shame you for not making their fantasies more complete.

Remember their kind of bad is much worse than we give them credit for.

Case in point: Last one had the fantasy that a husband should be willing to die for her. Made her heart go pitter-patter. Thought of men as some kind of pet or other species. I told her to go buy a Doberman.

I find it takes a exhaustive baby-sitting type of investigation of at least 2 years before they let their hair down and show you their true mind.

5606. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 16:15:30 UTC
From: JB <nospam@goofball.net>
Message-ID: <CYt3l.319$Es4.111@nwrddc01.gnilink.net>
Source record: 18980

> You are aware that many of the DTV signal are UHF band? Right?

> > > gain - I'm within 5 miles of most local stations, and within 20 miles
of a
> > > couple more.)

5607. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 16:28:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gilqrj$t2a$1@news.albasani.net>
Source record: 18981

JB wrote:

> ...
> Because the bad women get you into fights, jail, divorce court and strip you
> of your wealth so you wind up paying for their parties while they line up
> new suckers and try to shame you for not making their fantasies more
> complete.
>
> Remember their kind of bad is much worse than we give them credit for.
>
> Case in point: Last one had the fantasy that a husband should be willing to
> die for her. Made her heart go pitter-patter. Thought of men as some kind
> of pet or other species. I told her to go buy a Doberman.
>
> I find it takes a exhaustive baby-sitting type of investigation of at least
> 2 years before they let their hair down and show you their true mind.
>

From past experience, I have to give it to you, there is much truth
there ...

Regards,
JS

5608. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 18:23:58 UTC
From: JB <nospam@goofball.net>
Message-ID: <2Rv3l.357$Es4.236@nwrddc01.gnilink.net>
Source record: 18982

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gilqrj$t2a$1@news.albasani.net...
> JB wrote:
>
> > ...
> > Because the bad women get you into fights, jail, divorce court and strip
you
> > of your wealth so you wind up paying for their parties while they line
up
> > new suckers and try to shame you for not making their fantasies more
> > complete.
> >
> > Remember their kind of bad is much worse than we give them credit for.
> >
> > Case in point: Last one had the fantasy that a husband should be
willing to
> > die for her. Made her heart go pitter-patter. Thought of men as some
kind
> > of pet or other species. I told her to go buy a Doberman.
> >
> > I find it takes a exhaustive baby-sitting type of investigation of at
least
> > 2 years before they let their hair down and show you their true mind.
> >
>
> From past experience, I have to give it to you, there is much truth
> there ...
>
> Regards,
> JS

It looks like marriage is a forgone conclusion in California anyway. I
don't know why the fags want it. I guess they don't reproduce so they have
to steal someone else's kids. It's all beginning to look like reruns of
daytime TV.

What the church should do is Holy Matrimony and quit recognizing the state.

Beware the conspiracy. The problem is that so many people don't even
believe their own experience. let alone what they see happening to others.
"Oh, that won't happen to me." Their brains are too full of slogans that
tell them how to feel and what to say, that they can't make rational
conclusions.

The answer: A Christ centered boot camp that turns marriage partners into accountability partners in a team effort rather than a Detante.

5609. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 18:43:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gim2on$81c$1@news.albasani.net>
Source record: 18983

JB wrote:

> ...
> It looks like marriage is a forgone conclusion in California anyway. I
> don't know why the fags want it. I guess they don't reproduce so they have
> to steal someone else's kids. It's all beginning to look like reruns of
> daytime TV.
>
> What the church should do is Holy Matrimony and quit recognizing the state.
>
> Beware the conspiracy. The problem is that so many people don't even
> believe their own experience. let alone what they see happening to others.
> "Oh, that won't happen to me." Their brains are too full of slogans that
> tell them how to feel and what to say, that they can't make rational
> conclusions.
>
> The answer: A Christ centered boot camp that turns marriage partners into
> accountability partners in a team effort rather than a Detante.
>

I would like to know when the state/feds took over marriage, why and how
they are able to do it with NO justification. Marriage is a God/Church
thing ...

The same fags which demand they be able to marry will demand separation
of church and state powers; So, where is that separation here. Gov't
needs to back off ... only God and the Church has the power to
rightfully marry people--all other marriages are a fraud anyway.

Regards,
JS

5610. k3vr is truly sol

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 21:05:17 UTC
From: kb9rqz@yahoo.com
Message-ID: <1sbtk4l2a93ka837r0a9p35cortdolhefr@4ax.com>
Source record: 18984
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 20 Dec 2008 16:33:53 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>READ AND LEARN OF THE CONVICTED DRUG DEALER!!! LOL!!!!
>Merry Christmas you dork slurper!
spamer

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

5611. Re: k3vr is truly sol

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 21:08:55 UTC
From: mopeyzakween@yahoo.com
Message-ID: <2ca6d5ce-7545-4632-aa2f-a0f6a60c9d16@z27g2000prd.googlegroups.com>
Source record: 18985
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

On Dec 21, 4:05 pm, kb9...@yahoo.com wrote:
> On Sat, 20 Dec 2008 16:33:53 -0800 (PST), mopeyzakw...@yahoo.com
> wrote:
>
> >READ AND LEARN OF THE CONVICTED DRUG DEALER!!! LOL!!!!
> >Merry Christmas you dork slurper!
>
> spamer
>
> "one useless man is disgrace 2 become a law firm 3 or more become a congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
> altopia is never used by KB9RQZ
> nor is Konst...@hotmail.com ever
> btw i can be found at
> 17366 N River Rd
> Chassel Mi
>
> but the cowards asking lack the gut to act
> ** Posted fromhttp://www.teranews.com**

slurp my unwiped anus

5612. Re: k3vr is truly sol

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 21:23:00 UTC
From: kb9rqz@yahoo.com
Message-ID: <dtctk41jq5e2v5h62f57601g06iu328qvn@4ax.com>
Source record: 18986
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 21 Dec 2008 13:08:55 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>On Dec 21, 4:05ï¿½pm, kb9...@yahoo.com wrote:
>> On Sat, 20 Dec 2008 16:33:53 -0800 (PST), mopeyzakw...@yahoo.com
>> wrote:
>>
>> >READ AND LEARN OF THE CONVICTED DRUG DEALER!!! LOL!!!!
>> >Merry Christmas you dork slurper!
>>
>> spamer
>>
>> "one useless man is disgrace 2 become a law firm 3 or more become a congress"
>> adams
>>
>> woger you are a Congress all in your own head
>>
>> http://kb9rqz.bravejournal.com/
>> altopia is never used by KB9RQZ
>> nor is Konst...@hotmail.com ever
>> btw i can be found at
>> 17366 N River Rd
>> Chassel Mi
>>
>> but the cowards asking lack the gut to act
>> ** Posted fromhttp://www.teranews.com**
>
>slurp my unwiped anus
no

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

5613. Re: Vertical Monopole Radiation Characteristics

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-21 22:31:19 UTC
From: Richard Knoppow <dickburk@ix.netcom.com>
Message-ID: <BYOdnRPDrq1aXtPUnZ2dnUVZ_oTinZ2d@earthlink.com>
Source record: 18987

"Richard Fry" <rfry@adams.net> wrote in message
news:16a67e23-cc66-4620-8c7d-63b167b86b66@a26g2000prf.googlegroups.com...
Below is a recent post to another server, which also should
be of
interest here.

The "SOMEBODY" identified below is well known in the amateur
radio
community.

RF

++++

SOMEBODY wrote: \\ As long as we are screwing up a
perfectly good
thread about VHF antennas with nonsense about BC antennas,
let's try
to understand why a 5/8th wave has fading on the fringe.

The reason is the ground losses are so high the skywave lobe
is
dominant. The skywave is dominant even though the skywave
path is
significantly longer and the ionosphere has a great deal of
attenuation. //

Not wanting to hijack this thread, but also not wanting to
let stand
the incorrect information posted here by SOMEBODY...

Probably most people will acknowledge that the _received_
daytime
skywave of a MW AM broadcast station is insignificant in the
coverage
area of the groundwave of that station, regardless of the
frequency
and propagation path losses for that groundwave.

The distance to a given AM BCB groundwave field intensity
over a given
terrestrial path is very nearly the same, day and night. In
the
daytime that groundwave signal can be received usefully for
more than

100 miles from the tx site, for some stations.

At night, the outermost part of the groundwave coverage area also
receives a skywave signal from that radiator, which can cause
interference to the groundwave (fading) if the two signals have
comparable magnitudes, and are not co-phased.

The figure at the URL below was taken from Terman's Radio Engineers
Handbook, 1st edition.

http://i62.photobucket.com/albums/h85/rfry-100/TermanFig55.jpg

Note that the single-hop radiation from a monopole that serves
distances beyond about 500 miles leaves the monopole at elevation
angles of less than about 12 degrees.

Yet a NEC analysis of all monopoles of 5/8-wave AND LESS at an
infinite distance over real ground shows very little radiation in this
elevation sector. This causes a lot of misunderstanding to those who
believe that this NEC pattern is the pattern actually launched by that
monopole over real ground.

But it _definitely_ is not. If such monopoles actually launched
radiation patterns such as shown by NEC for an infinite distance over
real earth, then daytime AM BCB service would be impossible.

There is a nighttime zone where the skywave and groundwave from a
given radiator have nearly equal values. The distance to, and the
width of that zone are dependent on:

1) Frequency
2) Earth conductivity
3) Radiator height in electrical wavelengths
4) Applied r-f power
5) Ionospheric conditions, and possibly,
6) Earth curvature

(�SOMEBODY wrote) \\ This is because, even at a distance of a

kilometer or less, even the best soil and at a frequency in the
broadcast band where the soil is less lossy the earth still has
significant attenuation to ground wave signals. //

Here are the field intensity values using the FCC's MW propagation
curves for a 1 km groundwave path over a real earth of 8 mS/m, for 1
kW of power on 1,000 kHz, radiated by the stated monopoles:

1/4-wave = 295 mV/m
5/8-wave = 415 mV/m

The groundwave field from the 5/8-wave is about 40% greater than from
the 1/4-wave. The field of the 5/8-wave is NOT redirected from in and
near the horizontal plane to some high elevation angle as stated by
�SOMEBODY�.

Note that both of these values are less than 6% below the inverse
distance field for these conditions, over a perfect ground plane.
Probably not enough of a loss (0.54 dB) to be called very
"significant. "

Also note that my example is for rather average conditions, and not
for the "best soil and at a frequency in the broadcast band where the
soil is less lossy..." as in �SOMEBODY� �s description above.

RF (ex-WJR, Detroit)

Hello ex-WJR, I am old enough to remember station breaks
running This is the Good Will Station WJR, Fisher Building,
Detroit.
The idea that coverage is maximum for the 5/8th wave
radiator is common but in practice, (maybe we are saying the
same thing) a straight 1/2 wave may have a smaller fading
ring because it does not have the high-angle lobe wich
appears on the 5/8th wave pattern. I certainly agree that
patterns calculated for "ideal" ground are not matched by
practical ground systems except, perhaps, sea-water grounds.
The fading ring is one reason very high power BC stations
don't work well at night. I don't suppose many AM
broadcasters think nighttime coverage is important these

days but in antidiluvian days it was considered very important. Edmund A. La Port give all this good coverage in his old book which is available on line from Pete Millett's site at:
http://www.pmillett.com/

--

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@ix.netcom.com

5614. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 02:24:25 UTC
From: JB <nospam@goofball.net>
Message-ID: <tTC3l.440$Es4.363@nwrddc01.gnilink.net>
Source record: 18988

"John Smith" <assemblywizard@gmail.com> wrote in message
news:gim2on$81c$1@news.albasani.net...
> JB wrote:
>
> > ...
> > It looks like marriage is a forgone conclusion in California anyway. I
> > don't know why the fags want it. I guess they don't reproduce so they
have
> > to steal someone else's kids. It's all beginning to look like reruns of
> > daytime TV.
> >
> > What the church should do is Holy Matrimony and quit recognizing the
state.
> >
> > Beware the conspiracy. The problem is that so many people don't even
> > believe their own experience. let alone what they see happening to
others.
> > "Oh, that won't happen to me." Their brains are too full of slogans
that
> > tell them how to feel and what to say, that they can't make rational
> > conclusions.
> >
> > The answer: A Christ centered boot camp that turns marriage partners
into
> > accountability partners in a team effort rather than a Detante.
> >
>
> I would like to know when the state/feds took over marriage, why and how
> they are able to do it with NO justification. Marriage is a God/Church
> thing ...
>
> The same fags which demand they be able to marry will demand separation
> of church and state powers; So, where is that separation here. Gov't
> needs to back off ... only God and the Church has the power to
> rightfully marry people--all other marriages are a fraud anyway.
>
> Regards,
> JS

First off, "separation of church and state" is cited nowhere in The
Constitution, neither does "freedom from religion." In fact, First
Amendment was placed that no particular denomination would be made the
official religion of The State. But not only would a belief in God be
respected, but considered necessary and in fact, God is cited as the primary

justification for the very existence of, and the authority of, The State. When The State kills off God, then it usurps it's own authority.

AFAIK marriage was mostly a registration thing to start with, then it progressed to further regulation and intervention "for the sake of the children" as in rh factor typing, and tax credit, then on to legal authority in breaking up families and assigning child support and custody which has now become a complete Socialist joke since they have been awarding adoption and custody of even same sex children to gays so they can "indoctrinate" which really means "grooming" or preparing for rape by force, intimidation or bamboozle. They may claim they aren't really child moles_rs, but how can you believe that when someone aggressively promotes "lust of the flesh" or "sexual gratification" as an alternative to God's way. If it were only about LOVE there wouldn't be a discussion because in the end we would be brothers and sisters in heaven, not Plaintiff and Defendant, Gay or Straight, so as a people we seem to be "delivered over to a reprobate mind" and our government is only a reflection of that.

The sickest argument put forth is the "Scientific" argument, that it is only natural. But that argument works as well for even cannibalism, since it occurs in nature too. So what separates us from being animals?

The real enemy after all is the Devil. He is International and infiltrates anywhere he finds an empty thought.

5615. Prada shoes (paypal payment)www.king-trade.cn)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 02:51:45 UTC
From: wholesalepin@163.com
Message-ID: <37268f04-9770-4380-83af-eaa807b27745@s1g2000prg.googlegroups.com>
Source record: 18989
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,alt.astronomy

Footwear (paypal payment)www.king-trade.cn)
Paul Smith shoes
Jordan shoes
Bape shoes
Chanel shoes (paypal payment)www.king-trade.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)www.king-trade.cn)
Gucci shoes `
Hogan shoes (paypal payment)www.king-trade.cn)
Lv shoes
Prada shoes (paypal payment)www.king-trade.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)www.king-trade.cn)
Ice bream shoes
Sebago shoes (paypal payment)www.king-trade.cn)
Lacoste shoes
Air force one shoes (paypal payment)www.king-trade.cn)
TODS shoes
AF shoes

Footwear (paypal payment)www.king-trade.cn)
Paul Smith shoes
Jordan shoes
Bape shoes
Chanel shoes (paypal payment)www.king-trade.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)www.king-trade.cn)
Gucci shoes
Hogan shoes (paypal payment)www.king-trade.cn)
Lv shoes
Prada shoes (paypal payment)www.king-trade.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)www.king-trade.cn)
Ice bream shoes
Sebago shoes (paypal payment)www.king-trade.cn)

Lacoste shoes
Air force one shoes (paypal payment)www.king-trade.cn)
TODS shoes
AF shoes

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Paul Smith shoes
Jordan shoes
Bape shoes
Chanel shoes (paypal payment)www.king-trade.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)www.king-trade.cn)
Gucci shoes
Hogan shoes (paypal payment)www.king-trade.cn)
Lv shoes
Prada shoes (paypal payment)www.king-trade.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)www.king-trade.cn)
Ice bream shoes
Sebago shoes (paypal payment)www.king-trade.cn)
Lacoste shoes
Air force one shoes (paypal payment)www.king-trade.cn)
TODS shoes
AF shoes

5616. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 02:59:09 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <hoD3l.11177$YU2.688@nlpi066.nbdc.sbc.com>
Source record: 18990

JB wrote:
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:gim2on$81c$1@news.albasani.net...
>> JB wrote:
>>
>>> ...
>>> It looks like marriage is a forgone conclusion in California anyway. I
>>> don't know why the fags want it. I guess they don't reproduce so they
> have
>>> to steal someone else's kids. It's all beginning to look like reruns of
>>> daytime TV.
>>>
>>> What the church should do is Holy Matrimony and quit recognizing the
> state.
>>> Beware the conspiracy. The problem is that so many people don't even
>>> believe their own experience. let alone what they see happening to
> others.
>>> "Oh, that won't happen to me." Their brains are too full of slogans
> that
>>> tell them how to feel and what to say, that they can't make rational
>>> conclusions.
>>>
>>> The answer: A Christ centered boot camp that turns marriage partners
> into
>>> accountability partners in a team effort rather than a Detante.
>>>
>> I would like to know when the state/feds took over marriage, why and how
>> they are able to do it with NO justification. Marriage is a God/Church
>> thing ...
>>
>> The same fags which demand they be able to marry will demand separation
>> of church and state powers; So, where is that separation here. Gov't
>> needs to back off ... only God and the Church has the power to
>> rightfully marry people--all other marriages are a fraud anyway.
>>
>> Regards,
>> JS
>
> First off, "separation of church and state" is cited nowhere in The
> Constitution, neither does "freedom from religion." In fact, First
> Amendment was placed that no particular denomination would be made the
> official religion of The State. But not only would a belief in God be
> respected, but considered necessary and in fact, God is cited as the primary
> justification for the very existence of, and the authority of, The State.

> When The State kills off God, then it usurps it's own authority.
>
> AFAIK marriage was mostly a registration thing to start with, then it
> progressed to further regulation and intervention "for the sake of the
> children" as in rh factor typing, and tax credit, then on to legal authority
> in breaking up families and assigning child support and custody which has
> now become a complete Socialist joke since they have been awarding adoption
> and custody of even same sex children to gays so they can "indoctrinate"
> which really means "grooming" or preparing for rape by force, intimidation
> or bamboozle. They may claim they aren't really child moles_rs, but how can
> you believe that when someone aggressively promotes "lust of the flesh" or
> "sexual gratification" as an alternative to God's way. If it were only
> about LOVE there wouldn't be a discussion because in the end we would be
> brothers and sisters in heaven, not Plaintiff and Defendant, Gay or
> Straight, so as a people we seem to be "delivered over to a reprobate mind"
> and our government is only a reflection of that.
>
> The sickest argument put forth is the "Scientific" argument, that it is only
> natural. But that argument works as well for even cannibalism, since it
> occurs in nature too. So what separates us from being animals?
>
> The real enemy after all is the Devil. He is International and infiltrates
> anywhere he finds an empty thought.
>

Get help, JB. You can say all this stuff in some of the more psychotic churches in this country and maybe get some people to think you're wise and prophetic, but this is a forum for antennas, not the evils of consorting with devil-worshiping Thai ladyboys. On this forum, you're simply making a paranoid old fool of yourself.
Hope you get well, soon,
73,
Tom Donaly, KA6RUH

5617. Re: Vertical Monopole Radiation Characteristics

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 12:37:09 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <199b245c-5a03-49e5-9012-7880b66dc467@v5g2000prm.googlegroups.com>
Source record: 18991

> The idea that coverage is maximum for the 5/8th wave
> radiator is common but in practice, (maybe we are saying the
> same thing) a straight 1/2 wave may have a smaller fading
> ring because it does not have the high-angle lobe wich
> appears on the 5/8th wave pattern.

My comments also were addressing the belief of the OP that the peak gain of a 5/8-wave vertical was very little different than for a 1/4-wave, because of a high-angle lobe developed by a 5/8-wave.

It is true that such a high-angle lobe develops to some extent for all vertical monopoles between 1/2-wave and 5/8-wave in electrical height. This can be seen in the plots linked below (FCC method).

http://i62.photobucket.com/albums/h85/rfry-100/MWElPatComparison.jpg

But regardless, the 5/8-wave has the greatest peak gain of the five monopoles shown.

In situations where the combination of frequency, earth conductivity etc (my 6 points above) limits the useful groundwave coverage radius closer to the transmitter site than is served by the high-angle lobe from a 5/8-wave radiator, then the 5/8-wave would produce the greatest fade-free groundwave coverage area day and night (other things equal).

However this isn't the case for most "Class A" (50 kW, non-directional day/night) AM stations. The most common radiator height used by them is about 195 degrees, which provides a little more groundwave range than a 1/2-wave, and about the greatest distance/smallest width for the fade zone. WJR, in fact, uses a 195 degree vertical.

> I certainly agree that patterns calculated for "ideal" ground
> are not matched by practical ground systems except, perhaps,
> sea-water grounds.

The FCC approach for AM broadcast stations is to use the pattern/gain of the radiator over a perfect ground as a basis for the groundwave field intensity at a given distance over real ground, as determined by the FCC's MW propagation curves -- which curves are based on real-world, measured performance.

With the advent of NEC and NEC-2, some have been misled by the elevation pattern shown for a vertical radiator at an infinite distance over real ground as being that of the radiation launched by that vertical radiator. But it is not, it is only the amount of that original radiation that survives at an infinite distance, for those ground conditions (and for flat earth, at that).

This has led to the concept of a "take-off angle" from a ground-mounted vertical where peak radiation occurs, and that little to no radiation occurs from the monopole in and near the horizontal plane. But that isn't the case -- the relative field over real ground at low elevation angles close to the vertical radiator can be very high, and will continue onward to produce a long-range skywave. Even radiation at an elevation angle of one degree will reach the ionosphere, due to earth curvature.

The theoretical elevation patterns shown in my plots don't exist very far from the antenna, but they are a closer to reality over real ground than those shown by NEC and NEC-2 for an infinite distance over the same ground, and assumed also to exist close to the radiator.

The results obtained using NEC-4 to calculate the groundwave field intensity within the useful daytime coverage areas of AM broadcast stations give much better correlation to the measured fields, and to the methodology of using the theoretical pattern with the FCC's MW propagation curves.

RF

5618. NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 15:49:24 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <359a4957-ee91-4d17-aa07-38f7f71bb76f@z27g2000prd.googlegroups.com>
Source record: 18992

NEC in its various forms is an excellent means to evaluate the
radiation from various structures.

But without due care it still can lead to incorrect conclusions about
system performance when propagation effects are present -- as in the
recent thread here about the elevation patterns of MW monopoles.

Here is another situation...

http://i62.photobucket.com/albums/h85/rfry-100/GroundPlaneElevPatCompare.jpg

RF

5619. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 16:35:42 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <giofku$as06$1@tr22n12.aset.psu.edu>
Source record: 18993

Dave wrote:

> where did art go??? i need a good laugh!

Co-dependent, eh?

- 73 de Mike N3LI -

5620. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 17:10:52 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <wSP3l.13$%v1.3@edtnps83>
Source record: 18994

"Richard Fry" <rfry@adams.net> wrote in message
news:359a4957-ee91-4d17-aa07-38f7f71bb76f@z27g2000prd.googlegroups.com...
> NEC in its various forms is an excellent means to evaluate the
> radiation from various structures.
>
> But without due care it still can lead to incorrect conclusions about
> system performance when propagation effects are present -- as in the
> recent thread here about the elevation patterns of MW monopoles.
>
> Here is another situation...
>
> http://i62.photobucket.com/albums/h85/rfry-100/GroundPlaneElevPatCompare.jpg
>
> RF

The example above does not compute the surface wave.
The following card computes "Space Wave plus SurfaceWave":

```
CM 144 MHz Vertical Dipole
CE
GW 1 13 0 0 33.15 0 0 30 0.010417
GS 0 0 0.304800
GE 1 -1 0
GN 2 0 0 0 13.0000 0.0050
FR 0 1 0 0 147.3 0.1
EX 0 1 7 0 65.66981572 0
LD 5 0 0 0 3.801E7
RP 1 11 1 0000 0 90 1.00000 1.00000 50000
EN
```

In this example the vertical half wave dipole, with the base 30 ft above
an average ground, on 147.3 MHz, shows a field strength at ground
level of: 0.418 uV/m from 30 W into the antenna.

Frank

5621. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 17:13:13 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <JUP3l.14$%v1.9@edtnps83>
Source record: 18995

>
> In this example the vertical half wave dipole, with the base 30 ft above
> an average ground, on 147.3 MHz, shows a field strength at ground
> level of: 0.418 uV/m from 30 W into the antenna.
>
> Frank

And, obviously, at 50 km.

5622. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 17:45:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <giojok$8n9$1@news.albasani.net>
Source record: 18996

JB wrote:

> ...
> First off, "separation of church and state" is cited nowhere in The
> Constitution, neither does "freedom from religion." In fact, First
> Amendment was placed that no particular denomination would be made the
> official religion of The State. But not only would a belief in God be
> respected, but considered necessary and in fact, God is cited as the primary
> justification for the very existence of, and the authority of, The State.
> When The State kills off God, then it usurps it's own authority.
>

Absolutely, however, I think it is blatantly implied, the separation(s.)
Those who do not believe in an intelligence which created all this,
ask me to believe that you can take a handful of wood, glass, plastic,
etc. toss it into a mud-puddle, come back a few million years later and
begin digging up microwaves, cellphones, TVs', radios, etc.; And, they
laugh at me for believing a thinking mind had a hand in all this! Go
figure ...

> AFAIK marriage was mostly a registration thing to start with, then it
> progressed to further regulation and intervention "for the sake of the
> children" as in rh factor typing, and tax credit, then on to legal authority
> in breaking up families and assigning child support and custody which has
> now become a complete Socialist joke since they have been awarding adoption
> and custody of even same sex children to gays so they can "indoctrinate"
> which really means "grooming" or preparing for rape by force, intimidation
> or bamboozle. They may claim they aren't really child moles_rs, but how can
> you believe that when someone aggressively promotes "lust of the flesh" or
> "sexual gratification" as an alternative to God's way. If it were only
> about LOVE there wouldn't be a discussion because in the end we would be
> brothers and sisters in heaven, not Plaintiff and Defendant, Gay or
> Straight, so as a people we seem to be "delivered over to a reprobate mind"
> and our government is only a reflection of that.

Yeah, a look back though history provides all sorts of weird things.
Like, the king decided who could and could not marry, had dibs on having
sex with the bride first, etc. Like I said, gov't has no place in
religious affairs--end-of-story.

>
> The sickest argument put forth is the "Scientific" argument, that it is only
> natural. But that argument works as well for even cannibalism, since it
> occurs in nature too. So what separates us from being animals?

It looks pretty natural to me. Not only that, but it is the only way to have a stable society where there the children are well taken care of. But, your logic evades me; Can a dog behave any other way than as a dog? A cat? A bird? A mouse? Etc ...

>
> The real enemy after all is the Devil. He is International and infiltrates
> anywhere he finds an empty thought.
>

The bible brings us stories of another race(s) which are not benign to the human race. If these stories are true, or not, I do not know. I do know that behind any "myth", there is always a grain of truth ... ancient books from India, written on palm leaves bring us stories to rival Buck Rogers, spacecraft and wars in and out of our atmosphere--I find it strange that ancient people had such a strong affinity for science fiction ... it actually boggles my mind; I wonder ...

However, I do not hold any to my own thoughts, or open-mind. And, we waste a thread which follows the intent of antennas a whole lot more than our meanderings of mind ... I must make this the end of my story. Again, if we would agree, I would be bored ... thanks for not boring me. :-)

Warm regards,
JS

JS

5623. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 17:47:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <giojrk$8n9$2@news.albasani.net>
Source record: 18997

Tom Donaly wrote:

> ...
> Get help, JB. You can say all this stuff in some of the more psychotic
> churches in this country and maybe get some people to think you're wise
> and prophetic, but this is a forum for antennas, not the evils of
> consorting with devil-worshiping Thai ladyboys. On this forum, you're
> simply making a paranoid old fool of yourself.
> Hope you get well, soon,
> 73,
> Tom Donaly, KA6RUH

Tom:

Excuse us for having a bit of fun, but the subject matter grew boring
and we just had a bit of a side chat ... no harm met.

Regards,
JS

5624. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 17:49:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <giojum$8n9$3@news.albasani.net>
Source record: 18998

Bart Bailey wrote:

> ...
> It regains it's own authority.

There is much truth there. It seems humans are constructed with a need to worship "something." In the absence of a loving God, we get a stern and vengeful state ... wait and see.

Regards,
JS

5625. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 17:50:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <giok1c$8n9$4@news.albasani.net>
Source record: 18999

Bart Bailey wrote:

> ...
> Get the state out of religious affairs!
> IOW: No tax breaks for the existence of some religious condition, like
> marriage, nor for property ownership by some city's infrastructure
> loading church either.

Actually, strange thinking, IMHO.

No gov't has the right to tax God, ROFLOL! But, it is interesting to
watch ...

Regards,
JS

5626. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 17:55:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <giokb5$8n9$5@news.albasani.net>
Source record: 19000

Richard Fry wrote:
> NEC in its various forms is an excellent means to evaluate the
> radiation from various structures.
>
> But without due care it still can lead to incorrect conclusions about
> system performance when propagation effects are present -- as in the
> recent thread here about the elevation patterns of MW monopoles.
>
> Here is another situation...
>
> http://i62.photobucket.com/albums/h85/rfry-100/GroundPlaneElevPatCompare.jpg
>
> RF

Your statement is one of the most correct I have ever seen offered in
this group.

However, it, NEC, still remains one of the best available "antenna
prediction" offering of software obtainable to "normal" people ... and
provides some sort of an income for those who write the GUIs' who feed
the text file to it ...

Regards,
JS

5627. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 18:58:36 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fa0f82a1-b231-4319-80f2-b93bf6622ac0@r15g2000prd.googlegroups.com>
Source record: 18801

On Dec 22, 11:13 am, "Frank" <ve...@nospam.telus.net> wrote:
> > In this example the vertical half wave dipole, with the base 30 ft above
> > an average ground, on 147.3 MHz, shows a field strength at ground
> > level of: 0.418 uV/m from 30 W into the antenna.
>
> And, obviously, at 50 km.

Here is another method (Longley-Rice) for calculating the field intensity produced at the receive site by your model. But the NEC approach is less accurate than L-R for long path lengths (due to earth curvature), and for specific terrain contours.

In your model the path loss calculated using L-R is about 68.8 dB more than the free space loss. The peak, free space field produced by a 1/2-wave, linear dipole radiating 30 watts over a 50 km path is about 770 uV/m. This voltage reduction of 68.8 dB is a field multiplier of about 0.00036, so the 770 uV/m field is reduced to about 0.28 uV/m -- a bit less than your NEC model predicts. Agreement probably would be better over shorter paths (as long as no specific terrain profile needed to be applied), and worse for longer paths.

In the L-R example I set the path over the middle of Lake Michigan in order to get a smooth earth contour, such as used in NEC models.

This all just illustrates that analyses made using NEC and any other method need to consider the limits inherent in their algorithms with respect to the physical reality being analyzed.

http://i62.photobucket.com/albums/h85/rfry-100/147MHzTerrestrialPath.gif

RF

5628. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 20:42:50 UTC
From: kb9rqz@yahoo.com
Message-ID: <9uuvk49bjoj9p6h5hf244ao21bg6gt139f@4ax.com>
Source record: 18802
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5629. Re: Vertical Monopole Radiation Characteristics

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 21:17:06 UTC
From: Richard Knoppow <dickburk@ix.netcom.com>
Message-ID: <j9KdnW7n_NBCns3UnZ2dnUVZ_tjinZ2d@earthlink.com>
Source record: 18803

"Richard Fry" <rfry@adams.net> wrote in message
news:199b245c-5a03-49e5-9012-7880b66dc467@v5g2000prm.googlegroups.com...
> The idea that coverage is maximum for the 5/8th wave
> radiator is common but in practice, (maybe we are saying
> the
> same thing) a straight 1/2 wave may have a smaller fading
> ring because it does not have the high-angle lobe wich
> appears on the 5/8th wave pattern.

My comments also were addressing the belief of the OP that
the peak
gain of a 5/8-wave vertical was very little different than
for a 1/4-
wave, because of a high-angle lobe developed by a 5/8-wave.

It is true that such a high-angle lobe develops to some
extent for all
vertical monopoles between 1/2-wave and 5/8-wave in
electrical
height. This can be seen in the plots linked below (FCC
method).

http://i62.photobucket.com/albums/h85/rfry-100/MWElPatComparison.jpg

But regardless, the 5/8-wave has the greatest peak gain of
the five
monopoles shown.

Snipping here..........

I was not disagreeing with what you say above, perhaps
I did not express it well.

--

--
Richard Knoppow
Los Angeles
WB6KBL
dickburk@ix.netcom.com

5630. propagation models Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 21:42:20 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gip1jr$2vm$1@news.jpl.nasa.gov>
Source record: 18804

Richard Fry wrote:
> On Dec 22, 11:13 am, "Frank" <ve...@nospam.telus.net> wrote:
>>> In this example the vertical half wave dipole, with the base 30 ft above
>>> an average ground, on 147.3 MHz, shows a field strength at ground
>>> level of: 0.418 uV/m from 30 W into the antenna.
>> And, obviously, at 50 km.
> _____
>
> Here is another method (Longley-Rice) for calculating the field
> intensity produced at the receive site by your model. But the NEC
> approach is less accurate than L-R for long path lengths (due to earth
> curvature), and for specific terrain contours.
>

Once you get away from the near field, there's tons of models and modeling approaches available, depending on the kind of path you're interested in, and what you're looking to find out. For instance, ioncap and its ilk (VOACAP,etc.) model skywave paths in a statistical sense. Other models do raytracing for a more "point solution" type model. Yet others are good for things like forests or terrain.

Since nobody has a full up computed electromagnetics finite model of everything at fine resolution, all those models basically trade off computational resources against some approximations. Whether it's approximating the earth as flat surface of a uniform dielectric (NEC) or whatever..

5631. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 22:04:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <qoSdnboz2qV9k83UnZ2dnUVZ_h2dnZ2d@posted.easystreetonline>
Source record: 18805

Richard Fry wrote:
>
> This all just illustrates that analyses made using NEC and any other
> method need to consider the limits inherent in their algorithms with
> respect to the physical reality being analyzed.

Absolutely true. http://radiomagonline.com/fcc/radio_fcc_clamps_down/.

Roy Lewallen, W7EL

5632. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 22:07:32 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <EcU3l.65$z%.25@edtnps82>
Source record: 18806

"Richard Fry" <rfry@adams.net> wrote in message
news:fa0f82a1-b231-4319-80f2-b93bf6622ac0@r15g2000prd.googlegroups.com...
On Dec 22, 11:13 am, "Frank" <ve...@nospam.telus.net> wrote:
> > In this example the vertical half wave dipole, with the base 30 ft above
> > an average ground, on 147.3 MHz, shows a field strength at ground
> > level of: 0.418 uV/m from 30 W into the antenna.
>
> And, obviously, at 50 km.

>Here is another method (Longley-Rice) for calculating the field
>intensity produced at the receive site by your model. But the NEC
>approach is less accurate than L-R for long path lengths (due to earth
>curvature), and for specific terrain contours.

>In your model the path loss calculated using L-R is about 68.8 dB more
>than the free space loss. The peak, free space field produced by a
>1/2-wave, linear dipole radiating 30 watts over a 50 km path is about
>770 uV/m. This voltage reduction of 68.8 dB is a field multiplier of
>about 0.00036, so the 770 uV/m field is reduced to about 0.28 uV/m --
>a bit less than your NEC model predicts. Agreement probably would be
>better over shorter paths (as long as no specific terrain profile
>needed to be applied), and worse for longer paths.

>In the L-R example I set the path over the middle of Lake Michigan in
>order to get a smooth earth contour, such as used in NEC models.

>This all just illustrates that analyses made using NEC and any other
>method need to consider the limits inherent in their algorithms with
>respect to the physical reality being analyzed.

http://i62.photobucket.com/albums/h85/rfry-100/147MHzTerrestrialPath.gif

RF

Interesting comparison between methods at VHF frequencies. For curiosity
I had done a comparison between the FCC predicted curves, for an AM
broadcast station on 1655 kHz, and NEC. It seems that at the lower
frequencies NEC has greater accuracy. Of course NEC was never intended
as a propagation tool, but still appears to be reasonably useful. I had cut
and pasted an Excel spread sheet below, so not sure if it will retain the
formatting when posted.

Frank

Field Strength Comparison at 1655 kHz..

Antenna Description: 45.3 m ground mounted monopole. 120 X 45.3 m
radials, 15 cm below ground. All conductors copper.
Input power 100 W

Source: http://www.fcc.gov/mb/audio/73184/index.html per 47 CFR
Sections 73.183 and 73.184
Nittany Scientific GNEC Version 1.1a. Ground parameters: Conductivity
5 mS/m, permittivity 13 (Average ground)
Field strength RMS V/m.

Distance FCC GNEC Difference Difference
(km) (mV/m) (mV/m) (%) (db)

0.10 950.000 960.000 1.0 -0.09
0.50 170.000 168.000 1.2 0.10
1.00 77.000 75.000 2.6 0.23
5.00 8.500 8.110 4.7 0.41
10.00 2.400 2.270 5.6 0.48
50.00 0.068 0.067 2.1 0.18
100.00 0.014 0.015 7.0 -0.61
200.00 0.002 0.004 62.1 -5.58

5633. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 22:11:25 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <hgU3l.66$z%.4@edtnps82>
Source record: 18807

"Frank" <ve6cb@nospam.telus.net> wrote in message
news:EcU3l.65$z%.25@edtnps82...
>
> "Richard Fry" <rfry@adams.net> wrote in message
> news:fa0f82a1-b231-4319-80f2-b93bf6622ac0@r15g2000prd.googlegroups.com...
> On Dec 22, 11:13 am, "Frank" <ve...@nospam.telus.net> wrote:
>> > In this example the vertical half wave dipole, with the base 30 ft
>> > above
>> > an average ground, on 147.3 MHz, shows a field strength at ground
>> > level of: 0.418 uV/m from 30 W into the antenna.
>>
>> And, obviously, at 50 km.
> _____________
>
>>Here is another method (Longley-Rice) for calculating the field
>>intensity produced at the receive site by your model. But the NEC
>>approach is less accurate than L-R for long path lengths (due to earth
>>curvature), and for specific terrain contours.
>
>>In your model the path loss calculated using L-R is about 68.8 dB more
>>than the free space loss. The peak, free space field produced by a
>>1/2-wave, linear dipole radiating 30 watts over a 50 km path is about
>>770 uV/m. This voltage reduction of 68.8 dB is a field multiplier of
>>about 0.00036, so the 770 uV/m field is reduced to about 0.28 uV/m --
>>a bit less than your NEC model predicts. Agreement probably would be
>>better over shorter paths (as long as no specific terrain profile
>>needed to be applied), and worse for longer paths.
>
>>In the L-R example I set the path over the middle of Lake Michigan in
>>order to get a smooth earth contour, such as used in NEC models.
>
>>This all just illustrates that analyses made using NEC and any other
>>method need to consider the limits inherent in their algorithms with
>>respect to the physical reality being analyzed.
>
> http://i62.photobucket.com/albums/h85/rfry-100/147MHzTerrestrialPath.gif
>
> RF
>
> Interesting comparison between methods at VHF frequencies. For curiosity
> I had done a comparison between the FCC predicted curves, for an AM
> broadcast station on 1655 kHz, and NEC. It seems that at the lower
> frequencies NEC has greater accuracy. Of course NEC was never intended
> as a propagation tool, but still appears to be reasonably useful. I had

> cut
> and pasted an Excel spread sheet below, so not sure if it will retain the
> formatting when posted.
>
> Frank
>
>
> Field Strength Comparison at 1655 kHz..
>
> Antenna Description: 45.3 m ground mounted monopole. 120 X 45.3 m
> radials, 15 cm below ground. All conductors copper.
> Input power 100 W
>
> Source: http://www.fcc.gov/mb/audio/73184/index.html per 47 CFR
> Sections 73.183 and 73.184
> Nittany Scientific GNEC Version 1.1a. Ground parameters:
> Conductivity 5 mS/m, permittivity 13 (Average ground)
> Field strength RMS V/m.
>
> Distance FCC GNEC Difference Difference
> (km) (mV/m) (mV/m) (%) (db)
>
> 0.10 950.000 960.000 1.0 -0.09
> 0.50 170.000 168.000 1.2 0.10
> 1.00 77.000 75.000 2.6 0.23
> 5.00 8.500 8.110 4.7 0.41
> 10.00 2.400 2.270 5.6 0.48
> 50.00 0.068 0.067 2.1 0.18
> 100.00 0.014 0.015 7.0 -0.61
> 200.00 0.002 0.004 62.1 -5.58

Rats, loused up the formatting. Here is a 2nd attempt.

Distance FCC GNEC Difference Difference
(km) (mV/m) (mV/m) (%) (db)

0.10 950.000 960.000 1.0 -0.09
0.50 170.000 168.000 1.2 0.10
1.00 77.000 75.000 2.6 0.23
5.00 8.500 8.110 4.7 0.41
10.00 2.400 2.270 5.6 0.48
50.00 0.068 0.067 2.1 0.18
100.00 0.014 0.015 7.0 -0.61
200.00 0.002 0.004 62.1 -5.58

5634. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 22:51:40 UTC
From: JB <nospam@goofball.net>
Message-ID: <0SU3l.589$BC4.46@nwrddc02.gnilink.net>
Source record: 18808

> Bart Bailey wrote:
>
> > ...
> > It regains it's own authority.

Yes, by overthrow of the Constitution and the Bill of Rights. By far the best deal we ever had as citizens.

> There is much truth there. It seems humans are constructed with a need
> to worship "something." In the absence of a loving God, we get a stern
> and vengeful state ... wait and see.
>
> Regards,
> JS

The Government struggles with taking care of all the stupid minions, trained to fail for generations, that desire to be taken care of or need to belong to something at any cost, with an ever present temptation to either wipe them out or let nature somehow wipe them out to ease the burden. The collapse of the economy of the Soviet Union meant that despite the atrocities, it could have been a whole lot worse for a lot more people (perhaps the collapse itself was little more than an abdication of responsibility while hard-line idealists regrouped- I digress.). Perestroika was blamed for the fall, but economic realities resulted in that panic jump into a new course they knew nothing about. Look at how many new business fail because the owner doesn't even have a business plan. Now there is a knee-jerk reaction to old ways that never worked. It could be compared to the South after Reconstruction. Suddenly the slaves were free, but few knew how to prosper.

We still haven't found rock-bottom in the disaster we have incurred with so much Social tampering in our society. Even as of several years ago, I spoke to some people who straight faced hoped for another national crash, fall, and depression in the hopes that another leader like Roosevelt could emerge. An honest analysis of the depression era clearly shows that none of the so called progressive programs actually brought us out of the Great Depression. In fact many of those programs actually prolonged the misery. Recovery was actually credited to Shirley Temple and W.W.II. At least Shirley often gave the glory to God.

The credit for alleviating suffering throughout the World still goes to God. Even FEMA credits Christian charity and volunteers for far more than they ever could have done when referring to Katrina.

BTW anyone who doesn't get any part of this, just ask for a clarification. It can be broken down and s'plained in more personal terms. As for the

discone question, it was well answered and covered long ago.

5635. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 22:58:02 UTC
From: JB <nospam@goofball.net>
Message-ID: <_XU3l.590$BC4.553@nwrddc02.gnilink.net>
Source record: 18809

"John Smith" <assemblywizard@gmail.com> wrote in message
news:giojrk$8n9$2@news.albasani.net...
> Tom Donaly wrote:
>
> > ...
> > Get help, JB. You can say all this stuff in some of the more psychotic
> > churches in this country and maybe get some people to think you're wise
> > and prophetic, but this is a forum for antennas, not the evils of
> > consorting with devil-worshiping Thai ladyboys. On this forum, you're
> > simply making a paranoid old fool of yourself.
> > Hope you get well, soon,
> > 73,
> > Tom Donaly, KA6RUH
>
> Tom:
>
> Excuse us for having a bit of fun, but the subject matter grew boring
> and we just had a bit of a side chat ... no harm met.
>
> Regards,
> JS

In fact, if devil-worshipping Thai ladyboys are influencing or making public
policy regarding local zoning laws, it could have a great effect on your
available antenna choices.

5636. Re: Would a discone cover all the US TV broadcast Freqs?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-22 23:23:27 UTC
From: JB <nospam@goofball.net>
Message-ID: <PjV3l.585$Es4.239@nwrddc01.gnilink.net>
Source record: 18810

"John Smith" <assemblywizard@gmail.com> wrote in message
news:giojok$8n9$1@news.albasani.net...
> JB wrote:
>
> > ...
> > First off, "separation of church and state" is cited nowhere in The
> > Constitution, neither does "freedom from religion." In fact, First
> > Amendment was placed that no particular denomination would be made the
> > official religion of The State. But not only would a belief in God be
> > respected, but considered necessary and in fact, God is cited as the
primary
> > justification for the very existence of, and the authority of, The
State.
> > When The State kills off God, then it usurps it's own authority.
> >
>
> Absolutely, however, I think it is blatantly implied, the separation(s.)
> Those who do not believe in an intelligence which created all this,
> ask me to believe that you can take a handful of wood, glass, plastic,
> etc. toss it into a mud-puddle, come back a few million years later and
> begin digging up microwaves, cellphones, TVs', radios, etc.; And, they
> laugh at me for believing a thinking mind had a hand in all this! Go
> figure ...
>
> > AFAIK marriage was mostly a registration thing to start with, then it
> > progressed to further regulation and intervention "for the sake of the
> > children" as in rh factor typing, and tax credit, then on to legal
authority
> > in breaking up families and assigning child support and custody which
has
> > now become a complete Socialist joke since they have been awarding
adoption
> > and custody of even same sex children to gays so they can "indoctrinate"
> > which really means "grooming" or preparing for rape by force,
intimidation
> > or bamboozle. They may claim they aren't really child moles_rs, but how
can
> > you believe that when someone aggressively promotes "lust of the flesh"
or
> > "sexual gratification" as an alternative to God's way. If it were only
> > about LOVE there wouldn't be a discussion because in the end we would be
> > brothers and sisters in heaven, not Plaintiff and Defendant, Gay or
> > Straight, so as a people we seem to be "delivered over to a reprobate
mind"

> > and our government is only a reflection of that.
>
> Yeah, a look back though history provides all sorts of weird things.
> Like, the king decided who could and could not marry, had dibs on having
> sex with the bride first, etc. Like I said, gov't has no place in
> religious affairs--end-of-story.
>
> >
> > The sickest argument put forth is the "Scientific" argument, that it is
only
> > natural. But that argument works as well for even cannibalism, since it
> > occurs in nature too. So what separates us from being animals?
>
> It looks pretty natural to me. Not only that, but it is the only way to
> have a stable society where there the children are well taken care of.
> But, your logic evades me; Can a dog behave any other way than as a
> dog? A cat? A bird? A mouse? Etc ...
>
> >
> > The real enemy after all is the Devil. He is International and
infiltrates
> > anywhere he finds an empty thought.
> >
>
> The bible brings us stories of another race(s) which are not benign to
> the human race. If these stories are true, or not, I do not know. I do
> know that behind any "myth", there is always a grain of truth ...
> ancient books from India, written on palm leaves bring us stories to
> rival Buck Rogers, spacecraft and wars in and out of our atmosphere--I
> find it strange that ancient people had such a strong affinity for
> science fiction ... it actually boggles my mind; I wonder ...
>
> However, I do not hold any to my own thoughts, or open-mind. And, we
> waste a thread which follows the intent of antennas a whole lot more
> than our meanderings of mind ... I must make this the end of my story.
> Again, if we would agree, I would be bored ... thanks for not boring me.
> :-)
>
> Warm regards,
> JS

Thanks, It's good to find people that acknowledge history.

Dogs have been brainwashed and bred for specifics in temperament,
appearance, behavior. Cat's seem to resist that and are bred more for
appearance. Humans are more like dogs it seems, except for the capability
to commune with God, and thus be able to raise itself by providence where
the dog just seeks to address basic needs and desires.

You need to find the movie "Idiocracy" on DVD. That will blow you away as
well as any papyrus leaf science-fiction. Some Crude humor, language and

situations resulting from an experiment in suspended animation that goes awry. A hooker and an Army file clerk are put into suspended animation, then lost in the shuffle until 500 years later, the Great Garbage avalanche accidentally releases them in a future where they are the smartest people on Earth, just in time to save the planet.

5637. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 01:15:09 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <8_idncuWj4ABps3UnZ2dnUVZ_hWdnZ2d@bright.net>
Source record: 18811

Dear Group: What a delight it is to see a computer doing the calculations for VHF propagation.

Almost fifty years ago, I led a team who measured field strengths in the 100 to 250 MHz range (FM and TV broadcast transmitters) to verify (qualify) the propagation model. Of course, I used a slide rule and log tables to perform the calculations and manually extracted path profiles from topo. maps. The goal was to place confidence in the model for estimating expected interference levels at a radio-astronomy site located in a valley. The result from extensive filed measurements and data reduction was that we could be confident in the model.

I recall also doing some comparisons of predicted and measured strengths involving scattering (over quite long distances) in the VHF range with good correlation.

IONCAP, and its predecessors and successors, I have used to good effect for almost as many years.

In short, the developed propagation methods have been proven by me, and many others, to provide reasonably small uncertainties. Of course, the critical element is knowing which tool to use. That, I believe, is part of the point brought forward by Richard Fry and others. But put yet another way, any dam fool can (now) put numbers into a computer and get numbers back out of the computer - experience and judgment is needed to have significance accrue to the results of such calculations.

Central to all of the propagation models is the need to understand what the antenna and its environment actually does. I am also delighted that several of you are providing the education to the silent so that they do not fall into the traps that are always present.

Warm regards and season's greetings, Mac N8TT
--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
"Richard Fry" <rfry@adams.net> wrote in message
news:fa0f82a1-b231-4319-80f2-b93bf6622ac0@r15g2000prd.googlegroups.com...
On Dec 22, 11:13 am, "Frank" <ve...@nospam.telus.net> wrote:
> > In this example the vertical half wave dipole, with the base 30 ft above
> > an average ground, on 147.3 MHz, shows a field strength at ground
> > level of: 0.418 uV/m from 30 W into the antenna.
>
> And, obviously, at 50 km.

Here is another method (Longley-Rice) for calculating the field intensity produced at the receive site by your model. But the NEC approach is less accurate than L-R for long path lengths (due to earth curvature), and for specific terrain contours.

In your model the path loss calculated using L-R is about 68.8 dB more than the free space loss. The peak, free space field produced by a 1/2-wave, linear dipole radiating 30 watts over a 50 km path is about 770 uV/m. This voltage reduction of 68.8 dB is a field multiplier of about 0.00036, so the 770 uV/m field is reduced to about 0.28 uV/m -- a bit less than your NEC model predicts. Agreement probably would be better over shorter paths (as long as no specific terrain profile needed to be applied), and worse for longer paths.

In the L-R example I set the path over the middle of Lake Michigan in order to get a smooth earth contour, such as used in NEC models.

This all just illustrates that analyses made using NEC and any other method need to consider the limits inherent in their algorithms with respect to the physical reality being analyzed.

http://i62.photobucket.com/albums/h85/rfry-100/147MHzTerrestrialPath.gif

RF

5638. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 01:53:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kug0l4hjpl0o2jqiep15gusgjfdph8jogm@4ax.com>
Source record: 18812

On Mon, 22 Dec 2008 20:15:09 -0500, "J. Mc Laughlin"
<jcm@power-net.net> wrote:

>Almost fifty years ago, I led a team who measured field strengths in the 100
>to 250 MHz range (FM and TV broadcast transmitters) to verify (qualify) the
>propagation model.

Hi Mac, and season's greetings,

Can you relate the specifics of the measurement? At a minimum, what
you would deem to be your best accuracy compared to an absolute
standard, or to a relative standard (instrumentation, not
computational).

73's
Richard Clark, KB7QHC

5639. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 03:38:05 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <54KdnRGhXvGAwM3UnZ2dnUVZ_jCdnZ2d@bright.net>
Source record: 18813

Dear Richard:

It was almost 50 years ago when the models were rather new.....

More background: the terrain was hilly - far from smooth earth - and path profiles were a critical part of the information along with the inherent uncertainties of using "analog" maps and along with the assumption about almost-straight line propagation. (an aside: we found examples of unpredictable propagation along string-like valleys that were aligned with transmitters, but the protected site was in a bowl-like valley.) (I saw one family in a valley using a rhombic antenna to receive TV signals. Their son had been in the Signal Corps.)

We were using state-of-the-art Empire measuring systems (run off of a portable gasoline generator) that were calibrated with an impulse generator at each measurement. We selected paths that were similar to the expected paths of interfering transmitters. In other words, the paths were more-or-less normal to ridge lines not along string-like valleys.

One more qualification: one path was found to have knife-edge diffraction discovered by the caution of taking measurements spaced a few meters apart at each data point. It was absolutely classic, but that data was not used because the protected site did not have such sharp ridges at its periphery.

With those qualifications, my best recollection is that measurements and predicted measurements were within something like 3 or 4 dB. I doubt that repeating those measurements with a GPS receiver, digital topographical map, averaging near straight-line paths, and using a computer to do the arithmetic would be any better.

Another note: Because of the expected sensitivity to interference at the site, I would drive over a few hills, erect a dipole in trees, and work my father on HF from the back seat of my car. No cell phones in those days. ... long distance was a big deal too

Let us know how your studies are going. Warm regards, Mac N8TT
--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:kug0l4hjpl0o2jqiep15gusgjfdph8jogm@4ax.com...
> On Mon, 22 Dec 2008 20:15:09 -0500, "J. Mc Laughlin"
> <jcm@power-net.net> wrote:
>
>>Almost fifty years ago, I led a team who measured field strengths in the

>>100
>>to 250 MHz range (FM and TV broadcast transmitters) to verify (qualify)
>>the
>>propagation model.
>
> Hi Mac, and season's greetings,
>
> Can you relate the specifics of the measurement? At a minimum, what
> you would deem to be your best accuracy compared to an absolute
> standard, or to a relative standard (instrumentation, not
> computational).
>
> 73's
> Richard Clark, KB7QHC

5640. [url]http://www.liangdianup.com/clocks_1.htm[/url]

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 07:07:31 UTC
From: Miss Green <Miss.Green.3967d3b@radiobanter.com>
Message-ID: <Miss.Green.3967d3b@radiobanter.com>
Source record: 18814

This clock projects the time, date, or temp on the wall or ceiling some
people call
it a ceiling clock but I call it a digital projection clock. I got the
black one because at the time that was the only color
they had. But now they have them in black and also in white.

--
Miss Green

5641. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 12:20:26 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4b1e63fe-882c-47a3-bd2b-6cdce282c0f8@40g2000prx.googlegroups.com>
Source record: 18815

Richard Clark wrote:
>...what you would deem to be your best accuracy compared
> to an absolute standard, or to a relative standard (instrumentation,
> not computational).

You weren't asking me, but still you may be interested in the link below which leads to a good presentation of this by the NIST. A table on Page 3 there shows a measurement uncertainty at the NIST test facilities of ±1/4 to ±1 dB, depending on the DUT and the frequency range.

Field intensity measurements made using uncontrolled path conditions are more a measure of the propagation environment and the pattern/ location of the receive antenna than they are of the absolute performance of the transmitting antenna system. Such measurement errors can be gross, and difficult to quantify.

http://ts.nist.gov/MeasurementServices/Calibrations/upload/im-34-4b.pdf

RF

5642. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 15:25:58 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <KqGdnV8M2JebnszUnZ2dnUVZ_oLinZ2d@bright.net>
Source record: 18816

Dear Richard Fry:
Thank you for the 1985 reference, which I had not seen before. Too many IEEE groups exist!

A closed-loop system much like that shown in Figure 15 was built by me and a student and used by the mid 70s to subject DUTs to up to at least 200 v/m at frequencies up to about 200 MHz. This was for automated evaluation of the EMC of relatively small DUTs and was the prototype of a much larger system implemented by a major manufacturer that allowed the testing of entire cars. This was well before PCs, but after 488 signal sources and wattmeters were available. Confidence to about 1 dB was felt because of the tight correlation with a short voltage probe extending into the TEM cell. Unfortunately, the small effective volume of the TEM cell precluded measurements of antennas. The large room at NBS allowed them to measure antennas and I saw them measuring a large UHF antenna with a near-field probe in the early 1970s.

Jumping to HF antennas of 0.5 WL size or more: I am convinced that even with a helicopter being used to measure a pattern, one can have more confidence in the result of the intelligent use of NEC4 than in any measurements.

The measurements made in late 50s (to gain confidence with VHF propagation models) involved cherry-picking the paths to correspond with the goal of understanding propagation of possible interference into the radio-astronomy site. They also involved averaging a series of measurements taken within a few meters of each other. The measurement sites were all very rural and free of significant reflecting surfaces.

Warm regards, Mac N8TT
--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
"Richard Fry" <rfry@adams.net> wrote in message
news:4b1e63fe-882c-47a3-bd2b-6cdce282c0f8@40g2000prx.googlegroups.com...

Richard Clark wrote:
>...what you would deem to be your best accuracy compared
> to an absolute standard, or to a relative standard (instrumentation,
> not computational).

You weren't asking me, but still you may be interested in the link below which leads to a good presentation of this by the NIST. A table on Page 3 there shows a measurement uncertainty at the NIST test facilities of ±1/4 to ±1 dB, depending on the DUT and the frequency

range.

Field intensity measurements made using uncontrolled path conditions are more a measure of the propagation environment and the pattern/ location of the receive antenna than they are of the absolute performance of the transmitting antenna system. Such measurement errors can be gross, and difficult to quantify.

http://ts.nist.gov/MeasurementServices/Calibrations/upload/im-34-4b.pdf

RF

5643. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 17:40:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5182l41u1k7ifn75cdfqtbevm9ejeplb0c@4ax.com>
Source record: 18817

On Tue, 23 Dec 2008 04:20:26 -0800 (PST), Richard Fry <rfry@adams.net>
wrote:

>A table
>on Page 3 there shows a measurement uncertainty at the NIST test
>facilities of ï¿½1/4 to ï¿½1 dB, depending on the DUT and the frequency
>range.

Actually, ï¿½1 dB would be the most likely error for instrumentation
error (ï¿½ï¿½ dB could never be achieved); matching error would compound
that; the antenna would add another ï¿½1 dB; path would scramble that
further if not performed in an anechoic chamber or on a calibrated
range.

Mac's test system (from fig. 15 he reports in other correspondence)
would accumulate up to the several dB he reported earlier. It would
exhibit a very good relative accuracy, but absolute accuracy would be
several dB error as he has already offered in prior correspondence.
Path problems would have to be hammered out on their own.

73's
Richard Clark, KB7QHC

5644. Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 17:46:07 UTC
From: PJ <norahfan@gmail.com>
Message-ID: <ac8333ff-56ad-4809-8040-1a55b7c1bcfb@u18g2000pro.googlegroups.com>
Source record: 18818
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Folks,

I have purchased a Sangean ATS-909 World Receiver. It is equipped with an internal ferrite antenna för MW and LW, and a telescope antenna for SW and FM. It also comes with a portable SW antenna (ANT-60), seven meters long. Is this external antenna generally sufficient for SW reception, or should I get a different antenna? If yes, is there a solution that doesn't cost all that much money? I have a copy of the 2009 World Radio TV Handbook, and they are talking about a Wellbrook ALA-1530+ loop antenna, and let me tell you, that one is well past my budget, because it costs $466... I am looking for something a lot cheaper... :-) If it is recommended to replace the ANT-60, that is.

PJ

5645. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 18:23:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cua2l4553a7tvsfs3nb0v9mi1pctc898pl@4ax.com>
Source record: 18819
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Tue, 23 Dec 2008 09:46:07 -0800 (PST), PJ <norahfan@gmail.com>
wrote:

>Folks,
>
>I have purchased a Sangean ATS-909 World Receiver. It is equipped with
>an internal ferrite antenna fi¿½r MW and LW, and a telescope antenna for
>SW and FM. It also comes with a portable SW antenna (ANT-60), seven
>meters long. Is this external antenna generally sufficient for SW
>reception, or should I get a different antenna? If yes, is there a
>solution that doesn't cost all that much money? I have a copy of the
>2009 World Radio TV Handbook, and they are talking about a Wellbrook
>ALA-1530+ loop antenna, and let me tell you, that one is well past my
>budget, because it costs $466... I am looking for something a lot
>cheaper... :-) If it is recommended to replace the ANT-60, that is.
>
>PJ

Hi PJ,

With your location in Sweden, a long wire should pick up a lot of
stations unless you are buried deep in a valley. That long wire can
be as simple as 10 meters of wire with a clip to attach it to the whip
of the Sangean. When I was in Africa last year, that was enough to
fill my cheap SW set with signals from everywhere in Africa up into
Europe. Toss the wire out a window up into a tree. It is at least a
cheap, first attempt to see if you need anything more than that.

73's
Richard Clark, KB7QHC

5646. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 18:29:05 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <girali$uv0$1@news.jpl.nasa.gov>
Source record: 18820

Richard Clark wrote:
> On Tue, 23 Dec 2008 04:20:26 -0800 (PST), Richard Fry <rfry@adams.net>
> wrote:
>
>> A table
>> on Page 3 there shows a measurement uncertainty at the NIST test
>> facilities of ï¿½1/4 to ï¿½1 dB, depending on the DUT and the frequency
>> range.
>
> Actually, ï¿½1 dB would be the most likely error for instrumentation
> error (ï¿½ï¿½ dB could never be achieved); matching error would compound
> that; the antenna would add another ï¿½1 dB; path would scramble that
> further if not performed in an anechoic chamber or on a calibrated
> range.

At HF and VHF, you should be able to do power measurements to a tenth of a dB, with moderate care. (obviously, you'd have to deal with measuring the mismatch, etc.). A run of the mill power meter should give you 5% accuracy (0.2 dB) without too much trouble. A 8902 measuring receiver can do substantially better. Even at microwave frequencies, better than 0.1 dB uncertainty (2 sigma) are possible with free space measurements (e.g. from an orbiting satellite to a ground station), with all the uncertainties stacked up (atmospheric, radome loss, antenna, electronics, etc.), although this is decidedly non-trivial.

As mentioned, site effects or chamber uncertainties might contribute more.

A typical anechoic chamber might have -20dB worst case reflections from the walls, and -40dB as more typical. A single scattering path will then contribute an uncertainty (worst case) of 1%, or 0.04 dB, although modern measurement technique (using multiple probe positions) can quantify this error and remove it, assuming the UUT and equipment are stable enough over the measurement period.

The TEM cell is nice because it gives you a way to create a calibrated field to characterize your probe.

>
> Mac's test system (from fig. 15 he reports in other correspondence)
> would accumulate up to the several dB he reported earlier. It would
> exhibit a very good relative accuracy, but absolute accuracy would be
> several dB error as he has already offered in prior correspondence.
> Path problems would have to be hammered out on their own.
>
> 73's
> Richard Clark, KB7QHC

5647. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 19:35:43 UTC
From: bpnjensen <bpnjensen@yahoo.com>
Message-ID: <ca35ef0a-0a9b-4db8-b8db-a49ab93225fb@w24g2000prd.googlegroups.com>
Source record: 18821
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 23, 10:23 am, Richard Clark <kb7...@comcast.net> wrote:
> On Tue, 23 Dec 2008 09:46:07 -0800 (PST), PJ <norah...@gmail.com>
> wrote:
>
> >Folks,
>
> >I have purchased a Sangean ATS-909 World Receiver. It is equipped with
> >an internal ferrite antenna för MW and LW, and a telescope antenna for
> >SW and FM. It also comes with a portable SW antenna (ANT-60), seven
> >meters long. Is this external antenna generally sufficient for SW
> >reception, or should I get a different antenna? If yes, is there a
> >solution that doesn't cost all that much money? I have a copy of the
> >2009 World Radio TV Handbook, and they are talking about a Wellbrook
> >ALA-1530+ loop antenna, and let me tell you, that one is well past my
> >budget, because it costs $466... I am looking for something a lot
> >cheaper... :-) If it is recommended to replace the ANT-60, that is.
>
> >PJ
>
> Hi PJ,
>
> With your location in Sweden, a long wire should pick up a lot of
> stations unless you are buried deep in a valley. That long wire can
> be as simple as 10 meters of wire with a clip to attach it to the whip
> of the Sangean. When I was in Africa last year, that was enough to
> fill my cheap SW set with signals from everywhere in Africa up into
> Europe. Toss the wire out a window up into a tree. It is at least a
> cheap, first attempt to see if you need anything more than that.
>
> 73's
> Richard Clark, KB7QHC

Should be very careful when connecting the whip to the ATS-909 antenna
with a metal clip - the radio is quite sensitive and should be turned
off while "clipping". For my connection, I just wound a coil of
insulated wire that would slip over the whip - the inductance alone is
enough to bring in signals strongly, and avoids the chance of possible
static and internal damage. About 20 turns is enough to get you
started; wind more if you want a stronger signal.

Bruce

5648. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-23 20:39:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q0e2l4heqg0ormdrth6pse4e3vqh2fq9ci@4ax.com>
Source record: 18822

On Tue, 23 Dec 2008 10:29:05 -0800, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>At HF and VHF, you should be able to do power measurements to a tenth of
> a dB, with moderate care. (obviously, you'd have to deal with
>measuring the mismatch, etc.). A run of the mill power meter should
>give you 5% accuracy (0.2 dB) without too much trouble. A 8902
>measuring receiver can do substantially better.

Nothing astonishes me more than the simple dash-off notes that claim
power measurement is a snap. I can well imagine, Jim, that you don't
do these measurements with traceability to the limits you suggest.

For the other readers:

We will specifically start with the 8902 measuring receiver. A
premier instrument indeed, but it falls fall FAR short of actually
measuring power without a considerable body of necessary
instrumentation (well illustrated by Mac's observation found in that
fig. 15 already cited). Most claimants peer at one line in a spec
sheet and figure that is the end of the discussion. Glances elsewhere
begins to build the actual accuracy obtainable through the chain of
errors that accumulate. For instance with a 1mW input in the VHF
band:

Internal power standard: ï¿½1.2% and we have yet to look at the
measurement head's error contribution. The so-called "run of the mill
power meters" are drawing close, too close to this precision set's
expensive quality such that their estimation of 5% is already suspect
quality.

Scale error demands a full-scale indication to simple keep the error
contribution down to 0.1% (a 1/10th scale indication would jump that
error to 1%) ï¿½1 digit.

Input SWR with the HP 11792 is rated at 1.15 at worst (I've measured
with far better matches) to that same source's 1.05 SWR adds 0.4%
error. If you are not measuring power at the specific frequency of
the internal source, add more error averaging onwards to 2%.

Things build up from here for just one instrument and its RF head to a
worst case valuation of 5% to 6% error. This further trashes the
observation of "run of the mill power meters" vaunted 5% accuracies.

Of course, in this computation of error neophytes are tempted to
employ the RMS estimation. This clearly reveals those untested in the
arts where bench techs who do their best understand that the RSS

estimation is what pays their salary. Taking a step above skilled bench work to that of a Calibration lab, you buy all the error at face value (hence the term "worst case" that is used by the professionals employed in this art).

THEN we turn our attention to the rest of the bench that holds the remaining components that support the measurement of a power level and accuracy begins to slide drastically. I've been there, and I've been trained to reduce the variables - not an easy task and one that the march of time has NOT improved. Mismatch error climbs like the Himalayas if you don't employ line conditioners (which bring their own mismatch) and isolators (which bring their own mismatch) and so on down the proverbial line towards the source being measured (that antenna every one knows has X amount of power coming from it).

For those who are stunned by this bajillion dollar solution giving them 14% best accuracy (and RSS at that) results, confer with: http://www.home.agilent.com/upload/cmc_upload/All/EPSG085840.pdf and observe the commentary for slide 36.

See if you can cook up a method that doesn't hammer you into the ground. I can anticipate some:

1. Throw a box car of money at the problem;

2. Buy lab time at NIST;

3. Write a report that runs to book length (I've carried most of that water by providing the link above) - or xerox the book that already exists: "Microwave Theory and Applications," Stephen F. Adam;

4. Do it with precision components employing best practices to the best achievable accuracy - you will need further instruction into best practices, however;

5. Ignore reality.

Only the last two options are achievable by the ordinary Ham. To claim that "someone else" can do it better and is thus achievable is sophistry serving ego in an argument.

73's
Richard Clark, KB7QHC

5649. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-24 01:06:38 UTC
From: SC Dxing <scdxing@gmail.com>
Message-ID: <6bf5ddc9-4e11-412f-a0c0-549909f8b439@m12g2000vbp.googlegroups.com>
Source record: 18823
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

PJ,

I've discovered there is no best antenna for everyone for shortwave listening. Ignore the trolls here, start off with your wire antenna, then experiment if you wish. I've tried a few things over the past few weeks and for me, just running a wire along the ground about 60 feet works best for me. I guess the only certain thing is that an antenna that runs outside will work better than an inside antenna. If you can't run one outside, try to put it by a window or up high in your house/apartment. Experimenting is part of the fun, just google around, play around, and have hours of fun on your new radio. I only in the last few weeks have rediscovered listening to SW radio.

Happy listening.

5650. DUNK DUNK man DUNK women DUNK High man DUNK High women

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-24 02:30:31 UTC
From: wholesalezhi@163.com
Message-ID: <94716d26-67ea-40dc-9b60-ad5276bf3753@d42g2000prb.googlegroups.com>
Source record: 18824
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

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Air Max Air Max 90 man Air Max 90 women Air Max LTD man Air Max LTD
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Max 95 women

Air Max 97 man Air Max 97 women Air Max 360 man Air Max 360 women Air
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women Air Max 95 360 man
DUNK DUNK man DUNK women DUNK High man DUNK High women
(paypal payment)(www.king-trade.cn)Adiadis Adiadis 35th man
Adiadis 35th women

Adicolor man Adicolor women football shoe Good Year man
NIKE NIKE man NIKE women
(paypal payment)(www.king-trade.cn)Air Force One AF1 25th man AF1
25th women AF1

man AF1 women AF1 High man
PUMA PUMA man PUMA women

5651. cheap THE CROUN HOLDER jeans wholesale

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-24 02:31:02 UTC
From: wholesalezhi@163.com
Message-ID: <261b3f95-df2b-49dd-b910-dc5f372a37e3@o4g2000pra.googlegroups.com>
Source record: 18825
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

jeans:
cheap EVISU jeans wholesale www.king-trade.cn
cheap ED hardy jeans wholesale
cheap COOGI jeans wholesale www.king-trade.cn
cheap GINO GREEN GLOBAL jeans wholesale
cheap LACOSTE jeans wholesale
cheap G-STAR jeans wholesale
cheap KED ROBOT jeans wholesale
cheap RED MONKEY jeans wholesale
cheap ADIDAS jeans wholesale
cheap BBC jeans wholesale www.king-trade.cn
cheap BOSS jeans wholesale
cheap LRG jeans wholesale www.king-trade.cn
cheap HELEN jeans wholesale
cheap JUICY jeans wholesale
cheap THE CROUN HOLDER jeans wholesale
cheap SMET jeans wholesale
cheap SEVEN jeans wholesale www.king-trade.cn
cheap TRUN NORTH FACE jeans wholesale
cheap children jeans wholesale
cheap ARMANI jeans wholesale www.king-trade.cn
cheap BAPE jeans wholesale
cheap LEVIS jeans wholesale
cheap ANTIK jeans wholesale www.king-trade.cn
cheap true religion jeans wholesale

5652. HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-24 04:29:47 UTC
From: Steve Stone <spfleck@citlink.net>
Message-ID: <gisds6dhn1@news.motzarella.org>
Source record: 18826

I have a 5 band Hustler vertical.

Available install space in my backyard is an area adjacent to my septic system leach field.

I really don't want to place the antenna in the middle of the leach field and risk hitting an outflow pipe.
If I put it just outside of the reach of the outflow pipes the ground is still relatively moist due to natural run off and the leach field.

So will this leach field moisture enhance or inhibit the verticals performance due to soil conductivity.. or none of the above if the antenna is installed as indicated in the Hustler installation manual. (2 radials per band using insulated copper wire, 4 foot
metal mast pounded directly into the ground, no concrete, no wood).

There is also a 4 foot high chain link fence surrounding my backyard, 300' x 150', one side about 25 feet from the potential install location. No trees or shrubs closer than 15 feet from the vertical mast.

Steve
N2UBP

5653. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-24 06:19:51 UTC
From: kb9rqz@yahoo.com
Message-ID: <54l3l410tkhfvgh4pfvc6t9rknp9fujm6e@4ax.com>
Source record: 18827
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5654. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-24 11:36:23 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <2e852c01-f5b9-4548-a3de-abd9237cf2d6@g3g2000pre.googlegroups.com>
Source record: 18828
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 23, 9:46 am, PJ <norah...@gmail.com> wrote:
> Folks,
>
> I have purchased a Sangean ATS-909 World Receiver. It is equipped with
> an internal ferrite antenna för MW and LW, and a telescope antenna for
> SW and FM. It also comes with a portable SW antenna (ANT-60), seven
> meters long. Is this external antenna generally sufficient for SW
> reception, or should I get a different antenna? If yes, is there a
> solution that doesn't cost all that much money? I have a copy of the
> 2009 World Radio TV Handbook, and they are talking about a Wellbrook
> ALA-1530+ loop antenna, and let me tell you, that one is well past my
> budget, because it costs $466... I am looking for something a lot
> cheaper... :-) If it is recommended to replace the ANT-60, that is.
>
> PJ

PJ,

So your objective is to 'buy' a relatively low cost
Antenna for Shortwave Radio Listening (SWL)
to use with your Sangean ATS-909 World Receiver.

Check-Out the / Sangean ATS-909 Users Group
-aka- RadioShack DX-398 Users Group
http://groups.yahoo.com/group/DX398/

Consider using a "Portable Wire Antenna" with your
Sangean ATS-909 AM/FM Shortwave Radio :
http://www.geocities.com/n2uhc/portablewire.html
* WebPage presented by Tom Sevart, N2UHC
http://groups.google.com/group/rec.radio.shortwave/msg/09c73c4c94625fc7
http://groups.google.com/group/rec.radio.shortwave/msg/a789c8fd6fcb38f2

First "About" the Antenna Input of the Sangean
ATS-909 AM/FM Shortwave Radio :
The Sangean ATS-909 uses a 1/8" Stereo Jack
for the External Antenna Input.
Barrel = Circuit-Board-Ground (RF Signal Ground)
Tip = Shortwave Antenna RF Signal Input
Middle-Ring = AM/MW Antenna RF Signal Input

READY-MADE - Shortwave Listener (SWL) Antenna
that fits into the 45 Foot Long Range is the Par
Electronics EF-SWL Antenna. [~$75US]
It come with the Matching Transformer and 45 Feet

of Flex-Weave Wire Antenna Element; and all you
need to do is Install your Ground Rod; Rig the Wire
Antenna Element; and Attach your Coax Cable.
http://www.parelectronics.com/swl_end.htm
http://www.grove-ent.com/ANT8.html
http://www.universal-radio.com/catalog/sw_ant/2205.html

The Par EF-SWL is a moderate size Inverted "L"
Antenna with 'low noise' characteristics : The PAR
is the simplest Antenna for most of these 'portable'
AM/FM Shortwave Radios and lends itself to the
Inverted "L" Antenna configuration of about 45 Feet
long with a 15 Foot Vertical-Up-Leg and a 30 Foot
Horizontal-Out-Arm. With an Eight Ground Rod
at the base and a Coax Cable feed-in-line.

NOTE - Your biggest problem with using a Coax
Cable with your Shortwave Antenna is coming up
with an "Adapter" or Jumper Cable from the Coax
Connector to the Radio's 1/8" Stereo Jack.

Here is another 'low cost' SWL Antenna listed on eBay
"Super Longwire All Band SW. Antenna and 9:1 Balun"
http://cgi.ebay.com/_W0QQitemZ180315835723
* Has 80 Feet of Antenna Wire with a 9:1 Matching
Transformer; plus 50 Feet of Coax Cable.
* Rig as much of the 80 Feet of Antenna Wire in the
Inverted "L" Configuration
* Add an 8-foot Ground Rod
* Run the Coax Cable to you Radio

hope this helps - iane ~ RHF
.

5655. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-24 19:49:23 UTC
From: JB <nospam@goofball.net>
Message-ID: <7nw4l.923$BC4.650@nwrddc02.gnilink.net>
Source record: 18829

"Steve Stone" <spfleck@citlink.net> wrote in message
news:gisds6dhn1@news.motzarella.org...
> I have a 5 band Hustler vertical.
>
> Available install space in my backyard is an area adjacent to my septic
> system leach field.
>
> I really don't want to place the antenna in the middle of the leach
> field and risk hitting an outflow pipe.
> If I put it just outside of the reach of the outflow pipes the ground is
> still relatively moist due to natural run off and the leach field.
>
> So will this leach field moisture enhance or inhibit the verticals
> performance due to soil conductivity.. or none of the above if the
> antenna is installed as indicated in the Hustler installation manual. (2
> radials per band using insulated copper wire, 4 foot
> metal mast pounded directly into the ground, no concrete, no wood).
>
> There is also a 4 foot high chain link fence surrounding my backyard,
> 300' x 150', one side about 25 feet from the potential install location.
> No trees or shrubs closer than 15 feet from the vertical mast.
>
> Steve
> N2UBP

You would have to test the conductivity. If you have good soil conductivity several wavelengths out from your property it will surely add to performance.

The problem with moisture close to the surface is corrosion. Get the ground and coax connections up out of the marsh by a foot and seal them.

It probably wouldn't hurt to carefully dig a post hole so you can feel around, then just fill with gravel.

A pole in the ground does little for RF performance. You can't get resistance low enough to avoid great losses. Currents are greater in the first 1/8 wavelength so there is no substitute for keeping low resistance metal there. Add at least 8 or more full 1/4 wave for the lowest frequency (and preferably 100 more). It will be more critical at the lower frequencies. The 2 per band act as a counterpoise and will help keep RF out of the shack, but do little for performance by themselves. The goal is to capacitively couple to the surface of the ground with a field of multiple radials.

I hate chain link fences. Not a big problem when new, but as they age they actually generate harmonics when you transmit near them. I have a Butternut HF9v on a metal roof. I had to pay attention to hardware on the roof and bonding to the metal carport. Traced bad TVI to corrosion on a nearby TV mast. On a normal roof I would seriously consider running many radials inside the attic, then lightly camo paint the antenna with Krylon Flat Acrylic to match the view from the neighbors and break up reflectivity. Beware though darker colors may detune because of the pigment.

5656. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-24 20:40:53 UTC
From: JB <nospam@goofball.net>
Message-ID: <p7x4l.931$BC4.333@nwrddc02.gnilink.net>
Source record: 18830
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

ALA-1530+ loop antenna, and let me tell you, that one is well past my budget, because it costs $466... I am looking for something a lot cheaper... :-) If it is recommended to replace the ANT-60, that is.

This is my favorite:
http://www.antenna.it/military/log-periodic.htm

But seriously folks, the cheapest for me was busting open a junk TV for the deflection coils. A qrp type ham antenna tuner will certainly help. Easy to build L type by using an AM tuning cap and hind wound coil on toilet paper roll. Use a piece of scrap brass for a slider. Put the whole thing on a block of wood and use clip leads to change it around for the best signal.

The earphone jack can often be used for a ground point.

5657. FS Dentron Junior Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 00:50:11 UTC
From: Charlie Hugg <k5mbx@sbcglobal.net>
Message-ID: <7NA4l.11440$c45.8447@nlpi065.nbdc.sbc.com>
Source record: 18831

For sale a Very nice Dentron Junior Monitor antenna tuner, tunes a balanced or unbalanced line will handle 300 watts 160 thru 10 meters. Has jacks on the back for coax, ladder line, or random wire. Tuner is in great shape and works fine, tunes all bands with no problems. Includes the original owner's manual. Price is $75. Pictures available. Thanks, Charlie Hugg, K5MBX

5658. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 00:53:56 UTC
From: kb9rqz@yahoo.com
Message-ID: <2dm5l45pehad76bjq8524uo1r7jadgohj0@4ax.com>
Source record: 18832
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5659. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 01:54:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <giup4dpkt1@news.albasani.net>
Source record: 18833
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

JB wrote:
> ALA-1530+ loop antenna, and let me tell you, that one is well past my
> budget, because it costs $466... I am looking for something a lot
> cheaper... :-) If it is recommended to replace the ANT-60, that is.
>
> This is my favorite:
> http://www.antenna.it/military/log-periodic.htm
>
> But seriously folks, the cheapest for me was busting open a junk TV for the
> deflection coils. A qrp type ham antenna tuner will certainly help. Easy
> to build L type by using an AM tuning cap and hind wound coil on toilet
> paper roll. Use a piece of scrap brass for a slider. Put the whole thing
> on a block of wood and use clip leads to change it around for the best
> signal.
>
> The earphone jack can often be used for a ground point.
>
>

Huh, you triggered some memories. Best antenna I ever had was when I
was very young, probably ~8-10 years old, or so. Long-wire which ran
diagonally to property lines of my parents. And, certainly, longer than
120 ft. That antenna filled the bands, as I remember!

No baluns, no matching, no knowledge of what I consider now, krist, it
was most likely a very poor match to the input on the Collins,
Hallicrafters, Zeniths, Gonsets, etc. which it was hooked to. But, ya'
know what? Those were the best times of my life. And, to be absolutely
truthful with you, I did hope to hear aliens--as well as military,
gov't, etc. Some, I accomplished--but, no aliens which I am aware of
... :-(

But, I never have had that much fun in my whole life, since those times
... the rest of life has been rather easy.

I only hope youngsters can still find the same ... :-)

Regards,
JS

5660. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 07:10:34 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <c979f695-fabe-429b-be6c-3e09b1d2a12e@r22g2000vbp.googlegroups.com>
Source record: 18834
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 24, 8:54 pm, John Smith <assemblywiz...@gmail.com> wrote:
> JB wrote:
> > ALA-1530+ loop antenna, and let me tell you, that one is well past my
> > budget, because it costs $466... I am looking for something a lot
> > cheaper... :-) If it is recommended to replace the ANT-60, that is.
>
> > This is my favorite:
> >http://www.antenna.it/military/log-periodic.htm
>
> > But seriously folks, the cheapest for me was busting open a junk TV for the
> > deflection coils. A qrp type ham antenna tuner will certainly help. Easy
> > to build L type by using an AM tuning cap and hind wound coil on toilet
> > paper roll. Use a piece of scrap brass for a slider. Put the whole thing
> > on a block of wood and use clip leads to change it around for the best
> > signal.
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> > The earphone jack can often be used for a ground point.
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> Huh, you triggered some memories. Best antenna I ever had was when I
> was very young, probably ~8-10 years old, or so. Long-wire which ran
> diagonally to property lines of my parents. And, certainly, longer than
> 120 ft. That antenna filled the bands, as I remember!
>
> No baluns, no matching, no knowledge of what I consider now, krist, it
> was most likely a very poor match to the input on the Collins,
> Hallicrafters, Zeniths, Gonsets, etc. which it was hooked to. But, ya'
> know what? Those were the best times of my life. And, to be absolutely
> truthful with you, I did hope to hear aliens--as well as military,
> gov't, etc. Some, I accomplished--but, no aliens which I am aware of
> ... :-(
>
> But, I never have had that much fun in my whole life, since those times
> ... the rest of life has been rather easy.
>
> I only hope youngsters can still find the same ... :-)
>
> Regards,
> JS- Hide quoted text -
>
> - Show quoted text -

When I was in my teensI had access to a 5 mile beverage antenna in the
form of abandoned telegraph lines. I used to plug in the AM radio in

my car to it and listen for AM BCB dx. I could terminate either end and hook up to the opposite end. In the day it was also a great way to park with my date. Yes those were great times.

Jimmie

5661. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 07:25:53 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <fxG4l.12209$YU6.2611@bignews8.bellsouth.net>
Source record: 18835

"JB" <nospam@goofball.net> wrote

> Beware though darker colors may detune because of the pigment.

Me, I avoid paint with pigment. I'm a beefment paint man, myself. <G>

My advice is to just put the damned thing up somewhere and get on the air. Any contact is better than no contact and any piece of metal will provide you with a QSO or two.

Worrying about perfection with an HF9V is rather pointless anyway. Even my old HF6V worked the world when the bands were open. When the bands are closed, nothing works.

Ed, N2ECW

5662. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 08:28:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <givg6pnoh1@news.albasani.net>
Source record: 18836
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

JIMMIE wrote:

> ...
> When I was in my teensI had access to a 5 mile beverage antenna in the
> form of abandoned telegraph lines. I used to plug in the AM radio in
> my car to it and listen for AM BCB dx. I could terminate either end
> and hook up to the opposite end. In the day it was also a great way to
> park with my date. Yes those were great times.
>
> Jimmie

Amen brother, I pity those who have never felt the thrill, the mystery,
the wonder, the indescribable feeling--while very slowly turning that
dial ... and finding "that" signal!

Warmest regards,
JS

5663. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 11:29:53 UTC
From: PJ <norahfan@gmail.com>
Message-ID: <47de813e-5414-44f0-b96a-d877eaa516d0@z27g2000prd.googlegroups.com>
Source record: 18837
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Folks,

This is the OP speaking. Thanks for all the various tips and tricks! I don't care much for the unpleasant tone between some posters in the rec.radio.shortwave group, but there are still a few glimpses of good information that I can use.

I was a very keen DX:er in the seventies, and I used a Swedish vacuum tube radio from 1952, named Nornan LV 1220, with a continous SW band from 15 meters to 120 meters. I still have it, and it still works, but I thought that I'd go a little more modern with the ATS-909... :-) Although I think that the LV 1220 is just as good when it comes to SW reception.

I remember that my dream, in the seventies, was to hear the AFAN (American Forces Antarctic Network) SW transmissions here in Sweden. They then used a 1 kW transmitter, and I had heard that someone in the south of Sweden had been able to hear them at some point. Alas, I never did. I am pretty sure that I picked up the carrier wave, but I couldn't hear anything... Bummer... In the 2009 WRTH the AFAN are only listed as an FM station, so I guess that those days are over...

PJ

5664. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 15:21:42 UTC
From: Steve Stone <spfleck@citlink.net>
Message-ID: <gj08eanfn1@news.motzarella.org>
Source record: 18838

> My advice is to just put the damned thing up somewhere and get on the air.

It has been up for about a month Ed.
I wanted to see what people suggested, since this is the first vertical
I've worked with at my QTH.

Real life results with a IC-746pro and 100 watts on 80m, 40m, and 20m
show this Hustler 5 band vertical as installed works fairly well when
contacts are at least 300 miles or further from my QTH.
Not a flame thrower, but does the job, even from my New York QTH to NWS
offices in Spokane WA and Sacramento, CA.
during SWD.

Only issue is 15m SWR is 3:1 across the entire band, which according to
directions suggest some interaction with objects in my back yard. The
IC746Pro internal tuner can barely tune 15m down to a respectable SWR. I
can tune in 15M if I switch over to a TS-430S and AT-250 external tuner
combo.

For stuff closer in I switch to a 150 foot random wire about 20 feet high.
Come spring I might rework this antenna to be a multi band dipole and
restring it from higher tree branches as long as I can maintain
clearance from the vertical.

My RACES group has the same vertical antenna mounted on the roof top of
the local EOC without radials, about 40 feet above local terrain,
attached to a TS-2000 with about 280 feet of LMR400. I believe the
mounting point is tied into building iron work. We've gotten good
results with SSB on 80 to the state EOC 120 miles away as well as
Winlink Pactor connections to places as far out as British Columbia in
western Canada. We had an option to put it on a 190 foot county comm
tower but I decided not to so we could maintain the antenna ourselves
and not have to wait for profe$$ional tower climbers to schedule repair
actions as needed.

Steve
N2UBP

5665. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 16:31:05 UTC
From: JB <nospam@goofball.net>
Message-ID: <dzO4l.1049$BC4.751@nwrddc02.gnilink.net>
Source record: 18839

> Worrying about perfection with an is rather pointless anyway. Even my
> old HF6V worked the world when the bands were open. When the bands are
> closed, nothing works.
>
> Ed, N2ECW
>
This HF9V works great on all bands but 2 meter (or is it 6). It was a bit tricky to tune even with an analyzer. Low angle incidence on 80 though. Makes it rough for in-state and local comms. Works a lot better on 40-10 than the 4BTV I used.

The 5BTV 10 meter SWR problem may be due to low impedance at the feedpoint. This is typical if the ground is really good. The fence would be too far away at 25' to make a difference in match, although it might shield some energy. Be aware that 4BTV was made in the 60's and radios then had Pi-net plate tuning and there wouldn't be a problem at all with up to 5:1 SWR

An external tuner really helps on 80 because of the Q. Internal tuners on radios really fall short. A really decent internal tuner would take up half the cabinet, so the radio wouldn't sell. Remote auto tuners are really superior. Cuts down on coax losses. Look out for operation outside of the design frequencies or traps will burn.

Merry Christmas all!

5666. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 16:54:06 UTC
From: JB <nospam@goofball.net>
Message-ID: <OUO4l.1061$BC4.100@nwrddc02.gnilink.net>
Source record: 18840
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

> > But seriously folks, the cheapest for me was busting open a junk TV for
the
> > deflection coils. A qrp type ham antenna tuner will certainly help.
Easy
> > to build L type by using an AM tuning cap and hind wound coil on toilet
> > paper roll. Use a piece of scrap brass for a slider. Put the whole
thing
> > on a block of wood and use clip leads to change it around for the best
> > signal.
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> > The earphone jack can often be used for a ground point.
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> >
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> Huh, you triggered some memories. Best antenna I ever had was when I
> was very young, probably ~8-10 years old, or so. Long-wire which ran
> diagonally to property lines of my parents. And, certainly, longer than
> 120 ft. That antenna filled the bands, as I remember!
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> No baluns, no matching, no knowledge of what I consider now, krist, it
> was most likely a very poor match to the input on the Collins,
> Hallicrafters, Zeniths, Gonsets, etc. which it was hooked to. But, ya'
> know what? Those were the best times of my life. And, to be absolutely
> truthful with you, I did hope to hear aliens--as well as military,
> gov't, etc. Some, I accomplished--but, no aliens which I am aware of
> ... :-(
>
> But, I never have had that much fun in my whole life, since those times
> ... the rest of life has been rather easy.
>
> I only hope youngsters can still find the same ... :-)
>
> Regards,
> JS

Same age-- I ran the wire into a transistor radio and would tweak the
trimmers to go above the broadcast band. Finally got a five band radio,
then upgraded to a Hallicrafters S-110. Most of my vast entertainment
center (set of shelves along my longest wall) was rescued/repaired/cobbled
from junk, and open cabinets and exposed lethal voltages were part of the
mistique. My finger was the best signal generator/voltmeter I owned. By
High School I had my Advanced and 2nd phone and was into Remote Bases, HF,
RTTY and especially liked working on stuff with multiple squelch tails.

Then came computers. I guess I never really outgrew that stuff after all.

5667. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 16:55:36 UTC
From: KC8QJP <KC8QJP@yahoo.com>
Message-ID: <4953bb12$0$585$c5fe31e7@reader.usenet4all.se>
Source record: 18841

"Steve Stone" <spfleck@citlink.net> wrote in message
news:gisds6dhn1@news.motzarella.org...
>I have a 5 band Hustler vertical.
>
> Available install space in my backyard is an area adjacent to my septic
> system leach field.
>
> I really don't want to place the antenna in the middle of the leach field
> and risk hitting an outflow pipe.
> If I put it just outside of the reach of the outflow pipes the ground is
> still relatively moist due to natural run off and the leach field.
>
> So will this leach field moisture enhance or inhibit the verticals
> performance due to soil conductivity.. or none of the above if the antenna
> is installed as indicated in the Hustler installation manual. (2 radials
> per band using insulated copper wire, 4 foot
> metal mast pounded directly into the ground, no concrete, no wood).
>
> There is also a 4 foot high chain link fence surrounding my backyard, 300'
> x 150', one side about 25 feet from the potential install location.
> No trees or shrubs closer than 15 feet from the vertical mast.
>
> Steve
> N2UBP

>

we run the superskyhook sloper on 11 meters, it SCREAMS!

http://i40.tinypic.com/2ykgg05.jpg

mary xmas

5668. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 16:58:05 UTC
From: KC8QJP <KC8QJP@yahoo.com>
Message-ID: <4953bba6$0$582$c5fe31e7@reader.usenet4all.se>
Source record: 18842

"Dave" <noone@nowhere.com> wrote in message
news:NGc3l.199$Es4.43@nwrddc01.gnilink.net...
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:1de21ee7-161a-44d2-98be-0c87f24b6fdf@z1g2000yqn.googlegroups.com...
>> Since we are at the low sun cycle I shoose
>> 1" hexigon poultry wire for the mash on my 3 metre dish
>> At what frequency will there be a noticable effect on aperture
>> starting with top band?
>> Many thanks
>> Art KB9MZ...,XG
>
> where did art go??? i need a good laugh!
>
art deco?

mary xmas

5669. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 17:00:28 UTC
From: KC8QJP <KC8QJP@yahoo.com>
Message-ID: <4953bc35$0$585$c5fe31e7@reader.usenet4all.se>
Source record: 18843
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:cua2l4553a7tvsfs3nb0v9mi1pctc898pl@4ax.com...
> On Tue, 23 Dec 2008 09:46:07 -0800 (PST), PJ <norahfan@gmail.com>
> wrote:
>
>>Folks,
>>
>>I have purchased a Sangean ATS-909 World Receiver. It is equipped with
>>an internal ferrite antenna f�r MW and LW, and a telescope antenna for
>>SW and FM. It also comes with a portable SW antenna (ANT-60), seven
>>meters long. Is this external antenna generally sufficient for SW
>>reception, or should I get a different antenna? If yes, is there a
>>solution that doesn't cost all that much money? I have a copy of the
>>2009 World Radio TV Handbook, and they are talking about a Wellbrook
>>ALA-1530+ loop antenna, and let me tell you, that one is well past my
>>budget, because it costs $466... I am looking for something a lot
>>cheaper... :-) If it is recommended to replace the ANT-60, that is.
>>
>>PJ
>
> Hi PJ,
>
> With your location in Sweden, a long wire should pick up a lot of
> stations unless you are buried deep in a valley. That long wire can
> be as simple as 10 meters of wire with a clip to attach it to the whip
> of the Sangean. When I was in Africa last year, that was enough to
> fill my cheap SW set with signals from everywhere in Africa up into
> Europe. Toss the wire out a window up into a tree. It is at least a
> cheap, first attempt to see if you need anything more than that.
>
> 73's
> Richard Clark, KB7QHC
>
>
try the superskyhook sloper it works wonders over hear!
http://i40.tinypic.com/2ykgg05.jpg

mary xmas

5670. Re: FS Dentron Junior Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 17:03:02 UTC
From: KC8QJP <KC8QJP@yahoo.com>
Message-ID: <4953bccf$0$582$c5fe31e7@reader.usenet4all.se>
Source record: 18844

"Charlie Hugg" <k5mbx@sbcglobal.net> wrote in message
news:7NA4l.11440$c45.8447@nlpi065.nbdc.sbc.com...
> For sale a Very nice Dentron Junior Monitor antenna tuner, tunes a
> balanced or unbalanced line will handle 300 watts 160 thru 10 meters. Has
> jacks on the back for coax, ladder line, or random wire. Tuner is in great
> shape and works fine, tunes all bands with no problems. Includes the
> original owner's manual. Price is $75. Pictures available. Thanks, Charlie
> Hugg, K5MBX
>
we used too load up the rain gutters on the superbowl with one of
those..GRATE TUNER!

mary xmas

5671. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 17:24:28 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <41b68d0a-f719-4fe7-9249-26060fd03614@q30g2000prq.googlegroups.com>
Source record: 18845

On Dec 24, 2:49 pm, "JB" <nos...@goofball.net> wrote:
> "Steve Stone" <spfl...@citlink.net> wrote in message
>
> news:gisds6dhn1@news.motzarella.org...
>
>
>
>
>
> > I have a 5 band Hustler vertical.
>
> > Available install space in my backyard is an area adjacent to my septic
> > system leach field.
>
> > I really don't want to place the antenna in the middle of the leach
> > field and risk hitting an outflow pipe.
> > If I put it just outside of the reach of the outflow pipes the ground is
> > still relatively moist due to natural run off and the leach field.
>
> > So will this leach field moisture enhance or inhibit the verticals
> > performance due to soil conductivity.. or none of the above if the
> > antenna is installed as indicated in the Hustler installation manual. (2
> > radials per band using insulated copper wire, 4 foot
> > metal mast pounded directly into the ground, no concrete, no wood).
>
> > There is also a 4 foot high chain link fence surrounding my backyard,
> > 300' x 150', one side about 25 feet from the potential install location.
> > No trees or shrubs closer than 15 feet from the vertical mast.
>
> > Steve
> > N2UBP
>
> You would have to test the conductivity. If you have good soil conductivity
> several wavelengths out from your property it will surely add to
> performance.
>
> The problem with moisture close to the surface is corrosion. Get the ground
> and coax connections up out of the marsh by a foot and seal them.
>
> It probably wouldn't hurt to carefully dig a post hole so you can feel
> around, then just fill with gravel.
>
> A pole in the ground does little for RF performance. You can't get
> resistance low enough to avoid great losses. Currents are greater in the

> first 1/8 wavelength so there is no substitute for keeping low resistance
> metal there. Add at least 8 or more full 1/4 wave for the lowest frequency
> (and preferably 100 more). It will be more critical at the lower
> frequencies. The 2 per band act as a counterpoise and will help keep RF out
> of the shack, but do little for performance by themselves. The goal is to
> capacitively couple to the surface of the ground with a field of multiple
> radials.
>
> I hate chain link fences. Not a big problem when new, but as they age they
> actually generate harmonics when you transmit near them. I have a Butternut
> HF9v on a metal roof. I had to pay attention to hardware on the roof and
> bonding to the metal carport. Traced bad TVI to corrosion on a nearby TV
> mast. On a normal roof I would seriously consider running many radials
> inside the attic, then lightly camo paint the antenna with Krylon Flat
> Acrylic to match the view from the neighbors and break up reflectivity.
> Beware though darker colors may detune because of the pigment.- Hide quoted text -
>
> - Show quoted text -

My neighbor used to have a chain link fence that generated electrical
noise when the wind blew. I didnt realize what was making all the pops
until the house sold and the new owner put up a wooden fence.

Jimmie

5672. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 17:45:09 UTC
From: plimmer@telkomsa.net
Message-ID: <2ef34440-1446-4457-a4c9-13e9adde807a@v5g2000prm.googlegroups.com>
Source record: 18846
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 25, 1:29 pm, PJ <norah...@gmail.com> wrote:
> Folks,
>
> This is the OP speaking. Thanks for all the various tips and tricks! I
> don't care much for the unpleasant tone between some posters in the
> rec.radio.shortwave group, but there are still a few glimpses of good
> information that I can use.
>
> I was a very keen DX:er in the seventies, and I used a Swedish vacuum
> tube radio from 1952, named Nornan LV 1220, with a continous SW band
> from 15 meters to 120 meters. I still have it, and it still works, but
> I thought that I'd go a little more modern with the ATS-909... :-)
> Although I think that the LV 1220 is just as good when it comes to SW
> reception.
>
> I remember that my dream, in the seventies, was to hear the AFAN
> (American Forces Antarctic Network) SW transmissions here in Sweden.
> They then used a 1 kW transmitter, and I had heard that someone in the
> south of Sweden had been able to hear them at some point. Alas, I
> never did. I am pretty sure that I picked up the carrier wave, but I
> couldn't hear anything... Bummer... In the 2009 WRTH the AFAN are only
> listed as an FM station, so I guess that those days are over...
>
> PJ

PJ you can't get Antartica anymore as Ace says, but there are lots
more challenging AFN stations to seek out and have fun with. Sadly the
WRTH does not list them conveniently but you can see the full
shortwave spread at:
http://myafn.dodmedia.osd.mil/ShortWave.aspx

You have had lots of blah blah on antenna's, but for your 909 I
wouldn't use anything other than the ANT-60 you have, otherwise you
will overload it and possibly blow the front end.

If you like AM BCB MW DX you might find one of the cheap tuneable
loops provided by the big dealers such as Martin Lynch or Universal of
some help.

Have fun and good listening

John Plimmer, Montagu, Western Cape Province, South Africa
South 33 d 47 m 32 s, East 20 d 07 m 32 s
Icom IC-7700, Icom IC-756 PRO III with MW mods
ERGO software

Drake SW8. Sangean 803A
Sony 7600D, GE SRIII, Redsun RP2100
Antenna's RF Systems DX 1 Pro Mk II, Datong AD-270
Kiwa MW Loop.
http://www.dxing.info/about/dxers/plimmer.dx

5673. Re: moparholic is a limpwristed kween

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-25 23:37:25 UTC
From: mopeyzakween@yahoo.com
Message-ID: <d530cf49-af3d-444f-ad64-3bfb145e87db@z28g2000prd.googlegroups.com>
Source record: 18847
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Dec 24, 7:21 pm, mopeyzakw...@yahoo.com wrote:
> http://nimbusters.org/hams/read.php?board=1&id=29306

5674. w4nti is totlay wacked out

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-26 01:55:58 UTC
From: an_old_friend <kb9rqz@gmail.com>
Message-ID: <2723a3f8-6c7d-4774-ad4b-0c59db220074@s16g2000vbp.googlegroups.com>
Source record: 18848
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Dec 25, 6:37 pm, mopeyzakw...@yahoo.com wrote:
> On Dec 24, 7:21 pm, mopeyzakw...@yahoo.com wrote:

poor guy talking to yourself get a life

5675. Prada shoes (paypal payment)www.king-trade.cn)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-26 03:30:05 UTC
From: salewholeta@163.com
Message-ID: <11bab563-f375-4c8b-83cb-aded19bcc3c5@g1g2000pra.googlegroups.com>
Source record: 18849
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,alt.astronomy

Footwear (paypal payment)www.king-trade.cn)
Paul Smith shoes
Jordan shoes
Bape shoes
Chanel shoes (paypal payment)www.king-trade.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)www.king-trade.cn)
Gucci shoes `
Hogan shoes (paypal payment)www.king-trade.cn)
Lv shoes
Prada shoes (paypal payment)www.king-trade.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)www.king-trade.cn)
Ice bream shoes
Sebago shoes (paypal payment)www.king-trade.cn)
Lacoste shoes
Air force one shoes (paypal payment)www.king-trade.cn)
TODS shoes
AF shoes

Footwear (paypal payment)www.king-trade.cn)
Paul Smith shoes
Jordan shoes
Bape shoes
Chanel shoes (paypal payment)www.king-trade.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)www.king-trade.cn)
Gucci shoes
Hogan shoes (paypal payment)www.king-trade.cn)
Lv shoes
Prada shoes (paypal payment)www.king-trade.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)www.king-trade.cn)
Ice bream shoes
Sebago shoes (paypal payment)www.king-trade.cn)

Lacoste shoes
Air force one shoes (paypal payment)www.king-trade.cn)
TODS shoes
AF shoes

Footwear (paypal payment)www.king-trade.cn)
Paul Smith shoes
Jordan shoes
Bape shoes
Chanel shoes (paypal payment)www.king-trade.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)www.king-trade.cn)
Gucci shoes
Hogan shoes (paypal payment)www.king-trade.cn)
Lv shoes
Prada shoes (paypal payment)www.king-trade.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)www.king-trade.cn)
Ice bream shoes
Sebago shoes (paypal payment)www.king-trade.cn)
Lacoste shoes
Air force one shoes (paypal payment)www.king-trade.cn)
TODS shoes
AF shoes

5676. Chapwoman still at work!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-26 22:25:15 UTC
From: mopeyzakween@yahoo.com
Message-ID: <94fed151-f80e-4907-85c3-48b3dc3610da@o4g2000pra.googlegroups.com>
Source record: 18850
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.misc

http://nimbusters.org/hams/read.php?board=1&id=29668

5677. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 02:41:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <Bs6dneluBNVwCMjUnZ2dnUVZ_uGdnZ2d@posted.easystreetonline>
Source record: 18901
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

I can add a little information that might be helpful.

When considering a receiving antenna, the single thing you need to be concerned about is signal to noise ratio. Unless your antenna is exceptionally poor and/or your receiver exceptionally noisy, making what you receive louder is just a matter of turning up the volume, or adding an audio amplifier if it's not loud enough. But it won't help you hear a station, because it and the noise will get louder in the same proportion.

Quite a bit of what you'll read about antennas deals with improving antenna efficiency. That's because it's important when the antenna is used for transmitting. But when you use it for HF receiving, efficiency doesn't matter unless it gets to be bad enough that your receiver's noise becomes greater than the atmospheric noise it's receiving. A quick test for this condition is to disconnect the antenna. If the noise decreases, it means that atmospheric noise is greater than receiver noise -- the usual case -- and efficiency improvements won't help any. They'll just increase both the signal and noise by the same amount, which won't help you a bit in hearing any signals.

To improve reception, you have to improve the signal to noise ratio. If there's noise coming from a local source, for example a light dimmer or an arcing power line, you can often reduce the noise by using a horizontal antenna, putting the antenna away from the house and power line conductors, and making sure the feedline is decoupled so it isn't part of the antenna. If noise is mostly coming from a single direction, either local or distant, an antenna with a sharp null such as a small rotatable loop often helps. And, other rotatable antennas with a directional pattern such as Yagis and log periodics, will help if the signal and at least some of the noise are coming from different directions. If a fixed antenna is on the order of a half wave or longer, you might get lucky and have a null pointed at a noise source. The null will usually change direction with frequency, though, so it'll likely only do the trick over a narrow range of frequencies. This can actually be a bad thing, because when somebody gets lucky like this, he'll often tout the antenna as being nearly miraculous in its performance, but no one else will be able to duplicate the results.

Enjoy your shortwave listening. It's how I and probably most amateurs got started in this fascinating hobby.

Roy Lewallen, W7EL

5678. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 02:56:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj45h8$do7$1@news.albasani.net>
Source record: 18902
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Roy Lewallen wrote:
> I can add a little information that might be helpful.
>
> When considering a receiving antenna, the single thing you need to be
> concerned about is signal to noise ratio. Unless your antenna is
> exceptionally poor and/or your receiver exceptionally noisy, making what
> you receive louder is just a matter of turning up the volume, or adding
> an audio amplifier if it's not loud enough. But it won't help you hear a
> station, because it and the noise will get louder in the same proportion.
> ...
> Roy Lewallen, W7EL
>

I differ; although, I can understand why Roy would reply in such a simplistic manner ...

If the antenna is resonate, matched to its' load, and is not using lossy construction practices--a very magical thing occurs. And, in such a situation, it appears as if a wire runs directly from the transmitter to your antenna. Nicola Tesla first documents this, then others ...

However, most give up before they obtain the knowledge and construction practices which produce such antennas--and, indeed, if you wish broadband antennas, no matter how you construct them, they will only produce this performance on a narrow band of frequencies, or perhaps, just a single one ... but, they can be constructed to preform, reasonably well, over a broadband of frequencies or even bands.

If you have immense focus, devotion to the construction of antennas, a reasonably astute mind, and the necessary skills, a willingness to construct until you have that "revelation"--the realization of all this awaits you. :-)

Warm regards,
JS

5679. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 03:12:14 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <06301c07-1bc5-4717-9c6e-591f9e34acfd@g39g2000pri.googlegroups.com>
Source record: 18903
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 26, 12:56 pm, Telamon
<telamon_spamshi...@pacbell.net.is.invalid> wrote:
> In article
> <47de813e-5414-44f0-b96a-d877eaa51...@z27g2000prd.googlegroups.com>,
>
> PJ <norah...@gmail.com> wrote:
> > Folks,
>
> > This is the OP speaking. Thanks for all the various tips and tricks! I
> > don't care much for the unpleasant tone between some posters in the
> > rec.radio.shortwave group, but there are still a few glimpses of good
> > information that I can use.
>
> < SNIP >
>
> < edit news group header >
>
> There are many good people interested in the hobby that post here with
> information. Sometimes you just have to knock the Trolling idiots over
> the head with a clue stick.
>
> Please don't cross post to rec.radio.amateur.antenna. Normally it would
> be the right thing to do but that amateur group has a real collection of
> idiots in it and this news group already has its share of that type.
>
> But if you insist on cross posting there I can guarantee you there will
> be more of what you don't like to see here.
>
> --
> Telamon
> Ventura, California

PJ - Telamon Is Right :o)

i am a trolling idiot and i approve of his post ;-} ~ RHF
{sa-prez : trolling idiots-r-us}
.
IMHO the Rec.Radio.Amateur.Antenna people are
good people -but- They 'focus' on two disciplines :
Power Output Handling -and- Ability To Hear
[Cause They Both Transmit and Listen]

-while- The Shortwave Radio Listeners (SWL) is also
'focus' on two disciplines : Improved Signal plus Noise

Reduction -aka- Better Signal-to-Noise (S/N) Ratio
[Cause They "Only' Listen and Do Not Transmit]

Read these Posts here on Rec.Radio.Shortwave about
the Low Noise Shortwave Radio Antenna Concepts that
were 'popularized; by John Doty for Shortwave Radio
Listeners (SWLs) - about 74 Posts . . .
http://groups.google.com/group/rec.radio.shortwave/search?q=Low+Noise+Concepts+John+Doty+R
HF&start=0&scoring=d&
.
Here are the Three Key Posts :
.
1 - SWL Longwire -by- John Doty
[Shortwave Listener (SWL) Longwire Antenna]
http://www.google.com/group/rec.radio.shortwave/msg/9e3dd73e36381d46
http://groups.google.com/group/rec.radio.shortwave/msg/9e3dd73e36381d46
http://web.archive.org/web/20031204024006/http://anarc.org/naswa/badx/antennas/SWL_longwir
e.html
* Actually, a fixed matching transformer can dramatically
reduce the wild swings in antenna efficiency that a coax
fed wire antenna exhibits.
.
2 - Low Noise Antenna Connection -by- John Doty
http://www.google.com/group/rec.radio.shortwave/msg/1cde8bb62764b23a
http://groups.google.com/group/rec.radio.shortwave/msg/1cde8bb62764b23a
http://web.archive.org/web/20030701222251/anarc.org/naswa/badx/antennas/low-noise_antenna.
html
* The difference between a mediocre antenna system and
a great antenna system isn't the antenna itself: it's
the way you feed signals from the antenna to the receiver.
* The real trick with a shortwave receiving antenna system
is to keep your receiver from picking up noise from all
the electrical and electronic gadgets you and your
neighbors have.
.
3 - Grounding Is Key To Good Reception -by- John Doty
http://www.google.com/group/rec.radio.shortwave/msg/5fd8fe1179a5c6c8
http://groups.google.com/group/rec.radio.shortwave/msg/5fd8fe1179a5c6c8
http://web.archive.org/web/20030605064509/anarc.org/naswa/badx/antennas/grounding.html
* With grounds the most common experience is
"the more the merrier".
* The method I use is to ground the cable shield at
two ground stakes and bury the cable in between.
.
hope this helps - iane ~ RHF {pomkia}
.
Are You Interested in building a better Shortwave Listening
(SWL) Antenna ? {SWL Group} = http://tinyurl.com/ogvcf
GoTo = http://groups.yahoo.com/group/Shortwave-SWL-Antenna/
.

RHF's Standard "Shortwave Radio Listener (SWL) Antennas Group"
Reference Message Signature-Line = http://tinyurl.com/25zbrg
http://groups.google.com/group/rec.radio.shortwave/msg/411dac3b4a1798e0
.
* Remember 55.5% of Shortwave Radio Listening (SWL)
is the Shortwave Antenna = http://tinyurl.com/ogvcf
.
RHF's Radio Shack in Twain Harte, California -USA-
SHACK INFO = http://tinyurl.com/2skmxm
Shortwave Radio / Receiver and SWL Antenna Info
.
.

5680. Re: HYgain 18-AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 03:14:54 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <NOKdneFiea0sAMjUnZ2dnUVZ_r_inZ2d@bright.net>
Source record: 18904

Dear Owen: I just realized that I sent you a message but it will not
arrive for you do not use a real E-mail address.

73, Mac N8TT

--
J. McLaughlin; Michigan, USA
Home: JCM@power-net.net
"Owen Duffy" <none@no.where> wrote in message
news:Xns9B4771C164FBCnonenowhere@61.9.191.5...
> "J. Mc Laughlin" <jcm@power-net.net> wrote in
> news:K4adndoc0qSUZZXUnZ2dnUVZ_j6dnZ2d@bright.net:
>
>> Dear Owen:
>>
>> Experience here in the Upper Midwest is that ground dwelling animals
>> will chew PVC. but not PE. Had to replace a vast amount of PVC
>> covered cable, but PE covered coax and cable was untouched.
>
> Hi Mac,
>
> I know that some animals (eg rats) will eat soft PVC. That motivates cable
> sheaths impregnated with arsenic... which is worse? We don't have some of
> the critters that you have, thankfully.
>
> The other commonly used plastic I didn't mention was polypropylene, and I
> think the trap covers may be polyprop... .
>
> All in all, vermin resistance components, and ready availability are
> important factors in the life of antennas etc... but we are tame buyers
> who
> generally don't consider that until we need to repair the things.
>
> Owen

5681. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 03:17:19 UTC
From: Sum Ting Wong <sumtingwong@privacy.net>
Message-ID: <3a7bl4d5bgotgvfaf0cs95nrudqjngcg38@4ax.com>
Source record: 18905

On Tue, 23 Dec 2008 09:46:07 -0800 (PST), PJ <norahfan@gmail.com>
wrote:

>Folks,
>
>I have purchased a Sangean ATS-909 World Receiver. It is equipped with
>an internal ferrite antenna fï¿½r MW and LW, and a telescope antenna for
>SW and FM. It also comes with a portable SW antenna (ANT-60), seven
>meters long. Is this external antenna generally sufficient for SW
>reception, or should I get a different antenna? If yes, is there a
>solution that doesn't cost all that much money? I have a copy of the
>2009 World Radio TV Handbook, and they are talking about a Wellbrook
>ALA-1530+ loop antenna, and let me tell you, that one is well past my
>budget, because it costs $466... I am looking for something a lot
>cheaper... :-) If it is recommended to replace the ANT-60, that is.
>
>PJ

Google "traveling wave" or "Beverage antenna" and read up. They can be
built cheaply from wire and are very effective if you have room for
one. If you have an interest in receiving stations from a particular
direction then lay the antenna out in that direction. A terminated
traveling wave antenna is directional and if it's unterminated then
it's bidirectional.

Good luck with your project.

S.T.W.

5682. Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 03:33:15 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <f9d1a9d9-f954-42ef-90f9-a29979cb13d2@r36g2000prf.googlegroups.com>
Source record: 18906
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 26, 6:56 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Roy Lewallen wrote:
> > I can add a little information that might be helpful.
>
> > When considering a receiving antenna, the single thing you need to be
> > concerned about is signal to noise ratio. Unless your antenna is
> > exceptionally poor and/or your receiver exceptionally noisy, making what
> > you receive louder is just a matter of turning up the volume, or adding
> > an audio amplifier if it's not loud enough. But it won't help you hear a
> > station, because it and the noise will get louder in the same proportion.
> > ...
> > Roy Lewallen, W7EL
>
> I differ; although, I can understand why Roy would reply in such a
> simplistic manner ...
>
> If the antenna is resonate, matched to its' load, and is not using lossy
> construction practices--a very magical thing occurs. And, in such a
> situation, it appears as if a wire runs directly from the transmitter to
> your antenna. Nicola Tesla first documents this, then others ...
>
> However, most give up before they obtain the knowledge and construction
> practices which produce such antennas--and, indeed, if you wish
> broadband antennas, no matter how you construct them, they will only
> produce this performance on a narrow band of frequencies, or perhaps,
> just a single one ... but, they can be constructed to preform,
> reasonably well, over a broadband of frequencies or even bands.
>
> If you have immense focus, devotion to the construction of antennas, a
> reasonably astute mind, and the necessary skills, a willingness to
> construct until you have that "revelation"--the realization of all this
> awaits you. :-)
>
> Warm regards,
> JS

JS - You are replying like and Amateur Radio Operator
[HAM] and are most likely You Are Technically Correct
-wrt- Every item that you have pointed out is very valid
for Amateur Radio [HAM] Operators.

RL - In this instance Knows His Reader and is replying
as a Shortwave Radio Listener (SWL) to the Original

Question : Which was posted by a SWL for Tips on
what would be {how to make} a better SWL 'type' of
Antenna.
-wrt- The SWLer "RL" is Practically Correct.

JS - You speak of Antenna 'resonance' while the SWL
Antenna is by-design a board-banded "Random" Wire
Antenna : Which is often used un-tuned across the
Shortwave Radio Bands from 3~30 Mhz.
Result : On-average-better-Signal-Levels
-and- On-average-lower-Noise-Levels

RL - Is very correct that for the Shortwave Radio Listener
(SWL) : Their Antenna's should give them improved 'better'
Signal-to-Noise : So That They Can Hear More [.]

two similar hobbies and two different objectives - iane ~ RHF
.
.

5683. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 03:34:01 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Kmh5l.3000$Io6.1249@newsfe23.iad>
Source record: 18907

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:41b68d0a-f719-4fe7-9249-26060fd03614@q30g2000prq.googlegroups.com...

< snip >

> My neighbor used to have a chain link fence that generated electrical
> noise when the wind blew. I didnt realize what was making all the pops
> until the house sold and the new owner put up a wooden fence.

Oh, yeah!

This past summer I had occasion to haul some bundled antenna sections on the roof rack of my van. I was astonished at the BCB intermod that was generated with every vibration. I think the principal frequency intermoding was a broadcast station about two miles from the start of my trip, since the intermod got less and less as I got further away.

I'm familiar with intermods near transmit antennas, having dealt with EMI on USN ships for many years, but two miles?!?!?

5684. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 04:30:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj4b0u$j01$1@news.albasani.net>
Source record: 18908
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

> ...
> JS - You are replying like and Amateur Radio Operator
> [HAM] and are most likely You Are Technically Correct
> -wrt- Every item that you have pointed out is very valid
> for Amateur Radio [HAM] Operators.
>
> RL - In this instance Knows His Reader and is replying
> as a Shortwave Radio Listener (SWL) to the Original
> Question : Which was posted by a SWL for Tips on
> what would be {how to make} a better SWL 'type' of
> Antenna.
> -wrt- The SWLer "RL" is Practically Correct.
>
> JS - You speak of Antenna 'resonance' while the SWL
> Antenna is by-design a board-banded "Random" Wire
> Antenna : Which is often used un-tuned across the
> Shortwave Radio Bands from 3~30 Mhz.
> Result : On-average-better-Signal-Levels
> -and- On-average-lower-Noise-Levels
>
> RL - Is very correct that for the Shortwave Radio Listener
> (SWL) : Their Antenna's should give them improved 'better'
> Signal-to-Noise : So That They Can Hear More [.]
>
> two similar hobbies and two different objectives - iane ~ RHF
> .
> .

Again, in the narrow context which you describe this, you are correct. But, there is no reason to NOT have an antenna of resonate length. A simple motor and a spring loaded real to take up slack will allow you to construct an antenna of variable length and multi-band capability. Indeed, only ones knowledge, "macguiverisms", and patience limits one ... as opposed to purchasing a product which is solely, usually, based on construction costs alone.

I think the post, of mine, which you are responding to, with your above response, implied all this--I honestly meant to imply such ... or, in other words, you can only get out what you put in with your efforts, time, materials, knowledge, techniques, etc.; Or, i.e., the more thought, design and good construction practices used, the better the

results.

While some of us may search for the most simple constructions, others will go towards the most elaborate constructions--if anyone is like myself, complexity grew with understanding, knowledge, patience, etc.

And, as I implied, Roy gave an answer which would have sufficed for, perhaps, the majority of SWL-ers... I did not fault it (his response), rather I expanded upon it ... no harm meant here, nor did I intend to "slight" anyone! HONEST!

Regards,
JS

5685. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 05:22:25 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a6bcdd62-5920-470e-8373-5140379b37f4@k36g2000pri.googlegroups.com>
Source record: 18909

On Dec 25, 10:58 am, "KC8QJP" <KC8...@yahoo.com> wrote:
> "Dave" <no...@nowhere.com> wrote in message
>
> news:NGc3l.199$Es4.43@nwrddc01.gnilink.net...
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >news:1de21ee7-161a-44d2-98be-0c87f24b6fdf@z1g2000yqn.googlegroups.com...
> >> Since we are at the low sun cycle I shoose
> >> 1" hexigon poultry wire for the mash on my 3 metre dish
> >> At what frequency will there be a noticable effect on aperture
> >> starting with top band?
> >> Many thanks
> >> Art KB9MZ...,XG
>
> > where did art go??? i need a good laugh!
>
> art deco?
>
> mary xmas

Update
I have made the dish using 1 inch poultry fencing.
The outline of the dish encloses the backfire antenna i.e. the
antenna finishes at the same datum line
as the periphery of the dish. The reason for this is that I am trying
to obtain a zero plus take off angle or
something less than normal with respect to frequency and height using
a planar design
Placed dish on ground with beam pointing upwards and did a swr graph
from 2 to 20 mhz
Repeated above except dish placed at right angles to earth.
Swr for 14 meg hz rose from 2:1 to 3: 1 but both arrangements followed
the same oscillation of SWR.
Difference probably due to variation in dish efficiency.i.e the first
set up was augmented by the ground surface.,
Haven't added the band frequency selection points as yet.
With the graphed impedance curves being similar I am anticipating a
TOA of around
5 degrees when antenna is raised to around 30 feet
Antenna polarisation is horizontal, verticle and cw cwith respect to
gain polarization all being equal in gain, with total gain
being close to 2.5 db in excess of the other polarizations.
As I stated ,the idea is to lower the TOA from that of a normal planar
design.

Comments welcome as well as thrown rocks and sarcasm. I have modeled this type of antenna pointing straight up
but not in a horizontal plane which is why I was able to sugest gain comparables.
Regards
Art

5686. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 05:25:21 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <f641a77a-860a-4343-a6a0-7e009fc8a4c1@o40g2000prn.googlegroups.com>
Source record: 18910
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 26, 8:30 pm, John Smith <assemblywiz...@gmail.com> wrote:
> RHF wrote:
> > ...
> > JS - You are replying like and Amateur Radio Operator
> > [HAM] and are most likely You Are Technically Correct
> > -wrt- Every item that you have pointed out is very valid
> > for Amateur Radio [HAM] Operators.
>
> > RL - In this instance Knows His Reader and is replying
> > as a Shortwave Radio Listener (SWL) to the Original
> > Question : Which was posted by a SWL for Tips on
> > what would be {how to make} a better SWL 'type' of
> > Antenna.
> > -wrt- The SWLer "RL" is Practically Correct.
>
> > JS - You speak of Antenna 'resonance' while the SWL
> > Antenna is by-design a board-banded "Random" Wire
> > Antenna : Which is often used un-tuned across the
> > Shortwave Radio Bands from 3~30 Mhz.
> > Result : On-average-better-Signal-Levels
> > -and- On-average-lower-Noise-Levels
>
> > RL - Is very correct that for the Shortwave Radio Listener
> > (SWL) : Their Antenna's should give them improved 'better'
> > Signal-to-Noise : So That They Can Hear More [.]
>
> > two similar hobbies and two different objectives - iane ~ RHF
> > .
> > .
>
> Again, in the narrow context which you describe this, you are correct.
> But, there is no reason to NOT have an antenna of resonate length. A
> simple motor and a spring loaded real to take up slack will allow you to
> construct an antenna of variable length and multi-band capability.
> Indeed, only ones knowledge, "macguiverisms", and patience limits one
> ... as opposed to purchasing a product which is solely, usually, based
> on construction costs alone.
>
> I think the post, of mine, which you are responding to, with your above
> response, implied all this--I honestly meant to imply such ... or, in
> other words, you can only get out what you put in with your efforts,
> time, materials, knowledge, techniques, etc.; Or, i.e., the more

> thought, design and good construction practices used, the better the
> results.
>
> While some of us may search for the most simple constructions, others
> will go towards the most elaborate constructions--if anyone is like
> myself, complexity grew with understanding, knowledge, patience, etc.
>
> And, as I implied, Roy gave an answer which would have sufficed for,
> perhaps, the majority of SWL-ers... I did not fault it (his response),
> rather I expanded upon it ... no harm meant here, nor did I intend to
> "slight" anyone! HONEST!
>
> Regards,
> JS

JS,

Alas i am but a simple shortwave LISTENER

I simply LISTEN and 'enjoy' what I LISTEN too

Beyond that; when i LISTEN everything else
is so much technical 'noise'

JS - Enjoy "The Craft" of BEING an Amateur "Ham"
Radio Operator -and- I am sure that you are a lot
more . . . and rightly well deserved too.

js - but alas i remain a simple shortwave listener
who simply enjoys listening to the radio; cause
practically speaking; that is what i do
- - - respectfully ~ RHF
.

5687. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 06:29:17 UTC
From: BCBlazysusan <gkotr@earthlink.net>
Message-ID: <d9959beb-408a-4303-85f7-75f53c417525@r34g2000vbp.googlegroups.com>
Source record: 18911
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 23, 8:06 pm, SC Dxing <scdx...@gmail.com> wrote:
> PJ,
>
> I've discovered there is no best antenna for everyone for shortwave
> listening. Ignore the trolls here, start off with your wire antenna,
> then experiment if you wish. I've tried a few things over the past few
> weeks and for me, just running a wire along the ground about 60 feet
> works best for me. I guess the only certain thing is that an antenna
> that runs outside will work better than an inside antenna. If you
> can't run one outside, try to put it by a window or up high in your
> house/apartment. Experimenting is part of the fun, just google around,
> play around, and have hours of fun on your new radio. I only in the
> last few weeks have rediscovered listening to SW radio.
>
> Happy listening.

SC,
Did you inductively couple the antenna to your whip? If you didn't you
will notice a marked improvement if you do it that way. Just in case
you don't know (I think I posted this already) grab you some wire (I
use 11 or 12 gauge) and tightly wrap five-seven turns around your whip
and cut the rest off. Pull about an inch of the plastic off and clip
onto that. At one time I was doing the "exact" thing you are except I
think my stretch of wire was 70ft. But I picking up a lot rf here and
there, pretty high noise floor on some bands. When I coupled it that
way the noise floor dropped to nothing.

5688. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 07:40:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj4m4tujf1@news.albasani.net>
Source record: 18912
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

> ...
> js - but alas i remain a simple shortwave listener
> who simply enjoys listening to the radio; cause
> practically speaking; that is what i do
> - - - respectfully ~ RHF
> .

Quit peeing on my leg ...

Brother, I enjoy having a good time, a good drink and the company of a good woman as well as anyone; And, furthermore, I am here because I enjoy a good antenna as well as anyone else.

I am here because some know much more than me, can explain it in a manner which I can absorb (Cecil is but one example), and I expect there is much more for us ALL to learn, indeed ...

I ain't here to lecture you ... I ain't here to be a ham ... I ain't here to play the game of "one-up-man-ship"; I am here to catch what I missed "the-first-time-around"--end-of-story.

But now, a good argument, a good debate, a good "theory-session" ... count me in!

Sit back, and pick on the next guy in line ... ;-)

Regards,
JS

5689. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 07:45:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj4mehujf2@news.albasani.net>
Source record: 18913
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

>> ...
> - - - respectfully ~ RHF
> .

But, can I ask you one question?; You do pull on your pants one leg at
a time, right? <wink>

I mean, only politicians, as far as I know, claim different! LOL

Regards,
JS

5690. Prada shoes (paypal payment)www.king-trade.cn)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 08:10:00 UTC
From: fffffffffff <wholesaleyou@163.com>
Message-ID: <eccbe9b4-0405-41e4-8646-7c22c22ce341@w39g2000prb.googlegroups.com>
Source record: 18914
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Footwear (paypal payment)www.king-trade.cn)
Paul Smith shoes
Jordan shoes
Bape shoes
Chanel shoes (paypal payment)www.king-trade.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)www.king-trade.cn)
Gucci shoes `
Hogan shoes (paypal payment)www.king-trade.cn)
Lv shoes
Prada shoes (paypal payment)www.king-trade.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)www.king-trade.cn)
Ice bream shoes
Sebago shoes (paypal payment)www.king-trade.cn)
Lacoste shoes
Air force one shoes (paypal payment)www.king-trade.cn)
TODS shoes
AF shoes

Footwear (paypal payment)www.king-trade.cn)
Paul Smith shoes
Jordan shoes
Bape shoes
Chanel shoes (paypal payment)www.king-trade.cn)
D&G shoes
Dior shoes
ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)www.king-trade.cn)
Gucci shoes
Hogan shoes (paypal payment)www.king-trade.cn)
Lv shoes
Prada shoes (paypal payment)www.king-trade.cn)
Timberland shoes
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Lacoste shoes
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Bape shoes
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D&G shoes
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ED hardy shoes
Evisu shoes
Fendi shoes (paypal payment)www.king-trade.cn)
Gucci shoes
Hogan shoes (paypal payment)www.king-trade.cn)
Lv shoes
Prada shoes (paypal payment)www.king-trade.cn)
Timberland shoes
Tous shoes
Ugg shoes (paypal payment)www.king-trade.cn)
Ice bream shoes
Sebago shoes (paypal payment)www.king-trade.cn)
Lacoste shoes
Air force one shoes (paypal payment)www.king-trade.cn)
TODS shoes
AF shoes

5691. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 09:19:23 UTC
From: "miso@sushi.com" <miso@sushi.com>
Message-ID: <c755a0d7-ddb7-465f-a61b-96f9aa63ab8f@q30g2000prq.googlegroups.com>
Source record: 18915
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 23, 9:46 am, PJ <norah...@gmail.com> wrote:
> Folks,
>
> I have purchased a Sangean ATS-909 World Receiver. It is equipped with
> an internal ferrite antenna för MW and LW, and a telescope antenna for
> SW and FM. It also comes with a portable SW antenna (ANT-60), seven
> meters long. Is this external antenna generally sufficient for SW
> reception, or should I get a different antenna? If yes, is there a
> solution that doesn't cost all that much money? I have a copy of the
> 2009 World Radio TV Handbook, and they are talking about a Wellbrook
> ALA-1530+ loop antenna, and let me tell you, that one is well past my
> budget, because it costs $466... I am looking for something a lot
> cheaper... :-) If it is recommended to replace the ANT-60, that is.
>
> PJ

http://www.wellbrook.uk.com/ALA100b.html
With a bit of hacking, the Wellbrook ALA 100 is as good as any of the
shortwave antennas they sell. It is just the amplifier. You have to
roll your own loop. The ALA100 is the lowest cost welbrook. At the
current exchange rate, the ala100 is a over $200.

I have made a few loops with this amp. I have a 2ftx2ft out of copper
pipe for direction finding. I have 4ft x 6ft copper pipe for regular
use. It's really stupid big and will eventually be reduced to the
original 4ftx4ft. I have a few portable designs that are around 40ft
worth of wire.

The wellbrook loops are just amazing. All that said, the ATS909
probably can't handle that much signal. It would make sense to use
one with a portable shortwave radio.

5692. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 11:14:44 UTC
From: Dave <noone@nowhere.com>
Message-ID: <E6o5l.1332$BC4.178@nwrddc02.gnilink.net>
Source record: 18916

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:a6bcdd62-5920-470e-8373-5140379b37f4@k36g2000pri.googlegroups.com...

<totally worthless bull snipped>

thanks art, i needed that. i'd like to see how you do running qrp in the
stew perry contest this weekend.

5693. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 14:48:42 UTC
From: JB <nospam@goofball.net>
Message-ID: <efr5l.1360$BC4.616@nwrddc02.gnilink.net>
Source record: 18917

> < snip >
>
> > My neighbor used to have a chain link fence that generated electrical
> > noise when the wind blew. I didnt realize what was making all the pops
> > until the house sold and the new owner put up a wooden fence.
>
> Oh, yeah!
>
> This past summer I had occasion to haul some bundled antenna sections on
the
> roof rack of my van. I was astonished at the BCB intermod that was
generated
> with every vibration. I think the principal frequency intermoding was a
> broadcast station about two miles from the start of my trip, since the
> intermod got less and less as I got further away.
>
> I'm familiar with intermods near transmit antennas, having dealt with EMI
on
> USN ships for many years, but two miles?!?!?
>
Just like parasitic elements in a Yagi. Yes it does it on RX too. Not only
from the intended signal but chances are there are various closer sources
that can induce voltages in whatever junk is near your RX antenna too.

Very disconcerting to do the lab measurement and getting spurious down 70db
then measure 25db down off the air!?!

5694. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 15:03:51 UTC
From: Dave <dave@dave.dave>
Message-ID: <i-udnU_VI4dF3svUnZ2dnUVZ_sfinZ2d@earthlink.com>
Source record: 18918
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:
> RHF wrote:
>
>> ...
>> js - but alas i remain a simple shortwave listener
>> who simply enjoys listening to the radio; cause
>> practically speaking; that is what i do
>> - - - respectfully ~ RHF
>> .
>
> Quit peeing on my leg ...
>
> Brother, I enjoy having a good time, a good drink and the company of a
> good woman as well as anyone; And, furthermore, I am here because I
> enjoy a good antenna as well as anyone else.
>
> I am here because some know much more than me, can explain it in a
> manner which I can absorb (Cecil is but one example), and I expect there
> is much more for us ALL to learn, indeed ...
>
> I ain't here to lecture you ... I ain't here to be a ham ... I ain't
> here to play the game of "one-up-man-ship"; I am here to catch what I
> missed "the-first-time-around"--end-of-story.
>
> But now, a good argument, a good debate, a good "theory-session" ...
> count me in!
>
> Sit back, and pick on the next guy in line ... ;-)
>
> Regards,
> JS

A random wire (e.g. inverted L) transmits nicely if you use a tuner at
the feed point.

5695. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 15:05:29 UTC
From: Dave <dave@dave.dave>
Message-ID: <i-udnU7VI4ek2cvUnZ2dnUVZ_sfinZ2d@earthlink.com>
Source record: 18919
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:
> RHF wrote:
>
> >> ...
>> - - - respectfully ~ RHF
>> .
>
> But, can I ask you one question?; You do pull on your pants one leg at
> a time, right? <wink>
>
> I mean, only politicians, as far as I know, claim different! LOL
>
> Regards,
> JS

I don't recognize "politician" as being a monolithic culture. There are decent ones and there are many more shit-heads, but that holds true for society in general.

5696. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 15:05:42 UTC
From: JB <nospam@goofball.net>
Message-ID: <avr5l.1362$BC4.974@nwrddc02.gnilink.net>
Source record: 18920
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

>
> Again, in the narrow context which you describe this, you are correct.
> But, there is no reason to NOT have an antenna of resonate length. A
> simple motor and a spring loaded real to take up slack will allow you to
> construct an antenna of variable length and multi-band capability.
> Indeed, only ones knowledge, "macguiverisms", and patience limits one
> ... as opposed to purchasing a product which is solely, usually, based
> on construction costs alone.
>
> I think the post, of mine, which you are responding to, with your above
> response, implied all this--I honestly meant to imply such ... or, in
> other words, you can only get out what you put in with your efforts,
> time, materials, knowledge, techniques, etc.; Or, i.e., the more
> thought, design and good construction practices used, the better the
> results.
>
> While some of us may search for the most simple constructions, others
> will go towards the most elaborate constructions--if anyone is like
> myself, complexity grew with understanding, knowledge, patience, etc.
>
> And, as I implied, Roy gave an answer which would have sufficed for,
> perhaps, the majority of SWL-ers... I did not fault it (his response),
> rather I expanded upon it ... no harm meant here, nor did I intend to
> "slight" anyone! HONEST!
>
> Regards,
> JS

Actually there is no reason TO have a resonant length antenna if you can tune it electrically. After all, you may want to tune around some. I can tell you it is a pain to have to go out and physically make adjustments for any frequency excursion. There are many nonresonant length antennas that outperform the resonant length. The 5/8 wave vertical comes to mind. A long-wire provides a larger capture area. Then there are phased arrays that reinforce. Look up the HAARP project and see how they made a very large array and were able to electrically steer the pattern. Cool!

The more you know, the cheaper it gets, and the more you giggle when it works. The only problem is you get hooked and want to do so much more.

5697. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 16:28:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Yls5l.10818$yr3.1198@nlpi068.nbdc.sbc.com>
Source record: 18921
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

JB wrote:
> Actually there is no reason TO have a resonant length antenna if you can
> tune it electrically.

Actually, tuning it "electrically" *is* tuning the antenna
system to resonance. When I vary my ladder-line length
to achieve system resonance, I am using my feedline as a
series tuning section. When one achieves a Z0-match with a
tuner or by other means, one is tuning the antenna system
to resonance which, in a near-lossless system, results in
near-conjugate match and near-maximum power transfer in
either direction (assuming the receiver input impedance
equals the Z0-match impedance).
--
73, Cecil http://www.w5dxp.com

5698. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 16:30:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c53c9fd4-0e58-468c-b736-8943e758b52e@z27g2000prd.googlegroups.com>
Source record: 18922

On Dec 27, 5:14 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:a6bcdd62-5920-470e-8373-5140379b37f4@k36g2000pri.googlegroups.com...
>
> <totally worthless bull snipped>
>
> thanks art, i needed that. i'd like to see how you do running qrp in the
> stew perry contest this weekend.

Well the idea of 1 inch mesh was a bum idea. I should have kept to my
own thinking.
When transmitters have holes in the casing of 1 inch diameter will be
the time I will use such large holes.
Will now have to take it of and replace with aluminum window mesh.
The present mesh has no idication of working in any sence of the word
Art

5699. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 17:11:52 UTC
From: Billy Burpelson <billy@burpelsonafb.net>
Message-ID: <slt5l.11162$x%.4007@nlpi070.nbdc.sbc.com>
Source record: 18923
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:

> I ain't here to be a ham ...

Dave wrote:

> A random wire (e.g. inverted L) transmits nicely if you use a tuner at
> the feed point.

Say what?

He said he "ain't here to be a ham", so why would he want to transmit?

5700. Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 17:35:59 UTC
From: ve2pid <ve2pid@videotron.ca>
Message-ID: <f92d1a38-fcbd-4d8d-b784-3d4327af0ea9@w1g2000prm.googlegroups.com>
Source record: 18924

I am looking for a formula giving the inductance of a solid disk for a known diam/material/thickness...

Any idea?

Thanks for your hels de Pierre VE2PID

5701. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 17:42:54 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <6049129c-60b2-4fc8-ad4d-12a1e9652307@s9g2000prm.googlegroups.com>
Source record: 18925
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 27, 7:03 am, Dave <d...@dave.dave> wrote:
> John Smith wrote:
> > RHF wrote:
>
> >> ...
> >> js - but alas i remain a simple shortwave listener
> >> who simply enjoys listening to the radio; cause
> >> practically speaking; that is what i do
> >> - - - respectfully ~ RHF
> >> .
>
> > Quit peeing on my leg ...
>
> > Brother, I enjoy having a good time, a good drink and the company of a
> > good woman as well as anyone; And, furthermore, I am here because I
> > enjoy a good antenna as well as anyone else.
>
> > I am here because some know much more than me, can explain it in a
> > manner which I can absorb (Cecil is but one example), and I expect there
> > is much more for us ALL to learn, indeed ...
>
> > I ain't here to lecture you ... I ain't here to be a ham ... I ain't
> > here to play the game of "one-up-man-ship"; I am here to catch what I
> > missed "the-first-time-around"--end-of-story.
>
> > But now, a good argument, a good debate, a good "theory-session" ...
> > count me in!
>
> > Sit back, and pick on the next guy in line ... ;-)
>
> > Regards,
> > JS

- A random wire (e.g. inverted L) transmits nicely
- if you use a tuner at the feed point.

Dave,

IIRC a good Amateur Radio 1/4 WL Vertical-Up-Leg
by 1/4 WL Horizontal-Out-Arm {Inverted "L" Antenna
requires very little Tuning and performs very well near
and far on the HF Band that it is 'cut' to use on.
Using a direct-connect or 1:1 UnUn at the Feed-Point

* Half-Wave Inverted "L" Antenna : 1/4 WL + 1/4 WL
http://www.bloomington.in.us/~wh2t/invertedl.html
http://www.antennex.com/preview/archive3/ltv.htm
* Yes a "Tuner" can help on other bands.

Where-as the more common Shortwave Listener (SWL)
type of {Random Wire} Inverted "L" Antenna is un-equal
and usually has a shorter Vertical-Up-Leg and a longer
Horizontal-Out-Arm of at least 1V-to-2H and often
1V-to-3H or more. Using a 9:1 Matching Transformer
and Ground Rod at the Feed-Point which is at the base
of the Vertical-Up-Leg.
* Again the Wellbrook Drawing
http://www.wellbrook.uk.com/images/antright.gif
http://www.wellbrook.uk.com/longwire.html

as usual it's the 'l' if i know - iane ~ RHF
.

5702. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 18:05:51 UTC
From: nm5k@wt.net
Message-ID: <b0007a59-8b51-4b36-a841-883949ce6a6b@35g2000pry.googlegroups.com>
Source record: 18926
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 26, 9:12 pm, RHF <rhf-newsgro...@pacbell.net> wrote:

>
> > Please don't cross post to rec.radio.amateur.antenna. Normally it would
> > be the right thing to do but that amateur group has a real collection of
> > idiots in it and this news group already has its share of that type.
>
> > But if you insist on cross posting there I can guarantee you there will
> > be more of what you don't like to see here.
>
> > --
> > Telamon
> > Ventura, California
>
> PJ - Telamon Is Right :o)

No he's not. He's a bigger horses ass than nearly
anyone on rraa.. :/
And that's a fact. Only "John Smith" might give him
a run for his money in that dept. :/
But I'm not a whiner like Telamon, and try to tell
people what groups to use, or avoid.
They have horses asses of some kind on all the
groups. I just ignore *them*. Not the whole group.
It's like "John Smith". I think he's a horses ass,
but I don't try to tell him where to go, or others to
avoid him. I just lets the chips fall where they may.
Most people don't need me to help them decide
who is a horses ass, and who is not.
It becomes fairly obvious with the passage of time.
:/

>
> i am a trolling idiot and i approve of his post ;-} ~ RHF
> {sa-prez : trolling idiots-r-us}

I won't argue...

> .
> IMHO the Rec.Radio.Amateur.Antenna people are
> good people -but- They 'focus' on two disciplines :
> Power Output Handling -and- Ability To Hear
> [Cause They Both Transmit and Listen]
>
> -while- The Shortwave Radio Listeners (SWL) is also

> 'focus' on two disciplines : Improved Signal plus Noise
> Reduction -aka- Better Signal-to-Noise (S/N) Ratio
> [Cause They "Only' Listen and Do Not Transmit]
>

This is purely cheap ground luncheon loaf... IE: bologna
Radio reception is radio reception. It does not matter
if one is a ham, or SWL, or whatever. The rules do not
change due to the type of service being received.
I almost never worry about power handling. Most of
my antennas will take way more power than I would
ever use. It's rarely even a consideration.
What is "ability to hear"? It's basically the same thing
as S/N ratio. In this regard, there is no difference
what type of service is received, S/N ratio is equally
important.

> Read these Posts here on Rec.Radio.Shortwave about
> the Low Noise Shortwave Radio Antenna Concepts that
> were 'popularized;
> .
> Here are the Three Key Posts :
> .
> # 1 - SWL Longwire -by- John Doty

> * Actually, a fixed matching transformer can dramatically
> reduce the wild swings in antenna efficiency that a coax
> fed wire antenna exhibits.

But! that will rarely effect the S/N ratio on the shortwave
bands. Like Roy said, if you can disconnect the antenna,
and the background noise noticeably drops , you have
plenty of signal. Adding a better match will rarely
increase the S/N ratio on HF, because the desired signal
and the undesired noise increase at an equal level.
You have pumped up the S meter readings, but you
have not improved the actual S/N ratio.
When I use my large multi band dipoles for SW reception
on 49 meters, do you think I bother with a tuner?
Nope.. Total waste of time being I already have way
more signal than I would ever need even if looking into
a large mismatch.

> .
> # 2 - Low Noise Antenna Connection -by- J
> * The difference between a mediocre antenna system and
> a great antenna system isn't the antenna itself: it's
> the way you feed signals from the antenna to the receiver.
> * The real trick with a shortwave receiving antenna system
> is to keep your receiver from picking up noise from all
> the electrical and electronic gadgets you and your
> neighbors have.

I can't argue with this. But trust me, hams are no different
than SWL's when it comes to trying to reduce local noise
pickup. This is just common sense, and not a practice
only used by SWL's. :/
> .
> # 3 - Grounding Is Key To Good Reception

Now, this part here is just plain ole horse manure.
Grounding is not a "key" to good reception, unless you
are using an antenna that requires a ground connection
in order to complete the antenna.
Or the grounding is to further decouple the feed line
from the antenna. But you don't require a ground
to decouple a feed line. It's just one method commonly
used with random length antennas fed with a coax
feed line.
None of my wire antennas require a ground connection
as they are complete antennas unto themselves.
Ground can actually be a source of noise in many
cases.

To sum, some make a mountain out of a molehill. :/
Richard Clarks simple solution of just adding more wire
to the whip on the radio is likely to work just as well
as anything proposed so far. If local noise is a
problem, then he might consider feeding an outside
wire with a decoupled feedline.
Anything further than that is likely S meter pumping
overkill.

5703. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 18:11:12 UTC
From: Dave <noone@nowhere.com>
Message-ID: <4du5l.1382$Es4.1261@nwrddc01.gnilink.net>
Source record: 18927

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c53c9fd4-0e58-468c-b736-8943e758b52e@z27g2000prd.googlegroups.com...

>Well the idea of 1 inch mesh was a bum idea. I should have kept to my
>own thinking.
>When transmitters have holes in the casing of 1 inch diameter will be
>the time I will use such large holes.
>Will now have to take it of and replace with aluminum window mesh.
>The present mesh has no idication of working in any sence of the word
>Art

let me give you a hint... its not the mesh that is the problem.

5704. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 18:26:41 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <qtqcl4lbd28nfprnbrllh4b56i5ps15hb0@4ax.com>
Source record: 18928

On Tue, 23 Dec 2008 23:29:47 -0500, Steve Stone <spfleck@citlink.net>
wrote:

>I have a 5 band Hustler vertical.
>
>Available install space in my backyard is an area adjacent to my septic
>system leach field.
>
>I really don't want to place the antenna in the middle of the leach
>field and risk hitting an outflow pipe.
>If I put it just outside of the reach of the outflow pipes the ground is
>still relatively moist due to natural run off and the leach field.
>
>So will this leach field moisture enhance or inhibit the verticals
>performance due to soil conductivity.. or none of the above if the
>antenna is installed as indicated in the Hustler installation manual. (2
>radials per band using insulated copper wire, 4 foot
>metal mast pounded directly into the ground, no concrete, no wood).
>
>There is also a 4 foot high chain link fence surrounding my backyard,
>300' x 150', one side about 25 feet from the potential install location.
>No trees or shrubs closer than 15 feet from the vertical mast.
>
>Steve
>N2UBP
Just my two cents worth...
The moisture from the septic field won't hurt and it might help a
little.
The chain link fence is unlikely to be of any benefit and may be a
potential nuscience but it is unlikely there is anything you can do
about it. Until the mesh gets close enough to form a screen or the
lengths of components approach resonance it is likely to be invisible.
In my way of thinking the distance from the edge of the septic field
to the middle of it is insignificant.

Even if you don't damage the septic field you and everyone else
concerned about it will worry forever. Don't go there.

Four feet of metal mast in the ground sounds like an awful chore. I
think I would try less. If I drive anything it is usually a ground rod
and mount to that.

Use 1-1/2 inch fence staples to pin the radials to the ground and you
will be amazed at how well everything works! I tie the radials to the
ground rod with a stainless hose clamp, low cost & works fine.

John Ferrell W8CCW

5705. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 18:53:04 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <458cf55a-aa60-4a41-8ebe-a0fda9efba38@i18g2000prf.googlegroups.com>
Source record: 18929
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 27, 10:05 am, n...@wt.net wrote:
> On Dec 26, 9:12 pm, RHF <rhf-newsgro...@pacbell.net> wrote:
>
>
>
> > > Please don't cross post to rec.radio.amateur.antenna. Normally it would
> > > be the right thing to do but that amateur group has a real collection of
> > > idiots in it and this news group already has its share of that type.
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> > > be more of what you don't like to see here.
>
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> > > Telamon
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>
> > PJ - Telamon Is Right :o)
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> No he's not. He's a bigger horses ass than nearly
> anyone on rraa.. :/
> And that's a fact. Only "John Smith" might give him
> a run for his money in that dept. :/
> But I'm not a whiner like Telamon, and try to tell
> people what groups to use, or avoid.
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> groups. I just ignore *them*. Not the whole group.
> It's like "John Smith". I think he's a horses ass,
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> avoid him. I just lets the chips fall where they may.
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> who is a horses ass, and who is not.
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>
>
>
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> > {sa-prez : trolling idiots-r-us}
>
> I won't argue...
>
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> > IMHO the Rec.Radio.Amateur.Antenna people are

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> > Power Output Handling -and- Ability To Hear
> > [Cause They Both Transmit and Listen]
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> > -while- The Shortwave Radio Listeners (SWL) is also
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> This is purely cheap ground luncheon loaf... IE: bologna
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> if one is a ham, or SWL, or whatever. The rules do not
> change due to the type of service being received.
> I almost never worry about power handling. Most of
> my antennas will take way more power than I would
> ever use. It's rarely even a consideration.
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> as S/N ratio. In this regard, there is no difference
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> > * Actually, a fixed matching transformer can dramatically
> > reduce the wild swings in antenna efficiency that a coax
> > fed wire antenna exhibits.
>
> But! that will rarely effect the S/N ratio on the shortwave
> bands. Like Roy said, if you can disconnect the antenna,
> and the background noise noticeably drops , you have
> plenty of signal. Adding a better match will rarely
> increase the S/N ratio on HF, because the desired signal
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> You have pumped up the S meter readings, but you
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> When I use my large multi band dipoles for SW reception
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> > a great antenna system isn't the antenna itself: it's

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> > * The real trick with a shortwave receiving antenna system
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> I can't argue with this. But trust me, hams are no different
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> pickup. This is just common sense, and not a practice
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>
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> are using an antenna that requires a ground connection
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> Or the grounding is to further decouple the feed line
> from the antenna. But you don't require a ground
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> as they are complete antennas unto themselves.
> Ground can actually be a source of noise in many
> cases.
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> To sum, some make a mountain out of a molehill. :/
> Richard Clarks simple solution of just adding more wire
> to the whip on the radio is likely to work just as well
> as anything proposed so far. If local noise is a
> problem, then he might consider feeding an outside
> wire with a decoupled feedline.
> Anything further than that is likely S meter pumping
> overkill.

"N",

Don't know too many 'Hams' would would take 50 Feet
of common Speaker Wire and tie-a-knot at 30 Feet and
then split the two Wires in the remaining 20 Feet and
use the thing as a "Stealth" Dipole Antenna with their
Transmitter -but- a Shortwave Radio Listener (SWL)
can do that and have a very practical SWL Antenna
to use with many 'portable' AM&FM Shortwave Radios.

50-Ft. 24-Gauge Clear 2-Conductor Speaker Wire
RadioShack Catalog # 278-1301
http://www.radioshack.com/product/index.jsp?productId=2102499

"n" - practically speaking {in practice} there is a
difference between between hams and swls ~ RHF
.
.

5706. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 18:58:47 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <77964324-16d6-4760-8cf8-eb7fa6354868@e1g2000pra.googlegroups.com>
Source record: 18930

On Dec 27, 9:35 am, ve2pid <ve2...@videotron.ca> wrote:
> I am looking for a formula giving the inductance of a solid disk for a
> known diam/material/thickness...
>
> Any idea?
>
> Thanks for your hels de Pierre VE2PID

What, exactly, do you mean by "the inductance of a solid disk"? How do you connect to the disk? Are your connection points on opposite ends of a diameter across the disk, or along its axis from the center of one face to the center of the face on the opposite side -- or perhaps some other connection? With a wire (formed into any shape), it's reasonable to assume it's the inductance measured between the two ends of the wire. For a disk, it's not obvious to me.

Cheers,
Tom

5707. w4nti is totlay wacked out

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 19:15:15 UTC
From: kb9rqz@yahoo.com
Message-ID: <qlvcl49ejpsj4g4nre0fmfm2fo1bv5igdc@4ax.com>
Source record: 18931
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.misc

On Fri, 26 Dec 2008 14:25:15 -0800 (PST), mopeyzakween@yahoo.com
wrote:

>htt

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

5708. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 19:37:29 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <Ztv5l.1384$Es4.834@nwrddc01.gnilink.net>
Source record: 18932

"ve2pid" <ve2pid@videotron.ca> wrote in message
news:f92d1a38-fcbd-4d8d-b784-3d4327af0ea9@w1g2000prm.googlegroups.com...
>I am looking for a formula giving the inductance of a solid disk for a
> known diam/material/thickness...
>
> Any idea?
>
> Thanks for your hels de Pierre VE2PID

Hi Pierre

Can you measure or estimate the inductive reactance of the disk?

Jerry KD6JDJ

5709. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 19:45:41 UTC
From: nm5k@wt.net
Message-ID: <7a6cadf9-8a49-43e7-99fe-fc24498bfd13@e1g2000pra.googlegroups.com>
Source record: 18933
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 27, 12:53 pm, RHF <rhf-newsgro...@pacbell.net> wrote:

>
> "N",
>
> Don't know too many 'Hams' would would take 50 Feet
> of common Speaker Wire and tie-a-knot at 30 Feet and
> then split the two Wires in the remaining 20 Feet and
> use the thing as a "Stealth" Dipole Antenna with their
> Transmitter -but- a Shortwave Radio Listener (SWL)
> can do that and have a very practical SWL Antenna
> to use with many 'portable' AM&FM Shortwave Radios.

Well, sure, but what does transmitting have to do with
anything? We are not talking about transmitting.
We are talking about receiving, "or at least I am", and
the rules do not change when you vary the frequency a
few mhz.
And there are more than one ways to skin a cat with a
given piece of wire. If I had a portable that normally used
a whip antenna for SW, I would be much more likely to
take that zip cord and split it totally apart to make a
single 100 ft wire. I would simply clip it onto the whip.
I bet my version would be the better performer of the
two, low bands for sure. But this has nothing to do
with what I'm listening to. If I'm listening on a ham rig,
and I'm not transmitting, I'm a SWL the same as anyone
else. :/
And most certainly so if I'm listening to a broadcast band
like 31m, or whatever. Do you think I play by different
rules than you if we are both listening to 31m at the same
time?
I hope not... :/
Sure, you can make a quite decent and usable SWL
antenna from nothing but a piece of wire, or zip cord.
But that is not a requirement to be a ®real SWL.
How would you like to try listening to 19m DX on my
tri-band yagi, which is still close enough to 20m, to
give pretty danged good performance and some F/B?

With that, why would I want to use a zip cord antenna?
It boggles the mind... :/
And I'm talking receive, not transmit. We'll pretend the
mike and keyer have been superglued to a tango-

uniform status.
But I guess being I'd rather use my full size yagi and
have a bit of F/B ratio, which improves S/N ratio, which
is the whole purpose of this topic, I'm not a ®real SWL..
Chortle.. :/
You two guys kill me... You really do.

>
> 50-Ft. 24-Gauge Clear 2-Conductor Speaker Wire
> RadioShack Catalog #
278-1301http://www.radioshack.com/product/index.jsp?productId=2102499

Uh.. I know where to buy wire.. :/

>
> "n" - practically speaking {in practice} there is a
> difference between between hams and swls ~ RHF

No, there isn't. Not when it comes to receiving.
To propose otherwise is just ludicrous.
I listen to all the same bands you do at some
time or another. I was a rabid SWL when I was in
jr. high school. That was nearly 40 years ago.
I started DXing AM-BC when I was 8 years old
and got my first mighty six transister radio for my
birthday.
It's the main reason I'm a ham now. Just a natural
progression... In other words, I might have been
born yesterday, but not last night. :/

5710. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 20:18:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj62ismgg1@news.albasani.net>
Source record: 18934
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

JB wrote:

> ...
> Actually there is no reason TO have a resonant length antenna if you can
> tune it electrically. After all, you may want to tune around some. I can
> tell you it is a pain to have to go out and physically make adjustments for
> any frequency excursion. There are many nonresonant length antennas that
> outperform the resonant length. The 5/8 wave vertical comes to mind. A
> long-wire provides a larger capture area. Then there are phased arrays that
> reinforce. Look up the HAARP project and see how they made a very large
> array and were able to electrically steer the pattern. Cool!
>
> The more you know, the cheaper it gets, and the more you giggle when it
> works. The only problem is you get hooked and want to do so much more.

Actually, this is a total misconception.

Download EZNEC or MMANA-GAL. Plugin the figures for a 1/4 wave physical antenna "loaded" to 1/2 wave, examine the radiation pattern ...

Now, do the same for a full 1/2 wave physical length antenna and examine the pattern ...

But then, I am sure you suspected, you can't take a 2 ft. antenna and electrically resonate it to some other physical length, and have it preform as the full physical length version ... if this were possible, everyone would have little one inch antennas on their rigs ...

Regards,
JS

5711. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 20:27:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj6330$n4j$1@news.albasani.net>
Source record: 18935
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

> ...
> "n" - practically speaking {in practice} there is a
> difference between between hams and swls ~ RHF
> .
> .
>

Simply a pipe dream ...

The same antenna which transmits the MOST EFFICIENT signal possible, will also receive the signal the MOST EFFICIENTLY (given measuring parameters remain the same for both modes, i.e., T/R) ... smaller gauge components with far less power ratings can be used for receiving antennas--that is the most important difference, and actually, the only important one(s.)

However, I can see how some would come the the conclusion(s) you have. In cheap receivers, you really don't know what ohm impedance the antenna jack REALLY is. It may say 50 ohms and be 100, 200 ... 500 etc. Least, that has been my experience ... when you get into professional gear, costing thousands, they can take the time and aim for accuracy.

Regards,
JS

5712. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 20:29:04 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-459044.12290427122008@newsclstr03.news.prodigy.net>
Source record: 18936
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <YIs5l.10818$yr3.1198@nlpi068.nbdc.sbc.com>,
Cecil Moore <nospam@w5dxp.com> wrote:

> JB wrote:
> > Actually there is no reason TO have a resonant length antenna if you can
> > tune it electrically.
>
> Actually, tuning it "electrically" *is* tuning the antenna
> *system* to resonance. When I vary my ladder-line length
> to achieve system resonance, I am using my feedline as a
> series tuning section. When one achieves a Z0-match with a
> tuner or by other means, one is tuning the antenna system
> to resonance which, in a near-lossless system, results in
> near-conjugate match and near-maximum power transfer in
> either direction (assuming the receiver input impedance
> equals the Z0-match impedance).

This ever so helpful to the OP receiving antenna problem.

This was precipitated by the news group clown RHF who changed the
subject from "Antenna for shortwave reception" to the current "Re:
Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas"

Good job Trolling jackass RHF.

--
Telamon
Ventura, California

5713. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 20:31:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj63av$nh8$1@news.albasani.net>
Source record: 18937

ve2pid wrote:
> I am looking for a formula giving the inductance of a solid disk for a
> known diam/material/thickness...
>
> Any idea?
>
> Thanks for your hels de Pierre VE2PID

I am taking it, you mean when it is used as a radiating element in the antennas' construction. Such as a few charts which can be found around which predict the inductance of a wire radiating element -- I have never seen, either software or charts/tables/formulas, to predict such ... perhaps EZNEC or MMANA-GAL could be used for such a purpose--I honestly don't know ... Roy would know ... perhaps Cecil is aware of something?

Or, do you mean something else?

Regards,
JS

5714. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 20:52:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj64hm$ot8$1@news.albasani.net>
Source record: 18938
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dave wrote:

> ...
> A random wire (e.g. inverted L) transmits nicely if you use a tuner at
> the feed point.

Nicely is rather a broad term ...

And, if I am running 1KW+, or even multi-kilowatts, and the guy on the other end is doing the same--we can communicate "nicely" on very poor antennas ...

However, if I am running 5 watts, and the other guy is also, a properly constructed antenna which has been designed around efficiency and most desirable radiation pattern, along with having a correct impedance and is matched EXACTLY to the equipment, and such is done without a lossy "matchbox" or inefficient matching method--these would be of paramount importance.

Physics, as much as math, is an EXACT science ... antennas are NOT in realm of "art" (gray areas, open to interpretation, is a matter of personal opinion, etc.), there is but one "best" antenna for any given distance, terrain, pattern, etc.

Regards,
JS

5715. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 20:57:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj64rm$p9s$1@news.albasani.net>
Source record: 18939
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Billy Burpelson wrote:

> ...
> Say what?
>
> He said he "ain't here to be a ham", so why would he want to transmit?

Well, consider me a "different type of ham." In that, I always construct my antennas to receive the best signal for the application at hand, ALWAYS--transmitting is only a secondary consideration. As, I have never found an antenna which has been found to receive the most efficiently fail to do so in xmit mode. Given both xmitter and receiver have the same input impedances ...

I do, frequently, see hams adjust the antenna, and its' type, for the xmitter--and the best readings which can be obtained in that mode. I pay far more attention to how the antenna receives ... I can always crank up power on this end, should I ever find it necessary--I don't know what the guys capabilities on the other end is/are ...

Regards,
JS

5716. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 21:16:02 UTC
From: Sum Ting Wong <sumtingwong@privacy.net>
Message-ID: <ah6dl4p6h664nufm3u64a86jqofnr487j7@4ax.com>
Source record: 18940

On Sat, 27 Dec 2008 12:27:09 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>The same antenna which transmits the MOST EFFICIENT signal possible,
>will also receive the signal the MOST EFFICIENTLY

If that were true then the BIG boys on 160m would have no need for
tall vertical transmitting antennas and traveling wave (Beverage)
receive antennas. They could just use one or the other for both
transmitting and receiving, but they don't. That's because one is
better for transmitting and one is better for receiving.

S.T.W.

5717. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 21:17:51 UTC
From: Dave <noone@nowhere.com>
Message-ID: <3Yw5l.1398$Es4.18@nwrddc01.gnilink.net>
Source record: 18941

"Jerry" <jerrymartes@verizon.net> wrote in message
news:Ztv5l.1384$Es4.834@nwrddc01.gnilink.net...
>
> "ve2pid" <ve2pid@videotron.ca> wrote in message
> news:f92d1a38-fcbd-4d8d-b784-3d4327af0ea9@w1g2000prm.googlegroups.com...
>>I am looking for a formula giving the inductance of a solid disk for a
>> known diam/material/thickness...
>>
>> Any idea?
>>
>> Thanks for your hels de Pierre VE2PID
>
> Hi Pierre
>
> Can you measure or estimate the inductive reactance of the disk?
>
> Jerry KD6JDJ
>
try this:
http://www.consultrsr.com/resources/eis/induct5.htm

5718. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 21:24:44 UTC
From: Dave <noone@nowhere.com>
Message-ID: <w2x5l.1400$Es4.992@nwrddc01.gnilink.net>
Source record: 18942

"Sum Ting Wong" <sumtingwong@privacy.net> wrote in message
news:ah6dl4p6h664nufm3u64a86jqofnr487j7@4ax.com...
> On Sat, 27 Dec 2008 12:27:09 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>The same antenna which transmits the MOST EFFICIENT signal possible,
>>will also receive the signal the MOST EFFICIENTLY
>
> If that were true then the BIG boys on 160m would have no need for
> tall vertical transmitting antennas and traveling wave (Beverage)
> receive antennas. They could just use one or the other for both
> transmitting and receiving, but they don't. That's because one is
> better for transmitting and one is better for receiving.
>
> S.T.W.

efficiency is only one measure of antenna performance. high efficiency is
not always better. so while my 100' high inverted L's may be very
efficient, they are not as directive as my 600' long beverages and the
polarization is different, so sometimes when it is noisy listening on the
inverted L's it is nice and quiet listening on the Beverages.

5719. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 21:56:54 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-5A4EF3.13565427122008@newsclstr03.news.prodigy.net>
Source record: 18943
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gj64hm$ot8$1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> Dave wrote:
>
> > ...
> > A random wire (e.g. inverted L) transmits nicely if you use a tuner at
> > the feed point.
>
> Nicely is rather a broad term ...
>
> And, if I am running 1KW+, or even multi-kilowatts, and the guy on the
> other end is doing the same--we can communicate "nicely" on very poor
> antennas ...

Yeah but we don't care about transmitting goofball, we care about
receiving and so that statement "A random wire (e.g. inverted L)
transmits nicely if you use a tuner at the feed point" by Dave is
relevant where you are not.

--
Telamon
Ventura, California

5720. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 21:58:09 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-D23245.13580927122008@newsclstr03.news.prodigy.net>
Source record: 18944
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gj64rm$p9s$1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> Billy Burpelson wrote:
>
> > ...
> > Say what?
> >
> > He said he "ain't here to be a ham", so why would he want to transmit?
>
> Well, consider me a "different type of ham."

< SNIP >

Yeah, you are a Trolling Ham and a well done one at that.

--
Telamon
Ventura, California

5721. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-27 22:27:09 UTC
From: dplatt@radagast.org
Message-ID: <tmmi26-1i3.ln1@radagast.org>
Source record: 18945

>>The same antenna which transmits the MOST EFFICIENT signal possible,
>>will also receive the signal the MOST EFFICIENTLY
>
>If that were true then the BIG boys on 160m would have no need for
>tall vertical transmitting antennas and traveling wave (Beverage)
>receive antennas. They could just use one or the other for both
>transmitting and receiving, but they don't. That's because one is
>better for transmitting and one is better for receiving.

Let's not confuse "efficiency" (in the standard sense of
power-radiated vs. power-input) vs. "best for the particular purpose".

In the case of 160, you want high electrical efficiency you can get
from your transmitting antenna. This allows your signal to be as
strong as possible at the other end, so that you can be heard over the
band's high background noise level.

For receiving antennas on 160, electrical efficiency is a good deal
less important, because even an inefficient antenna will pick up
enough RF will pick up enough signal to bring the band background
noise level well up above the receiver's own internal noise. Once
you've got this much RF, adding more will simply raise both the
desired signal and the noise by the same ratio - net effect is no gain
in signal intelligibility.

The Beverage antenna is quite inefficient, but its relatively high
directivity makes it useful as a top-band receive antenna. Although
it's relatively insensitive to signals coming from the desired
direction, it's even *more* insensitive to signals and noise coming
from other directions - and thus it deliver a higher signal-to-noise
ratio than a less directional (but more efficient) antenna.

Hence, the Beverage is less efficient than (e.g.) a monopole, but may
do a better job as a receive antenna.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5722. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 00:14:48 UTC
From: Dave <dave@dave.dave>
Message-ID: <J4SdnSRma9VkWcvUnZ2dnUVZ_t7inZ2d@earthlink.com>
Source record: 18946
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

>
> Dave,
>
> IIRC a good Amateur Radio 1/4 WL Vertical-Up-Leg
> by 1/4 WL Horizontal-Out-Arm {Inverted "L" Antenna
> requires very little Tuning and performs very well near
> and far on the HF Band that it is 'cut' to use on.
> Using a direct-connect or 1:1 UnUn at the Feed-Point
> * Half-Wave Inverted "L" Antenna : 1/4 WL + 1/4 WL
>
>
> Where-as the more common Shortwave Listener (SWL)
> type of {Random Wire} Inverted "L" Antenna is un-equal
> and usually has a shorter Vertical-Up-Leg and a longer
> Horizontal-Out-Arm of at least 1V-to-2H and often
> 1V-to-3H or more. Using a 9:1 Matching Transformer
> and Ground Rod at the Feed-Point which is at the base
> of the Vertical-Up-Leg.
>

"Random" implies otherwise. Instead of a 9:1 UnUn, imagine one of these
at the feed point:

http://www.mfjenterprises.com/Product.php?productid=MFJ-927

I enjoy playing with these kind of things. So I got a license to
transmit. Some call that "elitist", I call it self-indulgent.

5723. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 00:31:43 UTC
From: Dave <dave@dave.dave>
Message-ID: <GrKdndptd8htVcvUnZ2dnUVZ_r3inZ2d@earthlink.com>
Source record: 18947
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:
> Dave wrote:
>
>> ...
>> A random wire (e.g. inverted L) transmits nicely if you use a tuner at
>> the feed point.
>
> Nicely is rather a broad term ...
>
> And, if I am running 1KW+, or even multi-kilowatts, and the guy on the
> other end is doing the same--we can communicate "nicely" on very poor
> antennas ...
>
> However, if I am running 5 watts, and the other guy is also, a properly
> constructed antenna which has been designed around efficiency and most
> desirable radiation pattern, along with having a correct impedance and
> is matched EXACTLY to the equipment, and such is done without a lossy
> "matchbox" or inefficient matching method--these would be of paramount
> importance.
>
> Physics, as much as math, is an EXACT science ... antennas are NOT in
> realm of "art" (gray areas, open to interpretation, is a matter of
> personal opinion, etc.), there is but one "best" antenna for any given
> distance, terrain, pattern, etc.
>
> Regards,
> JS

5724. 80m Dipole fed with open wire feeder.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 02:26:01 UTC
From: maxpowervk@yahoo.com.au
Message-ID: <f5c1ed52-c9b0-4682-ab35-40a378a24808@v39g2000pro.googlegroups.com>
Source record: 18948

Hello all,
I presently have an 80m dipole fed with about 50 feet of coax. I also have a 40m dipole fed with 50 feet of coax at the same height. If I was to replace the coax on the 80m dipole with open wire feeder and used it on 40m, would it have more gain than the coax fed 40m dipole? Also, would it receive better?
Cheers.

5725. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 02:43:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj6p46$he2$1@news.albasani.net>
Source record: 18949
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dave wrote:

> ...
> I don't recognize "politician" as being a monolithic culture. There are
> decent ones and there are many more shit-heads, but that holds true for
> society in general.

I don't believe that.

Simply because, in the last 30+ years, I have NEVER seen ANYTHING get any better--or, at least those things which are in the realm of things influenced by politics, legislation produced by politicians, or for that matter, ANYTHING done by politicians!

They are there because of their desire for either money, power, or both. They support a shadow government solely for what benefits they, their family and friends get from the individuals in this elite group. Although, the above would be impossible to prove at this date; I believe a through awareness and study of the direction "things" constantly seem to be going in leaves one with no other possible conclusion(s) ...

Regards,
JS

5726. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 02:49:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj6pfehlh1@news.albasani.net>
Source record: 18950
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

JB wrote:

> ...
> Actually there is no reason TO have a resonant length antenna if you can
> tune it electrically. After all, you may want to tune around some. I can
> tell you it is a pain to have to go out and physically make adjustments for
> any frequency excursion. There are many nonresonant length antennas that
> outperform the resonant length. The 5/8 wave vertical comes to mind. A
> long-wire provides a larger capture area. Then there are phased arrays that
> reinforce. Look up the HAARP project and see how they made a very large
> array and were able to electrically steer the pattern. Cool!
>
> The more you know, the cheaper it gets, and the more you giggle when it
> works. The only problem is you get hooked and want to do so much more.
>

Well, examine a mechanical tuning fork. They are cut to an exact
physical length for resonance, the are very sharp tuning. Now, it would
be possible to "lengthen" such a tuning fork with some coil of material,
or portion of a turn of material. There is a reason for this; as,
although it could be done, it would not be as efficient as one cut to
the exact length; plus, you would induce a high probability of increased
harmonics as a freq(s) which the fork was not created to induce ...
there are exact equivalents in the electrical world of RF ...

As you point out, physical length resonance is NOT a requirement ... it
is simply "best" ...

Regards,
JS

5727. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 02:50:45 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <f25b2f94-de98-4fdd-a30f-587024d6cf0d@z27g2000prd.googlegroups.com>
Source record: 18851
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 27, 6:14 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Dave wrote:
> > ...
> > You are not "pumping" any more "power" into a non-resonant antenna.
> > Unless you are using a tuner you are heating up your finals.
>
> First, your use of "resonant" is just plain confusing ...
>
> All my multiband antennas, which I have ever use in life, are physically
> resonate on but one freq (or band.) On the others, they are only
> electrically resonate (and, lossy loading components are used to effect
> this.)
>
> A matchbox can always improve the reception on a poorly designed
> antenna, a mismatched antenna, a non-physically resonate antenna, etc.

John Smith,

OK then what is a 'matchbox' in :
* a poorly designed transmitting antenna,
* a mismatched transmitting antenna,
* a non-physically resonate transmitting antenna,

Consider the 'matchbox' to be one element
in the RF Energy Radiating System :
Feed-Line + 'matchbox' + Antenna Element

i want to know - iane ~ RHF
.

>
> My 2m, 10m, 20m antennas are separate units. My 40m-80m-160 is a
> multiband, my neighbors and property limitations demand this ... and of
> course, a separate antenna, designed for a fairly narrow chunk of band
> would always be the most logical choice ... if possible.
>
> If I lived in an apartment and was forced to use one antenna for all
> bands, it could be done ... and would be better than nothing!
>
> Regards,
> JS

5728. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 02:51:25 UTC
From: Dave <dave@dave.dave>
Message-ID: <-_GdnTj1K7IzdMvUnZ2dnUVZ_hgAAAAA@earthlink.com>
Source record: 18852
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:
> Dave wrote:
>
>> ...
>> I don't recognize "politician" as being a monolithic culture. There
>> are decent ones and there are many more shit-heads, but that holds
>> true for society in general.
>
> I don't believe that.
>
> Simply because, in the last 30+ years, I have NEVER seen ANYTHING get
> any better--or, at least those things which are in the realm of things
> influenced by politics, legislation produced by politicians, or for that
> matter, ANYTHING done by politicians!
>
> They are there because of their desire for either money, power, or both.
> They support a shadow government solely for what benefits they, their
> family and friends get from the individuals in this elite group.
> Although, the above would be impossible to prove at this date; I
> believe a through awareness and study of the direction "things"
> constantly seem to be going in leaves one with no other possible
> conclusion(s) ...
>
> Regards,
> JS

You pretend to be powerless to fight this...

5729. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 02:58:33 UTC
From: kb9rqz@yahoo.com
Message-ID: <oqqdl45v2u8uigojobmedmhcd60rskbs2t@4ax.com>
Source record: 18853
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5730. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 03:06:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj6qfpiff1@news.albasani.net>
Source record: 18854
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dave wrote:
> John Smith wrote:
>> RHF wrote:
>>
>>> ...
>>> js - but alas i remain a simple shortwave listener
>>> who simply enjoys listening to the radio; cause
>>> practically speaking; that is what i do
>>> - - - respectfully ~ RHF
>>> .
>>
>> Quit peeing on my leg ...
>>
>> Brother, I enjoy having a good time, a good drink and the company of a
>> good woman as well as anyone; And, furthermore, I am here because I
>> enjoy a good antenna as well as anyone else.
>>
>> I am here because some know much more than me, can explain it in a
>> manner which I can absorb (Cecil is but one example), and I expect
>> there is much more for us ALL to learn, indeed ...
>>
>> I ain't here to lecture you ... I ain't here to be a ham ... I ain't
>> here to play the game of "one-up-man-ship"; I am here to catch what I
>> missed "the-first-time-around"--end-of-story.
>>
>> But now, a good argument, a good debate, a good "theory-session" ...
>> count me in!
>>
>> Sit back, and pick on the next guy in line ... ;-)
>>
>> Regards,
>> JS
>
> A random wire (e.g. inverted L) transmits nicely if you use a tuner at
> the feed point.

A resonate 1/4 wave dipole transmits "nicely" and uses no lossy tuner
... a resonate 1/4 wave vertical monopole, with drooping ground plane,
transmits "nicely", requires no lossy tuner, and is damn near a perfect
match to 50 ohm coax ...

A 1/2 wave version of either of the above produces a superior pattern
and can be matched with either a T-match or gamma-match ... indeed, a

very minimal counterpoise is all which is necessary--and, if things are "perfect", not even that is needed, or simply a choke on they outside of the coax a ~1/4 wave away from feed point. A 5/8 is non-resonate physical length, and even demonstrates a superior pattern (at least on paper and with antenna prediction software ...)

However, in side-by-side comparisons on 10-6-2m antennas I have built, comparing a 5/8 against the 1/2 (construction methods/materials and matching components identical) ... the actual difference, in the real world, must be less than the width of a meter needle in the readings ... or, put simply, I no longer deal with the extra length required of the 5/8 ... your mileage may vary ...

Regards,
JS

5731. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 03:40:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj6sg6$k56$1@news.albasani.net>
Source record: 18855
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

> ...
> "N",
>
> Don't know too many 'Hams' would would take 50 Feet
> of common Speaker Wire and tie-a-knot at 30 Feet and
> then split the two Wires in the remaining 20 Feet and
> use the thing as a "Stealth" Dipole Antenna with their
> Transmitter -but- a Shortwave Radio Listener (SWL)
> can do that and have a very practical SWL Antenna
> to use with many 'portable' AM&FM Shortwave Radios.
>
> 50-Ft. 24-Gauge Clear 2-Conductor Speaker Wire
> RadioShack Catalog # 278-1301
> http://www.radioshack.com/product/index.jsp?productId=2102499
>
> "n" - practically speaking {in practice} there is a
> difference between between hams and swls ~ RHF
> .
> .
>

I have taken ordinary lamp zip cord, split the two leads apart to for a
1/4 wave dipole and fed the end of the remaining length of zip cord with
a balun to the rig (some zip cord is ~68-72 ohm balanced line, the
mismatch is more than acceptable for field/emergency use.)

Never, say never ... some ham will do it!

Regards,
JS

5732. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 03:46:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj6spvkgj1@news.albasani.net>
Source record: 18856
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

nm5k@wt.net wrote:

>
> Well, sure, but what does transmitting have to do with
> anything? We are not talking about transmitting.
> ...

It has EVERYTHING to do with it, it is the same communication, both ways, simply in reverse ... like I have stated before, the exact same laws of physics governing the antenna makes it equally acceptable to both transmitting and receiving. The same pattern seen in the signal transmitted will be seen in the signal(s) received.

Your argument is the equivalent to arguing that a car designed to go forward would not be acceptable when backing up ... simply ridiculous!

Regards,
JS

5733. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 04:14:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj6uem$m5u$1@news.albasani.net>
Source record: 18857
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dave wrote:

> ...
> You pretend to be powerless to fight this...

My single voice IS powerless against the sheer magnitude of the
onslaught I would launch it against. However, the power of my voice
combined with thousands, tens-of-thousands, hundreds-of-thousands ... of
other voices eventually can and does make changes; and, is as it should be.

Regards,
JS

5734. everybody, check this out!!

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 04:41:16 UTC
From: Steve <kenwood1701@hotmail.com>
Message-ID: <495703dc$0$4881$607ed4bc@cv.net>
Source record: 18858

http://www.youtube.com/watch?v=vjDyp17BIlE&NR=1

5735. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 04:44:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj706tnvo1@news.albasani.net>
Source record: 18859
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

>
> OK then what is a 'matchbox' in :
> * a poorly designed transmitting antenna,
> * a mismatched transmitting antenna,
> * a non-physically resonate transmitting antenna,
>
> Consider the 'matchbox' to be one element
> in the RF Energy Radiating System :
> Feed-Line + 'matchbox' + Antenna Element
>
> i want to know - iane ~ RHF
> .
>

It would be far more "in the realm of correct" to consider what a matchbox DOES, rather than what it IS--as it is simply some combination of inductive and capacitive components which ALWAYS will induce some form of loss into any system it is inserted into.

However:
*a matchbox will allow you to use a poorly designed/constructed antenna--it will NOT improve the antenna.

*a matchbox will allow you to "match" differing impedances to achieve proper power transfer to the antenna--again, it will NOT improve the efficiency of that antenna, and the power will be "simply lost" (as heat.)

*a matchbox CAN allow you to alter the electrical length of an antenna--physical and electrical lengths are two different animals.

And, this is all-in-a-nut shell; as you realize, a proper education in this field is NOT a trivial thing.

That said, I frequently carry a cheap portable with me on trips and launch a longwire into a tree, etc., find acceptable signals and enjoy listening ... or else, just grab the SW stations audio from the net ... being an old-timer, the first is more enjoyable, for me.

Regards,
JS

5736. transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 04:48:21 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c59c52f3-035b-451d-868d-852346d75d21@y1g2000pra.googlegroups.com>
Source record: 18860

When measuring the SWR of a transmission line we can find a length
that is resonant. Or in other words the current is of an exact
sinusoidal form and thus the basis of SWR. When we apply the same
principles to a radiator
we cannot assume a perfect sinusoidal wave because of the field
generated outside the radiator where a degradation of amplitude
depends not only on the generated fields but also the length of the
radiator i.e a thin radiator. Thus one can see that a fractional wave
antenna if reflected as generally assumed cannot possibly be 1:1 for a
wavelength as per a perfect reflection as could or would be seen from
a transmississsion line.
The above not only shows that a transmission line is a closed circuit
as is a fractional wavelength antenna where the current travels on the
inside of the radiator and where the transmission line has current
flow on the inside of the
outer skin (brading) The antenna compendium states that an assumption
is made with MoM programs that an assumption is made that current in a
radiator is sinusoidal where as we all know that the current degrades
in aplitude dependent on radiator length. It should be seen that when
we use the term SWR we are looking at two different things, a
transmission line which is not radiating(ignoring leakage) but still
a closed circuit and a radiator that is radiating but with a non
sinusoidal current which is contrary to the assumptions made for MoM
style radiator programs. Thus it should be seen that any radiator is a
closed circuit with continuous leakage in current levels dependent on
its length via accountability for all four fouces present..
Regards
Art

5737. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 05:00:51 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <8KD5l.10271$701.7682@newsfe12.iad>
Source record: 18861

"Dave" <noone@nowhere.com> wrote in message
news:4du5l.1382$Es4.1261@nwrddc01.gnilink.net...
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:c53c9fd4-0e58-468c-b736-8943e758b52e@z27g2000prd.googlegroups.com...
>
> >Well the idea of 1 inch mesh was a bum idea. I should have kept to my
> >own thinking.
> >When transmitters have holes in the casing of 1 inch diameter will be
> >the time I will use such large holes.
> >Will now have to take it of and replace with aluminum window mesh.
> >The present mesh has no idication of working in any sence of the word
> >Art
>
> let me give you a hint... its not the mesh that is the problem.

The theoretical gain of a dish is expressed as (9.87 times D-squared) / (wavelength-squared), where D is the dish diameter. If you have a 3 meter dish and you're working 10m, I calculate the gain as less than unity. Ref: http://en.wikipedia.org/wiki/Parabolic_antenna

Even then, the efficiency of the dish is assumed to be 100% -- which it never is. One limitation is the effectiveness of illuminating the entire surface of the dish uniformly. How can you do that at HF? You need a compact illuminator at the focal point of the dish but HF doesn't lend itself to such gyrations.

I think you should not consider a dish for HF. It works only for wavelengths that are small, compared to the dish size. Don't fight the math.

5738. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 05:10:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj71p1$pj5$1@news.albasani.net>
Source record: 18862

Sum Ting Wong wrote:
> On Sat, 27 Dec 2008 12:27:09 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> The same antenna which transmits the MOST EFFICIENT signal possible,
>> will also receive the signal the MOST EFFICIENTLY
>
> If that were true then the BIG boys on 160m would have no need for
> tall vertical transmitting antennas and traveling wave (Beverage)
> receive antennas. They could just use one or the other for both
> transmitting and receiving, but they don't. That's because one is
> better for transmitting and one is better for receiving.
>
> S.T.W.

That is simply ridiculous, as I stated, in any properly designed antenna, with the proper pattern to achieve the points in question, and able to handle xmitter power, and is the MOST efficient for the purpose at hand will be EQUALLY efficient in both transmitting and receiving ...

On 160m, I have ALWAYS used the same antenna to transmit as to receive ...

What I stated is ABSOLUTELY TRUE ... and, there is but one truth possible here. And, certainly, in the situation you stated above, a discrepancy (imbalance) has been, absolutely, induced, as one antenna will out preform the other, have a different pattern, etc.

However, a beverage would NOT be my first choice for a transmitting antenna! And, certainly, there is no comparison over the directionality difference (i.e., patterns) between these two antennas!

Regards,
JS

5739. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 05:25:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj72kvqju1@news.albasani.net>
Source record: 18863
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Telamon wrote:

> ...
> Yeah but we don't care about transmitting goofball, we care about
> receiving and so that statement "A random wire (e.g. inverted L)
> transmits nicely if you use a tuner at the feed point" by Dave is
> relevant where you are not.
>

You ridiculous fool. You are the most complete brain dead example of a sub-human which has ever been presented to me ...

Receiving is EQUALLY as important as the transmitting element in the above. Or, to explain it to the necessary point, for a mental midget, such as yourself: "If the signal being transmitted is low power, or there are bad conditions, and, perhaps, the guy is in Australia, I'd better have the "best" antenna possible. However, if I am receiving the "50,000 watt atmosphere burner", 50 miles away, a rusty coat-hanger, most likely, would work ..."

However, you mileage may vary with you "magical antenna logic!" <grin>

You hit me as a guy attempting to pass off "magical physics" to kindergarten-ers; but then, even that is, most likely, a challenge for you ... sad, so very, very sad ... :-(

plonk ...

Regards,
JS

5740. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 05:46:01 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <toE5l.932$z%.775@edtnps82>
Source record: 18864

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c59c52f3-035b-451d-868d-852346d75d21@y1g2000pra.googlegroups.com...
> When measuring the SWR of a transmission line we can find a length
> that is resonant. Or in other words the current is of an exact
> sinusoidal form and thus the basis of SWR. When we apply the same
> principles to a radiator
> we cannot assume a perfect sinusoidal wave because of the field
> generated outside the radiator where a degradation of amplitude
> depends not only on the generated fields but also the length of the
> radiator i.e a thin radiator. Thus one can see that a fractional wave
> antenna if reflected as generally assumed cannot possibly be 1:1 for a
> wavelength as per a perfect reflection as could or would be seen from
> a transmississsion line.
> The above not only shows that a transmission line is a closed circuit
> as is a fractional wavelength antenna where the current travels on the
> inside of the radiator and where the transmission line has current
> flow on the inside of the
> outer skin (brading) The antenna compendium states that an assumption
> is made with MoM programs that an assumption is made that current in a
> radiator is sinusoidal where as we all know that the current degrades
> in aplitude dependent on radiator length. It should be seen that when
> we use the term SWR we are looking at two different things, a
> transmission line which is not radiating(ignoring leakage) but still
> a closed circuit and a radiator that is radiating but with a non
> sinusoidal current which is contrary to the assumptions made for MoM
> style radiator programs. Thus it should be seen that any radiator is a
> closed circuit with continuous leakage in current levels dependent on
> its length via accountability for all four fouces present..
> Regards
> Art

The "Method of Moments" (MOM) makes no assumptions about
current distribution on a radiator; it computes the current distribution.
The radiated field is then calculated based on the current distribution.

Frank

5741. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 08:47:16 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <7fb4354a-bcbf-44dd-a9f8-6f2c41d398a5@b41g2000pra.googlegroups.com>
Source record: 18865
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 27, 8:44 pm, John Smith <assemblywiz...@gmail.com> wrote:
> RHF wrote:
>
> > OK then what is a 'matchbox' in :
> > * a poorly designed transmitting antenna,
> > * a mismatched transmitting antenna,
> > * a non-physically resonate transmitting antenna,
>
> > Consider the 'matchbox' to be one element
> > in the RF Energy Radiating System :
> > Feed-Line + 'matchbox' + Antenna Element
>
- - i want to know - iane ~ RHF
- - .

- It would be far more "in the realm of correct" to
- consider what a matchbox DOES, rather than
- what it IS--as it is simply some combination
- of inductive and capacitive components which
- ALWAYS will induce some form of loss into
- any system it is inserted into.

Yeah - Once it is 'placed' in the "System" the MatchBox
becomes part of the "System" and becomes one of the
loses within the "System"

- However:
- *a matchbox will allow you to use a poorly designed/
- constructed antenna--it will NOT improve the antenna.

Now -if- That is True : Then Why Us The MatchBox
within an RF Energy Radiating System ?

- *a matchbox will allow you to "match" differing
- impedances to achieve proper power transfer to
- the antenna--again, it will NOT improve the
- efficiency of that antenna, and the power will be
- "simply lost" (as heat.)

So you are say that a MatchBox will not improve
the ERP of an RF Energy Radiating System ?
And that the Receiving Station will not hear you
'better' when the MatchBox is properly used with
the RF Energy Radiating System ?

- *a matchbox CAN allow you to alter the electrical
- length of an antenna--physical and electrical lengths
- are two different animals.

Electrical Characteristics = 'apparent electrical length'

- And, this is all-in-a-nut shell;

- as you realize, a proper education
- in this field is NOT a trivial thing.

A proper education in 'any' field is not a trivial thing.
And that education can take many forms : formal
practical, vocational {life time of work} and avocation
{life time hobby}

- That said, I frequently carry a cheap portable with me on trips and
- launch a longwire into a tree, etc., find acceptable signals and
enjoy
- listening ... or else, just grab the SW stations audio from the
net ...
- being an old-timer, the first is more enjoyable, for me.
-
- Regards,
- JS

being an old timer myself - i still find simply listening
to the radio to be enjoyable ~ RHF
.
.

5742. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 09:35:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj7h9b$c7k$1@news.albasani.net>
Source record: 18866
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

> ...
> Yeah - Once it is 'placed' in the "System" the MatchBox
> becomes part of the "System" and becomes one of the
> loses within the "System"
> ...

Actually, the ONLY reason to use a matchbox is that the antenna is less
than optimal for the freq(s) in question, end-of-story. However,
multi-band operation and simply having to cover a wide swath of
frequencies makes this the logical way to go, a matchbox ... in an ideal
situation, a matchbox would be avoided.

>
> Now -if- That is True : Then Why Us The MatchBox
> within an RF Energy Radiating System ?
>

There is nothing magical about a transmitting antenna, like I stated
earlier, the exact same physics govern that antenna in receive or xmit
modes. The matchbox allows you to achieve "maximum POOR performance"
from the POOR antenna ...

> ...
> So you are say that a MatchBox will not improve
> the ERP of an RF Energy Radiating System ?
> And that the Receiving Station will not hear you
> 'better' when the MatchBox is properly used with
> the RF Energy Radiating System ?
> ...

I said NO such thing, indeed, I stated the EXACT opposite, it allows
maximum power transfer to the antenna, however, the losses in the POOR
antenna are now increased due to the losses in the matchbox--as heat.
And, no problems which exist in the POOR antenna have been rectified,
they are just masked ...

> ...
> Electrical Characteristics = 'apparent electrical length'
> ...

As I stated before, physical length need not be related to electrical
length, however, in the most efficient design possible, they WILL be ...
and that is only considering maximum transfer of power to the antenna,
not, necessarily, the ether--and, that is NOT necessarily related to a

desirable pattern of radiation of that power from the POOR antenna--the patten, IMHO, is governed, mainly, by antenna length and shape, however, some designs actually can cheat this, at least a bit.

> - And, this is all-in-a-nut shell;
>
> - as you realize, a proper education
> - in this field is NOT a trivial thing.
> ...

> being an old timer myself - i still find simply listening
> to the radio to be enjoyable ~ RHF
> .
> .

As I stated before, a complete explanation/understanding of all factors involved defies a simple explanation ... as, if that were possible, no one would spend years in college, they could attend a week or a month and come away an expert.

And, my field is computer science, this is all just a hobby with me. The little knowledge which I have assembled has been done over the course of years, even decades. I am hear to find out just "how deep this rabbit hole goes ..."

Regards,
JS

5743. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 09:48:35 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <05c59601-5a26-4207-8110-f8a475f97e27@e1g2000pra.googlegroups.com>
Source record: 18867
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 27, 7:46 pm, John Smith <assemblywiz...@gmail.com> wrote:
> n...@wt.net wrote:
>
> > Well, sure, but what does transmitting have to do with
> > anything? We are not talking about transmitting.
>
> > ...
>
> It has EVERYTHING to do with it, it is the same communication, both
> ways, simply in reverse ... like I have stated before, the exact same
> laws of physics governing the antenna makes it equally acceptable to
> both transmitting and receiving. The same pattern seen in the signal
> transmitted will be seen in the signal(s) received.

- Your argument is the equivalent to arguing that
- a car designed to go forward would not be
- acceptable when backing up ...
- simply ridiculous!
-
- Regards,
- JS

JS -think-about-it-

IF 'by-design' the Car is in-fact designed
to go "Only" Forward :
* It may 'only' have Forward Gears and
a Transmission that has NO Reverse.
* No Rear Window
* No Rear Mirror
NOT So Ridiculous ~ RHF
http://www.prweb.com/prfiles/2006/10/17/452347/mormonmeteor72.jpg
.
Just an Example of "Single Focus" Thinking :
Optimizing Your Results For One Purpose.

Sort of what Shortwave Radio Listeners (SWL)
do when they consider how they are going to
Design, Build and Use an Antenna for the
Hobby of Shortwave Radio Listening (SWLing)

Yes as you have pointed out : There is a Greater
Boby of Knowledge and Practicum Out There
That Could Be Considered and Used -but- The
Shortwave Listener (SWL) often is 'selective' in

what they consider and use to achieve their
specific limited goals.

It Has To Do With "Level-of-Involvement" :
* Many/Most Amateur Radio Operators {Hams}
have the well earn knowledge and experience
to function 'like' an Auto Mechanic -wrt- Cars
* * Hams at their best are Advocates of the
Technology [Practicers of The Craft]
* Many/Most Shortwave Radio Listeners (SWLs)
simply enjoy a level of knowledge and experience
to function 'like' a Car Driver -wrt- Cars
* * SWLs at their best are Hobbyists Enjoyers
of the Technology [Users of the Technology]
TBL : Both are Need -and- Both are Different

~ RHF
.

5744. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 10:02:27 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <f0aca620-fd8e-47ac-8ab7-97b7f35b7a59@a29g2000pra.googlegroups.com>
Source record: 18868
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 27, 11:45 am, n...@wt.net wrote:
> On Dec 27, 12:53 pm, RHF <rhf-newsgro...@pacbell.net> wrote:
>
>
>
> > "N",
>
> > Don't know too many 'Hams' would would take 50 Feet
> > of common Speaker Wire and tie-a-knot at 30 Feet and
> > then split the two Wires in the remaining 20 Feet and
> > use the thing as a "Stealth" Dipole Antenna with their
> > Transmitter -but- a Shortwave Radio Listener (SWL)
> > can do that and have a very practical SWL Antenna
> > to use with many 'portable' AM&FM Shortwave Radios.
>
> Well, sure, but what does transmitting have to do with
> anything? We are not talking about transmitting.
> We are talking about receiving, "or at least I am", and
> the rules do not change when you vary the frequency a
> few mhz.
> And there are more than one ways to skin a cat with a
> given piece of wire. If I had a portable that normally used
> a whip antenna for SW, I would be much more likely to
> take that zip cord and split it totally apart to make a
> single 100 ft wire. I would simply clip it onto the whip.
> I bet my version would be the better performer of the
> two, low bands for sure. But this has nothing to do
> with what I'm listening to. If I'm listening on a ham rig,
> and I'm not transmitting, I'm a SWL the same as anyone
> else. :/
> And most certainly so if I'm listening to a broadcast band
> like 31m, or whatever. Do you think I play by different
> rules than you if we are both listening to 31m at the same
> time?
> I hope not... :/
> Sure, you can make a quite decent and usable SWL
> antenna from nothing but a piece of wire, or zip cord.
> But that is not a requirement to be a ®real SWL.
> How would you like to try listening to 19m DX on my
> tri-band yagi, which is still close enough to 20m, to
> give pretty danged good performance and some F/B?
>
> With that, why would I want to use a zip cord antenna?

> It boggles the mind... :/
> And I'm talking receive, not transmit. We'll pretend the
> mike and keyer have been superglued to a tango-
> uniform status.
> But I guess being I'd rather use my full size yagi and
> have a bit of F/B ratio, which improves S/N ratio, which
> is the whole purpose of this topic, I'm not a ®real SWL..
> Chortle.. :/
> You two guys kill me... You really do.
>
>
>
> > 50-Ft. 24-Gauge Clear 2-Conductor Speaker Wire
> > RadioShack Catalog #
278-1301http://www.radioshack.com/product/index.jsp?productId=2102499
>
> Uh.. I know where to buy wire.. :/
>
>
>
> > "n" - practically speaking {in practice} there is a
> > difference between between hams and swls ~ RHF
>
> No, there isn't. Not when it comes to receiving.
> To propose otherwise is just ludicrous.
> I listen to all the same bands you do at some
> time or another. I was a rabid SWL when I was in
> jr. high school. That was nearly 40 years ago.
> I started DXing AM-BC when I was 8 years old
> and got my first mighty six transister radio for my
> birthday.
> It's the main reason I'm a ham now. Just a natural
> progression... In other words, I might have been
> born yesterday, but not last night. :/

"N" - Alas in my heart I am still "that" 8-Year-Old
that gets daily joy from DXing the AM-BCB and
the Shortwave Bands; and more importantly simply
listening to the radio : One Word "Enjoyment".

"N" - You over time have evolved and grow with The
Craft -while- I still simply enjoy it's less technical
aspects as a user : We are different and therefore
naturally see things differently. ~ RHF
.

5745. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 10:10:42 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <e5a61379-619e-434a-b985-c7534cf34358@u18g2000pro.googlegroups.com>
Source record: 18869
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 26, 6:56 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Roy Lewallen wrote:
> > I can add a little information that might be helpful.
>
> > When considering a receiving antenna, the single thing you need to be
> > concerned about is signal to noise ratio. Unless your antenna is
> > exceptionally poor and/or your receiver exceptionally noisy, making what
> > you receive louder is just a matter of turning up the volume, or adding
> > an audio amplifier if it's not loud enough. But it won't help you hear a
> > station, because it and the noise will get louder in the same proportion.
> > ...
> > Roy Lewallen, W7EL
>
> I differ; although, I can understand why Roy would reply in such a
> simplistic manner ...

JS - What you call a "simplistic manner"

IMHO is a will 'crafted' answer by "RL" designed to
answer the readers question in a 'manner' that the
reader could easily understand, accept and act-on.

communications is about speaking 'to' the reader :
not 'at' them - iane ~ RHF
.
>
> If the antenna is resonate, matched to its' load, and is not using lossy
> construction practices--a very magical thing occurs. And, in such a
> situation, it appears as if a wire runs directly from the transmitter to
> your antenna. Nicola Tesla first documents this, then others ...
>
> However, most give up before they obtain the knowledge and construction
> practices which produce such antennas--and, indeed, if you wish
> broadband antennas, no matter how you construct them, they will only
> produce this performance on a narrow band of frequencies, or perhaps,
> just a single one ... but, they can be constructed to preform,
> reasonably well, over a broadband of frequencies or even bands.
>
> If you have immense focus, devotion to the construction of antennas, a
> reasonably astute mind, and the necessary skills, a willingness to
> construct until you have that "revelation"--the realization of all this
> awaits you. :-)
>
> Warm regards,

> JS

5746. 1296 vert

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 13:10:36 UTC
From: ml <m@di.net>
Message-ID: <m-2FED46.08103628122008@news.optonline.net>
Source record: 18870

hi

does anyone know of a make/model verticle antenna i can buy for
around 1296, just need to work the local repeaters

i am in a good high area so something simple would do , but oddly
enough i can't seem to find much for that band

already have some spare hardline run up to the roof

any help appreciate thanks

5747. dipole feed to leg

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 13:18:40 UTC
From: ml <m@di.net>
Message-ID: <m-0E4AB7.08184028122008@news.optonline.net>
Source record: 18871

hi

In the case of a center fed dipole, typically you want the
feedline lets say coax, drooping downwards

in a case where you might not be able to do this and need the feeding
coax to b closer and more parrallel to one of the legs .....

i realize that this will make the dipole more inefficient and
distort the pattern...

but how do you even roughly calculate that??

thanks

5748. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 13:20:58 UTC
From: Dave <dave@dave.dave>
Message-ID: <nZWdnQn3L9fZ4MrUnZ2dnUVZ_rrinZ2d@earthlink.com>
Source record: 18872
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

>
> Consider the 'matchbox' to be one element
> in the RF Energy Radiating System :
> Feed-Line + 'matchbox' + Antenna Element
>
> i want to know - iane ~ RHF
> .
>
>

It depends where the current node[s] end[s] up.

5749. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 13:25:27 UTC
From: Dave <dave@dave.dave>
Message-ID: <nc-dndmB4pnV48rUnZ2dnUVZ_tCdnZ2d@earthlink.com>
Source record: 18873
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:

> However, in side-by-side comparisons on 10-6-2m antennas I have built,
> comparing a 5/8 against the 1/2 (construction methods/materials and
> matching components identical) ... the actual difference, in the real
> world, must be less than the width of a meter needle in the readings ...
> or, put simply, I no longer deal with the extra length required of the
> 5/8 ... your mileage may vary ...
>
> Regards,
> JS

The advantage of a physical height (antenna length) between 180 and 215 degrees (see previous post regarding the magic number being around 195 degrees) is improved take-off angle and reduced skywave-groundwave interaction, not dramatic nearfield voltage increases.

5750. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 13:30:49 UTC
From: Dave <dave@dave.dave>
Message-ID: <nc-dnduB4pkU4srUnZ2dnUVZ_tCdnZ2d@earthlink.com>
Source record: 18874
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:
> RHF wrote:
>
>> ...
>> "N",
>>
>> Don't know too many 'Hams' would would take 50 Feet
>> of common Speaker Wire and tie-a-knot at 30 Feet and
>> then split the two Wires in the remaining 20 Feet and
>> use the thing as a "Stealth" Dipole Antenna with their
>> Transmitter -but- a Shortwave Radio Listener (SWL)
>> can do that and have a very practical SWL Antenna
>> to use with many 'portable' AM&FM Shortwave Radios.
>>
>> 50-Ft. 24-Gauge Clear 2-Conductor Speaker Wire
>> RadioShack Catalog # 278-1301
>> http://www.radioshack.com/product/index.jsp?productId=2102499
>>
>> "n" - practically speaking {in practice} there is a
>> difference between between hams and swls ~ RHF
>> .
>> .
>>
>
> I have taken ordinary lamp zip cord, split the two leads apart to for a
> 1/4 wave dipole and fed the end of the remaining length of zip cord with
> a balun to the rig (some zip cord is ~68-72 ohm balanced line, the
> mismatch is more than acceptable for field/emergency use.)
>
> Never, say never ... some ham will do it!
>
> Regards,
> JS
Yes,some ham will do it, with a 3 Watt transmitter tucked into a Sucrets
tin, and work 50 countries with his zip cord dipole.

5751. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 13:32:08 UTC
From: Dave <dave@dave.dave>
Message-ID: <nc-dndqB4plF4srUnZ2dnUVZ_tAAAAAA@earthlink.com>
Source record: 18875
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:
> nm5k@wt.net wrote:
>
>>
>> Well, sure, but what does transmitting have to do with
>> anything? We are not talking about transmitting.
> > ...
>
> It has EVERYTHING to do with it, it is the same communication, both
> ways, simply in reverse ... like I have stated before, the exact same
> laws of physics governing the antenna makes it equally acceptable to
> both transmitting and receiving. The same pattern seen in the signal
> transmitted will be seen in the signal(s) received.
>
> Your argument is the equivalent to arguing that a car designed to go
> forward would not be acceptable when backing up ... simply ridiculous!
>
> Regards,
> JS
How does one transmit MW with a ferrite bar antenna?

5752. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 13:50:13 UTC
From: Dave <dave@dave.dave>
Message-ID: <x4idnRM3WIOIGcrUnZ2dnUVZ_oPinZ2d@earthlink.com>
Source record: 18876
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:

>
> I said NO such thing, indeed, I stated the EXACT opposite, it allows
> maximum power transfer to the antenna, however, the losses in the POOR
> antenna are now increased due to the losses in the matchbox--as heat.
> And, no problems which exist in the POOR antenna have been rectified,
> they are just masked ...

That is vastly oversimplified.

5753. Re: 1296 vert

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 13:54:36 UTC
From: Dave <dave@dave.dave>
Message-ID: <x4idnRI3WIOBGMrUnZ2dnUVZ_oPinZ2d@earthlink.com>
Source record: 18877

ml wrote:
> hi
>
> does anyone know of a make/model verticle antenna i can buy for
> around 1296, just need to work the local repeaters
>
> i am in a good high area so something simple would do , but oddly
> enough i can't seem to find much for that band
>
> already have some spare hardline run up to the roof
>
> any help appreciate thanks
http://www.new-tronics.com/main/html/base_spirit_antenna_1_2-1_3_gh.html

5754. Re: HF Vertical in a septic leach field

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 14:03:24 UTC
From: RF BURNS <rfburns422@yahoo.com>
Message-ID: <49578730$1$17067$6e1ede2f@read.cnntp.org>
Source record: 18878

"KC8QJP" <KC8QJP@yahoo.com> wrote in message
news:4953bb12$0$585$c5fe31e7@reader.usenet4all.se...
>
> "Steve Stone" <spfleck@citlink.net> wrote in message
> news:gisds6dhn1@news.motzarella.org...
>>I have a 5 band Hustler vertical.
>>
>> Available install space in my backyard is an area adjacent to my septic
>> system leach field.
>>
>> I really don't want to place the antenna in the middle of the leach field
>> and risk hitting an outflow pipe.
>> If I put it just outside of the reach of the outflow pipes the ground is
>> still relatively moist due to natural run off and the leach field.
>>
>> So will this leach field moisture enhance or inhibit the verticals
>> performance due to soil conductivity.. or none of the above if the
>> antenna is installed as indicated in the Hustler installation manual. (2
>> radials per band using insulated copper wire, 4 foot
>> metal mast pounded directly into the ground, no concrete, no wood).
>>
>> There is also a 4 foot high chain link fence surrounding my backyard,
>> 300' x 150', one side about 25 feet from the potential install location.
>> No trees or shrubs closer than 15 feet from the vertical mast.
>>
>> Steve
>> N2UBP
>
>
>>
>
> we run the superskyhook sloper on 11 meters, it SCREAMS!
>
> http://i40.tinypic.com/2ykgg05.jpg
>
> mary xmas
>
Isn't your old man none other than N8WWM MrBindwell the fatboy, and he's
having some sort of party here?

Lance & Lisa Adair
10431 Jackman Rd
Temperance, MI 48182-9629
(734) 854-2426

http://groups.google.com/group/rec.radio.amateur.antenna/msg/f62a443e49628e5c

5755. Re: FS Dentron Junior Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 14:09:44 UTC
From: RF BURNS <rfburns422@yahoo.com>
Message-ID: <495788ac$1$17066$6e1ede2f@read.cnntp.org>
Source record: 18879

"KC8QJP" <KC8QJP@yahoo.com> wrote in message
news:4953bccf$0$582$c5fe31e7@reader.usenet4all.se...
>
> "Charlie Hugg" <k5mbx@sbcglobal.net> wrote in message
> news:7NA4l.11440$c45.8447@nlpi065.nbdc.sbc.com...
>> For sale a Very nice Dentron Junior Monitor antenna tuner, tunes a
>> balanced or unbalanced line will handle 300 watts 160 thru 10 meters. Has
>> jacks on the back for coax, ladder line, or random wire. Tuner is in
>> great shape and works fine, tunes all bands with no problems. Includes
>> the original owner's manual. Price is $75. Pictures available. Thanks,
>> Charlie Hugg, K5MBX
>>
> we used too load up the rain gutters on the superbowl with one of
> those..GRATE TUNER!
>
> mary xmas
>
How did you get banned from QRZ.com, Kathy?

http://forums.qrz.com/showthread.php?t=36738

5756. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 14:10:43 UTC
From: Dave <noone@nowhere.com>
Message-ID: <DNL5l.1548$BC4.857@nwrddc02.gnilink.net>
Source record: 18880

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:8KD5l.10271$701.7682@newsfe12.iad...
>
> "Dave" <noone@nowhere.com> wrote in message
> news:4du5l.1382$Es4.1261@nwrddc01.gnilink.net...
>>
>> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
>> news:c53c9fd4-0e58-468c-b736-8943e758b52e@z27g2000prd.googlegroups.com...
>>
>> >Well the idea of 1 inch mesh was a bum idea. I should have kept to my
>> >own thinking.
>> >When transmitters have holes in the casing of 1 inch diameter will be
>> >the time I will use such large holes.
>> >Will now have to take it of and replace with aluminum window mesh.
>> >The present mesh has no idication of working in any sence of the word
>> >Art
>>
>> let me give you a hint... its not the mesh that is the problem.
>
>
> The theoretical gain of a dish is expressed as (9.87 times D-squared) /
> (wavelength-squared), where D is the dish diameter. If you have a 3 meter
> dish and you're working 10m, I calculate the gain as less than unity.
> Ref:
> http://en.wikipedia.org/wiki/Parabolic_antenna
>
> Even then, the efficiency of the dish is assumed to be 100% -- which it
> never is. One limitation is the effectiveness of illuminating the entire
> surface of the dish uniformly. How can you do that at HF? You need a
> compact illuminator at the focal point of the dish but HF doesn't lend
> itself to such gyrations.
>
> I think you should not consider a dish for HF. It works only for
> wavelengths that are small, compared to the dish size. Don't fight the
> math.
>
>

what do you get for gain when you use it on 160m like art is doing?

5757. KC8QJP felon tax fraud -was- Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 14:17:26 UTC
From: RF BURNS <rfburns422@yahoo.com>
Message-ID: <49578a7b$0$17070$6e1ede2f@read.cnntp.org>
Source record: 18881
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

"KC8QJP" <KC8QJP@yahoo.com> wrote in message
news:4953bc35$0$585$c5fe31e7@reader.usenet4all.se...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:cua2l4553a7tvsfs3nb0v9mi1pctc898pl@4ax.com...
>> On Tue, 23 Dec 2008 09:46:07 -0800 (PST), PJ <norahfan@gmail.com>
>> wrote:
>>
>>>Folks,
>>>
>>>I have purchased a Sangean ATS-909 World Receiver. It is equipped with
>>>an internal ferrite antenna f�r MW and LW, and a telescope antenna for
>>>SW and FM. It also comes with a portable SW antenna (ANT-60), seven
>>>meters long. Is this external antenna generally sufficient for SW
>>>reception, or should I get a different antenna? If yes, is there a
>>>solution that doesn't cost all that much money? I have a copy of the
>>>2009 World Radio TV Handbook, and they are talking about a Wellbrook
>>>ALA-1530+ loop antenna, and let me tell you, that one is well past my
>>>budget, because it costs $466... I am looking for something a lot
>>>cheaper... :-) If it is recommended to replace the ANT-60, that is.
>>>
>>>PJ
>>
>> Hi PJ,
>>
>> With your location in Sweden, a long wire should pick up a lot of
>> stations unless you are buried deep in a valley. That long wire can
>> be as simple as 10 meters of wire with a clip to attach it to the whip
>> of the Sangean. When I was in Africa last year, that was enough to
>> fill my cheap SW set with signals from everywhere in Africa up into
>> Europe. Toss the wire out a window up into a tree. It is at least a
>> cheap, first attempt to see if you need anything more than that.
>>
>> 73's
>> Richard Clark, KB7QHC
>>
>>
> try the superskyhook sloper it works wonders over hear!
> http://i40.tinypic.com/2ykgg05.jpg
>
> mary xmas
>

That looks like junk,KC8QJP . You're better off sticking to the bogus tax returns or are you still in prison for that?

FORMAL DISCIPLINARY HEARING-KATHLEEN R. LEE
Chairman Woods noted that Kathleen Lee was issued CPA certificate 36,525 on July 15, 1998. The hearing was to consider disciplinary action against Ms. Lee's CPA certificate pursuant to Ohio Revised Code section 4701.16(A)(5), conviction of a felony under the laws of any state or of the United States. Ms. Lee was convicted in the United States District Court, Northern District of Ohio of five counts of Aiding & Assisting in Filing False Tax Returns, a violation of 26 USC 7206(2), on June 12, 2000. Ms. Lee did not appear at the hearing. The Board agreed to deliberate the disciplinary action in a later executive session.
Action taken.
Kathleen R. Lee, CPA 4701.16(A)(5)-Convicted of aiding & assisting in filing of false tax returns. CPA certificate revoked.

5758. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 14:20:45 UTC
From: Dave <noone@nowhere.com>
Message-ID: <1XL5l.1556$BC4.1417@nwrddc02.gnilink.net>
Source record: 18882

"Frank" <ve6cb@nospam.telus.net> wrote in message
news:toE5l.932$z%.775@edtnps82...
>
> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> news:c59c52f3-035b-451d-868d-852346d75d21@y1g2000pra.googlegroups.com...
>> When measuring the SWR of a transmission line we can find a length
>> that is resonant. Or in other words the current is of an exact
>> sinusoidal form and thus the basis of SWR. When we apply the same
>> principles to a radiator
>> we cannot assume a perfect sinusoidal wave because of the field
>> generated outside the radiator where a degradation of amplitude
>> depends not only on the generated fields but also the length of the
>> radiator i.e a thin radiator. Thus one can see that a fractional wave
>> antenna if reflected as generally assumed cannot possibly be 1:1 for a
>> wavelength as per a perfect reflection as could or would be seen from
>> a transmississsion line.
>> The above not only shows that a transmission line is a closed circuit
>> as is a fractional wavelength antenna where the current travels on the
>> inside of the radiator and where the transmission line has current
>> flow on the inside of the
>> outer skin (brading) The antenna compendium states that an assumption
>> is made with MoM programs that an assumption is made that current in a
>> radiator is sinusoidal where as we all know that the current degrades
>> in aplitude dependent on radiator length. It should be seen that when
>> we use the term SWR we are looking at two different things, a
>> transmission line which is not radiating(ignoring leakage) but still
>> a closed circuit and a radiator that is radiating but with a non
>> sinusoidal current which is contrary to the assumptions made for MoM
>> style radiator programs. Thus it should be seen that any radiator is a
>> closed circuit with continuous leakage in current levels dependent on
>> its length via accountability for all four fouces present..
>> Regards
>> Art
>
> The "Method of Moments" (MOM) makes no assumptions about
> current distribution on a radiator; it computes the current distribution.
> The radiated field is then calculated based on the current distribution.
>
> Frank
>
art doesn't know MOM from the fractal least squares genetic optimizer
code... so don't be surprised when he comes back with more gibberish.

5759. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 14:52:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <joM5l.15659$ZP4.6444@nlpi067.nbdc.sbc.com>
Source record: 18883

John Smith wrote:
> ... perhaps Cecil is aware of something?

I'm wondering if he means "reactance" instead of
inductance. The reactance to ground is capacitive
for a solid disk.
--
73, Cecil http://www.w5dxp.com

5760. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 14:53:06 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8aebbd4e-3975-4fe8-8e74-344e83b3de3a@d36g2000prf.googlegroups.com>
Source record: 18884

snip

. Ref:http://en.wikipedia.org/wiki/Parabolic_antenna
>
snip

Thank you so much for your input
The URL that you directed me to does not show the restrictions and
assumptions that apply
and we all know that radiation is filled with such things some of
which are not supportable.
A case in point is how reflection is shown upon the belts that
surround the earth which is shown as a curved
like particle rejection where at the same time the URL shows a
straight line reflection.
I do not accept this theory but do accept that a dish is covered with
particles at rest which will repell impinging particles with spin.
I would also point out that the design shown in the URL is based
around an antenna that is broardside where the phase angle comes into
play.
This is distinctly different to a radiator with axial flow that does
not depend on phase change as with planar design reflectors that
evolve solely around inter inductive coupling. As far as the math is
concerned I am starting a a premise that is supported by marthematics
just as one would expand all of Maxwells laws to be solely limited to
those of Ampere where I used an extended Gauss insteas all of which
are based around Newton where the term
(=) is the support for equilibrium or symmetry and where the theory of
radiation of sound and light being of a wave nature is thourouly
debunked in favor of particles.
Never the less your comments are interesting but also symbolic of the
fact that the laws of radiation sghould be thourouly reviewed in the
light of present day findings such that incorrect notions such as the
formation of waves are re examined.
Regards
Art

5761. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 15:00:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <669ff6cb-92ec-41fb-a091-6fdd981fba7d@z27g2000prd.googlegroups.com>
Source record: 18885

```
On Dec 27, 11:46 pm, "Frank" <ve...@nospam.telus.net> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:c59c52f3-035b-451d-868d-852346d75d21@y1g2000pra.googlegroups.com...
>
>
>
> > When measuring the SWR of a transmission line we can find a length
> > that is resonant. Or in other words the current is of an exact
> > sinusoidal form and thus the basis of SWR. When we apply the same
> > principles to a radiator
> > we cannot assume a perfect sinusoidal wave because of the field
> > generated outside the radiator where a degradation of amplitude
> > depends not only on the generated fields but also the length of the
> > radiator i.e a thin radiator. Thus one can see that a fractional wave
> > antenna if reflected as generally assumed cannot possibly be 1:1 for a
> > wavelength as per a perfect reflection as could or would be seen from
> > a transmississsion line.
> > The above not only shows that a transmission line is a closed circuit
> > as is a fractional wavelength antenna where the current travels on the
> > inside of the radiator and where the transmission line has current
> > flow on the inside of the
> > outer skin (brading) The antenna compendium states that an assumption
> > is made with MoM programs that an assumption is made that current in a
> > radiator is sinusoidal where as we all know that the current degrades
> > in aplitude dependent on radiator length. It should be seen that when
> > we use the term SWR we are looking at two different things, a
> > transmission line which is not radiating( ignoring leakage) but still
> > a closed circuit and a radiator that is radiating but with a non
> > sinusoidal current which is contrary to the assumptions made for MoM
> > style radiator programs. Thus it should be seen that any radiator is a
> > closed circuit with continuous leakage in current levels dependent on
> > its length via accountability for all four fouces present..
> > Regards
> > Art
>
> The "Method of Moments" (MOM) makes no assumptions about
> current distribution on a radiator;  it computes the current distribution.
> The radiated field is then calculated based on the current distribution.
>
> Frank

Yes it does but as always one must review the basis on which formula
is formed and conditions expressed
```

One of these conditions is that current flow is sinusoidal which
cannot be true because of leakage (radiation)
per unit length of the radiator. If on compares the current flow of a
full wave radiatior to a fractional wave
current flow this becomes very obvious especially when either of them
is compared to a true sino soidal curve
Cheers Frank

5762. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 15:04:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c0d7a650-7ccf-4b72-8388-b87486073358@c36g2000prc.googlegroups.com>
Source record: 18886

On Dec 28, 8:20 am, "Dave" <no...@nowhere.com> wrote:
> "Frank" <ve...@nospam.telus.net> wrote in message
>
> news:toE5l.932$z%.775@edtnps82...
>
>
>
> > "Art Unwin" <ArthurUn...@gmail.com> wrote in message
> >news:c59c52f3-035b-451d-868d-852346d75d21@y1g2000pra.googlegroups.com...
> >> When measuring the SWR of a transmission line we can find a length
> >> that is resonant. Or in other words the current is of an exact
> >> sinusoidal form and thus the basis of SWR. When we apply the same
> >> principles to a radiator
> >> we cannot assume a perfect sinusoidal wave because of the field
> >> generated outside the radiator where a degradation of amplitude
> >> depends not only on the generated fields but also the length of the
> >> radiator i.e a thin radiator. Thus one can see that a fractional wave
> >> antenna if reflected as generally assumed cannot possibly be 1:1 for a
> >> wavelength as per a perfect reflection as could or would be seen from
> >> a transmississsion line.
> >> The above not only shows that a transmission line is a closed circuit
> >> as is a fractional wavelength antenna where the current travels on the
> >> inside of the radiator and where the transmission line has current
> >> flow on the inside of the
> >> outer skin (brading) The antenna compendium states that an assumption
> >> is made with MoM programs that an assumption is made that current in a
> >> radiator is sinusoidal where as we all know that the current degrades
> >> in aplitude dependent on radiator length. It should be seen that when
> >> we use the term SWR we are looking at two different things, a
> >> transmission line which is not radiating(ignoring leakage) but still
> >> a closed circuit and a radiator that is radiating but with a non
> >> sinusoidal current which is contrary to the assumptions made for MoM
> >> style radiator programs. Thus it should be seen that any radiator is a
> >> closed circuit with continuous leakage in current levels dependent on
> >> its length via accountability for all four fouces present..
> >> Regards
> >> Art
>
> > The "Method of Moments" (MOM) makes no assumptions about
> > current distribution on a radiator; it computes the current distribution.
> > The radiated field is then calculated based on the current distribution.
>
> > Frank
>

> art doesn't know MOM from the fractal least squares genetic optimizer
> code... so don't be surprised when he comes back with more gibberish.

David there is nothing technical to respond to in your posting so
what
sort of response were you looking for?. If MoM has the condition
stated in
the ARRL compendium then something is seriously wrong with antenna
programs!
Regards
Art

5763. Re: 80m Dipole fed with open wire feeder.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 15:37:26 UTC
From: nm5k@wt.net
Message-ID: <035c0927-62f6-4b2f-82c9-fa5874353fdf@d42g2000prb.googlegroups.com>
Source record: 18887

On Dec 27, 8:26 pm, maxpowe...@yahoo.com.au wrote:
> Hello all,
> I presently have an 80m dipole fed with about 50 feet of coax. I also
> have a 40m dipole fed with 50 feet of coax at the same height. If I
> was to replace the coax on the 80m dipole with open wire feeder and
> used it on 40m, would it have more gain than the coax fed 40m dipole?
> Also, would it receive better?
> Cheers.

In theory the full wave should be good for a couple of extra DB
broadside. So yes, you would have a little gain broadside to the
wire. But you would have less gain in the other directions.
Receiving would be reciprocal. Gain broadside, less gain in the
other directions.
Whether it's any better is up to the directions you are working
at the time. Could be slightly better. Could be slightly worse..
There is no free lunch.
If it were me.. I'd stick with what you have unless you have a real
need for gain broadside to the wire. Also, 2 DB is barely a 1/2
S unit on the average receiver. Just barely worth the trouble.
I have used extended dipoles at times, but I prefer the EDZ over
the full wave dipole. IE: .64 wave per leg, instead of .50 wave per
leg. You will show appx 3 db gain broadside over the dipole with
the EDZ. Even 3 db is not earthshaking, but it is an effective
doubling of power in the two directions broadside to the wire.
You have to decide if more gain broadside is worth less gain
in the other directions.
On the low bands like 80/40, I prefer to be fairly omnidirectional
as the people I work are usually in all directions.
Also, a 1/2 wave dipole fed with coax is one of the most efficient
systems you can use. :)
If I run anything else, it would usually be a turnstile. That's what
I've been using on 80m the past few years. But I'm just running
a regular dipole on 40m.

5764. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 16:37:43 UTC
From: ve2pid <ve2pid@videotron.ca>
Message-ID: <ff7b1171-382d-45cd-ae49-f4bd1a5050bd@k41g2000yqn.googlegroups.com>
Source record: 18888

On 28 déc, 09:52, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith wrote:
> > ... perhaps Cecil is aware of something?
>
> I'm wondering if he means "reactance" instead of
> inductance. The reactance to ground is capacitive
> for a solid disk.
> --
> 73, Cecil http://www.w5dxp.com

Hello to all,

The context is this: We are discuting about capacitance hats.. It seems that the name is confusing, since it adds inductance instead of capacitance to an antenna.

So, since a solid disk adds inductance (the resonnant freq of the antenna drops), we are looking for a formula to evaluate that inductance (and then inductive reactance)..

BTW, why don't we use the name 'inductive hat'...??

5765. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 16:42:06 UTC
From: Dave <noone@nowhere.com>
Message-ID: <y%N5l.1572$BC4.203@nwrddc02.gnilink.net>
Source record: 18889

"ve2pid" <ve2pid@videotron.ca> wrote in message
news:ff7b1171-382d-45cd-ae49-f4bd1a5050bd@k41g2000yqn.googlegroups.com...
>The context is this: We are discuting about capacitance hats.. It
>seems that the name is confusing, since it adds inductance instead of
>capacitance to an antenna.

>So, since a solid disk adds inductance (the resonnant freq of the
>antenna drops), we are looking for a formula to evaluate that
>inductance (and then inductive reactance)..

>BTW, why don't we use the name 'inductive hat'...??

adding capacitance also lowers the resonant frequency. remember, the
capacitive hat is not adding capacitance in series with the feedpoint, it is
adding to the self capacitance and capacitance to the ground.

5766. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 16:46:40 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Q3O5l.1573$BC4.923@nwrddc02.gnilink.net>
Source record: 18890

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:8aebbd4e-3975-4fe8-8e74-344e83b3de3a@d36g2000prf.googlegroups.com...
>I do not accept this theory but do accept that a dish is covered with
>particles at rest which will repell impinging particles with spin.

ah yes, don't forget the diamagnetic part... maybe your antenna didn't work
because the wire mesh you used was ferromagnetic instead of diamagnetic so
it didn't have the layer of magical mystery levitating neutrinos. or maybe
you turned it upside down so all the neutrinos ran out of the dish.

5767. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 17:06:18 UTC
From: Frank <ve6cbxyz@nospam.telus.net>
Message-ID: <emO5l.953$z%.536@edtnps82>
Source record: 18891

>> The "Method of Moments" (MOM) makes no assumptions about
>> current distribution on a radiator; it computes the current distribution.
>> The radiated field is then calculated based on the current distribution.
>>
>> Frank

>Yes it does but as always one must review the basis on which formula
>is formed and conditions expressed
>One of these conditions is that current flow is sinusoidal which
>cannot be true because of leakage (radiation)
>per unit length of the radiator. If on compares the current flow of a
>full wave radiatior to a fractional wave
>current flow this becomes very obvious especially when either of them
>is compared to a true sino soidal curve
>Cheers Frank

None of the conditions assume current (distribution) on a radiator is
sinusoidal. It can be anything, not even remotely sinusoidal, and
frequently has discontinuities (such as a "unit step function" in the
case of a shunt fed, gamma matched, grounded tower, for example).

The theory behind the "Moment method", in the case of NEC 2,
is in the public domain, and available here:

http://www.nec2.org/other/nec2prt1.pdf

Frank

5768. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 18:11:54 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8338988f-abd2-4f19-ade1-8d6a787b48ef@r36g2000prf.googlegroups.com>
Source record: 18892

On Dec 28, 11:06 am, "Frank" <ve6cb...@nospam.telus.net> wrote:
> >> The "Method of Moments" (MOM) makes no assumptions about
> >> current distribution on a radiator; it computes the current distribution.
> >> The radiated field is then calculated based on the current distribution.
>
> >> Frank
> >Yes it does but as always one must review the basis on which formula
> >is formed and conditions expressed
> >One of these conditions is that current flow is sinusoidal which
> >cannot be true because of leakage (radiation)
> >per unit length of the radiator. If on compares the current flow of a
> >full wave radiatior to a fractional wave
> >current flow this becomes very obvious especially when either of them
> >is compared to a true sino soidal curve
> >Cheers Frank
>
> None of the conditions assume current (distribution) on a radiator is
> sinusoidal. It can be anything, not even remotely sinusoidal, and
> frequently has discontinuities (such as a "unit step function" in the
> case of a shunt fed, gamma matched, grounded tower, for example).
>
> The theory behind the "Moment method", in the case of NEC 2,
> is in the public domain, and available here:
>
> http://www.nec2.org/other/nec2prt1.pdf
>
> Frank

Frank
What I am pointing out that radiation theory is based on assumpotions
and theories
both of which are built upon to the present day. Examples are the
extrapolations with respect to light
consisting of waves (arrived at be fore Maxwells correction to his
laws) and the assumption of reflection from an open ended antenna
which has now become an erronious science of its own.
Such assumptions and theories are thourly embrased in the NEC format
in the same way the yagi was embraced as a close approximation
of antenna theory. A point to note besides Krauss';s study of helical
antennas there have been two additional studies of the gain provided
(Hayward was one plus another based on NEC) All of the gain figures
arrived at were different by a disturbing amount a problem that has
not been resolved. Actualy one of these studies showed that a "cupped
" reflector provided far superior gains over other style reflectors.

I am not saying that NEC is grossly inaccurate but only that the solutions provided are not precise., Using just one example radiation at present is presumed to provide many waves along a conductor purely on the bases that current is reflected from the antenna end and progresses along the same path that it arrived. This error alone has allowed many assumptions and erronious theories to be expanded.
Cheers
Art

5769. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 18:15:40 UTC
From: nm5k@wt.net
Message-ID: <a066b7c4-f83b-41cb-99a6-a01cacfca4ef@s9g2000prg.googlegroups.com>
Source record: 18893
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 28, 4:02 am, RHF <rhf-newsgro...@pacbell.net> wrote:

>
> "N" - Alas in my heart I am still "that" 8-Year-Old
> that gets daily joy from DXing the AM-BCB and
> the Shortwave Bands; and more importantly simply
> listening to the radio : One Word "Enjoyment".
>
> "N" - You over time have evolved and grow with The
> Craft -while- I still simply enjoy it's less technical
> aspects as a user : We are different and therefore
> naturally see things differently. ~ RHF
> .

I was pretty primitive in the early days. :/
Not much money, so I made do with some weird stuff.
Here is my "radio room" when I was in the 7th, 8th grade
or so. Probably about 1971. The "room" is the closet in
my bedroom..
http://home.comcast.net/~nm5k/r2.jpg
The radio was a philco portable. Covered 4-12 mhz.
No BFO.. So... I would use the white AM radio sitting
behind it as a BFO. :/ Not the most fun in the world,
being neither radio was the most stable things around..
But it would let me listen to CW and SSB with tuning
tweaks every once in a while. Well, maybe more than
once in a while.. :(
The other white AM radio to the left was more for the
clock, and I used the radio in it for local AM listening
most of the time.
The antenna was just a random wire strung out the
back window.
The contraption in the foreground was the first transmitter
I built. It was a single 6V6 run off line voltage for the B+.
Did maybe 5-10 watts I guess.. 40m, and I had two
crystals. Look at my advanced scotch tape coil forming
construction. :/
The chassis was WW2 Navy issue.. The circuit from the
1949 ARRL handbook. Yes, it actually worked.. :)
I later rebuilt it using a transformer, and a bit more power.
I used it as my first novice transmitter for a good while.
By that time, I had a Hammarlund HQ-110 for a receiver.
But as a SWL, I listened to half a zillion stations just with
that little philco portable and about 50 feet of wire hooked

to it.
Spent half a fortune "to me back then" on IRC's to get
faster QSL replies. You can see a RAI card on the wall.
They sent me magazines for about 20 years after that card..
I still got color RAI magazines into the late 80's at least..
For many years, I used to get a Christmas card from Radio
Havana.. Every year.. Then like the RAI mags, they finally
quit coming.
I used to get some real nice glossy color magazines from
China back in those days. :/ The FBI probably thought I
was some kind of communist being I used to get so much
mail from them...

5770. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 18:20:55 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <c3fe3de4-7d4d-4dda-9c65-1d9f47059add@g3g2000pre.googlegroups.com>
Source record: 18894

On Dec 28, 10:46 am, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:8aebbd4e-3975-4fe8-8e74-344e83b3de3a@d36g2000prf.googlegroups.com...
>
> >I do not accept this theory but do accept that a dish is covered with
> >particles at rest which will repell impinging particles with spin.
>
> ah yes, don't forget the diamagnetic part... maybe your antenna didn't work
> because the wire mesh you used was ferromagnetic instead of diamagnetic so
> it didn't have the layer of magical mystery levitating neutrinos. or maybe
> you turned it upside down so all the neutrinos ran out of the dish.

Let me make this clear once and foir all. Ferromagnetic material
provides for retension of energy via
the hysterysis effect amoung other things. This detracts from energy
required for the Foucault current
which is required for the application of spin to particles. This is
not to say that some vestiges of the
eddy current is not present but it does suggest a typically reduced
radiation field.
As far as a dish reflecter is concerned that has been built around the
necessity of a focal point in the phase changing aproach provided by
inductive interactive elements and does not follow the same aproach
required by the addition of the levitating weak force known as the
Foucalt current
Art

5771. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 18:24:00 UTC
From: Dave <noone@nowhere.com>
Message-ID: <4vP5l.1507$Es4.490@nwrddc01.gnilink.net>
Source record: 18895

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:8338988f-abd2-4f19-ade1-8d6a787b48ef@r36g2000prf.googlegroups.com...
>Using just one example radiation
>at present is presumed to provide many waves along a conductor purely
>on the bases that current is reflected from the antenna end and
>progresses along the same path that it arrived. This error alone has
>allowed many assumptions and erronious theories to be expanded.

oh no! now he doesn't believe in reflections! how could we ever survive on
here without endless discussions of reflections and waves?

5772. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 18:25:56 UTC
From: Richard Fry <"rfry at adams.net">
Message-ID: <ce442$4957c4b2$649@news.teranews.com>
Source record: 18601

"Art Unwin" wrote
>The antenna compendium states that an assumption
> is made with MoM programs that an assumption is made that current
> in a radiator is sinusoidal where as we all know that the current
> degrades in aplitude dependent on radiator length.

Art, the current distribution along even the shortest (fractional wavelength), constant OD radiator also is ~sinusoidal.

Currrent always is near zero at the open end of a linear radiator of every physical length. The shape of the current wave formed along a very short radiator appears to be very close to triangular. But in fact that "triangular" current distribution is just a very short section of a sinusoidal waveform.

N.B. that MoM programs show exactly this for radiators that are very short in terms of electrical wavelengths. This also is proven mathematically in the antenna engineering textbooks of Kraus, Balanis, Johnson & Jasik, etc etc.

RF

** Posted from http://www.teranews.com **

5773. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 18:27:11 UTC
From: Dave <noone@nowhere.com>
Message-ID: <3yP5l.1509$Es4.1178@nwrddc01.gnilink.net>
Source record: 18896

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:c3fe3de4-7d4d-4dda-9c65-1d9f47059add@g3g2000pre.googlegroups.com...
>As far as a dish reflecter is concerned that has been built around the
>necessity of a focal point in the phase changing aproach provided by
>inductive interactive elements and does not follow the same aproach
>required by the addition of the levitating weak force known as the
>Foucalt current

ah, so your old theory with the magical levitating diamagnetic neutrinos was
wrong and now you are using a phase change approach (whatever that may be)
and inductive interactions (which i thought you disliked because that is
part of how a Yagi-Uda array works). if the magical levitating diamagnetic
neutrinos is good enough for one antenna, why isn't it good enough for this
one??? or are you admitting you are totally wrong?

5774. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 18:36:55 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <a9c1b4bf-871f-431c-b39c-f11bb955ba5a@e1g2000pra.googlegroups.com>
Source record: 18897

"Art Unwin" wrote
>The antenna compendium states that an assumption
> is made with MoM programs that an assumption is made that current
> in a radiator is sinusoidal where as we all know that the current
> degrades in aplitude dependent on radiator length.

Art, the current distribution along even the shortest fractional wavelength, constant OD radiator also is ~sinusoidal.

Current always is near zero at the open end of a linear radiator of every physical length. The shape of the current wave formed along a very short radiator appears to be very close to triangular. But in fact that "triangular" current distribution is just a very short section of a sinusoidal waveform.

N.B. that MoM programs show exactly this for radiators that are very short in terms of electrical wavelengths. This also is proven mathematically in the antenna engineering texts of Kraus, Balanis, Johnson & Jasik, etc.

RF

5775. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 19:08:21 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a4e424a7-ce7e-4b27-8236-ede2f5e207a8@40g2000prx.googlegroups.com>
Source record: 18898

On Dec 28, 12:27 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:c3fe3de4-7d4d-4dda-9c65-1d9f47059add@g3g2000pre.googlegroups.com...
>
> >As far as a dish reflecter is concerned that has been built around the
> >necessity of a focal point in the phase changing aproach provided by
> >inductive interactive elements and does not follow the same aproach
> >required by the addition of the levitating weak force known as the
> >Foucalt current
>
> ah, so your old theory with the magical levitating diamagnetic neutrinos was
> wrong and now you are using a phase change approach (whatever that may be)
> and inductive interactions (which i thought you disliked because that is
> part of how a Yagi-Uda array works). if the magical levitating diamagnetic
> neutrinos is good enough for one antenna, why isn't it good enough for this
> one??? or are you admitting you are totally wrong?

David,
you are building an auguement on sand like "have you stopped beating
your wife?"
You can traverse the world with a steel antenna using less than a watt
with the same message
as a Kw from a huge antenna. The only difference is that one system
provides less samples
of communication for the ear bone requires to decifer. This being
under ideal conditions which are rarely the situation.
I have never disliked the Yagi antenna but I refuse to belief that the
gains enjoyed are absolute because they ignore
the implications of the weak force or eddy currents.They are easily
built. They give close approximations in terms of gain
But the gains supplied do not equate in absolute terms upon which
science rests.
Art

5776. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 19:26:46 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <5f1c3807-3d39-4d8b-894a-1ca67a1a9a92@p2g2000prn.googlegroups.com>
Source record: 18899

On Dec 28, 12:36 pm, Richard Fry <r...@adams.net> wrote:
> "Art Unwin" wrote>The antenna compendium states that an assumption
> > is made with MoM programs that an assumption is made that current
> > in a radiator is sinusoidal where as we all know that the current
> > degrades in aplitude dependent on radiator length.
>
> _____________
>
> Art, the current distribution along even the shortest fractional
> wavelength, constant OD radiator also is ~sinusoidal.
>
> Current always is near zero at the open end of a linear radiator of
> every
> physical length. The shape of the current wave formed along a very
> short
> radiator appears to be very close to triangular. But in fact that
> "triangular" current distribution is just a very short section of a
> sinusoidal waveform.
>
> N.B. that MoM programs show exactly this for radiators that are very
> short
> in terms of electrical wavelengths. This also is proven
> mathematically in
> the antenna engineering texts of Kraus, Balanis, Johnson & Jasik,
> etc.
>
> RF

O.K. have it your way. At the end of a radiator voltage is a maximum
as current is zero
ie the curves of current and current crosses each other. We can then
use the absolute standard
equatiion of E = I R. Using this formula for understanding conditions
at the end of a radiator
we can state that E, I and R equals zero ala a non closed circuit.
Kraus used four travelling waves in his analysis of the helical
antenna an analysis that was not corrobarated by
following examiners or the application of the NEC (MoM) programs where
disturbing differences was never resolved.
You introduce wavelength as if it was a standard without considering
the velocity factor and where a transmission line analogy
does not satisfy a helical antenna because of slow wave created in a
similar way to cavitation as explored by Bernoulle
or by the addition of sharp corners encountered by current flow

As far as what has been proven in text books they are only reflect the conditions placed on the problem but also assumption of correct theory applied.
This is why history shows the evolution of science is a series of broken theories whose value is measured by their resistance to attack over time.
I would remind you that the metric of time has NOT stopped. But as I stated earlier you can have it your way without objection from me
Art

5777. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 19:42:32 UTC
From: Dave <noone@nowhere.com>
Message-ID: <IEQ5l.1519$Es4.1360@nwrddc01.gnilink.net>
Source record: 18900

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:a4e424a7-ce7e-4b27-8236-ede2f5e207a8@40g2000prx.googlegroups.com...
>you are building an auguement on sand like "have you stopped beating
>your wife?"

well, have you?

>You can traverse the world with a steel antenna using less than a watt
>with the same message
>as a Kw from a huge antenna. The only difference is that one system
>provides less samples
>of communication for the ear bone requires to decifer.

now this i must hear... how do you get from steel antennas to samples in the
ear bone? is my ear bone a digital sampler now? does it somehow sample
your magical levitating diamagnetic neutrinos straight out of the aether?
There must be more to this radio stuff than meets the eye if the ear is
involved now! how does that work for transmitting video, does it change how
the eye bone works also?

>I have never disliked the Yagi antenna but I refuse to belief that the
>gains enjoyed are absolute because they ignore
>the implications of the weak force or eddy currents.

you better believe they ignore the weak farce, that is all in your head.

5778. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 19:52:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8lersco1@news.albasani.net>
Source record: 18751
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

> ...
> JS - What you call a "simplistic manner"
>
> IMHO is a will 'crafted' answer by "RL" designed to
> answer the readers question in a 'manner' that the
> reader could easily understand, accept and act-on.
>
> communications is about speaking 'to' the reader :
> not 'at' them - iane ~ RHF
> .

I have no problem with the way Roy presented the material ... and, I believe there is high probability that you are correct, some people are more concerned with how material is delivered rather than the material itself ... I don't do well in those situations. And, I wish to accept no responsibility in having to participate, it makes for too much work.

I simply wish to cut to the heart and deliver the material in a manner I prefer, I am sure there some who prefer the importance of material over the presentation ...

Regards,
JS

5779. VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 19:56:24 UTC
From: Nigel Molesworth <reply@thegroup.email.invalid>
Message-ID: <1qlfl4tbpillere3uilrkg8k7p61vk46kf@4ax.com>
Source record: 18752

A little OT for this group, but I figure you guys are the experts!

I've got a boat, it has an VHF FM Car Radio with a car aerial. The first problem is that there is no ground plane, the boat is GRP. It is also lying horizontally, it is too long to be vertical.

I want to replace the aerial something a bit more suitable. Modern cars seem to have much shorter aerials, so is there a coil involved?

Any suggestions on making or buying a replacement?

BTW, the radio has a DIN antenna socket, so 150 Ohms I think?

--
Nigel M
G1NDM (a long time ago)

5780. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 19:58:58 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <b44084f3-d810-402d-b7d5-f99e3fcd416c@u18g2000pro.googlegroups.com>
Source record: 18753

On Dec 28, 1:42 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:a4e424a7-ce7e-4b27-8236-ede2f5e207a8@40g2000prx.googlegroups.com...
>
> >you are building an auguement on sand like "have you stopped beating
> >your wife?"
>
> well, have you?
>
> >You can traverse the world with a steel antenna using less than a watt
> >with the same message
> >as a Kw from a huge antenna. The only difference is that one system
> >provides less samples
> >of communication for the ear bone requires to decifer.
>
> now this i must hear... how do you get from steel antennas to samples in the
> ear bone? is my ear bone a digital sampler now? does it somehow sample
> your magical levitating diamagnetic neutrinos straight out of the aether?
> There must be more to this radio stuff than meets the eye if the ear is
> involved now! how does that work for transmitting video, does it change how
> the eye bone works also?
>
> >I have never disliked the Yagi antenna but I refuse to belief that the
> >gains enjoyed are absolute because they ignore
> >the implications of the weak force or eddy currents.
>
> you better believe they ignore the weak farce, that is all in your head.

As a talking head there is no need for you to understand the nuances
of science.
You, like Richard have survived most of your life on unproven data so
I can understand your need to question
whether there is a need for the corrected data that science provides.
This echoes the statement for removing the patent office as "all
possible discoveries have been realized"
Remember what I told you in the past. Free speech is O.K. but the
downside is that it also shows who and what manner of man you actually
are.
From my viewpoint what you have stated so far has only reduced your
credability with respect to radiation and increased the assumption
that you are nothing but a talking head, a trail you started years ago
when denying the feasability of introducing static law with those of
Maxwell where your basis was again just words without scientific

backing.
Art

5781. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 19:59:46 UTC
From: Dave <dave@dave.dave>
Message-ID: <GbadnSmw57svR8rUnZ2dnUVZ_gqdnZ2d@earthlink.com>
Source record: 18754

Nigel Molesworth wrote:
> A little OT for this group, but I figure you guys are the experts!
>
> I've got a boat, it has an VHF FM Car Radio with a car aerial. The first
> problem is that there is no ground plane, the boat is GRP. It is also lying
> horizontally, it is too long to be vertical.
>
> I want to replace the aerial something a bit more suitable. Modern cars seem
> to have much shorter aerials, so is there a coil involved?
>
> Any suggestions on making or buying a replacement?
>
> BTW, the radio has a DIN antenna socket, so 150 Ohms I think?
>
Modern cars use active antennas.

5782. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 20:05:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8m5dtcq1@news.albasani.net>
Source record: 18755
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dave wrote:
> John Smith wrote:
>
>>
>> I said NO such thing, indeed, I stated the EXACT opposite, it allows
>> maximum power transfer to the antenna, however, the losses in the POOR
>> antenna are now increased due to the losses in the matchbox--as heat.
>> And, no problems which exist in the POOR antenna have been rectified,
>> they are just masked ...
>
> That is vastly oversimplified.

Absolutely, and at some point I must trust the reader has the resources
to extrapolate; otherwise, all postings would soon turn in to the
length, depth and completeness of a college textbook ...

For example, an antenna is a two lane road, running in both
directions(T/R), the same parameters which allow it to be the best
choice for transmitting, also are in action when that same antenna
"plucks" its' signals from the ether ... something I have pointed out in
multiple ways, multiple times ...

The average person must hear, read, study the same material six times
before "learning" it. And, an instructor once pointed out to me, not
all people respond to the same method, personality, mode-of-presentation
as another or others ... so, he pointed out the importance of gathering
data from multiple sources until the "epiphany" is realized ...

Regards,
JS

5783. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 20:10:57 UTC
From: PhattyMo <phattymo@not.net>
Message-ID: <4957dd46$0$89873$815e3792@news.qwest.net>
Source record: 18756

Nigel Molesworth wrote:
> A little OT for this group, but I figure you guys are the experts!
>
> I've got a boat, it has an VHF FM Car Radio with a car aerial. The first
> problem is that there is no ground plane, the boat is GRP. It is also lying
> horizontally, it is too long to be vertical.
>
> I want to replace the aerial something a bit more suitable. Modern cars seem
> to have much shorter aerials, so is there a coil involved?
>
> Any suggestions on making or buying a replacement?
>
> BTW, the radio has a DIN antenna socket, so 150 Ohms I think?
>

IME,Most car radios are sensitive and selective enough to pull in local
stations with only a short wire hanging out of the antenna socket. I've
routinely checked them out on the bench,and just stuffed a piece of
hookup wire in the antenna jack,works fine.
Maybe you could just run a wire up some vertical-surface of the boat?

There *IS* a ground plane-The water. When the boat is in the water,the
water itself is the ground plane.

5784. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 20:14:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8mmbtuq1@news.albasani.net>
Source record: 18757
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:
> On Dec 27, 7:46 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> n...@wt.net wrote:
>>
>>> Well, sure, but what does transmitting have to do with
>>> anything? We are not talking about transmitting.
>> > ...
>>
>> It has EVERYTHING to do with it, it is the same communication, both
>> ways, simply in reverse ... like I have stated before, the exact same
>> laws of physics governing the antenna makes it equally acceptable to
>> both transmitting and receiving. The same pattern seen in the signal
>> transmitted will be seen in the signal(s) received.
>
> - Your argument is the equivalent to arguing that
> - a car designed to go forward would not be
> - acceptable when backing up ...
> - simply ridiculous!
> -
> - Regards,
> - JS
>
> JS -think-about-it-
>
> IF 'by-design' the Car is in-fact designed
> to go "Only" Forward :
> * It may 'only' have Forward Gears and
> a Transmission that has NO Reverse.
> * No Rear Window
> * No Rear Mirror
> NOT So Ridiculous ~ RHF
> http://www.prweb.com/prfiles/2006/10/17/452347/mormonmeteor72.jpg
> .
> Just an Example of "Single Focus" Thinking :
> Optimizing Your Results For One Purpose.
>
> Sort of what Shortwave Radio Listeners (SWL)
> do when they consider how they are going to
> Design, Build and Use an Antenna for the
> Hobby of Shortwave Radio Listening (SWLing)
>
> Yes as you have pointed out : There is a Greater
> Boby of Knowledge and Practicum Out There

> That Could Be Considered and Used -but- The
> Shortwave Listener (SWL) often is 'selective' in
> what they consider and use to achieve their
> specific limited goals.
>
> It Has To Do With "Level-of-Involvement" :
> * Many/Most Amateur Radio Operators {Hams}
> have the well earn knowledge and experience
> to function 'like' an Auto Mechanic -wrt- Cars
> * * Hams at their best are Advocates of the
> Technology [Practicers of The Craft]
> * Many/Most Shortwave Radio Listeners (SWLs)
> simply enjoy a level of knowledge and experience
> to function 'like' a Car Driver -wrt- Cars
> * * SWLs at their best are Hobbyists Enjoyers
> of the Technology [Users of the Technology]
> TBL : Both are Need -and- Both are Different
>
> ~ RHF
> .

I see you are ready to go to extraordinary lengths to justify your statements or propose "special cases" which are only correct in extreme circumstances of very limited parameters--this is all fine, however, carry on without me ...

Again, it is as true as when I originally stated it, the same antenna, its efficiency, fitness-for-purpose, pattern delivered, etc. will work the same, both forward (transmitting), or in reverse (receiving.) I am sure there exists the possiblily of "breaking" or "orchastrating" the antenna physics to bring about a special case or cases ... no practical use I have yet seen has required this.

Many hams wish to think themselves "special" because of their hobby, now you have brought me to the realization that there is the equivalent in the SWL'ers hobby ... to me, it just looks like one of my other hobbies, like tropical fish, for example.

Regards,
JS

5785. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 20:15:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8mputuq2@news.albasani.net>
Source record: 18758
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dave wrote:
> John Smith wrote:
>> nm5k@wt.net wrote:
>>
>>>
>>> Well, sure, but what does transmitting have to do with
>>> anything? We are not talking about transmitting.
>> > ...
>>
>> It has EVERYTHING to do with it, it is the same communication, both
>> ways, simply in reverse ... like I have stated before, the exact same
>> laws of physics governing the antenna makes it equally acceptable to
>> both transmitting and receiving. The same pattern seen in the signal
>> transmitted will be seen in the signal(s) received.
>>
>> Your argument is the equivalent to arguing that a car designed to go
>> forward would not be acceptable when backing up ... simply ridiculous!
>>
>> Regards,
>> JS
> How does one transmit MW with a ferrite bar antenna?

I have come across data on the net of people using ferrite loops for
transmitting, a comprehensive google search should provide those to you
... personally, I have never had interest or need ...

Regards,
JS

5786. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 20:26:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8ndv$up7$1@news.albasani.net>
Source record: 18759
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dave wrote:

>> ...
>> I have taken ordinary lamp zip cord, split the two leads apart to for
>> a 1/4 wave dipole and fed the end of the remaining length of zip cord
>> with a balun to the rig (some zip cord is ~68-72 ohm balanced line,
>> the mismatch is more than acceptable for field/emergency use.)
>>
>> Never, say never ... some ham will do it!
>>
>> Regards,
>> JS
> Yes,some ham will do it, with a 3 Watt transmitter tucked into a Sucrets
> tin, and work 50 countries with his zip cord dipole.

Now, I'd say, "That's the spirit!"

Warm regards,
JS

5787. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 20:34:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8nsuvot1@news.albasani.net>
Source record: 18760

Cecil Moore wrote:
> John Smith wrote:
>> ... perhaps Cecil is aware of something?
>
> I'm wondering if he means "reactance" instead of
> inductance. The reactance to ground is capacitive
> for a solid disk.

I see what you mean, the disk DOES contain inductive reactance (I don't even know how to begin to compute its' value, however), and, as per your post, the capacitive reactance to ground is an important point to consider.

I hope he posts back, with more definition, he posed a question to catch my interest; although, you are best to provide us with real information.

Regards,
JS

5788. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 20:38:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8o39vot2@news.albasani.net>
Source record: 18761

ve2pid wrote:
> On 28 dï¿½c, 09:52, Cecil Moore <nos...@w5dxp.com> wrote:
>> John Smith wrote:
>>> ... perhaps Cecil is aware of something?
>> I'm wondering if he means "reactance" instead of
>> inductance. The reactance to ground is capacitive
>> for a solid disk.
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Hello to all,
>
> The context is this: We are discuting about capacitance hats.. It
> seems that the name is confusing, since it adds inductance instead of
> capacitance to an antenna.
>
> So, since a solid disk adds inductance (the resonnant freq of the
> antenna drops), we are looking for a formula to evaluate that
> inductance (and then inductive reactance)..
>
> BTW, why don't we use the name 'inductive hat'...??

Sorry, when replying to Cecil, I missed this post ... thanks for posting back. Yes, in the scope of my knowledge, it WOULD, indeed, add inductive reactance to the antenna, however, as Cecil seemed to imply, the effect of the capacitive reactance, you are also adding with the disk, overwhelms the inductive ... however, Cecils' input will be the correct one; consider mine a guess.

Regards,
JS

5789. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 20:58:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8pa1$1oq$1@news.albasani.net>
Source record: 18762
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dave wrote:

> ...
> The advantage of a physical height (antenna length) between 180 and 215
> degrees (see previous post regarding the magic number being around 195
> degrees) is improved take-off angle and reduced skywave-groundwave
> interaction, not dramatic nearfield voltage increases.

As I previously stated, works nicely on paper/software; in real life, I have not been able to construct an antenna which demonstrates an advantage to justify the difficulty of dealing with the extra length. Now, a 2m on down, why not "toss it on", just in case?

Now, when loading a 1/4 wave physical length antenna to a 1/2 wave electrical length, I DO see an advantage, increased radiation resistance, minimal counterpoise required, etc. Even when taking into consideration the losses added by the coil ...

Regards,
JS

5790. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 21:18:31 UTC
From: Monty Hall <HallMonitor@Hall.com>
Message-ID: <gj8qlspfn2@news.motzarella.org>
Source record: 18763
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

"Telamon" <telamon_spamshield@pacbell.net.is.invalid> wrote in message
news:telamon_spamshield-D23245.13580927122008@newsclstr03.news.prodigy.net...
> In article <gj64rm$p9s$1@news.albasani.net>,
> John Smith <assemblywizard@gmail.com> wrote:
>
>> Billy Burpelson wrote:
>>
>> > ...
>> > Say what?
>> >
>> > He said he "ain't here to be a ham", so why would he want to transmit?
>>
>> Well, consider me a "different type of ham."
>
> < SNIP >
>
> Yeah, you are a Trolling Ham and a well done one at that.

And Telamon is just a newgroup troll....so he trumps you.

5791. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 21:32:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <IsmdnY-ZnYPwbcrUnZ2dnUVZ_judnZ2d@posted.easystreetonline>
Source record: 18764

>
> The "Method of Moments" (MOM) makes no assumptions about
> current distribution on a radiator; it computes the current distribution.
> The radiated field is then calculated based on the current distribution.
>
> Frank

Exactly correct. EZNEC (including demo) users can get a good illustration of this by looking at the pattern from the example file Cardioid.ez which consists of two identical elements with perfect spacing and perfectly ratioed base currents. Notice that the front/back ratio is about 35 dB (dropping to about 31 dB with more segments for more accurate results), while it should be essentially infinite. The small back lobe is caused by modification of the current distribution on the two elements caused by mutual coupling -- although the base currents are perfectly equal in magnitude and 90 degrees out of phase, the fields from the two elements aren't, due to their having slightly different current distributions. When I first saw this back lobe with perfectly ratioed base currents, I searched through the program code looking for what I was certain was a bug. I finally realized that the result was correct and that the lobe was caused by the altered current distribution which the program had correctly calculated. For more about this, see http://eznec.com/Amateur/Articles/Current_Dist.pdf.

The assumption of sinusoidal current distribution is strictly true only with straight, isolated conductors which are infinitely thin, although it's a reasonably good assumption in many other cases. Mathematical analyses of antennas done before computers were pretty much limited to cases where sinusoidal distribution was assumed, because a more accurate determination of current distribution was virtually impossible to calculate. The ability to determine the actual current distribution is one of the very important advantages of computer analysis.

Roy Lewallen, W7EL

5792. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 21:35:22 UTC
From: Dave <dave@dave.dave>
Message-ID: <uiS5l.11444$gY5.3217@newsfe21.iad>
Source record: 18765
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:
> Dave wrote:
>> John Smith wrote:
>>
>>>
>>> I said NO such thing, indeed, I stated the EXACT opposite, it allows
>>> maximum power transfer to the antenna, however, the losses in the
>>> POOR antenna are now increased due to the losses in the matchbox--as
>>> heat. And, no problems which exist in the POOR antenna have been
>>> rectified, they are just masked ...
>>
>> That is vastly oversimplified.
>
> Absolutely, and at some point I must trust the reader has the resources
> to extrapolate; otherwise, all postings would soon turn in to the
> length, depth and completeness of a college textbook ...
>
> For example, an antenna is a two lane road, running in both
> directions(T/R), the same parameters which allow it to be the best
> choice for transmitting, also are in action when that same antenna
> "plucks" its' signals from the ether ... something I have pointed out in
> multiple ways, multiple times ...
>
> The average person must hear, read, study the same material six times
> before "learning" it. And, an instructor once pointed out to me, not
> all people respond to the same method, personality, mode-of-presentation
> as another or others ... so, he pointed out the importance of gathering
> data from multiple sources until the "epiphany" is realized ...
>
> Regards,
> JS

You're the guy from Lost in Space!

5793. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 21:39:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8rml$4me$1@news.albasani.net>
Source record: 18766
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dave wrote:

> ...
> You're the guy from Lost in Space!

And, since your reasoning and manners are so ALIEN to me ... oh my gawd,
a real one! <grin>

Regards,
JS

5794. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 22:12:51 UTC
From: richardharrison@webtv.net
Message-ID: <27512-4957F9E3-4809@storefull-3173.bay.webtv.net>
Source record: 18768

Art wrote:
"We can then use the absolute standard equation of E = I R."

For ac (RF) that`s not true. The formula is E=IZ, where Z includes reactance and resistance in quadrature. I`m not piling on but some readers may believe Art.

Best regards, Ricxhard Harrison, KB5WZI

5795. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 22:16:18 UTC
From: Sum Ting Wong <sumtingwong@privacy.net>
Message-ID: <7kufl4t6arfhh2j4a1rmira9tqlh37upin@4ax.com>
Source record: 18767

On Sat, 27 Dec 2008 21:24:44 GMT, "Dave" <noone@nowhere.com> wrote:

>efficiency is only one measure of antenna performance.

Exactly. You get it and JS doesn't.

S.T.W.

5796. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 22:23:25 UTC
From: Nigel Molesworth <reply@thegroup.email.invalid>
Message-ID: <d2vfl4lrdkf8vaqphh1c2s1ihgc2rjp7ht@4ax.com>
Source record: 18769

On Sun, 28 Dec 2008 12:10:57 -0800, PhattyMo <phattymo@not.net> wrote:

>Maybe you could just run a wire up some vertical-surface of the boat?

What about 1/4 wavelengths, and all that stuff?

5797. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 22:30:03 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <8d46d628-b43c-4976-9d8c-e9b14d369c5f@t39g2000prh.googlegroups.com>
Source record: 18770

On Dec 28, 4:12 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "We can then use the absolute standard equation of E = I R."
>
> For ac (RF) that`s not true. The formula is E=IZ, where Z includes
> reactance and resistance in quadrature. I`m not piling on but some
> readers may believe Art.
>
> Best regards, Ricxhard Harrison, KB5WZI

Yes you are correct but the original equation was E=IR
which preceeds the implication of impedance which is a derivative
of my equation and came about with the addition of A.C. technology.
If the impedance is totally resistive then my statement is not untrue
Now to avoid the nitpicking are you saying that E=IZ cannot be used
for calculations at the end of an antenna and if so" WHY "
Art

5798. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 22:43:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj8veh$9ev$1@news.albasani.net>
Source record: 18771

Sum Ting Wong wrote:
> On Sat, 27 Dec 2008 21:24:44 GMT, "Dave" <noone@nowhere.com> wrote:
>
>> efficiency is only one measure of antenna performance.
>
> Exactly. You get it and JS doesn't.
>
> S.T.W.

Oh, "I get it", you guys just don't get the lack of importance to your point(s!)

Correct match to you rig does NOT affect the antennas efficiency, you would still want the most efficient antenna.

Antenna length does relate to efficiency, and normally you would erect the longest possible for the freqs, and the efficiency of the antenna is improve, if by nothing else, than capture area ... however, you must balance this against the antenna pattern you wish.

The pattern of the antenna, which will be identical in both T/R, is important. Antenna efficiency is important. Match to feedline, and feedline to rig is important.

You seem to feel that s/n ratio is something to pursue, I tell you it is not. This is actually handled in the antenna pattern, you do NOT want the antenna to be receptive in the direction(s) of noise sources nor have it prone to static charges and disturbance ... antenna design is what controls this.

Your main problem is that you wish to separate all the elements out and be able to deal with each one separately--you can't, every added capacitance adds some measurable amount of inductance, every added inductance adds some measurable amount of capacitance.

There is never a case when you wish to decrease antenna efficiency, well, unless you are attempting to construct a dummy load ...

If the antenna is "too sensitive" (efficient), crank your rf gain down a bit to the noise floor ...

However, if I was supporting a poor antennas' use, or selling a poor antenna, lack of attention to efficiency would be my first "selling point!"

Let me repeat, there is NEVER a time a ham or swl'er will want lack of efficiency--they have rf gain controls and other "attenuation boxes" to handle that--you obviously are attempting to confuse antenna efficiency

with another aspect of antennas ... indeed, efficiency can be applied to most aspects of an antenna, i.e., "most efficient length", "most efficient match", "most efficient placement", "most efficient design", "most efficient pattern", etc.--and these CAN all vary as to the antennas intended use ... you can never make one change in antenna design which DOES NOT affect all others--i.e., one change makes many ... it is why EZNEC and MMANA-GAL are so desirable to toy with ... load up the software, make one change, watch it affect all others ... well, most of the time.

Regards,
JS

5799. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 22:53:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj900r$a54$1@news.albasani.net>
Source record: 18772

Sum Ting Wong wrote:
> On Sat, 27 Dec 2008 21:24:44 GMT, "Dave" <noone@nowhere.com> wrote:
>
>> efficiency is only one measure of antenna performance.
>
> Exactly. You get it and JS doesn't.
>
> S.T.W.

Now, to sum that previous post up tightly, and it the hopes you "may get it" THIS TIME ... you NEVER want a less efficient antenna--in the fact that efficiency relates to transferring power to and from the ether. Or, in the case you wish to focus upon, "efficiency = ability to pluck incredibly weak signals from the ether."

Any other argument, is simply to replace a respectable antenna with a dummy load or a partial dummy load; and, is not something which is usually argued against, by sane men ...

Regards,
JS

5800. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 23:35:17 UTC
From: richardharrison@webtv.net
Message-ID: <27512-49580D35-4842@storefull-3173.bay.webtv.net>
Source record: 18773

Art wrote:
"Now to avoid nitpicking are you saying that E=IZ cannot be used for calculations at the end of an antenna and if so "WHY"?"

It is complicated by multiple currents. Like an open-circuited transmission line, electrical conduction stops at the end of the conductor. Current then becomes a phasor problem.

Collapse of conduction current induces a voltage which combined with the incident voltage almost doubles the total voltage at this spot in many cases. This reverses the direction of current in the conductor. Due to capacitance at his high-voltage spot with the iniverse, displacement current flows into free space from open-circuited antenna ends. It is usually smaller than the conduction current.

Best regards, Richard Harrison, KB5WZI

5801. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 23:47:54 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <18382950-7c02-418e-98ce-87588d58defc@m16g2000vbp.googlegroups.com>
Source record: 18774

On Dec 27, 1:58 pm, K7ITM <k7...@msn.com> wrote:
> On Dec 27, 9:35 am, ve2pid <ve2...@videotron.ca> wrote:
>
> > I am looking for a formula giving the inductance of a solid disk for a
> > known diam/material/thickness...
>
> > Any idea?
>
> > Thanks for your hels de Pierre VE2PID
>
> What, exactly, do you mean by "the inductance of a solid disk"? How
> do you connect to the disk? Are your connection points on opposite
> ends of a diameter across the disk, or along its axis from the center
> of one face to the center of the face on the opposite side -- or
> perhaps some other connection? With a wire (formed into any shape),
> it's reasonable to assume it's the inductance measured between the two
> ends of the wire. For a disk, it's not obvious to me.
>
> Cheers,
> Tom

I would think if you measure the inductance from the center of one
side of the disk to the cnter of the other side of it would be like a
large number of hair pins in parallel.
I tried building a collinear antenna around this idea with the
vertical part of the antenna a solid piece of CU tubing with the disk
place at .5wl points. The problem was that the disc act as capacity
hat.

Jimmie

5802. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-28 23:53:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <04cf5851-4517-49f2-bd80-2988474dccee@t26g2000prh.googlegroups.com>
Source record: 18775

On Dec 28, 3:32 pm, Roy Lewallen <w...@eznec.com> wrote:
> > The "Method of Moments" (MOM) makes no assumptions about
> > current distribution on a radiator; it computes the current distribution.
> > The radiated field is then calculated based on the current distribution.
>
> > Frank
>
> Exactly correct. EZNEC (including demo) users can get a good
> illustration of this by looking at the pattern from the example file
> Cardioid.ez which consists of two identical elements with perfect
> spacing and perfectly ratioed base currents. Notice that the front/back
> ratio is about 35 dB (dropping to about 31 dB with more segments for
> more accurate results), while it should be essentially infinite. The
> small back lobe is caused by modification of the current distribution on
> the two elements caused by mutual coupling -- although the base currents
> are perfectly equal in magnitude and 90 degrees out of phase, the fields
> from the two elements aren't, due to their having slightly different
> current distributions. When I first saw this back lobe with perfectly
> ratioed base currents, I searched through the program code looking for
> what I was certain was a bug. I finally realized that the result was
> correct and that the lobe was caused by the altered current distribution
> which the program had correctly calculated. For more about this,
seehttp://eznec.com/Amateur/Articles/Current_Dist.pdf.
>
> The assumption of sinusoidal current distribution is strictly true only
> with straight, isolated conductors which are infinitely thin, although
> it's a reasonably good assumption in many other cases. Mathematical
> analyses of antennas done before computers were pretty much limited to
> cases where sinusoidal distribution was assumed, because a more accurate
> determination of current distribution was virtually impossible to
> calculate. The ability to determine the actual current distribution is
> one of the very important advantages of computer analysis.
>
> Roy Lewallen, W7EL

If current distribution is calculated correctly as stated then the
answer with respect
to the route taken of the current of a fractional wave antenna should
be available and beyond doubt
as the program is derived from Maxwells laws. The distributed current
should be DC based if current flow is thru the center
of the radiator. As far as the resistance encountered on reverse flow
on the outside of a radiator the figure provided by computor programs
should be rather interesting as I have never encountered in print

suggested figures. In accordance with some engineers the radiation resistance but be stated as the radiation impedance to avoid sniping
Art

5803. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 00:07:20 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d767c47e-bda8-4a31-ac15-b3f5ef5c81ee@r15g2000prh.googlegroups.com>
Source record: 18776

On Dec 28, 5:35 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "Now to avoid nitpicking are you saying that E=IZ cannot be used for
> calculations at the end of an antenna and if so "WHY"?"
>
> It is complicated by multiple currents. Like an open-circuited
> transmission line, electrical conduction stops at the end of the
> conductor. Current then becomes a phasor problem.
>
> Collapse of conduction current induces a voltage which combined with the
> incident voltage almost doubles the total voltage at this spot in many
> cases. This reverses the direction of current in the conductor. Due to
> capacitance at his high-voltage spot with the iniverse, displacement
> current flows into free space from open-circuited antenna ends. It is
> usually smaller than the conduction current.
>
> Best regards, Richard Harrison, KB5WZI

You skated over the difference between an open circuit of the
transmission
line compared to the end of an antenna.
The analogy is flawed and will be shown when the resistance in the
center of a radiator is disclosed via the
computor programs. You never did supply the information needed to
justify the values of E,I and R when
the current value crosses the zero line on a graph. You can ofcourse,
declare that none of the given factors
can ever be equal to zero by jumping the datum line !!!!! By the way,
could you state a situation where the
displacement current is LARGER than the conduction current so I may
review it in the light of Newtonian laws?
Art
Art

5804. Re: Inductance of a solid disk

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 00:13:49 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <2c9dcf63-3836-45aa-a4a2-27be5d704231@40g2000prx.googlegroups.com>
Source record: 18778

On Dec 28, 8:37 am, ve2pid <ve2...@videotron.ca> wrote:
> On 28 déc, 09:52, Cecil Moore <nos...@w5dxp.com> wrote:
>
> > John Smith wrote:
> > > ... perhaps Cecil is aware of something?
>
> > I'm wondering if he means "reactance" instead of
> > inductance. The reactance to ground is capacitive
> > for a solid disk.
> > --
> > 73, Cecil http://www.w5dxp.com
>
> Hello to all,
>
> The context is this: We are discuting about capacitance hats.. It
> seems that the name is confusing, since it adds inductance instead of
> capacitance to an antenna.
>
> So, since a solid disk adds inductance (the resonnant freq of the
> antenna drops), we are looking for a formula to evaluate that
> inductance (and then inductive reactance)..
>
> BTW, why don't we use the name 'inductive hat'...??

Remember, the current where a capacitive hat is located in the antenna
(at the end of an element) is relatively low. Adding inductance there
has relatively little effect. On the other hand, that's just where
even small amounts of capacitance have a fairly large effect.

Consider too that if the environment is symmetric, such as with a
vertical over a flat, uniform (or radially symmetrical) ground, with a
top had that's also radially symmetrical, the current in that top hat
will be radial and symmetrical, and will for all practical purposes
cancel out with respect to radiation from the top hat itself.

Look at the change in current distribution along the antenna
conductor, and compare the situation with and without top hats. It
should become immediately obvious what the advantage of a top hat is.
I would certainly call the effect "capacitive" and not "inductive."

It may also be instructive to look up design notes about VLF
transmitting antennas. Very large non-radiating "top hat" structures
are commonly used in them to get reasonable efficiency. I think
you'll be able to find examples of this sort of design from as far
back as a hundred years ago. The folks I've talked with about the

design of one such local antenna system are quite clear about the top wires' role in changing the current distribution in the vertical element, but not contributing directly to the radiation in any significant way.

Adios,
Tom

5805. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 00:17:32 UTC
From: kb9rqz@yahoo.com
Message-ID: <qo5gl4dbetj6am4npd08b43arsip8br75i@4ax.com>
Source record: 18777
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5806. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 00:19:39 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9B82A6082216Cdoldridgsprintca@69.16.185.250>
Source record: 18779

Nigel Molesworth <reply@thegroup.email.invalid> wrote in
news:d2vfl4lrdkf8vaqphh1c2s1ihgc2rjp7ht@4ax.com:

>On Sun, 28 Dec 2008 12:10:57 -0800, PhattyMo <phattymo@not.net> wrote:
>
>>Maybe you could just run a wire up some vertical-surface of the boat?
>
>What about 1/4 wavelengths, and all that stuff?

Powerboat or sail? I recommend a quarter wave for sail, but 5/8 should work on most powerboats. If you can mount atop a metal mast 1/4 wave should easily do the job. I get really good broadcast FM reception on my FT897D from my dual band mobile antenna out on the back deck. For receive-only with good broadcast signals, impedance matching is not that much of a concern. If you're trying to DX, that's another story, involving yagis.

--
Dave Oldridge+
ICQ 454777283

5807. Re: dipole feed to leg

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 00:23:08 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <b6a01564-a15a-482c-bff7-e26fe42902e2@y1g2000pra.googlegroups.com>
Source record: 18780

On Dec 28, 5:18 am, ml <m...@di.net> wrote:
> hi
>
> In the case of a center fed dipole, typically you want the
> feedline lets say coax, drooping downwards
>
> in a case where you might not be able to do this and need the feeding
> coax to b closer and more parrallel to one of the legs .....
>
> i realize that this will make the dipole more inefficient and
> distort the pattern...
>
> but how do you even roughly calculate that??
>
> thanks

How about a simulation? NEC is happy to handle this sort of
situtation. It's the outside of the coax that you care about as a
radiator; just add a conductor to the model approximating the position
and length of the coax as best you can. If the coax goes all the way
to the ground, that probably makes the model simpler. You can model
it with and without a choke (balun) to try to isolate the coax from
the antenna feedpoint.

I think you will find that if you put a choke balun at the antenna
feedpoint and another one a quarter wavelength back down the line from
that, the feedline will have relatively little effect on the antenna.
You might model the baluns as, say, 500 ohm inductive reactances (or
other inductance, if you know what you'll actually use). In
situations where I've had trouble with a lot of RF induced on a wire
where I didn't want it, I've found resonant chokes to be very
effective: as much inductance as I could reasonably get, paralleled by
some capacitance added on purpose to make it resonant at the operating
frequency.

Cheers,
Tom

5808. Motorcycle mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 01:16:53 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <gj98dv$d41a$1@tr22n12.aset.psu.edu>
Source record: 18781

Santa left me an FT-10R, which I plan to put on my Shadow Spirit 1100. Nice bulletproof dual band unit with a detachable head, Bluetooth, and a lot of other features.

While I'm deciding where to mount the radio - a Spirit is kind of retro chopper style, not a lot of open space, and whether to go bluetooth or wired for the headset, the antenna could be another issue.

I had originally thought about a 5/8th, but a possible setup might have the antenna have no or little feedline, being directly connected to th e unit.

I also want some sort of compromise between obtrusiveness and performance. I'm willing to put a bugcatcher on the SUV, but aesthetics are more important on the bike.

Dual band 144/440 on a motorcycle...Any suggestions?

- 73 de Mike N3LI -

5809. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 01:59:16 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-B48730.17591628122008@newsclstr03.news.prodigy.net>
Source record: 18782
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <uiS5l.11444$gY5.3217@newsfe21.iad>, Dave <dave@dave.dave>
wrote:

> John Smith wrote:
> > Dave wrote:
> >> John Smith wrote:
> >>
> >>>
> >>> I said NO such thing, indeed, I stated the EXACT opposite, it allows
> >>> maximum power transfer to the antenna, however, the losses in the
> >>> POOR antenna are now increased due to the losses in the matchbox--as
> >>> heat. And, no problems which exist in the POOR antenna have been
> >>> rectified, they are just masked ...
> >>
> >> That is vastly oversimplified.
> >
> > Absolutely, and at some point I must trust the reader has the resources
> > to extrapolate; otherwise, all postings would soon turn in to the
> > length, depth and completeness of a college textbook ...
> >
> > For example, an antenna is a two lane road, running in both
> > directions(T/R), the same parameters which allow it to be the best
> > choice for transmitting, also are in action when that same antenna
> > "plucks" its' signals from the ether ... something I have pointed out in
> > multiple ways, multiple times ...
> >
> > The average person must hear, read, study the same material six times
> > before "learning" it. And, an instructor once pointed out to me, not
> > all people respond to the same method, personality, mode-of-presentation
> > as another or others ... so, he pointed out the importance of gathering
> > data from multiple sources until the "epiphany" is realized ...
> >
>
> You're the guy from Lost in Space!

You are to kind Dave. The lost in Space Dr. Smith fooled some of the
people some of the time where our Smith fools none of the people none of
the time.

--
Telamon
Ventura, California

5810. The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 02:54:31 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <f637f13d-91be-41b3-9a99-7b9b559ced0e@q30g2000prq.googlegroups.com>
Source record: 18783
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 28, 12:14 pm, John Smith <assemblywiz...@gmail.com> wrote:
> RHF wrote:
> > On Dec 27, 7:46 pm, John Smith <assemblywiz...@gmail.com> wrote:
> >> n...@wt.net wrote:
>
> >>> Well, sure, but what does transmitting have to do with
> >>> anything? We are not talking about transmitting.
> >> > ...
>
> >> It has EVERYTHING to do with it, it is the same communication, both
> >> ways, simply in reverse ... like I have stated before, the exact same
> >> laws of physics governing the antenna makes it equally acceptable to
> >> both transmitting and receiving. The same pattern seen in the signal
> >> transmitted will be seen in the signal(s) received.
>
> > - Your argument is the equivalent to arguing that
> > - a car designed to go forward would not be
> > - acceptable when backing up ...
> > - simply ridiculous!
> > -
> > - Regards,
> > - JS
>
> > JS -think-about-it-
>
> > IF 'by-design' the Car is in-fact designed
> > to go "Only" Forward :
> > * It may 'only' have Forward Gears and
> > a Transmission that has NO Reverse.
> > * No Rear Window
> > * No Rear Mirror
> > NOT So Ridiculous ~ RHF
> >http://www.prweb.com/prfiles/2006/10/17/452347/mormonmeteor72.jpg
> > .
> > Just an Example of "Single Focus" Thinking :
> > Optimizing Your Results For One Purpose.
>
> > Sort of what Shortwave Radio Listeners (SWL)
> > do when they consider how they are going to
> > Design, Build and Use an Antenna for the
> > Hobby of Shortwave Radio Listening (SWLing)
>

> > Yes as you have pointed out : There is a Greater
> > Boby of Knowledge and Practicum Out There
> > That Could Be Considered and Used -but- The
> > Shortwave Listener (SWL) often is 'selective' in
> > what they consider and use to achieve their
> > specific limited goals.
>
> > It Has To Do With "Level-of-Involvement" :
> > * Many/Most Amateur Radio Operators {Hams}
> > have the well earn knowledge and experience
> > to function 'like' an Auto Mechanic -wrt- Cars
> > * * Hams at their best are Advocates of the
> > Technology [Practicers of The Craft]
> > * Many/Most Shortwave Radio Listeners (SWLs)
> > simply enjoy a level of knowledge and experience
> > to function 'like' a Car Driver -wrt- Cars
> > * * SWLs at their best are Hobbyists Enjoyers
> > of the Technology [Users of the Technology]
> > TBL : Both are Need -and- Both are Different
>
> > ~ RHF
> > .
>
> I see you are ready to go to extraordinary lengths to justify your
> statements or propose "special cases" which are only correct in extreme
> circumstances of very limited parameters--this is all fine, however,
> carry on without me ...
>
> Again, it is as true as when I originally stated it, the same antenna,
> its efficiency, fitness-for-purpose, pattern delivered, etc. will work
> the same, both forward (transmitting), or in reverse (receiving.) I am
> sure there exists the possiblily of "breaking" or "orchastrating" the
> antenna physics to bring about a special case or cases ... no practical
> use I have yet seen has required this.
>
> Many hams wish to think themselves "special" because of their hobby, now
> you have brought me to the realization that there is the equivalent in
> the SWL'ers hobby ... to me, it just looks like one of my other hobbies,
> like tropical fish, for example.
>
> Regards,
> JS

JS - You started using 'Car' Analogy; and
I followed through with 'Car' Analogy ~ RHF

To many/most Hobbyists there 'hobbies are simply
"Hobbies" : Some thing that they do in their spare
time to enjoy and pass the time. Most Shortwave
Radio Listeners (SWL) fit into this Category of
Hobbyists.

For some/many Hobbyists there 'hobby' is their true
"Avocation" in-fact for some Their HOBBY is Their
Life : Some thing that They Do All The Time : They
Live and Breath Their Hobby : Many Amateur Radio
Operators {Hams} fit into this Category of HOBBYISTS.
http://www.answers.com/Avocation

This is Why I refer to Amateur Radio as "The Craft" :
The Mastery* of the Body of Knowledge and Practices
related to the Science and Art of Radio Operating.
* All Praise Be To Them That Do.
-but- that is not me : for i remain simply a plain old
shortwave radio listener : who keeps his swling
"k-i-s-a-p" = keep/ing it simply and practical

If some one asks "Where To Buy" :
I tell them 'where to buy'.

If some one asks "How To" {Build It} :
I tell them 'how to' {build it}
They Did Not Ask for "The Theory Behind It"
-and- i don't give them 'the theory behind it'

If some asks "What Do You "Recommend" :
I 'recommend' a something or two and usually
provide a few links as pointers to get them going.

hey it is just my opinion and nothing more - kisap ~ RHF
-ps- JS Yes You Are Right "I Am Extremely Special" ;-}
.

5811. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 03:01:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj9ei3$rl1$1@news.albasani.net>
Source record: 18784
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

[stuff]

RHF, I have no bone to pick with you, don't fall victim to trolls here which just wish to "stir up chit", to mask their ignorance ...

I had a chit load of ignorance (still do in many areas, including this one!), you don't know until you do ... we are all here on differing levels, we can all get along. When Roy, Cecil and others make statements, I LISTEN, may not understand it, but I listen! :-)

I understand; trust me, you have done nothing to either make me like you, or not ... that may or may not come later.

Now, this discussion continues ...

Warm regards,
JS

5812. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 03:50:43 UTC
From: Frank <ve6cbxyz@nospam.telus.net>
Message-ID: <nOX5l.2045$%v1.913@edtnps83>
Source record: 18785

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:IsmdnY-ZnYPwbcrUnZ2dnUVZ_judnZ2d@posted.easystreetonline...
>>
>> The "Method of Moments" (MOM) makes no assumptions about
>> current distribution on a radiator; it computes the current
>> distribution.
>> The radiated field is then calculated based on the current distribution.
>>
>> Frank
>
> Exactly correct. EZNEC (including demo) users can get a good illustration
> of this by looking at the pattern from the example file Cardioid.ez which
> consists of two identical elements with perfect spacing and perfectly
> ratioed base currents. Notice that the front/back ratio is about 35 dB
> (dropping to about 31 dB with more segments for more accurate results),
> while it should be essentially infinite. The small back lobe is caused by
> modification of the current distribution on the two elements caused by
> mutual coupling -- although the base currents are perfectly equal in
> magnitude and 90 degrees out of phase, the fields from the two elements
> aren't, due to their having slightly different current distributions. When
> I first saw this back lobe with perfectly ratioed base currents, I
> searched through the program code looking for what I was certain was a
> bug. I finally realized that the result was correct and that the lobe was
> caused by the altered current distribution which the program had correctly
> calculated. For more about this, see
> http://eznec.com/Amateur/Articles/Current_Dist.pdf.
>
> The assumption of sinusoidal current distribution is strictly true only
> with straight, isolated conductors which are infinitely thin, although
> it's a reasonably good assumption in many other cases. Mathematical
> analyses of antennas done before computers were pretty much limited to
> cases where sinusoidal distribution was assumed, because a more accurate
> determination of current distribution was virtually impossible to
> calculate. The ability to determine the actual current distribution is one
> of the very important advantages of computer analysis.
>
> Roy Lewallen, W7EL

Thanks for the info. A very interesting link. I have experimented
with NEC models of phased arrays, and found the same problem
with a small back lobe. I followed the procedure in the ARRL
Antenna book, which involved calculating the elements in a 2 X 2
complex Z matrix, for a 2 element phased dipole array. The
results appeared to be very good, but I never actually built it.

Frank, VE6CB

5813. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 04:12:32 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-4E3044.20123228122008@newsclstr03.news.prodigy.net>
Source record: 18786
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gj72kvqju1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> Telamon wrote:
>
> > ...
> > Yeah but we don't care about transmitting goofball, we care about
> > receiving and so that statement "A random wire (e.g. inverted L)
> > transmits nicely if you use a tuner at the feed point" by Dave is
> > relevant where you are not.
> >
>
> You ridiculous fool. You are the most complete brain dead example of a
> sub-human which has ever been presented to me ...

You dumb twit. We don't care about transmitting.

> Receiving is EQUALLY as important as the transmitting element in the
> above.

Again you dumb twit, we don't care about transmitting.

> Or, to explain it to the necessary point, for a mental midget, such
> as yourself: "If the signal being transmitted is low power, or there
> are bad conditions, and, perhaps, the guy is in Australia, I'd better
> have the "best" antenna possible. However, if I am receiving the
> "50,000 watt atmosphere burner", 50 miles away, a rusty coat-hanger,
> most likely, would work ..."

You are one funny guy I'll give you that.

> However, you mileage may vary with you "magical antenna logic!" <grin>

The only magic around here is spouted by you. Your experience is
"magically" different than anyone else's and your antenna theory is
simplistic at best not to mention the great job you do of putting words
in peoples mouthes never spoken but what else can we expect from the
comprehension impaired.

I'll tell you what is "magical" and that's the conversations you seem to
have in your head before you post.

> You hit me as a guy attempting to pass off "magical physics" to
> kindergarten-ers; but then, even that is, most likely, a challenge for
> you ... sad, so very, very sad ... :-(

Yeah, very sad of you to keep plonking and then continue to read me.

What a goofball.

--
Telamon
Ventura, California

5814. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 04:21:09 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-1D01AF.20210928122008@newsclstr03.news.prodigy.net>
Source record: 18787
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gj6uem$m5u$1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> Dave wrote:
>
> > ...
> > You pretend to be powerless to fight this...
>
> My single voice IS powerless against the sheer magnitude of the
> onslaught I would launch it against. However, the power of my voice
> combined with thousands, tens-of-thousands, hundreds-of-thousands ... of
> other voices eventually can and does make changes; and, is as it should be.

You have been very entertaining voice as usual though.

--
Telamon
Ventura, California

5815. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 04:38:37 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-A065FE.20383728122008@newsclstr03.news.prodigy.net>
Source record: 18788
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gj9ei3$rl1$1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> RHF wrote:
>
> [stuff]
>
> RHF, I have no bone to pick with you, don't fall victim to trolls here
> which just wish to "stir up chit", to mask their ignorance ...

< SNIP >

Now that is funny. One Trolling idiot posting a response to another
trolling idiot "don't fall victim to the Trolls".

--
Telamon
Ventura, California

5816. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 05:14:14 UTC
From: richardharrison@webtv.net
Message-ID: <23936-49585CA6-5154@storefull-3171.bay.webtv.net>
Source record: 18789

Art wrote:
"could you state a situation where the displacement current is LARGER than the conduction current so I may review it in the light of Newtonian laws?"

I have difficulty in imagining current between the plates of a capacitor exceeding the current through the capacitor`s leads.

Values of voltages and currents anywhere along an antenna primarily depend on the impedance of the antenna at that point and then are dictated by the phasors of the incident and reflected totals at the same point. Arnold B. Bailey in Fig. 7-28 on page 368 of "TV And Other Receiving Antennas" shows current distribution on a half-wave dipole which smoothly varies from zero at its ends to maximum at its center.

Experience shows that a quarter-wave back from a maximum impedance point, a minimum impedance point is created by incident and reflected phasors.

Best regards, Richard Harrison, KB5WZI

5817. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 05:25:59 UTC
From: Sum Ting Wong <sumtingwong@privacy.net>
Message-ID: <khngl49svl34mgn5gc5oo7i42i8jnkjptd@4ax.com>
Source record: 18790

On Sun, 28 Dec 2008 14:43:27 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>You seem to feel that s/n ratio is something to pursue, I tell you it is
>not.

You must have been one of the really strong stations I heard during
the last ARRL 160m contest that kept calling CQ over and over without
being able to hear all the stations that were answering you. It must
have been frustrating.

73, S.T.W.

5818. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 06:19:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj9q6j$830$1@news.albasani.net>
Source record: 18791

Sum Ting Wong wrote:

> ...
> You must have been one of the really strong stations I heard during
> the last ARRL 160m contest that kept calling CQ over and over without
> being able to hear all the stations that were answering you. It must
> have been frustrating.
>
> 73, S.T.W.

Hmmm, from your statements, and text--if adhered to, most-certainly suggests, they must be following your advise, surely! The "alligators", or, i.e., stations which are all mouth and no ears ...

However, I am willing to debate, argue, stand-behind, etc., all which I have said ... I actually HAVE built my antennas, and continue to do so ... indeed, my statement is, "Only lamers buy them."

Regards,
JS

5819. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 06:22:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gj9qbd$830$2@news.albasani.net>
Source record: 18792

John Smith wrote:

> ...
> Hmmm, from your statements, and text--if adhered to, most-certainly
> suggests, they must be following your advise, surely! The "alligators",
> or, i.e., stations which are all mouth and no ears ...
>
> However, I am willing to debate, argue, stand-behind, etc., all which I
> have said ... I actually HAVE built my antennas, and continue to do so
> ... indeed, my statement is, "Only lamers buy them."
>
> Regards,
> JS

P.S. Just in case you wondered, yes, I did purchase a couple, in the
early days ...

Regards,
JS

5820. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 12:11:19 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-2912080711190001@jbw-mac.itd.nrl.navy.mil>
Source record: 18793

In article <IsmdnY-ZnYPwbcrUnZ2dnUVZ_judnZ2d@posted.easystreetonline>, Roy Lewallen <w7el@eznec.com> wrote:

>
> The assumption of sinusoidal current distribution is strictly true only
> with straight, isolated conductors which are infinitely thin, although
> it's a reasonably good assumption in many other cases. Mathematical
> analyses of antennas done before computers were pretty much limited to
> cases where sinusoidal distribution was assumed, because a more accurate
> determination of current distribution was virtually impossible to
> calculate. The ability to determine the actual current distribution is
> one of the very important advantages of computer analysis.
>
> Roy Lewallen, W7EL

Hello, Roy, and while the above is certainly correct, you're probably wasting your time. Many folks like to fashion their own "reasonable" explanations even when they're completely off track (should I mention the CFA again?). Of course they're always right and it's the rest of the world who's wrong. Certain folks on this ng appear to be in constant need of validation. Persons without some knowledge of the underlying physics and applied math are destined to reach the wrong conclusions IMO. Of course that's not going to stop some from building a CFA because as we all know it's the standard comms antenna used at the Groom Lake facility to keep in touch with Klaatu. Sincerely, and 73s from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

5821. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 13:17:39 UTC
From: ltdoc@yahoo.com
Message-ID: <a09423c9-e787-4cc0-b141-03c88fd436d5@a26g2000prf.googlegroups.com>
Source record: 18794

Nigel,
How long is this antenna?
- 'Doc

5822. Re: dipole feed to leg

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 13:26:56 UTC
From: ml <m@di.net>
Message-ID: <m-21175F.08265629122008@news.optonline.net>
Source record: 18795

In article
<b6a01564-a15a-482c-bff7-e26fe42902e2@y1g2000pra.googlegroups.com>,
K7ITM <k7itm@msn.com> wrote:

> On Dec 28, 5:18 am, ml <m...@di.net> wrote:
> > hi
> >
> > In the case of a center fed dipole, typically you want the
> > feedline lets say coax, drooping downwards
> >
> > in a case where you might not be able to do this and need the feeding
> > coax to b closer and more parrallel to one of the legs .....
> >
> > i realize that this will make the dipole more inefficient and
> > distort the pattern...
> >
> > but how do you even roughly calculate that??
> >
> > thanks
>
> How about a simulation? NEC is happy to handle this sort of
> sitution. It's the outside of the coax that you care about as a
> radiator; just add a conductor to the model approximating the position
> and length of the coax as best you can. If the coax goes all the way
> to the ground, that probably makes the model simpler. You can model
> it with and without a choke (balun) to try to isolate the coax from
> the antenna feedpoint.
>
> I think you will find that if you put a choke balun at the antenna
> feedpoint and another one a quarter wavelength back down the line from
> that, the feedline will have relatively little effect on the antenna.
> You might model the baluns as, say, 500 ohm inductive reactances (or
> other inductance, if you know what you'll actually use). In
> situations where I've had trouble with a lot of RF induced on a wire
> where I didn't want it, I've found resonant chokes to be very
> effective: as much inductance as I could reasonably get, paralleled by
> some capacitance added on purpose to make it resonant at the operating
> frequency.
>
> Cheers,
> Tom

<<thanks very much surprized to hear ya say it might have little
effect, my gut told me as the feed wire got anywhere near one of the

legs something would go really wrong either pattern , or swr or
etc etc

i guess the feedline wouldn't go to ground per say at least not
physically thou i guess the chassies of the rigs are technically
grounded

I wasn't worried about (thou it's important) my 'antenna'
disturbing the feedline, more the other way aroound due to proxmity,
so i wonder if your comments regarding chokes were with respect to
that meaning i wouldn't think chokes would make the feedline
less 'visable' to the dipole leg then again maybe i am wrong
on that

really appreciate your taking the time to post thanks much and
happy holidays

5823. Re: Motorcycle mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 13:29:43 UTC
From: ltdoc@yahoo.com
Message-ID: <40930726-1312-4cfc-ba23-128b8ea08720@a29g2000pra.googlegroups.com>
Source record: 18796

Mike,
Not being familiar with that bike, and also probably not having the same 'aesthetic' values, what I would consider 'workable' probably isn't going to be the same as your 'workable'. So, take this for what it's worth.

Does your bike have a fairing? What are the chances of mounting an antenna on that, if it does have one? Is it fiberglass? How about just running a strap to the frame? Considering the size of 'groundplane' required by a typical VHF/UHF antenna, a bike isn't all that small. Getting that antenna 'connected' to the frame ought'a do just fine.

The idea is certainly do-able, so I think the 'aesthetic' value is the 'catch'. That's up to you...
- 'Doc

5824. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 13:50:09 UTC
From: Dave <dave@dave.dave>
Message-ID: <qIadnadhwbwPSMXUnZ2dnUVZ_oDinZ2d@earthlink.com>
Source record: 18797
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

>
> This is Why I refer to Amateur Radio as "The Craft" :
> The Mastery* of the Body of Knowledge and Practices
> related to the Science and Art of Radio Operating.
> * All Praise Be To Them That Do.
> -but- that is not me : for i remain simply a plain old
> shortwave radio listener : who keeps his swling
> "k-i-s-a-p" = keep/ing it simply and practical

I enjoy sending intelligence from point A to point B without wires. I enjoy making spikes (not Xmas trees) on my FSH-313. My work involves UHF FM transmitters of between 10 mW and 250 mW. These need to go 300-500 feet (flawlessly). This is very similar to my hobby (what I enjoy). I can't believe they pay me to do this.

5825. Re: dipole feed to leg

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 13:50:24 UTC
From: ltdoc@yahoo.com
Message-ID: <2ea351b3-f9bb-4595-b40b-8e4663961036@z6g2000pre.googlegroups.com>
Source record: 18798

ML,
Any/every thing around an antenna is going to affect it's radiation pattern to some extent, including feed lines. How much affect those things have is the practical aspect of that. The 'classical' radiation patterns, typically shown, are just that 'classical', best case possibilities. The more 'mundane'(?) patterns are usually never going to be the same, and in most cases, not really all that important, sort of. It would be nice to be able to predict things by using the 'classical' patterns, but just not a very practical thing to count on. Depends a lot on which bands you're talking about too. 'Directional' is typically more important for the higher bands than the lower ones, propagation and all that 'stuff'. Which isn't to say that you shouldn't worry about it, just only to a 'practical' extent. The easiest/hardest solution is to just move the thing till it's 'right' for you.
Yeah, I know, sort of a totally useless post, right? Oh well...
- 'Doc

5826. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 13:58:34 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <56735c5c-715e-4ed9-b271-c5efc4a47706@z27g2000prd.googlegroups.com>
Source record: 18799
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

```
On Dec 28, 8:38 pm, Telamon
<telamon_spamshi...@pacbell.net.is.invalid> wrote:
> In article <gj9ei3$rl...@news.albasani.net>,
>  John Smith <assemblywiz...@gmail.com> wrote:
>
> > RHF wrote:
>
> > [stuff]
>
> > RHF, I have no bone to pick with you, don't fall victim to trolls here
> > which just wish to "stir up chit", to mask their ignorance ...
>
> < SNIP >

- Now that is funny. One Trolling idiot posting
- a response to another trolling idiot "don't fall
- victim to the Trolls".
-
- --
- Telamon
- Ventura, California

Ah Telamon - You know me all too well ~ RHF
.
```

5827. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 14:02:09 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <744aa526-cfce-490b-8b46-adf8d8f55269@r15g2000prh.googlegroups.com>
Source record: 18800
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 29, 5:50 am, Dave <d...@dave.dave> wrote:
> RHF wrote:
>
> > This is Why I refer to Amateur Radio as "The Craft" :
> > The Mastery* of the Body of Knowledge and Practices
> > related to the Science and Art of Radio Operating.
> > * All Praise Be To Them That Do.
> > -but- that is not me : for i remain simply a plain old
> > shortwave radio listener : who keeps his swling
> > "k-i-s-a-p" = keep/ing it simply and practical
>
- I enjoy sending intelligence from point A to point B without wires.
 I
- enjoy making spikes (not Xmas trees) on my FSH-313. My work
involves
- UHF FM transmitters of between 10 mW and 250 mW. These need to go
- 300-500 feet (flawlessly).
- This is very similar to my hobby (what I enjoy).
- I can't believe they pay me to do this.

Dave - You Are One of The Lucky Ones. - enjoy ~ RHF
.

5828. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 14:10:23 UTC
From: Dave <dave@dave.dave>
Message-ID: <cpqdndIItYXSR8XUnZ2dnUVZ_ofinZ2d@earthlink.com>
Source record: 18701
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:
> On Dec 29, 5:50 am, Dave <d...@dave.dave> wrote:
>> RHF wrote:
>>
>>> This is Why I refer to Amateur Radio as "The Craft" :
>>> The Mastery* of the Body of Knowledge and Practices
>>> related to the Science and Art of Radio Operating.
>>> * All Praise Be To Them That Do.
>>> -but- that is not me : for i remain simply a plain old
>>> shortwave radio listener : who keeps his swling
>>> "k-i-s-a-p" = keep/ing it simply and practical
> - I enjoy sending intelligence from point A to point B without wires.
> I
> - enjoy making spikes (not Xmas trees) on my FSH-313. My work
> involves
> - UHF FM transmitters of between 10 mW and 250 mW. These need to go
> - 300-500 feet (flawlessly).
> - This is very similar to my hobby (what I enjoy).
> - I can't believe they pay me to do this.
>
> Dave - You Are One of The Lucky Ones. - enjoy ~ RHF
> .

I do. Thanks.

5829. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 14:29:15 UTC
From: richardharrison@webtv.net
Message-ID: <19665-4958DEBB-1415@storefull-3172.bay.webtv.net>
Source record: 18703

Nigel M, former G1NDM wrote:
"Any suggestions on making or buying a replacement?"

I`ve installed coaxial antennas at VHF which worked well on boats. They consist of a quarter-wave rod insulated and mounted on a quarter-wave cylindrical skirt which surrounds the coax feedline. The match is good. There are no radials to poke eyes. The assembly makes a half-wave vertical antenna.

At 100 MHz, the wavelength is about 3 meters so the overall length of an FM broafcast antenna should be about 1.5 meters. You likely can find such an antenna for sale ready made. If not, it is not difficult to make your own. The folded dipole made from TV twinlead also works well but presents a 300-ohm impedance and may not work as well with your DIN connector. It also requires suspension. The coaxial antenna usually is equipped with a small mounting pipe surrounding the coax.

Best regards, Richard Harrison, KB5WZI

5830. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 14:29:35 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <a06029f2-b9ec-4a59-8bba-7076b5b929e9@w24g2000prd.googlegroups.com>
Source record: 18702
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 27, 12:57 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Billy Burpelson wrote:
> > ...
> > Say what?
>
> > He said he "ain't here to be a ham", so why would he want to transmit?
>
> Well, consider me a "different type of ham." In that, I always
> construct my antennas to receive the best signal for the application at
> hand, ALWAYS--transmitting is only a secondary consideration. As, I
> have never found an antenna which has been found to receive the most
> efficiently fail to do so in xmit mode. Given both xmitter and receiver
> have the same input impedances ...
>
> I do, frequently, see hams adjust the antenna, and its' type, for the
> xmitter--and the best readings which can be obtained in that mode. I
> pay far more attention to how the antenna receives ... I can always
> crank up power on this end, should I ever find it necessary--I don't
> know what the guys capabilities on the other end is/are ...
>
> Regards,
> JS

JS,

Good Antenna Building Concept :
You Can't Talk To Them -unless-
You Can First Hear Them. ~ RHF
.

5831. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 15:11:29 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <AM56l.11981$be.2443@nlpi061.nbdc.sbc.com>
Source record: 18704

Art Unwin wrote:
> You never did supply the information needed to
> justify the values of E,I and R when
> the current value crosses the zero line on a graph.

In simple terms, when the standing-wave current has
a zero amplitude at a current node, none of the energy
is in the magnetic field and all of the energy is in
the electric field. That's why a voltage maximum appears
at a current minimum. When the current equals zero, the
virtual impedance, E/I, is infinite.

This is essentially what happens at the end of a dipole
or monopole or open-circuit stub. The characteristic
impedance of a #14 wire 30 feet above ground is very
close to 600 ohms. Given that Z0, we can treat a dipole
element as a lossy transmission line and calculate the
voltage at the end of the dipole element.

If we model a 1/4WL 600 ohm open-circuit stub with
EZNEC and adjust the resistivity to 0.0000021 ohm-m
to simulate the radiation resistance of a dipole
wire, the feedpoint impedance of the stub is 35 ohms
and conditions on the lossy stub are very close to
the conditions on a dipole element.
--
73, Cecil http://www.w5dxp.com

5832. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 15:57:30 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <7af3175f-add9-42b0-a172-5ff7e58db377@g39g2000pri.googlegroups.com>
Source record: 18705

On Dec 29, 9:11 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Art Unwin wrote:
> > You never did supply the information needed to
> > justify the values of E,I and R when
> > the current value crosses the zero line on a graph.
>
> In simple terms, when the standing-wave current has
> a zero amplitude at a current node, none of the energy
> is in the magnetic field and all of the energy is in
> the electric field. That's why a voltage maximum appears
> at a current minimum. When the current equals zero, the
> virtual impedance, E/I, is infinite.
>
> This is essentially what happens at the end of a dipole
> or monopole or open-circuit stub. The characteristic
> impedance of a #14 wire 30 feet above ground is very
> close to 600 ohms. Given that Z0, we can treat a dipole
> element as a lossy transmission line and calculate the
> voltage at the end of the dipole element.
>
> If we model a 1/4WL 600 ohm open-circuit stub with
> EZNEC and adjust the resistivity to 0.0000021 ohm-m
> to simulate the radiation resistance of a dipole
> wire, the feedpoint impedance of the stub is 35 ohms
> and conditions on the lossy stub are very close to
> the conditions on a dipole element.
> --
> 73, Cecil http://www.w5dxp.com

At the end of the radiator you state the energy is transfered to the
field
so I would imagine there is zero skin effect at that point and the
chain of
skin effect is still present on the outside of the radiator, this
because a full period has not yet elapsed
This equates to a displacement current across the capacitance gap
(plates) between
the outside and the inside of the radiator which is the only current
route available
when the capacitor field expires. Note that this energy is released
prior to the end of the current flow period
because of the absence of the skin effect at that time.
Cecil I am examining all the holy cows that pervade the science of
radiation

as it is universally accepted that radiation is not fully understood,
thus the many hats!
At the moment I see no mechanism that supports the capacitor field to
expire in the direction of incoming current
prior to the completion of the forward period.
Regards
Art

5833. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 16:26:21 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <vQ66l.98$FM6.56@flpi143.ffdc.sbc.com>
Source record: 18706

Art Unwin wrote:
> At the moment I see no mechanism that supports the capacitor field to
> expire in the direction of incoming current
> prior to the completion of the forward period.

The "capacitive" field is the *electric* field which is
at a *maximum* amplitude at the tip of a dipole. It is
the magnetic (inductive) field that is close to zero
at the tip of a dipole.
--
73, Cecil http://www.w5dxp.com

5834. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 16:51:19 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gjb7f1$f4$1@news.netins.net>
Source record: 18712

Shakesphere makes good antennas for marine use. Just google (Shakesphere Antenna) and that should get you to a link to their site. Rollie KD0FGX

"Nigel Molesworth" <reply@thegroup.email.invalid> wrote in message news:1qlfl4tbpillere3uilrkg8k7p61vk46kf@4ax.com...
>A little OT for this group, but I figure you guys are the experts!
>
> I've got a boat, it has an VHF FM Car Radio with a car aerial. The first
> problem is that there is no ground plane, the boat is GRP. It is also
> lying
> horizontally, it is too long to be vertical.
>
> I want to replace the aerial something a bit more suitable. Modern cars
> seem
> to have much shorter aerials, so is there a coil involved?
>
> Any suggestions on making or buying a replacement?
>
> BTW, the radio has a DIN antenna socket, so 150 Ohms I think?
>
> --
> Nigel M
> G1NDM (a long time ago)
>

5835. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 17:16:12 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <4e398541-c175-418b-a7ea-3c4dec86bd09@v5g2000prm.googlegroups.com>
Source record: 18707

On Dec 29, 10:26 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Art Unwin wrote:
> > At the moment I see no mechanism that supports the capacitor field to
> > expire in the direction of incoming current
> > prior to the completion of the forward period.
>
> The "capacitive" field is the *electric* field which is
> at a *maximum* amplitude at the tip of a dipole. It is
> the magnetic (inductive) field that is close to zero
> at the tip of a dipole.
> --
> 73, Cecil http://www.w5dxp.com
Cecil
I still am looking for an explanation that prevents current flow thru
the center.
I recognise that the common thinking is to accept reflection but I
fail to see
how that can happen so I can follow up with the numbers.
The capacitor is limited with respect to the energy that it can retain
so what happens when that
limit is reached and the forward period has not come to an end? Yes,
the common thinking
is that the current changes direction to oppose the forward moving
current as with a reflection
where the eddy current in the reverse direction cancels the eddy
current moving in the other direction.
It is here that I am looking for a mechanism that justifies this
reasoning of reflection so I can begin to dispel the
closed circuit aproach as seen with a full wave radiator in
equilibrium
Best regards
Art
Art
but I am looking for actual proof

5836. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 18:25:19 UTC
From: richardharrison@webtv.net
Message-ID: <27512-4959160F-5217@storefull-3173.bay.webtv.net>
Source record: 18708

Art wrote:
"The capacitor is limited with respect to energy it can retain so what happens when that limit is reached and the forward period has not come to an end?"

There is a sudden flash as energy jumps the gap between the plates.

The energy a capacitor can store expressed in joules is equal to its capacitance in microfarads times the voltage (squared) across its plates divided by two million.

For a fixed capacitor, the only vatiable is the voltage. So, the greater the voltage across the capacitor the greater the energy it stores. The only limit is the breakdown voltage.

Best regards, Richard Harrison, KB5WZI

5837. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 19:01:19 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <46f032c5-6926-4c48-b7bd-0d39543a08ff@r10g2000prf.googlegroups.com>
Source record: 18709

On Dec 29, 12:25 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "The capacitor is limited with respect to energy it can retain so what
> happens when that limit is reached and the forward period has not come
> to an end?"
>
> There is a sudden flash as energy jumps the gap between the plates.
>
> The energy a capacitor can store expressed in joules is equal to its
> capacitance in microfarads times the voltage (squared) across its plates
> divided by two million.
>
> For a fixed capacitor, the only vatiable is the voltage. So, the greater
> the voltage across the capacitor the greater the energy it stores. The
> only limit is the breakdown voltage.
>
> Best regards, Richard Harrison, KB5WZI

So one acknowledges the presence of a capacitor at the end of a
radiator
So now we determine the capacitance and the voltage withstand
together
with what comprises as a capacitor at the end of a radiator to relate
to
which way the current flows.
The question with respect to current flow is still present and
unanswered
despite all of the manouvaring the face the question head on.
If the past means anything this subject could go to a 1000 posts with
neither
a modicom of science to bolster the talk
Art

5838. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 19:05:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <5c96l.15349$Ws1.2607@nlpi064.nbdc.sbc.com>
Source record: 18710

> I still am looking for an explanation that prevents current flow thru
> the center.

Well, being a logical person, I would ask what mechanism
of physics keeps the forward current from flowing through
the center to start with? Why doesn't the forward current
flow through the center and the reflected current flow
back on the surface?

Whatever that mechanism is, it seems logical to conclude
that it might also prevent reflected current from flowing
back through the center.

If we put a signal generator at each end of a wire,
which current flows on the outside and which flows on
the inside?
--
73, Cecil http://www.w5dxp.com

5839. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 19:09:28 UTC
From: richardharrison@webtv.net
Message-ID: <23936-49592068-5416@storefull-3171.bay.webtv.net>
Source record: 18711

Art wrote:
"Yes, the common thinking is that current changes direction to oppose the forward moving current as with a reflection where the eddy current moving in the reverse direction cancels the eddy current moving in the other direction."

Transformers are laminated to reduce eddy current core losses.

Reverse currents on a transmission line or on an antenna are usually called the reflected current.

Reflections are caused by discontinuities in the path of the EM wave.

In the case of an open circuit, the reflection coefficient is infinite and the incident and reflected waves have the same magnitude and phase. The voltage at the discontinuity is thus doubled. See Terman`s 1955 opus page 89. But, the current goes to zero as conduction ends at the open circuit. No energy is lost in the open circuit. It is just concentrated in the electric field as the magnetic field loses its energy.

Best regards, Richard Harrison, KB5WZI

5840. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 19:14:43 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Kk96l.15350$Ws1.8244@nlpi064.nbdc.sbc.com>
Source record: 18713

Art Unwin wrote:
> So one acknowledges the presence of a capacitor at the end of a
> radiator

Let's use IEEE definitions to avoid confusion. A "capacitor"
is a physical component that exhibits capacitance. Capacitance
can be exhibited without the existence of a physical lumped
component. At the end of a radiator, we would have a
distributed capacitance, not *a* lumped capacitor. And
actually, it is not only at the end since it is "distributed".
In fact, an antenna element can be modeled as a distributed
RLC network where the R includes all "losses" including radiation.
--
73, Cecil http://www.w5dxp.com

5841. Marine Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 19:24:47 UTC
From: Rollie <rollie@iowatelecom.net>
Message-ID: <gjb860$308$1@news.netins.net>
Source record: 18714

Re:VHF FM Radio Antenna Construction
http://www.shakespeare-marine.com/

There are all kinds of plans for antennas by searching google, but sometimes is cheaper to buy a quality factory made product.
Shakespeare has always made a high quality antenna that functions with the best of them. I use them because they stay up during ice storms if the tower stays up. Rollie KD0FGX

5842. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 19:36:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <C9mdneuNRblYu8TUnZ2dnUVZ_j6dnZ2d@posted.easystreetonline>
Source record: 18715

J. B. Wood wrote:
>
> Hello, Roy, and while the above is certainly correct, you're probably
> wasting your time. Many folks like to fashion their own "reasonable"
> explanations even when they're completely off track (should I mention the
> CFA again?). Of course they're always right and it's the rest of the
> world who's wrong. Certain folks on this ng appear to be in constant need
> of validation. Persons without some knowledge of the underlying physics
> and applied math are destined to reach the wrong conclusions IMO. Of
> course that's not going to stop some from building a CFA because as we all
> know it's the standard comms antenna used at the Groom Lake facility to
> keep in touch with Klaatu. Sincerely, and 73s from N4GGO,
>
> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

If what you say is true, I am wasting my time. But I believe there's a more diverse group of readers:

1. The people who already already know and understand what I'm explaining;
2. The people who think they know and understand what I'm explaining, but don't, and won't change their minds no matter what I write; and
3. The people who are willing to read and understand what I write, and learn from it or at least think about it.

Just like medical triage, only one of the three groups can be helped, in this case #3. It's for those folks that I take the time to post. I hear from them in various ways from time to time, so I know they're out there. And I'm glad to pass along to them what I've learned, when I can.

Roy Lewallen, W7EL

5843. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 19:36:34 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <cF96l.15353$Ws1.13173@nlpi064.nbdc.sbc.com>
Source record: 18716

Richard Harrison wrote:
> In the case of an open circuit, the reflection coefficient is infinite

Richard, I'll bet you know that the reflection coefficient
is 1.0 for an open circuit and -1.0 for a short circuit.:-)
--
73, Cecil http://www.w5dxp.com

5844. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 20:24:27 UTC
From: richardharrison@webtv.net
Message-ID: <27512-495931FB-5264@storefull-3173.bay.webtv.net>
Source record: 18718

Art wrote:
"At the end of the radiator you state the energy is transfered to the field so I would imagine there is zero skin effect at that point and the chain of skin effect es still present on the outside of the radiator, this is because the full period has not elapsed."

It will elapse as it does in every period so that the higher resistance at RF will take its toll as predicted.

Because of skin effect, hollow conducting pipes exhibit almost as much conducting ability as solid rods of the same material. This creates a market for aluminum tubes as radiating elements and Copperweld wire in antennas. High-powered transmitters use silver-plated coiled pipes to carry distilled water to cool their final amplifiers. The space within the coiled pipes carries no significant RF. RF energy does not flow out on the surface of a conductor and return in the conducting material within the conductor in ordinary circumstances, although phase lag within a conductor increases as penetration depth increases.

Best regards, Richard Harrison, KB5WZI

5845. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 20:27:11 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <315f81ea-9bda-46c6-80c1-38f60970e59f@w24g2000prd.googlegroups.com>
Source record: 18717

>
> oh no! now he doesn't believe in reflections! how could we ever survive on
> here without endless discussions of reflections and waves?

He believes that anything that trashes his delusions of how an antenna
works has to be wrong.

Jimmie

5846. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 20:39:38 UTC
From: kb9rqz@yahoo.com
Message-ID: <8cdil4pb3tfbbq58lrgcfs7306abqmo1qg@4ax.com>
Source record: 18719
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5847. Re: 80m Dipole fed with open wire feeder.

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 20:54:01 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <ade89e2e-8c66-4692-9afe-b5ee5c97c5fd@s9g2000prg.googlegroups.com>
Source record: 18720

On Dec 27, 9:26 pm, maxpowe...@yahoo.com.au wrote:
> Hello all,
> I presently have an 80m dipole fed with about 50 feet of coax. I also
> have a 40m dipole fed with 50 feet of coax at the same height. If I
> was to replace the coax on the 80m dipole with open wire feeder and
> used it on 40m, would it have more gain than the coax fed 40m dipole?
> Also, would it receive better?

The gain would be different, but that's because the pattern would
change, you would have more gain broadside but at the expense of less
gain elsewhere in the pattern.

You would very definitely need a tuner, but that's not a disadvantage.

I am a strong strong proponent of the "all band doublet", with a tuner
what you describe would be a useful antenna on all ham bands shorter
than 80M. And with a little cleverness (tie the two conductors
together and feed it like a vertical against ground with a tuner) it
will be usable on 160M too.

Tim N3QE

5848. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 20:59:59 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ba43dfd4-b5cb-488b-8d36-3bc9acc9850f@z6g2000pre.googlegroups.com>
Source record: 18721

On Dec 29, 1:36 pm, Roy Lewallen <w...@eznec.com> wrote:
> J. B. Wood wrote:
>
> > Hello, Roy, and while the above is certainly correct, you're probably
> > wasting your time. Many folks like to fashion their own "reasonable"
> > explanations even when they're completely off track (should I mention the
> > CFA again?). Of course they're always right and it's the rest of the
> > world who's wrong. Certain folks on this ng appear to be in constant need
> > of validation. Persons without some knowledge of the underlying physics
> > and applied math are destined to reach the wrong conclusions IMO. Of
> > course that's not going to stop some from building a CFA because as we all
> > know it's the standard comms antenna used at the Groom Lake facility to
> > keep in touch with Klaatu. Sincerely, and 73s from N4GGO,
>
> > John Wood (Code 5550)   e-mail: w...@itd.nrl.navy.mil
> > Naval Research Laboratory
> > 4555 Overlook Avenue, SW
> > Washington, DC 20375-5337
>
> If what you say is true, I am wasting my time. But I believe there's a
> more diverse group of readers:
>
> 1. The people who already already know and understand what I'm explaining;
> 2. The people who think they know and understand what I'm explaining,
> but don't, and won't change their minds no matter what I write; and
> 3. The people who are willing to read and understand what I write, and
> learn from it or at least think about it.
>
> Just like medical triage, only one of the three groups can be helped, in
> this case #3. It's for those folks that I take the time to post. I hear
> from them in various ways from time to time, so I know they're out
> there. And I'm glad to pass along to them what I've learned, when I can.
>
> Roy Lewallen, W7EL

Roy,
That is exactly how I felt when I declared that the addition of a
radiator
to a Gaussian statics field under the application of a time varying
field equates to the
mathematics of Maxwells laws. Nobody, including you, showed an error
in that thinking.
Another person provided the mathematics that proved my point again ,
nobody could disprove it.

Anybody can view the book by Ramo and co "Fields and waves in
communication Engineering"
where in Appendix 11 where the a sample method of tackling the proof
is available in it's entirety.
Some could even read the chapter on radiastrion which spells out
problems with the existing aproach.
Remember when the presence of particles on a radiator is determined by
any person well versed in mathematics
and science then the true vehicle of communication is thus determined.
All of the above is directly
applicable to the stance in words only that you have expressed above
but.....no action
It blows my mind when people desert from mathematics and science in
efforts to prevent change.
T,here is no evidence what so ever that Newton's laws applicable in
this case has now been discarded in science
and that evidence destroys the notion of communication and the
emmission of light can be attributed to a field wave form
instead of the particles outlined in Gaussian law.
Art

5849. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 21:08:45 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <dfcc5d94-70dd-4431-9d2b-5846764087fd@n33g2000pri.googlegroups.com>
Source record: 18722

On Dec 29, 1:14 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Art Unwin wrote:
> > So one acknowledges the presence of a capacitor at the end of a
> > radiator
>
> Let's use IEEE definitions to avoid confusion. A "capacitor"
> is a physical component that exhibits capacitance. Capacitance
> can be exhibited without the existence of a physical lumped
> component. At the end of a radiator, we would have a
> distributed capacitance, not *a* lumped capacitor.

No Cecil. We are at the end of the radiator and there is no eddy
currents in front.
Ther apparently is a gap between the outside of the radiator end which
some see as a capacitor
(tho I see nothing that suggests that as yet) If one accepts a
capacitor as distributed then I will go along with that
but that alone cannot stop the flow of current.
Regards
Art

And
> actually, it is not only at the end since it is "distributed".
> In fact, an antenna element can be modeled as a distributed
> RLC network where the R includes all "losses" including radiation.
> --

I would love to see that circuit in its entirety since it will show
the points of collision

> 73, Cecil http://www.w5dxp.com

5850. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 21:21:28 UTC
From: richardharrison@webtv.net
Message-ID: <27515-49593F58-1478@storefull-3173.bay.webtv.net>
Source record: 18725

Cecil, W5DXP wrote:
"Richard , I`ll bet you know that the reflection coefficient is 1.0 for an open circuit and -1.0 for a short circuit. :-)

Yes, Cecil caught me not paying attention. At an open circuit, the impedance is infinite but the coefficient of reflection is the ratio of the voltage of the reflected wave to the voltage of the incident wave. As both have the same phase and magnitude, value of the reflection coefficient for an open circuit is 1.0, not infinity.

Best regards, Richard Harrison, KB5WZI

5851. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 21:21:41 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <2f77f907-72c2-40a2-976b-e28890b5401b@r37g2000prr.googlegroups.com>
Source record: 18723

On Dec 29, 1:09 pm, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art wrote:
>
> "Yes, the common thinking is that current changes direction to oppose
> the forward moving current as with a reflection where the eddy current
> moving in the reverse direction cancels the eddy current moving in the
> other direction."
>
> Transformers are laminated to reduce eddy current core losses.
>
> Reverse currents on a transmission line or on an antenna are usually
> called the reflected current.
>
> Reflections are caused by discontinuities in the path of the EM wave.
>
> In the case of an open circuit, the reflection coefficient is infinite
> and the incident and reflected waves have the same magnitude and phase.
> The voltage at the discontinuity is thus doubled. See Terman`s 1955 opus
> page 89. But, the current goes to zero as conduction ends at the open
> circuit. No energy is lost in the open circuit. It is just concentrated
> in the electric field as the magnetic field loses its energy.
>
> Best regards, Richard Harrison, KB5WZI

Richard,
the above does not address my question other than a stream of words
It is difficult to cull anything with respect to my question that
allows for scientific debate or response
to which actual numbers can be applied. I know what the status quo is
with respect to present day thinking
so repetitive statements provide nothing to the thread.
Note how Cecil is responding in a scientific way without deviating
off point and learn from it. Otherwise there is no reason for me to
respond
Art

5852. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 21:29:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gjbff1$8si$1@news.albasani.net>
Source record: 18724
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

> ...
> - Now that is funny. One Trolling idiot posting
> - a response to another trolling idiot "don't fall
> - victim to the Trolls".
> -
> - --
> - Telamon
> - Ventura, California
>
> Ah Telamon - You know me all too well ~ RHF
> .

Problem is, telemundo does not use the term "newsnet troll" correctly.

His definition: "newsnet-troll = anyone not agreeing with me or
pointing out inaccuracies in my text."

Quite obviously, most here will appear as a troll, to telemundo ... sad,
so very, very sad. :-(

Regards,
JS

5853. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 21:33:07 UTC
From: kb9rqz@yahoo.com
Message-ID: <79gil49drfjao21j75956nk6ie02fb7pgl@4ax.com>
Source record: 18750
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Sun, 30 Nov 2008 16:59:49 -0500, kb9rqz@yahoo.com wrote:

>On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
><assemblywizard@gmail.com> wrote:
>
>>K4YZ wrote:
>>> Nope.
>>>
>>> The IP Address and servers are complete proof that I do NOT share
>>> any annonymous character's "address".
>>>
>>> Sounds like Lennie, to me....
>>>
>>> Steve, K4YZ
>>>
>>
>>To anyone with even an elementary understanding of anonymous proxies,
>>anonymous remailers, zombie backdoors, etc., the ability to change ones
>>IP address and header details is simplistic, indeed, with little time
>>spent anyone can appear to be "coming" from anywhere in the world.
>>
>>You waste my time. Worse, you think us all idiots here. You remind me
>>of the "street smart" prosecutors and defense attorneys who stack jurys
>>with members of little or no technical knowledge and then call in
>>"expert witnesses" and propose arguments of technical details to boggle
>>their minds.
>>
>>You have only proven that you, yourself are either ignorant to such
>>technical details, or else you are indeed street smart, I favor the
>>latter in this case (however, if you in the dark about such things, 15
>>minutes on google will enlighten you.)
>>
>>JS
>
>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
>adams
>
>woger you are a Congress all in your own head
>
>http://kb9rqz.bravejournal.com/
>altopia is never used by KB9RQZ
>nor is Konstans@hotmail.com ever
>btw i can be found at

>17366 N River Rd
>Chassel Mi
>
>but the cowards asking lack the gut to act

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **

5854. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 21:35:34 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-DCFD36.13353429122008@newsclstr02.news.prodigy.com>
Source record: 18727
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gjbff1$8si$1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> RHF wrote:
>
> > ...
> > - Now that is funny. One Trolling idiot posting
> > - a response to another trolling idiot "don't fall
> > - victim to the Trolls".
> > -
> >
> > Ah Telamon - You know me all too well ~ RHF
> > .
>
> Problem is, telemundo does not use the term "newsnet troll" correctly.
>
> His definition: "newsnet-troll = anyone not agreeing with me or
> pointing out inaccuracies in my text."

That is just a comprehension impaired interpretation.

> Quite obviously, most here will appear as a troll, to telemundo ... sad,
> so very, very sad. :-(
>

You have a great imagination but you don't know how to usefully apply it.

--
Telamon
Ventura, California

5855. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 21:35:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gjbfr9$8si$2@news.albasani.net>
Source record: 18726
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:

> ...
> JS,
>
> Good Antenna Building Concept :
> You Can't Talk To Them -unless-
> You Can First Hear Them. ~ RHF
> .

Well, I'd like an antenna like this one (see URL, below.) He comes into my location in the low valley of CA like a door buster, from his secret location in NV. Jumping the high Sierra Mountains in a single leap! <grin>

http://www.smeter.net/w6obb/antenna-farm.php

Regards,
JS

5856. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 22:34:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <kOydnbiliKMZzcTUnZ2dnUVZ_jOdnZ2d@posted.easystreetonline>
Source record: 18728
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Here's why antenna efficiency is important for transmitting but not for HF receiving.

First, the definition of efficiency: For a transmitting antenna, it's the fraction of the power applied which is radiated. The remainder is turned into heat. For receiving, it's the ratio of the power which is delivered to the receiver to the power which could be delivered to the receiver if the antenna had no loss. The efficiency of a given antenna is the same when transmitting and receiving. Sometimes people use "efficiency" to mean other things -- this is the meaning of the term in all antenna literature and texts.

Consider this communications system:

transmitter - antenna - propagation path - antenna - receiver - listener

A receiver unavoidably adds noise to the received signal. So if no noise is injected in the propagation path, the signal/noise ratio is the ratio of the signal entering the receiver to the noise created by the receiver's input circuitry. This is generally the case at VHF and above.

When receiver noise dominates, as above, increasing the receive antenna's efficiency increases the signal arriving at the receiver, so the signal/noise ratio improves. This allows you to hear the signal better. But it only works for VHF and above.

HF is a different story. At HF, there's a lot of atmospheric noise (injected in the "propagation path" part of the system), and unless the receive antenna and receiver are exceptionally bad, the atmospheric noise is much greater than the noise created by the receiver. I mentioned a simple test in my last posting, to see whether this is the case -- just disconnect the antenna. If the noise level drops, atmospheric noise dominates. It's not hard to make a receiver that atmospheric noise will dominate with a 3 foot whip antenna at HF. So at HF where atmospheric noise dominates, the signal/noise ratio is the ratio of the signal entering the receiver to the atmospheric noise entering the receiver. Compare this to the situation described above for higher frequencies.

Now let's see what happens when we improve the efficiency of an HF receiving antenna. Because both the signal and the dominant noise come from locations in front of (that is, on the transmit side of) the antenna, improving the efficiency of the antenna makes both the signal and noise greater in the same proportion when they arrive at the

receiver. There's no improvement at all in the signal/noise ratio. The effect is the same as turning up the receiver volume control. The only way you can improve the signal/noise ratio is to somehow favor one over the other, such as by making the antenna directional. And an inefficient, directional antenna like a Beverage or small loop will nearly always enable you to hear better in some directions than an efficient, nondirectional antenna because directionality helps and inefficiency doesn't hurt.

How about transmit antenna efficiency?

The signal strength from the transmit antenna is proportional to the antenna's efficiency. (It also depends on other things, but I'm just talking about efficiency here.) So if the efficiency of the transmit antenna increases from, say, 33% to 66%, the power levels of the signals at the receive antenna and the receiver double, and there's no change to the received noise, on either HF or VHF and above. So improving the transmit antenna efficiency always improves the signal/noise ratio at the receiver, in this case by 3 dB.

That's why you can hear bunches of HF stations with a very inefficient antenna, but they won't hear you if you try to transmit using that same antenna -- it's because the noise is injected into the system between you. And it's likely that you'll be able to hear stations just as well with the very inefficient antenna as with a much larger, efficient one.

Roy Lewallen, W7EL

5857. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-29 22:41:26 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <09120080-257f-438f-9246-b3ceb53d0b6b@a29g2000pra.googlegroups.com>
Source record: 18729

On Dec 29, 2:27 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> > oh no! now he doesn't believe in reflections! how could we ever survive on
> > here without endless discussions of reflections and waves?
>
> He believes that anything that trashes his delusions of how an antenna
> works has to be wrong.
>
> Jimmie

Enough of the talking Jimmie and prove the Gaussian equation
transformation is wrong.
You missed your chance when it was shown on the net. My earlier
posting pointed you
to a place so you can handle the CGS units and trash it if you can.
All those posts you
have wasted would not have been necessary if you had educated yourself
in the mean time
instead of becoming just a talking head
Art

5858. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 00:13:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gjbp3s$ko5$2@news.albasani.net>
Source record: 18730
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Roy Lewallen wrote:

> ...
> Roy Lewallen, W7EL
>

YEAH, what he said! LOL

And, I must defer to him, his experience allows nothing less ...

Regards,
JS

5859. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 00:36:36 UTC
From: kb9rqz@yahoo.com
Message-ID: <86ril4p9cbp24fr0dt0fgbc9rks1fuklei@4ax.com>
Source record: 18731
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5860. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 00:45:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <7be6l.12021$be.8302@nlpi061.nbdc.sbc.com>
Source record: 18732

Roy Lewallen wrote:
> 1. The people who already already know and understand what I'm explaining;

Assumes that you are omniscient and others should worship at
your feet.

> 2. The people who think they know and understand what I'm explaining,
> but don't, and won't change their minds no matter what I write;

Assumes that you are omniscient and anyone who disagrees with
you is wrong.

> 3. The people who are willing to read and understand what I write, and
> learn from it or at least think about it.

Assumes that you are omniscient and people can only learn
facts from you.

Roy, I don't think that any assumption of your omniscience
is warranted. Is it impossible that you are wrong about
anything in the world? Is the reason that you absolutely
refuse to engage in a rational discussion of the role of
interference in antenna systems because you might be proven
to be wrong and also learn something new in the process?
--
73, Cecil http://www.w5dxp.com

5861. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 01:52:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gjbuu2$5gk$1@news.motzarella.org>
Source record: 18733

Sum Ting Wong wrote:
> On Sun, 28 Dec 2008 14:43:27 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> You seem to feel that s/n ratio is something to pursue, I tell you it is
>> not.
>
> You must have been one of the really strong stations I heard during
> the last ARRL 160m contest that kept calling CQ over and over without
> being able to hear all the stations that were answering you. It must
> have been frustrating.
>
> 73, S.T.W.

I have given some thought your statement; I mean, it just strikes me as so bizarre, I ignored it.

S/N ratio will NOT improve with an antennas efficiency, indeed, it will increase lineally. The more efficient the antenna (sensitive) the more-efficient it will be at receiving "on frequency noise" from even greater distances. However, a poor antenna may be "efficiently receiving" harmonic related noise which a cheap receiver may have inadequate rejection against ... indeed, there are many "side-scenerios" which are possible.

You seem to wish for a very highly efficient/sensitive antenna which will do some sort of noise rejection (or, for some reason, have, in error, given antenna physics this magical/mystical ability(s.)) However, "that/those antenna(s) only exists in science fiction, at least at this date."

Surely, you have poor design which is subject to static noise and/or poor antenna pattern which has noise sources within that pattern. And, of course, if one operates an omni antenna, noise is a given, unless you live in a very remote part of the world, or are running a dummy-load as an antenna ...

Regards,
JS

5862. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 01:55:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gjbv2i$5gk$2@news.motzarella.org>
Source record: 18734

Sum Ting Wong wrote:
> On Sun, 28 Dec 2008 14:43:27 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> You seem to feel that s/n ratio is something to pursue, I tell you it is
>> not.
>
> You must have been one of the really strong stations I heard during
> the last ARRL 160m contest that kept calling CQ over and over without
> being able to hear all the stations that were answering you. It must
> have been frustrating.
>
> 73, S.T.W.

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S/N ratio will NOT improve with an antennas efficiency, indeed, it will increase lineally. The more efficient the antenna (sensitive) the more-efficient it will be at receiving "on frequency noise" from even greater distances. However, a poor antenna may be "efficiently receiving" harmonic related noise which a cheap receiver may have inadequate rejection against ... indeed, there are many "side-scenerios" which are possible.

You seem to wish for a very highly efficient/sensitive antenna which will do some sort of noise rejection (or, for some reason, have, in error, given antenna physics this magical/mystical ability(s.)) However, "that/those antenna(s) only exists in science fiction, at least at this date."

Surely, you have poor design which is subject to static noise and/or poor antenna pattern which has noise sources within that pattern, confused with antenna efficiency. And, of course, if one operates an omni antenna, noise is a given, unless you live in a very remote part of the world, or are running a dummy-load as an antenna ...

Regards,
JS

5863. Re: dipole feed to leg

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 02:17:54 UTC
From: ml <m@di.net>
Message-ID: <m-4F4FDD.21175429122008@news.optonline.net>
Source record: 18735

In article
<2ea351b3-f9bb-4595-b40b-8e4663961036@z6g2000pre.googlegroups.com>,
ltdoc@yahoo.com wrote:

> ML,
> Any/every thing around an antenna is going to affect it's radiation
> pattern to some extent, including feed lines. How much affect those
> things have is the practical aspect of that. The 'classical'
> radiation patterns, typically shown, are just that 'classical', best
> case possibilities. The more 'mundane'(?) patterns are usually never
> going to be the same, and in most cases, not really all that
> important, sort of. It would be nice to be able to predict things by
> using the 'classical' patterns, but just not a very practical thing to
> count on. Depends a lot on which bands you're talking about too.
> 'Directional' is typically more important for the higher bands than
> the lower ones, propagation and all that 'stuff'. Which isn't to say
> that you shouldn't worry about it, just only to a 'practical' extent.
> The easiest/hardest solution is to just move the thing till it's
> 'right' for you.
> Yeah, I know, sort of a totally useless post, right? Oh well...
> - 'Doc

>>nah i get the point, that was really what i was wondering, in
a way what the practically of it all is, meaning if i have to for
certain reason hve the feed wire very close and sorta parrallel to a
leg how much 'worse' the dipole overall will be

vs say does it pay to switch to another type of design say ocf
and or even end feed it would be a 'easy' question to answer if i
really knew the effeciencies of each compared, in my particular
situation

the freq i typically use are 160-10 and sometimes 6m

do appreciate the reply

5864. Re: 1296 vert

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 02:19:02 UTC
From: ml <m@di.net>
Message-ID: <m-54E1E2.21190229122008@news.optonline.net>
Source record: 18736

In article <x4idnRI3WIOBGMrUnZ2dnUVZ_oPinZ2d@earthlink.com>,
Dave <dave@dave.dave> wrote:

> ml wrote:
> > hi
> >
> > does anyone know of a make/model verticle antenna i can buy for
> > around 1296, just need to work the local repeaters
> >
> > i am in a good high area so something simple would do , but oddly
> > enough i can't seem to find much for that band
> >
> > already have some spare hardline run up to the roof
> >
> > any help appreciate thanks
> http://www.new-tronics.com/main/html/base_spirit_antenna_1_2-1_3_gh.html

forgot to say thanks found some comet antennas that were on that
band a previous search on one of there sites didn't show it before

5865. 2m tvi stub

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 02:42:47 UTC
From: ml <m@di.net>
Message-ID: <m-46D957.21424729122008@news.optonline.net>
Source record: 18737

after my building changed to a new tv antenna and master amp
seems i am giving alot of tvi on strangly enough 2m

also some tvi from 10m too never did before

my antenna is physically pretty close to the antenna (thou it also
was previsiously)

for an experiment i was thinking about just making a coaxial stub
for 2m to see if that would 'notch ' out the interference

and using a T connector putting it just before the master amp (which
i think is just amplifing my 2m signal and mixing w/the tv channels
and or overloading the tv's)

should the stub be 1/4w on 2m or would say 1/2w be 'better'?

i'd cut it for the center of 2m

tnx

5866. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 03:18:42 UTC
From: Dave <dave@dave.dave>
Message-ID: <hfednZIjuv6ODsTUnZ2dnUVZ_gOdnZ2d@earthlink.com>
Source record: 18738
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

John Smith wrote:
his secret
> location in NV.

9041 Desert Lane
Pahrump, NV 89048

http://maps.google.com

5867. Re: Vertical Monopole Radiation Characteristics

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 03:45:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <Ia2dnWKOxPj6BMTUnZ2dnUVZ_s_inZ2d@posted.easystreetonline>
Source record: 18739

Richard Fry wrote:
>
> The FCC approach for AM broadcast stations is to use the pattern/gain
> of the radiator over a perfect ground as a basis for the groundwave
> field intensity at a given distance over real ground, as determined by
> the FCC's MW propagation curves -- which curves are based on real-
> world, measured performance.
>
> With the advent of NEC and NEC-2, some have been misled by the
> elevation pattern shown for a vertical radiator at an infinite
> distance over real ground as being that of the radiation launched by
> that vertical radiator. But it is not, it is only the amount of that
> original radiation that survives at an infinite distance, for those
> ground conditions (and for flat earth, at that).

That is correct, except only the people who misunderstand surface wave propagation are being misled.

> This has led to the concept of a "take-off angle" from a ground-
> mounted vertical where peak radiation occurs, and that little to no
> radiation occurs from the monopole in and near the horizontal plane.
> But that isn't the case -- the relative field over real ground at low
> elevation angles close to the vertical radiator can be very high, and
> will continue onward to produce a long-range skywave. Even radiation
> at an elevation angle of one degree will reach the ionosphere, due to
> earth curvature.

Radiation at one degree will indeed reach the ionosphere. But not the radiation propagating as a surface wave, as I'll show.

The field launched at very low angles contacts the ground and in doing so, induces a current into it. This extracts power from the wave as it propagates. The result is that the surface wave field is attenuated quite rapidly with distance. At AM broadcast frequencies, it propagates far enough to be useful for local broadcasting, but it doesn't reach the ionosphere. If it did, fading (due to surface and sky wave interference at distant points) would be a much more serious problem for broadcasters than it is. As you go higher in frequency, the attenuation becomes greater, so the surface wave propagates even less distance before dropping below the noise level. No measurable fraction of it ever goes anywhere near far enough to reach the ionosphere.

> The theoretical elevation patterns shown in my plots don't exist very
> far from the antenna, but they are a closer to reality over real
> ground than those shown by NEC and NEC-2 for an infinite distance over
> the same ground, and assumed also to exist close to the radiator.

NEC (NEC-2 and NEC-4) does a very good job of showing surface wave ("ground wave") field strength. It uses the same calculation method as used by the FCC and, I understand that NEC modeling results are now being accepted by the FCC in lieu of measurement for AM broadcast proof of performance.

> The results obtained using NEC-4 to calculate the groundwave field
> intensity within the useful daytime coverage areas of AM broadcast
> stations give much better correlation to the measured fields, and to
> the methodology of using the theoretical pattern with the FCC's MW
> propagation curves.

NEC-2 and NEC-4 give virtually identical results for both ground and sky wave propagated fields. The results below were done using EZNEC Pro with the double precision NEC-4 calculating engine. Results using the double precision NEC-2 engine were different by less than 0.1 dB.

Here are some numerical values to illustrate what happens to the ground wave field(*). Two antennas are analyzed, one at 1 MHz and the other at 7 MHz. Each is 1/4 wavelength high with effectively a zero loss ground system. The 1 MHz antenna is 7 inches in diameter, the 7 MHz antenna one inch diameter. (Diameter in this range makes no significant difference.) Ground is "average" -- 5 mS/m conductivity, dielectric constant of 13. Data are for elevation angles of zero, one, and two degrees, to distances of 50 miles. In that distance range, the difference between flat and curved Earth is negligible. The reported field strengths are in dBi for easy comparison; to convert to mV/m, use

mV/m = 1000 / Distance(m) * Sqrt(30 * Power(w)) * 10 ^ (dBi / 20)

dBi is a comparison to the field from an isotropic antenna with the same input power, measured at the same distance. So if the attenuation of all parts of the field is the same with distance (in other words, if the pattern is the same shape at all distances), the dBi field strength will be the same at all distances.

First, the results. Field intensities are shown at various distances from the antenna. These are the entire field, including surface wave. View with a fixed-width font.

Field strengths, dBi, are under each elevation angle:

		-- Elev angle --		
Freq(MHz)	Dist(mi)	0 deg	1 deg	2 deg
1	inf	-inf	-11.8	-6.8
1	1	4.0	3.6	3.4
1	10	-2.8	-5.0	-4.6
1	50	-18.7	-12.6	-7.0
7	inf	-inf	-18.1	-12.7
7	1	-15.8	-15.4	-12.2
7	10	-36.7	-18.3	-12.8
7	50	-50.8	-18.1	-12.7

The two lines with "inf" distance are sky wave only, that is, the field is evaluated at a great enough distance that the ground wave has decayed to effectively zero. This is what you'll see with EZNEC's Far Field analysis, or with NEC if you don't include the ground wave. The difference between these and the entries at other distances represents the contribution of the ground wave at those distances.

As Richard has observed, the field strength is zero at zero elevation angle and long distances. At the AM broadcast frequency of 1 MHz, there's still the useful field strength of -18.7 dBi at the surface at 50 miles (even though the field strength is 20 dB greater -- not shown -- at an elevation angle of 20 degrees). Notice, though, how the zero degree field relative field strength continues getting smaller with distance. Fortunately for the broadcasters, the surface wave component doesn't detach itself from the Earth and head for the ionosphere as the Earth curves away, but follows the curvature of the Earth. This allows broadcasting beyond the horizon without ionospheric skip, and prevents fading from the ground wave alone. It doesn't reach the ionosphere as Richard has claimed.

The ground wave contribution is noticeable at one and two degrees also. But look at what happens with distance (at 1 MHz). At 50 miles, the ground wave contribution at those angles is hardly noticeable, as you can see by comparing the dBi field strength at that distance with the dBi field strength at an infinite distance. Interestingly, the dBi field strength is shown to be very slightly lower at 50 miles than at an infinite distance. This might be due to some of the power in the surface wave at 50 miles being transferred to the sky wave at greater distances, or it might be due to small calculation errors. But the differences are slight, indicating that no significant ground wave energy remains at 50 miles at elevation angles of 1 and 2 degrees. There's no noticeable ground wave energy at higher angles at or beyond 50 miles, and very little at closer distances.

An analysis of the 7 MHz antenna shows the same thing, except that the ground wave decays faster as expected. At that frequency, the one and two degree field strengths have reached their sky wave-only values at 10 miles -- indicating essentially full decay of the ground wave -- , and the zero degree field strength is less than -50 dBi at 50 miles.

The _ARRL Antenna Book_ propagation chapter devotes only one paragraph to surface wave propagation(*). It summarizes that "The surface wave is of little value in amateur communication, except possibly at 1.8 MHz." Analysis which concludes that the surface wave plays a role in ionospheric skip is erroneous and leads to conclusions which are simply and demonstrably not true. Ground wave field strength is of interest at HF only for communicating with stations within a few miles, and at MF with stations within a few tens of miles.

(*) Technically, the surface wave is only one kind or component of a ground wave, as explained in the _ARRL Antenna Book_. However, NEC uses "ground wave" to mean the wave in contact with the ground, which some others call the surface wave. This discussion is about the wave in

contact with the ground, for which I've used "ground wave" and "surface wave" pretty much interchangeably. There's a good discussion of surface wave propagation in Terman's _Radio Engineering_ as well as other references.

Roy Lewallen, W7EL

5868. Re: 2m tvi stub

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 03:50:17 UTC
From: richardharrison@webtv.net
Message-ID: <27512-49599A79-5472@storefull-3173.bay.webtv.net>
Source record: 18740

ML wrote:
"----seems like I am giving a lot of TVI on strangely enough 2m."

Probably receiving amplifier overload.

Antennas usually couple more tightly side by side than they do end to end where they reside in each other`s nulls. If the TV antenna is horizintally polarized while your transmitting antenna is vertically polarized. that should greatly decrease coupling between the antennas. Maybe distance between the two antennas can be maximized. Maybe the new TV antenna has a feedline defect allowing the line to become part of the receiving antenna. Its coax should prevent noise pickup not cause it. Maybe careful adjusting cross-polarization of the antennas, or a combination of cures will fix your problem. I hope you are lucky.

Best regards, Richard Harrison, KB5WZI

5869. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 04:10:22 UTC
From: Brian Oakley <brian.oakley@charter.net>
Message-ID: <Kah6l.27003$an4.1105@newsfe08.iad>
Source record: 18741
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:kOydnbiliKMZzcTUnZ2dnUVZ_jOdnZ2d@posted.easystreetonline...
> Here's why antenna efficiency is important for transmitting but not for HF
> receiving.
>
> First, the definition of efficiency: For a transmitting antenna, it's the
> fraction of the power applied which is radiated. The remainder is turned
> into heat. For receiving, it's the ratio of the power which is delivered
> to the receiver to the power which could be delivered to the receiver if
> the antenna had no loss. The efficiency of a given antenna is the same
> when transmitting and receiving. Sometimes people use "efficiency" to mean
> other things -- this is the meaning of the term in all antenna literature
> and texts.
>
> Consider this communications system:
>
> transmitter - antenna - propagation path - antenna - receiver - listener
>
> A receiver unavoidably adds noise to the received signal. So if no noise
> is injected in the propagation path, the signal/noise ratio is the ratio
> of the signal entering the receiver to the noise created by the receiver's
> input circuitry. This is generally the case at VHF and above.
>
> When receiver noise dominates, as above, increasing the receive antenna's
> efficiency increases the signal arriving at the receiver, so the
> signal/noise ratio improves. This allows you to hear the signal better.
> But it only works for VHF and above.
>
> HF is a different story. At HF, there's a lot of atmospheric noise
> (injected in the "propagation path" part of the system), and unless the
> receive antenna and receiver are exceptionally bad, the atmospheric noise
> is much greater than the noise created by the receiver. I mentioned a
> simple test in my last posting, to see whether this is the case -- just
> disconnect the antenna. If the noise level drops, atmospheric noise
> dominates. It's not hard to make a receiver that atmospheric noise will
> dominate with a 3 foot whip antenna at HF. So at HF where atmospheric
> noise dominates, the signal/noise ratio is the ratio of the signal
> entering the receiver to the atmospheric noise entering the receiver.
> Compare this to the situation described above for higher frequencies.
>
> Now let's see what happens when we improve the efficiency of an HF
> receiving antenna. Because both the signal and the dominant noise come

> from locations in front of (that is, on the transmit side of) the antenna,
> improving the efficiency of the antenna makes both the signal and noise
> greater in the same proportion when they arrive at the receiver. There's
> no improvement at all in the signal/noise ratio. The effect is the same as
> turning up the receiver volume control. The only way you can improve the
> signal/noise ratio is to somehow favor one over the other, such as by
> making the antenna directional. And an inefficient, directional antenna
> like a Beverage or small loop will nearly always enable you to hear better
> in some directions than an efficient, nondirectional antenna because
> directionality helps and inefficiency doesn't hurt.
>
> How about transmit antenna efficiency?
>
> The signal strength from the transmit antenna is proportional to the
> antenna's efficiency. (It also depends on other things, but I'm just
> talking about efficiency here.) So if the efficiency of the transmit
> antenna increases from, say, 33% to 66%, the power levels of the signals
> at the receive antenna and the receiver double, and there's no change to
> the received noise, on either HF or VHF and above. So improving the
> transmit antenna efficiency always improves the signal/noise ratio at the
> receiver, in this case by 3 dB.
>
> That's why you can hear bunches of HF stations with a very inefficient
> antenna, but they won't hear you if you try to transmit using that same
> antenna -- it's because the noise is injected into the system between you.
> And it's likely that you'll be able to hear stations just as well with the
> very inefficient antenna as with a much larger, efficient one.
>
> Roy Lewallen, W7EL

Well said Roy, however, can you explain why this is not so at VHF and above?
I would think that would have to do more with mode than with
antenna/propagation. When I turn down the squelch on my vhf rx i get lots
of noise. Let me know.
TIA,
B

5870. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 04:32:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <2pGdnVgbzsjgOcTUnZ2dnUVZ_vqdnZ2d@posted.easystreetonline>
Source record: 18742
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Brian Oakley wrote:
>
> Well said Roy, however, can you explain why this is not so at VHF and
> above? I would think that would have to do more with mode than with
> antenna/propagation. When I turn down the squelch on my vhf rx i get
> lots of noise. Let me know.
> TIA,
> B

It's purely because of where the dominant noise comes from, more specifically whether it gets into the system before or after the antenna. Atmospheric noise gets greater as you go down in frequency. At VHF and above, it's less than receiver noise, so receiver noise dominates and masks whatever atmospheric noise there might be. At HF and below, it's usually greater than receiver noise, so atmospheric noise masks the receiver noise. Obviously there's no precise line, so somewhere typically near the upper end of HF either one might dominate, depending on conditions, antenna, and receiver.

The noise you get from your VHF radio when you turn down the squelch is receiver noise. You can prove it by disconnecting the antenna and noticing that the noise doesn't change. Disconnect the antenna from an HF receiver and the noise will drop, because it's coming from the other side of the antenna.

Roy Lewallen, W7EL

5871. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 05:10:28 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <3vajl49494sublcku8u3odmcknvn52fcs1@4ax.com>
Source record: 18743
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Mon, 29 Dec 2008 20:32:58 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>It's purely because of where the dominant noise comes from, more
>specifically whether it gets into the system before or after the
>antenna. Atmospheric noise gets greater as you go down in frequency. At
>VHF and above, it's less than receiver noise, so receiver noise
>dominates and masks whatever atmospheric noise there might be. At HF and
>below, it's usually greater than receiver noise, so atmospheric noise
>masks the receiver noise. Obviously there's no precise line, so
>somewhere typically near the upper end of HF either one might dominate,
>depending on conditions, antenna, and receiver.
(...)
>Roy Lewallen, W7EL

This might help:
<http://en.wikipedia.org/wiki/Atmospheric_noise>

If you extend the red line showing man made noise, at greater than
about 30Mhz, the man made noise (ignition noise, motor noise, etc)
predominates over atmospheric noise.

--
Jeff Liebermann 150 Felker St #D Santa Cruz CA 95060
831-336-2558 jeffl@comix.santa-cruz.ca.us
http://802.11junk.com jeffl@cruzio.com
http://www.LearnByDestroying.com AE6KS

5872. Re: 2m tvi stub

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 06:04:59 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <c9qo26-ni7.ln1@p400bob.personal.cox.net>
Source record: 18744

Usually a 1/4 wave open stub, or a half wave shorted stub...

I used to use 1/4 wave stubs to attenuate strong local TV signals from a masthead amp that was primarily used for weaker signals. The frequency of the wanted vs interferring signal were a nice 2:1 relationship so I was kind of lucky. I used 75r coax and just chopped it to about .82VF and it actually worked first time.

I'd suspect though that the problem is more likely to be fundamental overload. Of course it cant hurt to try.

Both a 1/4 wave open and 1/2 wave short stub present a low Z to the tuned frequency, or if you like "shorts it out", If however the wanted pass freqency is an odd multiple (1/4 wave) or an even multiple (1/2 wave) then you end up attentuating that as well.

Cheers Bob VK2YQA

ml wrote:
> after my building changed to a new tv antenna and master amp
> seems i am giving alot of tvi on strangly enough 2m

5873. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 06:38:30 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Hlj6l.37540$fs1.12004@newsfe05.iad>
Source record: 18745

```
"Dave" <noone@nowhere.com> wrote in message
news:DNL5l.1548$BC4.857@nwrddc02.gnilink.net...
>
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
> news:8KD5l.10271$701.7682@newsfe12.iad...
> >
> > "Dave" <noone@nowhere.com> wrote in message
> > news:4du5l.1382$Es4.1261@nwrddc01.gnilink.net...
> >>
> >> "Art Unwin" <ArthurUnwin@gmail.com> wrote in message
> >>
news:c53c9fd4-0e58-468c-b736-8943e758b52e@z27g2000prd.googlegroups.com...
> >>
> >> >Well the idea of 1 inch mesh was a bum idea. I should have kept to my
> >> >own thinking.
> >> >When transmitters have holes in the casing of 1 inch diameter will be
> >> >the time I will use such large holes.
> >> >Will now have to take it of and replace with aluminum window mesh.
> >> >The present mesh has no idication of working in any sence of the word
> >> >Art
> >>
> >> let me give you a hint... its not the mesh that is the problem.
> >
> >
> > The theoretical gain of a dish is expressed as (9.87 times D-squared) /
> > (wavelength-squared), where D is the dish diameter. If you have a 3
meter
> > dish and you're working 10m, I calculate the gain as less than unity.
> > Ref:
> > http://en.wikipedia.org/wiki/Parabolic_antenna
> >
> > Even then, the efficiency of the dish is assumed to be 100% -- which it
> > never is. One limitation is the effectiveness of illuminating the
entire
> > surface of the dish uniformly. How can you do that at HF? You need a
> > compact illuminator at the focal point of the dish but HF doesn't lend
> > itself to such gyrations.
> >
> > I think you should not consider a dish for HF. It works only for
> > wavelengths that are small, compared to the dish size. Don't fight the
> > math.
> >
> >
>
```

> what do you get for gain when you use it on 160m like art is doing?
>
>

OK, a 3 meter dish at 160m:

Numerator is 9.87 times 3-squared = 88.83
Denominator is 160-squared = 25600

The quotient is the nominal power gain = 0.00347

In technical terms, this equals a fart in a windstorm.

BTW, to validate the formula for a practical dish, plug in the values for the same 3-meter dish, but use C-band TVRO freqs around 4 GHz. Take the log of the quotient, multiply by 10 and you get close the customary 40dB gain associated with those backyard beauties. (I just got rid of mine this year; the new owner wants to try EME at 1.2 GHz.)

"Sal"
(KD6VKW)

5874. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 07:18:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <JcydnTDrlJHHVsTUnZ2dnUVZ_rPinZ2d@posted.easystreetonline>
Source record: 18746
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Jeff Liebermann wrote:
>
> This might help:
> <http://en.wikipedia.org/wiki/Atmospheric_noise>
>
> If you extend the red line showing man made noise, at greater than
> about 30Mhz, the man made noise (ignition noise, motor noise, etc)
> predominates over atmospheric noise.

In my last couple of postings, I was lumping man-made and atmospheric noise together as "atmospheric noise". Both enter the system between the transmit and receive antenna, so improving the receive antenna efficiency won't help the ratio of signal to either atmospheric or man made noise. The referenced graph doesn't show receiver noise at all, which dominates at VHF and above.

It can be useful, however, to distinguish between atmospheric noise and *local* man-made noise, since the latter can sometimes be reduced by using techniques such as feedline decoupling and using horizontally polarized antennas.

Roy Lewallen, W7EL

5875. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 07:28:50 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9egjl4ls351lattnotsa1d1gdcaqsmnula@4ax.com>
Source record: 18747

On Mon, 29 Dec 2008 11:36:34 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>If what you say is true, I am wasting my time. But I believe there's a
>more diverse group of readers:
>
>1. The people who already already know and understand what I'm explaining;
>2. The people who think they know and understand what I'm explaining,
>but don't, and won't change their minds no matter what I write; and
>3. The people who are willing to read and understand what I write, and
>learn from it or at least think about it.
>
>Just like medical triage, only one of the three groups can be helped, in
>this case #3. It's for those folks that I take the time to post. I hear
>from them in various ways from time to time, so I know they're out
>there. And I'm glad to pass along to them what I've learned, when I can.
>
>Roy Lewallen, W7EL

Well, this is probably a suitable time to offer my thanks for taking
the time to explain how things work (and to correct my screwups).
Thanks much. I suspect that the time and effort are not a major
problem. It's tolerating the nonsense that passes as a substitute for
intelligence that bothers me. It's difficult to argue with
unsubstantiated illogic and one-line simulated cleverness.

I do the same in alt.internet.wireless.
<http://groups.google.com/groups/profile?hl=en&enc_user=bLQuYRAAAACBvdjA7WBXQw3w3fqwxHRj>
Hmmm... there should be much more dating back to about 1987.

One of my tag lines is:
"I judge people by their willingness and ability to learn".
I have no problem with those that disagree with me. It's easy enough
to make the distinction between disagreement and learning failure. If
they understand both sides of a debate, they're doing just fine.
Otherwise, you're debating against dogma and bias, with little home of
having anyone change their opinion.

I'm mostly in #3. I read, learn, sometime ask, occasionally comment,
and save some postings for reference. I'm fairly well informed in my
areas of expertise, but am seriously lacking in others. Antennas is
one of those where I'm lacking. Sometimes you go over my head, which
is not a problem. I can dig out the details later. However, some
URL's, references, and additional reading pointers would be helpful.
Overall, your postings are all useful, interesting, and well worth
reading.

As for the diversity of the readers, it's probably all over the map. You have the difficult problem of trying to write something that is understandable by every knowledge level from complete beginner to professional antenna designer. It's easy if you know something about the person with whom your discussing some topic, but very different if you're dealing with an anonymous visitor.

Thanks again.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5876. Re: 2m tvi stub

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 08:10:44 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <flk6l.46558$Uk3.3761@newsfe10.iad>
Source record: 18748

"ml" <m@di.net> wrote in message
news:m-46D957.21424729122008@news.optonline.net...
> after my building changed to a new tv antenna and master amp
> seems i am giving alot of tvi on strangly enough 2m
>
> also some tvi from 10m too never did before
>
> my antenna is physically pretty close to the antenna (thou it also
> was previsiously)
>
> for an experiment i was thinking about just making a coaxial stub
> for 2m to see if that would 'notch ' out the interference
>
> and using a T connector putting it just before the master amp (which
> i think is just amplifing my 2m signal and mixing w/the tv channels
> and or overloading the tv's)
>
>
> should the stub be 1/4w on 2m or would say 1/2w be 'better'?
>
> i'd cut it for the center of 2m
>
>
> tnx

Open quarter wave, shorted half wave. I don't know which is better.
Remember to shorten the stub length by the velocity factor of the coax.

I had a similar problem years ago on a Navy ship. Nearby taxi radios around
154 MHz overloaded the antenna amp. I bought a "Midband Trap" from a TV
shop downtown which fixed things. It went inline and attenuated those
non-TV signals between (approx) 120 - 170 MHz. It was only a few dollars
from one of the well-known TV reception equipment makers, Channel Master, I
think.

Unfortunately, I haven't found it from any familiar names, but I did locate
this page http://www.microwavefilter.com/pdffiles/pg27.pdf. The 3367-A/I,
3367-B/G, 3367-C/G and 3367-C/H should all do what you need for 2m
suppression. Prices unknown.

... and this page: http://www.atvresearch.com/overstk.pdf Find their
number 5KMT-A/I-TX Midband Trap. A clearance sale bargain if they still
have any left.

Here's a single-frequency tunable notch;
http://www.microwavefilter.com/pdffiles/pg28.pdf.

Good luck.

5877. NIKE AIR JORDAN FORCE FUSION SHOES AJF 5 V JORDANs 5 FUSION NIKE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 09:34:26 UTC
From: 654 <wholesalenikeshoes@163.com>
Message-ID: <55d87a43-969a-43a6-9178-0108fc59ead1@a12g2000pro.googlegroups.com>
Source record: 18749
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

shoes on
AIR Jordan 1 (paypal payment)www.king-trade.cn
AIR Jordan 2
AIR Jordan 3
AIR Jordan 4
AIR Jordan 5 (paypal payment)www.king-trade.cn
AIR Jordan 6 Rings
AIR Jordan 6
AIR Jordan 7
AIR Jordan 8
AIR Jordan 9 (paypal payment)www.king-trade.cn
AIR Jordan 10
AIR Jordan 11
AIR Jordan 12
AIR Jordan 13 (paypal payment)www.king-trade.cn
AIR Jordan 14
AIR Jordan 15
AIR Jordan 16
AIR Jordan 17
AIR Jordan 18
AIR Jordan 19
AIR Jordan 20 (paypal payment)www.king-trade.cn
AIR Jordan 21
AIR Jordan 22
AIR Jordan 23 (paypal payment)www.king-trade.cn
AIR Jordan 3.5
AIR AIR Jordan 4.5
AIR Jordan 7.5
AIR Jordan 9.5
AIR Jordan 12.5 (paypal payment)www.king-trade.cn
AIR Jordan 15.5
AIR Jordan 19.5
AIR Jordan 21.5
AIR Jordan Large Size Jordan
AIR Jordan Size 14 Jordan
AIR Jordan Size 15 shoes
AIR Jordan DMP
Nike air force one, air force 1, air force one low cut, air force one
high cut, air force one release date
Air force one, air foce one 25TH, af 1, af 1 25TH, Nike air force one
new releases, limited version
Air Force One (paypal payment)www.king-trade.cn

Air Force one 25TH
AF 1
AF 1 25TH (paypal payment)www.king-trade.cn
Dunk sb nike sb dunk nike dunk sb dunk sb high dunk sb low dunk sb woman
Nike sb dunk Nike Dunk High SB nike dunk low premuim sb Nike SB Dunk High Shimizu
Nike SB Dunk Pro Nike SB Dunk Dunk SB
Nike Dunk shoes
Dunk shoes for woman (paypal payment)www.king-trade.cn
Dunk low cut
Dunk high cut

AIR Jordans Fusion 1 Jordan 2 Fusion AIR Jordan 3 Nike Jordan Fusion 4
Jordan 5 shoes Nike Air Jordan 6 VI Force 1 Jordan Fusion AJF 6 AJF6 AJ6F Jordan 6 Rings Jordan 6 fusion (paypal payment)(www.king-trade.cn)

AIR Jordan Fusions 13 NIKE Jordan Fusion 14 AIR Jordans 15Nike Jordan 16 Fusion Jordan 17 shoes Nike Air Jordans 18 XVIII Force 1 Jordan Fusion AJF18 AJF18 AJ18F Jordan 18 fusions
(paypal payment)www.king-trade.cn

AIR Jordan Fusions 7 NIKE Jordan Fusion 8 AIR Jordans 9 Nikes Jordan Fusion 10 Jordan 11 shoes Nike Air Jordan 12 XII Force 1 Jordan Fusion AJF 12 AJF12 AJ12F Jordans 12 fusions
(paypal payment)www.king-trade.cn

NIKE AIR JORDAN FORCE FUSION SHOES AJF 5 V JORDANs 5 FUSION NIKE JORDAN 5 FUSION SHOES AJF5 Nike Air Jordan XXIII 23 Force 1 Jordan Fusion AJF 23 AJF23 AJ23F
(paypal payment)www.king-trade.cn

Nike Jordans Fusion 23 AIR Jordan 22 Jordan Fusions 21 AIR Jordans Fusion 20 Jordan 19 shoes Air Jordan Force Fusion VIII (8), AJF 8 Nike (paypal payment)www.king-trade.cn
Air Jordan 17 XVII Force 1 Jordan Fusions AJF 17 AJF17 AJ17F Jordan
our website : www.king-trade.cn

5878. Re: Vertical Monopole Radiation Characteristics

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 12:11:23 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bd171585-9bfc-463f-9a9e-5082f567779b@i20g2000prf.googlegroups.com>
Source record: 18602

Roy Lewallen's post of Dec 29, 9:45 pm generally supports the points I have been writing about.

But two observations are due:

> Fortunately for the broadcasters, the surface wave component
> doesn't detach itself from the Earth and head for the ionosphere
> as the Earth curves away, but follows the curvature of the Earth.
> This allows broadcasting beyond the horizon without ionospheric
> skip, and prevents fading from the ground wave alone. It doesn't
> reach the ionosphere as Richard has claimed.

The last sentence above is incorrect in that I made no such claim. My post stated only that radiation from elevation angles as small as one degree will reach the ionosophere. See the paste below.

"But that isn't the case -- the relative field over real ground at low elevation angles close to the vertical radiator can be very high, and will continue onward to produce a long-range skywave. Even radiation at an elevation angle of one degree will reach the ionosphere, due to earth curvature."

A low elevation angle does not include zero degrees (the horizontal plane).

>The reported field strengths are in dBi for easy comparison; ...

The term "dBi" is not a unit of field strength. Field strength is a voltage existing between two points in space typically one meter apart, and is expressed in terms of that voltage with respect to that distance, as in volts/meter (V/m).

Field strengths can be compared using decibels, but such comparisons are referenced to the field strength shown in standard form. For example, a field strength of 1,000 µV/m may be expressed as 60 dBµV/m.

RF

5879. Re: 2m tvi stub radials

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 12:22:13 UTC
From: ml <m@di.net>
Message-ID: <m-B9F606.07221330122008@news.optonline.net>
Source record: 18603

In article <27512-49599A79-5472@storefull-3173.bay.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:

> ML wrote:
> "----seems like I am giving a lot of TVI on strangely enough 2m."
>
> Probably receiving amplifier overload.
>
> Antennas usually couple more tightly side by side than they do end to
> end where they reside in each other`s nulls. If the TV antenna is
> horizintally polarized while your transmitting antenna is vertically
> polarized. that should greatly decrease coupling between the antennas.
> Maybe distance between the two antennas can be maximized. Maybe the new
> TV antenna has a feedline defect allowing the line to become part of the
> receiving antenna. Its coax should prevent noise pickup not cause it.
> Maybe careful adjusting cross-polarization of the antennas, or a
> combination of cures will fix your problem. I hope you are lucky.
>
> Best regards, Richard Harrison, KB5WZI

<< big thanks to all those that replied

I agree it is prob 'overload' but thought perhaps notching might
work, i already have some really good multistage tvi filters but
wanted to be ready with a notch for when the building lets me into
the closet in case that is not enough.

My thought was to try and make stubs cause they are 'cheep' but
those links to the commercial site were pretty cool

wasn't sure the difference between the single stop unit and the one
with 2 stops (past the obvious)

my thoughts would be that either wont effect the other
frequencies as a stub might (2nd 3rd harmonic?)

Currently have 2 2m antennas Rich, once is a arrow 2/440 jpole
and it is about middle of the antenna towards it's left side
about 2 ft or so away

directly in front of it is a M2 eggbeater rather omni pattern

it's about 3-4ft away so the tv antenna is looking right at it

I don't really have any place to move the antennas to other than
some sort of compramise like moving the antenna towards the floor
wich then the elevator room would block me in at least 1 compas

direction and losing the altitude would of course loose me the distant repeaters using one of those floor mounts which i already have actually

question
perhaps putting the 2m antenna higher than the tvi antenna might do the trick ? the jpole has no radials the eggbeater does so i am guessing the eggbeater might offer less downward radation? and therefore offer less tvi if higher than the tv ant?

thanks

5880. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 12:41:44 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bc15e3d6-3d05-45b8-8708-891480b0012b@l33g2000pri.googlegroups.com>
Source record: 18604

RE my earlier post starting:
> Art, the current distribution along even the shortest (fractional
> wavelength), constant OD radiator also is ~sinusoidal. etc
>
> ** Posted from http://www.teranews.com**

That was my first (and last) use of Teranews, who took a couple of days to post it. I had given up on them, and switched to Google to make the post. Now this duplicate shows up - sorry.

5881. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 14:31:46 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <a81eafd8-7cf0-42a3-b163-50a4134134af@o40g2000prn.googlegroups.com>
Source record: 18605

```
On Dec 30, 12:38 am, "Sal M. Onella" <salmone...@food.poisoning.org>
wrote:
> "Dave" <no...@nowhere.com> wrote in message
>
> news:DNL5l.1548$BC4.857@nwrddc02.gnilink.net...
>
> > "Sal M. Onella" <salmone...@food.poisoning.org> wrote in message
> >news:8KD5l.10271$701.7682@newsfe12.iad...
>
> > > "Dave" <no...@nowhere.com> wrote in message
> > >news:4du5l.1382$Es4.1261@nwrddc01.gnilink.net...
>
> > >> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:c53c9fd4-0e58-468c-b736-8943e758b52e@z27g2000prd.googlegroups.com...
>
>
>
>
>
> > > >> >Well the idea of 1 inch mesh was a bum idea. I should have kept to my
> > > >> >own thinking.
> > > >> >When transmitters have holes in the casing of 1 inch diameter will be
> > > >> >the time I will use such large holes.
> > > >> >Will now have to take it of and replace with aluminum window mesh.
> > > >>  >The present mesh has no idication of working in any sence of the word
> > > >> >Art
>
> > > >> let me give you a hint... its not the mesh that is the problem.
>
> > > > The theoretical gain of a dish is expressed as (9.87 times D-squared) /
> > > > (wavelength-squared), where D is the dish diameter.  If you have a 3
> meter
> > > > dish and you're working 10m, I calculate the gain as less than unity.
> > > > Ref:
> > > >http://en.wikipedia.org/wiki/Parabolic_antenna
>
> > > > Even then, the efficiency of the dish is assumed to be 100% -- which it
> > > > never is.  One limitation is the effectiveness of illuminating the
> entire
> > > > surface of the dish uniformly.  How can you do that at HF?  You need a
> > > > compact illuminator at the focal point of the dish but HF doesn't lend
> > > > itself to such gyrations.
>
```

> > > I think you should not consider a dish for HF. It works only for
> > > wavelengths that are small, compared to the dish size. Don't fight the
> > > math.
>
> > what do you get for gain when you use it on 160m like art is doing?
>
> OK, a 3 meter dish at 160m:
>
> Numerator is 9.87 times 3-squared = 88.83
> Denominator is 160-squared = 25600
>
> The quotient is the nominal power gain = 0.00347
>
> In technical terms, this equals a fart in a windstorm.
>
> ---
>
> BTW, to validate the formula for a practical dish, plug in the values for
> the same 3-meter dish, but use C-band TVRO freqs around 4 GHz. Take the log
> of the quotient, multiply by 10 and you get close the customary 40dB gain
> associated with those backyard beauties. (I just got rid of mine this year;
> the new owner wants to try EME at 1.2 GHz.)
>
> "Sal"
> (KD6VKW)

Sal
Are you using formula based on phasing i.e. has a focal point?
If so that is not applicable to CP (circular polarisation) antennas
One is a broardside radiator and the other is a axial or end fire
radiator.
BIG BIG difference. If you study the use of reflectors with helix
antennas you will see that all
reflectors used are straight sided whether as a flat plate, cupped or
as in one instance
conical for the length of the antenna. The parabala is based on inter
inductive coupling
of a dipole so the parabola reflects at maximum current amplitude.,
The helix reflector is not based on
coupling but the true mechanical impact of particles which is vastly
different. It is wonderful when
you use formulas but it is always best to initial perform the
calculation from first principles
to ensure that the formula is applicable where you intend to use it
I have removed my dish and have replaced it with a sheath an aproach
that has already been used for CP
radiators.

Art

5882. How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 14:50:22 UTC
From: Eric <answer.to.newsgroup@nospam.com>
Message-ID: <71ckl4drdn9qgos1cqnlih5d7h84fupq3q@4ax.com>
Source record: 18606

Can anyone tell me the best way to estimate the groundwave coverage I'm likely to get on 75 meters?

I tried R. J. Edwards (G4FGQ] GRNDWAV3.EXE, answered all the questions about type of terrain, frequency, power output, and antenna efficiency, and got an answer of around 50 miles for an S-5 signal at the other end.

(With the noise level around here, S-5 is about the minimum to shoot for around here...)

And yet, in the real world, I am lucky to be able to establish reliable contact with another station that's a bit less than 10 miles away.

We are both using horizontal NVIS antennas, which I guess aren't as good for groundwave as vertical antennas. In any case I have no idea what to put in to G4FGQ's program for "antenna efficiency". I tried 25 percent and got the 50 miles for S-5, then reduced antenna efficiency to 10 percent and got 40 miles for S-5... still well below what I am seeing in the real world.

I switched to a terrain type of "City blocks, roads, streets, industrial areas, rivers" and got 32 miles for S-5, then switched to "Mountainous regions, bare rock, vegetation in valleys" (we do have a few molehills around here that people call mountains) and got 28 miles... still beyond what I'm really seeing.

So, how can I estimate the longest reliable groundwave distance on 75?

Thanks...

5883. Re: transmission lines and SWR and fractional wave antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 14:52:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ZAq6l.11759$c45.3516@nlpi065.nbdc.sbc.com>
Source record: 18607

Richard Fry wrote:
> But in fact that
> "triangular" current distribution is just a very short section of a
> sinusoidal waveform.

Yes, for a few degrees around the zero crossing
point, y=Ax+B can be a close approximation.
--
73, Cecil http://www.w5dxp.com

5884. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 14:56:07 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <799ebd65-386c-4369-9aa4-a1e03e0c5196@n33g2000pri.googlegroups.com>
Source record: 18608

On Dec 28, 1:42 pm, "Dave" <no...@nowhere.com> wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:a4e424a7-ce7e-4b27-8236-ede2f5e207a8@40g2000prx.googlegroups.com...
>
> >you are building an auguement on sand like "have you stopped beating
> >your wife?"
>
> well, have you?

Absolutely not!
I am working from first principles starting with the mathematics of
the Gauss/
Maxwell comparison which was mathematically shown on this newsgroup
by Doctor Davis of M.I.T. provided., This clearly shows the connection
of .
particles as opposed to waves with respect to radiation . This is a
confirming proof of my
aproach I have taken with respect to first principles. Nobody but
nobody has pointed out any error in this aproach.,
For years you have asked for the mathematics and now you have it. If
you can't break the
mathematics then you do not have a platform. It has been quite a
while since the math was provided
and no faults have been provided, the silence has been deafining.
It is because of this finding in my work I am forced to proceed via
first principles since our ancient books
follow a contrary aproach

>snip

> you better believe they ignore the weak farce, that is all in your head.

The whole world supports the CERN project which costs billions, which
is based on the existence of the four forces. If you are not aware the
weak force is one of the four stated.

Art

5885. FS MFJ-941D Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 14:56:15 UTC
From: Charlie Hugg <k5mbx@sbcglobal.net>
Message-ID: <Klq6l.7640$pr6.5700@flpi149.ffdc.sbc.com>
Source record: 18609

FS MFJ-941D Versa Tuner II, in very good condition. There are a few tiny scratches on the cabinet. Front panel is good. Works great.
$75 plus shipping from 79602. Thanks, Charlie Hugg, K5MBX

5886. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 15:35:41 UTC
From: John Passaneau <w3jxp@arrl.net>
Message-ID: <gjdf4h$sg0u$1@tr22n12.aset.psu.edu>
Source record: 18610

Eric wrote:
> Can anyone tell me the best way to estimate the groundwave coverage
> I'm likely to get on 75 meters?
>
> I tried R. J. Edwards (G4FGQ] GRNDWAV3.EXE, answered all the questions
> about type of terrain, frequency, power output, and antenna
> efficiency, and got an answer of around 50 miles for an S-5 signal at
> the other end.
>
> (With the noise level around here, S-5 is about the minimum to shoot
> for around here...)
>
> And yet, in the real world, I am lucky to be able to establish
> reliable contact with another station that's a bit less than 10 miles
> away.
>
> We are both using horizontal NVIS antennas, which I guess aren't as
> good for groundwave as vertical antennas. In any case I have no idea
> what to put in to G4FGQ's program for "antenna efficiency". I tried
> 25 percent and got the 50 miles for S-5, then reduced antenna
> efficiency to 10 percent and got 40 miles for S-5... still well below
> what I am seeing in the real world.
>
> I switched to a terrain type of "City blocks, roads, streets,
> industrial areas, rivers" and got 32 miles for S-5, then switched to
> "Mountainous regions, bare rock, vegetation in valleys" (we do have a
> few molehills around here that people call mountains) and got 28
> miles... still beyond what I'm really seeing.
>
> So, how can I estimate the longest reliable groundwave distance on 75?
>
> Thanks...
>
I don't think that a NVIS antenna is a "ground wave" antenna. It works
by sending the signal straight up and bouncing it off the ionosphere
back down covering the area around the antenna.

But you should do better than what your doing if you are using on both
ends a NVIS antenna. It strikes me that maybe the antennas are not at
the right hight to function correctly. Also if only one station is using
a NVIS antenna and the other is using a vertical or dipole that is high
off the ground that could be the problem. Those antennas have a reduced
response to signals coming in from high angles. It is a well known effect.

73

John Passaneau W3JXP

5887. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 16:48:32 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <7a861659-6526-41c9-9337-a9e91805d3a4@35g2000pry.googlegroups.com>
Source record: 18611
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 29, 1:35 pm, John Smith <assemblywiz...@gmail.com> wrote:
> RHF wrote:
> > ...
> > JS,
>
> > Good Antenna Building Concept :
> > You Can't Talk To Them -unless-
> > You Can First Hear Them. ~ RHF
> > .
>
> Well, I'd like an antenna like this one (see URL, below.) He comes into
> my location in the low valley of CA like a door buster, from his secret
> location in NV. Jumping the high Sierra Mountains in a single leap! <grin>
>
- http://www.smeter.net/w6obb/antenna-farm.php
-
- Regards,
- JS

JS - Yeah some people have the money
to Do-It-Up right. ~ RHF
.

5888. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 17:07:49 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <x5adnVyTzf_wyMfUnZ2dnUVZ8qGdnZ2d@bt.com>
Source record: 18612

"Eric" <answer.to.newsgroup@nospam.com> wrote in message
news:71ckl4drdn9qgos1cqnlih5d7h84fupq3q@4ax.com...
>
> Can anyone tell me the best way to estimate the groundwave coverage
> I'm likely to get on 75 meters?
>
> I tried R. J. Edwards (G4FGQ] GRNDWAV3.EXE, answered all the questions
> about type of terrain, frequency, power output, and antenna
> efficiency, and got an answer of around 50 miles for an S-5 signal at
> the other end.
>
> (With the noise level around here, S-5 is about the minimum to shoot
> for around here...)
>
> And yet, in the real world, I am lucky to be able to establish
> reliable contact with another station that's a bit less than 10 miles
> away.
>
> We are both using horizontal NVIS antennas, which I guess aren't as
> good for groundwave as vertical antennas. In any case I have no idea
> what to put in to G4FGQ's program for "antenna efficiency". I tried
> 25 percent and got the 50 miles for S-5, then reduced antenna
> efficiency to 10 percent and got 40 miles for S-5... still well below
> what I am seeing in the real world.
>
> I switched to a terrain type of "City blocks, roads, streets,
> industrial areas, rivers" and got 32 miles for S-5, then switched to
> "Mountainous regions, bare rock, vegetation in valleys" (we do have a
> few molehills around here that people call mountains) and got 28
> miles... still beyond what I'm really seeing.
>
> So, how can I estimate the longest reliable groundwave distance on 75?
>
> Thanks...

Consider using vertically polarised antennas because a ground wave is
predominantly vertically polarised. NVIS antennas are usually horizontally
polarised with respect to zero degrees elevation.

Chris

5889. Re: 2m tvi stub

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 17:28:58 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <l6Kdnce_jP34x8fUnZ2dnUVZ8tzinZ2d@bt.com>
Source record: 18613

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:fIk6l.46558$Uk3.3761@newsfe10.iad...
>
> "ml" <m@di.net> wrote in message
> news:m-46D957.21424729122008@news.optonline.net...
>> after my building changed to a new tv antenna and master amp
>> seems i am giving alot of tvi on strangly enough 2m
>>
>> also some tvi from 10m too never did before
>>
>> my antenna is physically pretty close to the antenna (thou it also
>> was previsiously)
>>
>> for an experiment i was thinking about just making a coaxial stub
>> for 2m to see if that would 'notch ' out the interference
>>
>> and using a T connector putting it just before the master amp (which
>> i think is just amplifing my 2m signal and mixing w/the tv channels
>> and or overloading the tv's)
>>
>>
>> should the stub be 1/4w on 2m or would say 1/2w be 'better'?
>>
>> i'd cut it for the center of 2m
>>
>>
>> tnx
>
> Open quarter wave, shorted half wave. I don't know which is better.
> Remember to shorten the stub length by the velocity factor of the coax.
>
> I had a similar problem years ago on a Navy ship. Nearby taxi radios
> around
> 154 MHz overloaded the antenna amp. I bought a "Midband Trap" from a TV
> shop downtown which fixed things. It went inline and attenuated those
> non-TV signals between (approx) 120 - 170 MHz. It was only a few dollars
> from one of the well-known TV reception equipment makers, Channel Master,
> I
> think.
>
> Unfortunately, I haven't found it from any familiar names, but I did
> locate
> this page http://www.microwavefilter.com/pdffiles/pg27.pdf. The
> 3367-A/I,

> 3367-B/G, 3367-C/G and 3367-C/H should all do what you need for 2m
> suppression. Prices unknown.
>
> ... and this page: http://www.atvresearch.com/overstk.pdf Find their
> number 5KMT-A/I-TX Midband Trap. A clearance sale bargain if they still
> have any left.
>
> Here's a single-frequency tunable notch;
> http://www.microwavefilter.com/pdffiles/pg28.pdf.
>
> Good luck.

Professionally its often done with a pair of stubs shunting the transmission line with a quarter wavelength of line between their junctions so the shunt low impedance of each appears as a high impedance where the other stub is connected. Sometimes the Q is increased by using resonators with lower loss than co-ax cable (e.g. cavities or helical resonators). The resonant frequencies can be staggered a bit to improve temperature stability.

An interesting homebrew affair that can yield an impressively narrow notch is the bridged 'T' circuit, like http://www.hobby-electronics.info/course/html/ch20s04.html, one of which is explained at http://www.hobby-electronics.info/course/html/ch20s04.html. The temperature stability is only as good as the (lumped) components but using a preset variable resistor allows the loss resistance of the coil to be cancelled out to some extent. For 2m I have used the centre-tapped L version but with the input and output lines tapped into the coil, which preserves more of its Q. It worked well for 'listen through' from a 2m repeater with 600 kHz separation, using separate Tx and Rx antennas.

Chris

5890. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 18:23:53 UTC
From: nm5k@wt.net
Message-ID: <1f39817c-a309-4b5d-90ce-c58ea40c2fe4@w1g2000prm.googlegroups.com>
Source record: 18614

On Dec 30, 8:50 am, Eric <answer.to.newsgr...@nospam.com> wrote:

>
> So, how can I estimate the longest reliable ground wave distance on 75?
>
> Thanks...

You need to use verticals if you want to use the ground wave on
the lower bands.
There basically is no ground wave when horizontal. Only a space
wave, which is not likely to go as far.
So in order to use the ground wave on the low bands, you need
to be using a vertical antenna to transmit.
How well that will do depends on the antenna, amount of noise, etc.
50 miles should be a good average, with some times better, maybe
others worse. IE: you will almost always do a lot better in the
winter,
than summer just due to lower noise.
Try it in the daytime. The noise is usually lower, and the ground
wave doesn't care what time it is.. :/ It should always be about
the same no matter what time of day. You lose a lot of ionospheric
clutter in the day, and can get a better idea what the ground
wave is doing. But there is still some skip in the day..
So if you end up working someone 200 miles away, it's
probably *not* via the ground wave. More likely the D layer
or whatever. But on the other hand, if you can work someone
50 miles away, and the signal is the same appx level every
day, day in, day out, it's probably the ground wave.
There could be minor season and moisture changes, but
overall it should stay fairly stable strength.
I know when I ran a 40m dipole at 36 ft, and also had a full size
ground plane with the base at the same height, the difference
in local coverage was drastic. Some times the band conditions
"NVIS" would stretch out, and I would lose the locals that were
across town if I were on the dipole.
But I could switch to the ground plane, and no problem.
In the daytime on 40m, I could often work people way out
west of town in mobiles, that the locals on dipoles wouldn't hear
due to the often long skip and lower signals due to being mobile
and vertical. Some of these were 70-90+ miles away.
I don't know how much of the total was ground wave vs space
wave, vs the ionosphere , but when I would switch to the dipole,
they would drop way down.
The ground plane did put out a pretty decent space wave
being it was elevated. Way better than the same antenna

ground mounted. And it was fairly efficient, which helps
no matter which path it takes.
The lower the frequency, the better the ground wave.
IE: tune AM radio in the daytime. Any station you pick
up that is out of town is coming to you via the ground wave.
With a good radio and antenna, you can receive quite a
distance. IE: from Houston, I can hear Dallas, San Antonio,
even farther, no problem at all. Almost pure ground wave,
and being such, it's easy to null out if needed vs sky wave
which usually comes from multiple paths.
But say take a 10m vertical at 50 ft in the air. The space
wave is the primary path in case of working local.
Not the ground wave like the low frequencies.

5891. W6OBB Art Bell's 5-Acre Antenna Farm in Pahrump, Nevada

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 18:45:31 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <80271c00-6343-485c-967a-a146b3a9dbc5@l33g2000pri.googlegroups.com>
Source record: 18615
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On Dec 29, 7:18 pm, Dave <d...@dave.dave> wrote:
> John Smith wrote:
>
- - his secret
- - location in NV.

- 9041 Desert Lane
- Pahrump, NV 89048
-
- http://maps.google.com
.
Art Bell, W6OBB, Pahrump, Nevada
http://www.smeter.net/pahrump/art-bell.php
http://en.wikipedia.org/wiki/Pahrump,_Nevada
.
Art Bell's 5-Acre Antenna Farm
http://www.smeter.net/w6obb/antenna-farm.php
SAT IMAGE = http://tinyurl.com/828s5d
.
The Art Bell W6OBB Loop Antenna Slide Show
http://patriciaray.net/movie1.html

QRZ : Art Bell [W6OBB] Pahrump, Nevada
http://www.qrz.com/callsign.html?callsign=W6OBB
.
.
KNYE-FM 95.1 MHz in Pahrump, Nevada
http://www.knye.com/
http://en.wikipedia.org/wiki/KNYE
http://www.rayjanko.com/area_51/21.htm
http://www.radio-locator.com/cgi-bin/finder?sr=Y&call=KNYE
* From the The Kingdom of [K]NYE . . .
http://www.kingdomofnye.com/
http://www.co.nye.nv.us/
http://en.wikipedia.org/wiki/Nye_County,_Nevada
.
KNYE-FM 95.1 MHz Transmitter Location :
36° 11' 52" N -by- 116° 02' 08" W
http://maps.google.com/maps?f=q&hl=en&q=36.19778,+-116.03556+(KNYE-FM)&om=1
.

5892. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 18:59:55 UTC
From: Eric <answer.to.newsgroup@nospam.com>
Message-ID: <h8rkl41pp443voqpehc44ulruhitsm4i03@4ax.com>
Source record: 18616

On Tue, 30 Dec 2008 10:35:41 -0500, John Passaneau <w3jxp@arrl.net>
wrote:

>I don't think that a NVIS antenna is a "ground wave" antenna. It works
>by sending the signal straight up and bouncing it off the ionosphere
>back down covering the area around the antenna.
>
>But you should do better than what your doing if you are using on both
>ends a NVIS antenna. It strikes me that maybe the antennas are not at
>the right hight to function correctly. Also if only one station is using
>a NVIS antenna and the other is using a vertical or dipole that is high
>off the ground that could be the problem. Those antennas have a reduced
>response to signals coming in from high angles. It is a well known effect.

We're both using horizontal antennas... his is a dipole up about 25
feet, and mine is an inverted vee that's up about 40 feet in the
center and 10 feet at the ends.

I know that a vertically polarized antenna would work groundwave
better, but we need to be able to maintain reasonably reliable
communications pretty much everywhere within about a 200-mile circle.
We can use 160, 80, and 40 meters to do it, and theoretically we can
use any amount of power up to the legal limit but in reality, as a
practical matter we are limited to 100-200 watts.

There are some in our group who really, REALLY think that the vertical
is the way to go, and I need some debating points. So, if I had a
decent ground-mounted vertical, should I expect to get the ground wave
distances that G4FGQ indicates in his calculation program?

Is there any area / radius that would be covered by a ground-mounted
vertical that wouldn't be covered by an NVIS horizontal (assuming that
we're operating below the critical frequency)? I have always assumed
that by the theory behind NVIS, the answer would be no... NVIS should
cover everything out to a radius well beyond groundwave distance.
But, I suppose we could install NVIS antennas AND verticals and switch
between them to see which one works best at any given time. Does seem
to be a wasted effort but WDIK?

While I'm at it, how do I estimate antenna efficiency? What is the
average range of efficiencies normally seen with a quarter-wave
ground-mounted vertical, with an adequate ground radial system, in
average soil?

5893. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 19:26:58 UTC
From: RP <rpalino@NOSPAMmailandnews.com>
Message-ID: <gjdsna$eg5$3@news.albasani.net>
Source record: 18617
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

>> You ridiculous fool. You are the most complete brain dead example of a
>> sub-human which has ever been presented to me ...
>
> You dumb twit. We don't care about transmitting.

We don't...?

>> Receiving is EQUALLY as important as the transmitting element in the
>> above.
>
> Again you dumb twit, we don't care about transmitting.

We don't...?

> Yeah, very sad of you to keep plonking and then continue to read me.

I thought this was your trick?

> What a goofball.

Takes one to know one.

5894. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 19:28:09 UTC
From: RP <rpalino@NOSPAMmailandnews.com>
Message-ID: <gjdt11erq1@news.albasani.net>
Source record: 18618
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

"Telamon" <telamon_spamshield@pacbell.net.is.invalid> wrote in message
news:telamon_spamshield-A065FE.20383728122008@newsclstr03.news.prodigy.net...
> In article <gj9ei3$rl1$1@news.albasani.net>,
> John Smith <assemblywizard@gmail.com> wrote:
>
>> RHF wrote:
>>
>> [stuff]
>>
>> RHF, I have no bone to pick with you, don't fall victim to trolls here
>> which just wish to "stir up chit", to mask their ignorance ...
>
> < SNIP >
>
> Now that is funny. One Trolling idiot posting a response to another
> trolling idiot "don't fall victim to the Trolls".

And the hobo of s.r.sw Teleamon, the biggest troll here....is telling other
trolls how to act!

Hillarious!

5895. Re: Vertical Monopole Radiation Characteristics

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 19:34:50 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <8f95f3b9-995f-4179-9db8-c301ff6fca8e@40g2000prx.googlegroups.com>
Source record: 18619

On Dec 29, 9:45 pm, Roy Lewallen <w...@eznec.com> wrote:

> Here are some numerical values to illustrate what happens to the
> ground wave field..... Field intensities are shown at various
> distances from the antenna. These are the entire field, including
> surface wave. View with a fixed-width font.
>
> Field strengths, dBi, are under each elevation angle:
>
> -- Elev angle --
> Freq(MHz) Dist(mi) 0 deg
...
> 1 1 4.0
> 1 10 -2.8
> 1 50 -18.7

I thought it would interesting to compare the field strength values for these parameters when using the FCC's propagation curves to that which can be calculated using the antenna gains in dBi (not field intensities) stated in the 3rd column above.

Here are the results (fixed font):

Distance to NEC Field
Dist, miles Calculated NEC Field per FCC Curves
1 170.6 mV/m 0.9949 miles
10 7.8 10.25
50 0.25 49.94

Agreement is excellent at 1 and 50 miles, less so at 10 miles.

RF

5896. Re: 2m tvi stub

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 21:39:48 UTC
From: JB <nospam@goofball.net>
Message-ID: <Eyw6l.2066$Es4.310@nwrddc01.gnilink.net>
Source record: 18620

> > 154 MHz overloaded the antenna amp. I bought a "Midband Trap" from a TV
> > shop downtown which fixed things. It went inline and attenuated those
> > non-TV signals between (approx) 120 - 170 MHz. It was only a few
dollars
> > from one of the well-known TV reception equipment makers, Channel
Master,
> > I
> > think.
> >
> > Unfortunately, I haven't found it from any familiar names, but I did
> > locate
> > this page http://www.microwavefilter.com/pdffiles/pg27.pdf. The
> > 3367-A/I,
> > 3367-B/G, 3367-C/G and 3367-C/H should all do what you need for 2m
> > suppression. Prices unknown.
> >
> > ... and this page: http://www.atvresearch.com/overstk.pdf Find their
> > number 5KMT-A/I-TX Midband Trap. A clearance sale bargain if they still
> > have any left.
> >
> > Here's a single-frequency tunable notch;
> > http://www.microwavefilter.com/pdffiles/pg28.pdf.
> >
> > Good luck.
These are pretty common in the CATV business where they will notch channels
to put their own access channel in place.

It is likely the CATV guy came out and took all the filters out in
preparation for the digital channel changeovers. There ought to be a High
pass filter to cuttoff below channel 2 and likely a notch for VHF
air/commercial?ham energy. They may have also goofed around with a cheap
distribution amp. Many of the good setups would split up and break out
individual channels to peak or attenuate to try to balance the lineup.

5897. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 21:49:49 UTC
From: Frank <ve6cbxyz@nospam.telus.net>
Message-ID: <1lw6l.480$PH1.385@edtnps82>
Source record: 18621

> There are some in our group who really, REALLY think that the vertical
> is the way to go, and I need some debating points. So, if I had a
> decent ground-mounted vertical, should I expect to get the ground wave
> distances that G4FGQ indicates in his calculation program?
>
> Is there any area / radius that would be covered by a ground-mounted
> vertical that wouldn't be covered by an NVIS horizontal (assuming that
> we're operating below the critical frequency)? I have always assumed
> that by the theory behind NVIS, the answer would be no... NVIS should
> cover everything out to a radius well beyond groundwave distance.
> But, I suppose we could install NVIS antennas AND verticals and switch
> between them to see which one works best at any given time. Does seem
> to be a wasted effort but WDIK?
>
> While I'm at it, how do I estimate antenna efficiency? What is the
> average range of efficiencies normally seen with a quarter-wave
> ground-mounted vertical, with an adequate ground radial system, in
> average soil?

Note that radiation from the end of a low dipole is vertically polarized.
Antenna efficiency, and surface wave field strength, can be computed
with NEC.

Frank, VE6CB

5898. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 22:30:23 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <nJSdnbZp1dOVPMfUnZ2dnUVZ8jidnZ2d@bt.com>
Source record: 18622

"Eric" <answer.to.newsgroup@nospam.com> wrote in message
news:h8rkl41pp443voqpehc44ulruhitsm4i03@4ax.com...
> On Tue, 30 Dec 2008 10:35:41 -0500, John Passaneau <w3jxp@arrl.net>
> wrote:
>
>>I don't think that a NVIS antenna is a "ground wave" antenna. It works
>>by sending the signal straight up and bouncing it off the ionosphere
>>back down covering the area around the antenna.
>>
>>But you should do better than what your doing if you are using on both
>>ends a NVIS antenna. It strikes me that maybe the antennas are not at
>>the right hight to function correctly. Also if only one station is using
>>a NVIS antenna and the other is using a vertical or dipole that is high
>>off the ground that could be the problem. Those antennas have a reduced
>>response to signals coming in from high angles. It is a well known effect.
>
> We're both using horizontal antennas... his is a dipole up about 25
> feet, and mine is an inverted vee that's up about 40 feet in the
> center and 10 feet at the ends.
>
> I know that a vertically polarized antenna would work groundwave
> better, but we need to be able to maintain reasonably reliable
> communications pretty much everywhere within about a 200-mile circle.
> We can use 160, 80, and 40 meters to do it, and theoretically we can
> use any amount of power up to the legal limit but in reality, as a
> practical matter we are limited to 100-200 watts.
>
> There are some in our group who really, REALLY think that the vertical
> is the way to go, and I need some debating points. So, if I had a
> decent ground-mounted vertical, should I expect to get the ground wave
> distances that G4FGQ indicates in his calculation program?
>
> Is there any area / radius that would be covered by a ground-mounted
> vertical that wouldn't be covered by an NVIS horizontal (assuming that
> we're operating below the critical frequency)? I have always assumed
> that by the theory behind NVIS, the answer would be no... NVIS should
> cover everything out to a radius well beyond groundwave distance.
> But, I suppose we could install NVIS antennas AND verticals and switch
> between them to see which one works best at any given time. Does seem
> to be a wasted effort but WDIK?
>
> While I'm at it, how do I estimate antenna efficiency? What is the
> average range of efficiencies normally seen with a quarter-wave
> ground-mounted vertical, with an adequate ground radial system, in

> average soil?

Why don't you connect together the two terminals of your 'NVIS' thing, drive it with respect to a good earth, and use it as a monopole with a capacity hat? There's a lot of chat going on about those here at the moment, and some of it is correct, like no appreciable HP radiation from a symmetrical horizontal hat. All it really does is to move the radiating part into a higher-current portion of the quarter sine wave.

Chris

5899. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-30 23:31:15 UTC
From: Frank <ve6cbxyz@nospam.telus.net>
Message-ID: <7by6l.491$PH1.45@edtnps82>
Source record: 18623

"Frank" <ve6cbxyz@nospam.telus.net> wrote in message
news:1Iw6l.480$PH1.385@edtnps82...
>> There are some in our group who really, REALLY think that the vertical
>> is the way to go, and I need some debating points. So, if I had a
>> decent ground-mounted vertical, should I expect to get the ground wave
>> distances that G4FGQ indicates in his calculation program?
>>
>> Is there any area / radius that would be covered by a ground-mounted
>> vertical that wouldn't be covered by an NVIS horizontal (assuming that
>> we're operating below the critical frequency)? I have always assumed
>> that by the theory behind NVIS, the answer would be no... NVIS should
>> cover everything out to a radius well beyond groundwave distance.
>> But, I suppose we could install NVIS antennas AND verticals and switch
>> between them to see which one works best at any given time. Does seem
>> to be a wasted effort but WDIK?
>>
>> While I'm at it, how do I estimate antenna efficiency? What is the
>> average range of efficiencies normally seen with a quarter-wave
>> ground-mounted vertical, with an adequate ground radial system, in
>> average soil?
>
> Note that radiation from the end of a low dipole is vertically polarized.
> Antenna efficiency, and surface wave field strength, can be computed
> with NEC.
>
> Frank, VE6CB

Given the type of antennas you mentioned with 100 W. If they are facing end
to end,
and, over an average ground, you should expect: 21uV (S7 - 8) at 20 mi, and
14 uV (S6 - 7) at 30 mi. If the antennas are parallel then the signals
will be
10 db weaker. I used NEC for the analysis.

Frank

5900. Re: Motorcycle mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 00:42:34 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <gjef5l$co60$1@tr22n12.aset.psu.edu>
Source record: 18624

ltdoc@yahoo.com wrote:
> Mike,
> Not being familiar with that bike, and also probably not having the
> same 'aesthetic' values, what I would consider 'workable' probably
> isn't going to be the same as your 'workable'. So, take this for what
> it's worth.

My aesthetics are variable. The

> Does your bike have a fairing? What are the chances of mounting an
> antenna on that, if it does have one?

It's a cruiser - it looks like this one, minus the windshield.

http://www.motorcycleminnesota.com/030107/05/05.htm

> Is it fiberglass? How about
> just running a strap to the frame?

The rear fender is steel. I think I'll opt for a small dual bander,
mount the radio on the back of the backrest, the antenna on the fender
and go from there.
Shouldn't be too much loss in the 6 inch piece of coax needed!

-73 de Mike N3LI -

5901. Re: 2m tvi stub radials

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 00:58:24 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <gjeg3a$co64$1@tr22n12.aset.psu.edu>
Source record: 18625

ml wrote:

> I agree it is prob 'overload' but thought perhaps notching might
> work, i already have some really good multistage tvi filters but
> wanted to be ready with a notch for when the building lets me into
> the closet in case that is not enough.
>
> My thought was to try and make stubs cause they are 'cheep' but
> those links to the commercial site were pretty cool

Stubs work very well. You should try the single wire stub first.

You'll want good low loss coax. The better, the deeper the notch.

1/4 wave for the middle of the 2 meter band, and open at the end should take out the 2 meter overload.

Anecdotally, I used a single stub during a contest to knock out overload from 40 meters @ over a kilowatt. The antennas were around 50 feet away from each other.

- 73 de Mike N3LI -

5902. Re: 2m tvi stub radials

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 01:19:43 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <PMz6l.2094$BC4.671@nwrddc02.gnilink.net>
Source record: 18626

"Mike Coslo" <mjc5@psu.edu> wrote in message
news:gjeg3a$co64$1@tr22n12.aset.psu.edu...
> ml wrote:
>
>> I agree it is prob 'overload' but thought perhaps notching might
>> work, i already have some really good multistage tvi filters but
>> wanted to be ready with a notch for when the building lets me into
>> the closet in case that is not enough. My thought was to try and
>> make stubs cause they are 'cheep' but those links to the commercial
>> site were pretty cool
>
>
> Stubs work very well. You should try the single wire stub first.
>
> You'll want good low loss coax. The better, the deeper the notch.
>
> 1/4 wave for the middle of the 2 meter band, and open at the end should
> take out the 2 meter overload.
>
> Anecdotally, I used a single stub during a contest to knock out overload
> from 40 meters @ over a kilowatt. The antennas were around 50 feet away
> from each other.
>
> - 73 de Mike N3LI -

Being a 2 pole circuit, the stubs are quite broad and because they appear
as a shunt capacity or inductance off frequency can cause major VSWR upset.
The other drawback which may be an issue for TV is that they will also notch
out frequencies at 2N+1 (odd multiples).

Dale W4OP

5903. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 01:54:10 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <gjejbs$8c7o$1@tr22n12.aset.psu.edu>
Source record: 18627

Eric wrote:

> I know that a vertically polarized antenna would work groundwave
> better, but we need to be able to maintain reasonably reliable
> communications pretty much everywhere within about a 200-mile circle.
> We can use 160, 80, and 40 meters to do it, and theoretically we can
> use any amount of power up to the legal limit but in reality, as a
> practical matter we are limited to 100-200 watts.
>
> There are some in our group who really, REALLY think that the vertical
> is the way to go, and I need some debating points. So, if I had a
> decent ground-mounted vertical, should I expect to get the ground wave
> distances that G4FGQ indicates in his calculation program?

You really need both. I'd not put in a vertical unless I had a horizontal one also. If I had to choose one, it would be the dipole. But if you can do both, the vertical has it's uses.

> Is there any area / radius that would be covered by a ground-mounted
> vertical that wouldn't be covered by an NVIS horizontal (assuming that
> we're operating below the critical frequency)? I have always assumed
> that by the theory behind NVIS, the answer would be no... NVIS should
> cover everything out to a radius well beyond groundwave distance.
> But, I suppose we could install NVIS antennas AND verticals and switch
> between them to see which one works best at any given time.

That is the ticket. I'd done some experiments between the two antennas, using an attenuator and antenna switch. Aside from generalities, which have become "truth" under different circumstances, the antenna that performed best at any given time changed, and not always in the way you thought. Sometimes in mid-QSO.

Too many people think of take off angle as some sort of blob of RF that comes out of the antenna at one place, and not much elsewhere. All antennas radiate at all angles. Some just more at some angles than others. The point of this is that that vertical better be pretty efficient, because what use is a lower angle of radiation if it is putting out less RF than another antenna that even though the other antenna might have a higher take off angle, but have still more power output at the lower angle.

> While I'm at it, how do I estimate antenna efficiency? What is the
> average range of efficiencies normally seen with a quarter-wave
> ground-mounted vertical, with an adequate ground radial system, in
> average soil?

Best way is to use an antenna design program. This would probably be a very good idea if you need to convince your cohorts The big thing is, don't just look at the SWR plots, and don't just look at the antenna patterns. Looking at the bigger picture, it becomes more than just a Ford versus Chevy argument.

- 73 de Mike N3LI -

5904. Re: W6OBB Art Bell's 5-Acre Antenna Farm in Pahrump, Nevada

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 02:23:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gjel2t$er9$1@news.albasani.net>
Source record: 18628
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:
> On Dec 29, 7:18 pm, Dave <d...@dave.dave> wrote:
>> John Smith wrote:
>>
> - - his secret
> - - location in NV.
>
> - 9041 Desert Lane
> - Pahrump, NV 89048
> -
> - http://maps.google.com
> .
> Art Bell, W6OBB, Pahrump, Nevada
> http://www.smeter.net/pahrump/art-bell.php
> http://en.wikipedia.org/wiki/Pahrump,_Nevada
> .
> Art Bell's 5-Acre Antenna Farm
> http://www.smeter.net/w6obb/antenna-farm.php
> SAT IMAGE = http://tinyurl.com/828s5d
> .
> The Art Bell W6OBB Loop Antenna Slide Show
> http://patriciaray.net/movie1.html
>
> QRZ : Art Bell [W6OBB] Pahrump, Nevada
> http://www.qrz.com/callsign.html?callsign=W6OBB
> .
> .
> KNYE-FM 95.1 MHz in Pahrump, Nevada
> http://www.knye.com/
> http://en.wikipedia.org/wiki/KNYE
> http://www.rayjanko.com/area_51/21.htm
> http://www.radio-locator.com/cgi-bin/finder?sr=Y&call=KNYE
> * From the The Kingdom of [K]NYE . . .
> http://www.kingdomofnye.com/
> http://www.co.nye.nv.us/
> http://en.wikipedia.org/wiki/Nye_County,_Nevada
> .
> KNYE-FM 95.1 MHz Transmitter Location :
> 36ï¿½ 11' 52" N -by- 116ï¿½ 02' 08" W
> http://maps.google.com/maps?f=q&hl=en&q=36.19778,+-116.03556+(KNYE-FM)&om=1
> .

Oh yeah, that IS the dirty culprit, and if you know where to turn, in the 80m band, you just might hear him! <lol>

Regards,
JS

5905. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 02:26:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gjel89$er9$2@news.albasani.net>
Source record: 18629
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RP wrote:
>>> You ridiculous fool. You are the most complete brain dead example of a
>>> sub-human which has ever been presented to me ...
>> You dumb twit. We don't care about transmitting.
>
> We don't...?
>
>>> Receiving is EQUALLY as important as the transmitting element in the
>>> above.
>> Again you dumb twit, we don't care about transmitting.
>
> We don't...?
>
>> Yeah, very sad of you to keep plonking and then continue to read me.
>
> I thought this was your trick?
>
>> What a goofball.
>
> Takes one to know one.
>
>

Hey, telemundo is a great man, in his own mind, leave him alone ...
humor here is sparse, he provides for a needed demand ... :-)

Regards,
JS

5906. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 02:29:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gjeldf$er9$3@news.albasani.net>
Source record: 18630
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RP wrote:

> ...
> And the hobo of s.r.sw Teleamon, the biggest troll here....is telling other
> trolls how to act!
>
> Hillarious!
>
>

Hmmm, I can see how you are mistaken; but, brother you are mistaken.
telemundo would not even amount to a pimple of a decent trolls hoary old
butt ... indeed, I can't imagine the lifeform he could make a pimple on
... <grin>

But then, you know, he already knows that ... :-(

Regards,
JS

5907. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 02:59:55 UTC
From: kb9rqz@yahoo.com
Message-ID: <4vnll49qia0o7hfefoh5svdv11inegokmq@4ax.com>
Source record: 18631
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5908. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 03:41:41 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <XRB6l.30242$H11.18917@newsfe09.iad>
Source record: 18632

"Art Unwin" <ArthurUnwin@gmail.com> wrote in message
news:a81eafd8-7cf0-42a3-b163-50a4134134af@o40g2000prn.googlegroups.com...

> The parabala [sic] is based on inter
> inductive coupling
> of a dipole so the parabola reflects at maximum current amplitude.

Plane wave reflection from a parabola doesn't have a discrete current
maximum, per se. You are not describing an antenna element whose current is
maximum at the feed point, etc, etc.

> The helix reflector is not based on
> coupling but the true mechanical impact of particles which is vastly
> different.

Maybe true, maybe not. Irrelevant either way. No 160m helix antennas.

> ... it is always best to initial perform the calculation
> from first principles to ensure that the formula is applicable
> where you intend to use it.

I did that, it was, and I'm grateful to have your support.

"Sal"

5909. Re: Reflector mesh surface

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 04:25:08 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <ddd741aa-d308-4582-a88a-d5170171fe28@z27g2000prd.googlegroups.com>
Source record: 18633

On Dec 30, 9:41 pm, "Sal M. Onella" <salmone...@food.poisoning.org>
wrote:
> "Art Unwin" <ArthurUn...@gmail.com> wrote in message
>
> news:a81eafd8-7cf0-42a3-b163-50a4134134af@o40g2000prn.googlegroups.com...
>
> > The parabala [sic] is based on inter
> > inductive coupling
> > of a dipole so the parabola reflects at maximum current amplitude.
>
> Plane wave reflection from a parabola doesn't have a discrete current
> maximum, per se. You are not describing an antenna element whose current is
> maximum at the feed point, etc, etc.

That was not my intention. I am pointing to the use of a parabola
reflector as used
with a planar design such as a dipole placed at the focal point to
provide the required phase change
for reflection. ala best possible coupling to achiev e desired effect

>
> > The helix reflector is not based on
> > coupling but the true mechanical impact of particles which is vastly
> > different.
>
> Maybe true, maybe not. Irrelevant either way. No 160m helix antennas.
If you review the works of Kraus and written thesis on different types
of helix
design including the addition of multiple studs you will note that
all reflector surface are linear
and where the sheath style reflector provided maximum gain.
Because of the condensed volume of designs based upon equilibrium
top band frequencies as well as broadcast and below frequences are
available
in a rotatable manner for directivity.
By the way my antenna is based on equilibrium
(how many times have I stated that on this newsgroup?)
which ruled out the standard helical design as it is NOT in
equilibrium

>
> > ... it is always best to initial perform the calculation
> > from first principles to ensure that the formula is applicable
> > where you intend to use it.
>

> I did that, it was, and I'm grateful to have your support.

Sal
I don't think you did that
The parabolic reflector
is a design to be used in concert with planar designs only.
I used a parabolic initially for temporary experimental purposes only
as I did not find any data of it's use. As cup style reflectors have
proven gain figures for NON planar axial radiation radiators that
would seem
the obvious way to go at the moment

>
> "Sal"
Interesting thoughts tho
Regards
Art

5910. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 08:34:31 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9B855C298341doldridgsprintca@69.16.185.250>
Source record: 18634

Eric <answer.to.newsgroup@nospam.com> wrote in
news:h8rkl41pp443voqpehc44ulruhitsm4i03@4ax.com:

>On Tue, 30 Dec 2008 10:35:41 -0500, John Passaneau <w3jxp@arrl.net>
>wrote:
>
>>I don't think that a NVIS antenna is a "ground wave" antenna. It works
>>by sending the signal straight up and bouncing it off the ionosphere
>>back down covering the area around the antenna.
>>
>>But you should do better than what your doing if you are using on both
>>ends a NVIS antenna. It strikes me that maybe the antennas are not at
>>the right hight to function correctly. Also if only one station is
>>using a NVIS antenna and the other is using a vertical or dipole that
>>is high off the ground that could be the problem. Those antennas have
>>a reduced response to signals coming in from high angles. It is a well
>>known effect.
>
>We're both using horizontal antennas... his is a dipole up about 25
>feet, and mine is an inverted vee that's up about 40 feet in the
>center and 10 feet at the ends.
>
>I know that a vertically polarized antenna would work groundwave
>better, but we need to be able to maintain reasonably reliable
>communications pretty much everywhere within about a 200-mile circle.
>We can use 160, 80, and 40 meters to do it, and theoretically we can
>use any amount of power up to the legal limit but in reality, as a
>practical matter we are limited to 100-200 watts.
>
>There are some in our group who really, REALLY think that the vertical
>is the way to go, and I need some debating points. So, if I had a
>decent ground-mounted vertical, should I expect to get the ground wave
>distances that G4FGQ indicates in his calculation program?
>
>Is there any area / radius that would be covered by a ground-mounted
>vertical that wouldn't be covered by an NVIS horizontal (assuming that
>we're operating below the critical frequency)? I have always assumed
>that by the theory behind NVIS, the answer would be no... NVIS should
>cover everything out to a radius well beyond groundwave distance.
>But, I suppose we could install NVIS antennas AND verticals and switch
>between them to see which one works best at any given time. Does seem
>to be a wasted effort but WDIK?
>
>While I'm at it, how do I estimate antenna efficiency? What is the

>average range of efficiencies normally seen with a quarter-wave
>ground-mounted vertical, with an adequate ground radial system, in
>average soil?

Are your NVIS antennas oriented the same way, geographically? And are you seeing a nice spike in the signals during the early part of the evening, only to lose them later? If so, consider dropping to 160 after signals fade in the evening. Consider 40m to be only a daytime band at best under present conditions. You might try 60m during the day.

Ground wave on 75 and 160 can work with good quality vertical antennas, but my experience has been that it works best with a salt water ground or with at least a couple of KW over a good radial ground system (I used 2mhz commercially with 2 and 5kw transmitters for a long while and typical daytime range over ocean was about 250 miles. We had a VERY quiet location over a mile from our own tranmitters).

--
Dave Oldridge+
ICQ 454777283
VA7CZ

5911. Re: 2m tvi stub

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 08:37:28 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9B85641E8F3Fdoldridgsprintca@69.16.185.250>
Source record: 18635

ml <m@di.net> wrote in news:m-46D957.21424729122008@news.optonline.net:

>after my building changed to a new tv antenna and master amp
>seems i am giving alot of tvi on strangly enough 2m
>
>also some tvi from 10m too never did before
>
>my antenna is physically pretty close to the antenna (thou it also
>was previsiously)
>
>for an experiment i was thinking about just making a coaxial stub
>for 2m to see if that would 'notch ' out the interference
>
>and using a T connector putting it just before the master amp (which
>i think is just amplifing my 2m signal and mixing w/the tv channels
>and or overloading the tv's)
>
>
>should the stub be 1/4w on 2m or would say 1/2w be 'better'?
>
>i'd cut it for the center of 2m

Try an open quarter-wave stub. Remember to take the velocity factor for
the stub line into account when you cut it. Alternately a shorted half
wave stub would be OK.

--
Dave Oldridge+
ICQ 454777283

5912. Re: 2m tvi stub

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 09:06:52 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <xnofquEsYzWJFwb+@g3ohx.demon.co.uk>
Source record: 18636

In message <Xns9B85641E8F3Fdoldridgsprintca@69.16.185.250>, Dave
Oldridge <doldridg@leavethisoutshaw.ca> writes
>ml <m@di.net> wrote in news:m-46D957.21424729122008@news.optonline.net:
>
>>after my building changed to a new tv antenna and master amp
>>seems i am giving alot of tvi on strangly enough 2m
>>
>>also some tvi from 10m too never did before
>>
>>my antenna is physically pretty close to the antenna (thou it also
>>was previsiously)
>>
>>for an experiment i was thinking about just making a coaxial stub
>>for 2m to see if that would 'notch ' out the interference
>>
>>and using a T connector putting it just before the master amp (which
>>i think is just amplifing my 2m signal and mixing w/the tv channels
>>and or overloading the tv's)
>>
>>
>>should the stub be 1/4w on 2m or would say 1/2w be 'better'?
>>
>>i'd cut it for the center of 2m
>
>Try an open quarter-wave stub. Remember to take the velocity factor for
>the stub line into account when you cut it. Alternately a shorted half
>wave stub would be OK.
>
If you have no test equipment, simply cut the stub when listening to
preferably strong signals on a 2m receiver, and transfer it to the input
of you TV amplifier.

As stated in another post, a single stub is fairly broad. The notch will
be typically 25dB deep on 145MHz, but it will still cause considerable
attenuation of any TV signals around 175MHz. However, it is quick to
make, and it should tell you if you are on the right track for
eliminating the TVI. If necessary, you can improve it.

Two stubs, separated by an electrical quarterwave, are much sharper and
deeper than a single stub.

As has also been mentioned, a 145MHz stub will also remove signals on
odd harmonic frequencies (ie 435 and 725MHz). Any TV around 725MHz?
--
Ian

5913. NIKE AIR JORDAN FORCE FUSION SHOES AJF 5 V JORDANs 5 FUSION NIKE

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 09:44:13 UTC
From: wholesalew@126.com
Message-ID: <e20a9e7c-9d3f-4f22-95f1-04e144c34c65@o40g2000prn.googlegroups.com>
Source record: 18637
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

shoes on
AIR Jordan 1 (paypal payment)www.king-trade.cn
AIR Jordan 2
AIR Jordan 3
AIR Jordan 4
AIR Jordan 5 (paypal payment)www.king-trade.cn
AIR Jordan 6 Rings
AIR Jordan 6
AIR Jordan 7
AIR Jordan 8
AIR Jordan 9 (paypal payment)www.king-trade.cn
AIR Jordan 10
AIR Jordan 11
AIR Jordan 12
AIR Jordan 13 (paypal payment)www.king-trade.cn
AIR Jordan 14
AIR Jordan 15
AIR Jordan 16
AIR Jordan 17
AIR Jordan 18
AIR Jordan 19
AIR Jordan 20 (paypal payment)www.king-trade.cn
AIR Jordan 21
AIR Jordan 22
AIR Jordan 23 (paypal payment)www.king-trade.cn
AIR Jordan 3.5
AIR AIR Jordan 4.5
AIR Jordan 7.5
AIR Jordan 9.5
AIR Jordan 12.5 (paypal payment)www.king-trade.cn
AIR Jordan 15.5
AIR Jordan 19.5
AIR Jordan 21.5
AIR Jordan Large Size Jordan
AIR Jordan Size 14 Jordan
AIR Jordan Size 15 shoes
AIR Jordan DMP
Nike air force one, air force 1, air force one low cut, air force one high cut, air force one release date
Air force one, air foce one 25TH, af 1, af 1 25TH, Nike air force one new releases, limited version
Air Force One (paypal payment)www.king-trade.cn

Air Force one 25TH
AF 1
AF 1 25TH (paypal payment)www.king-trade.cn
Dunk sb nike sb dunk nike dunk sb dunk sb high dunk sb low dunk sb woman
Nike sb dunk Nike Dunk High SB nike dunk low premuim sb Nike SB Dunk High Shimizu
Nike SB Dunk Pro Nike SB Dunk Dunk SB
Nike Dunk shoes
Dunk shoes for woman (paypal payment)www.king-trade.cn
Dunk low cut
Dunk high cut

AIR Jordans Fusion 1 Jordan 2 Fusion AIR Jordan 3 Nike Jordan Fusion 4
Jordan 5 shoes Nike Air Jordan 6 VI Force 1 Jordan Fusion AJF 6 AJF6 AJ6F Jordan 6 Rings Jordan 6 fusion (paypal payment)(www.king-trade.cn)

AIR Jordan Fusions 13 NIKE Jordan Fusion 14 AIR Jordans 15Nike Jordan 16 Fusion Jordan 17 shoes Nike Air Jordans 18 XVIII Force 1 Jordan Fusion AJF18 AJF18 AJ18F Jordan 18 fusions
(paypal payment)www.king-trade.cn

AIR Jordan Fusions 7 NIKE Jordan Fusion 8 AIR Jordans 9 Nikes Jordan Fusion 10 Jordan 11 shoes Nike Air Jordan 12 XII Force 1 Jordan Fusion AJF 12 AJF12 AJ12F Jordans 12 fusions
(paypal payment)www.king-trade.cn

NIKE AIR JORDAN FORCE FUSION SHOES AJF 5 V JORDANs 5 FUSION NIKE JORDAN 5 FUSION SHOES AJF5 Nike Air Jordan XXIII 23 Force 1 Jordan Fusion AJF 23 AJF23 AJ23F
(paypal payment)www.king-trade.cn

Nike Jordans Fusion 23 AIR Jordan 22 Jordan Fusions 21 AIR Jordans Fusion 20 Jordan 19 shoes Air Jordan Force Fusion VIII (8), AJF 8 Nike (paypal payment)www.king-trade.cn
Air Jordan 17 XVII Force 1 Jordan Fusions AJF 17 AJF17 AJ17F Jordan
our website : www.king-trade.cn

5914. Wire Receiving Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 11:00:33 UTC
From: Spin <noemail@alone.invalid>
Message-ID: <lhl6l.2216$Es4.1832@nwrddc01.gnilink.net>
Source record: 18638

Is it possible to construct a random length receiving antenna by capactive loading it thru a window? Both sides of the window with a glued sheet of copper & random length of wire soldered to the outside copper with a strain relief. Inside copper soldered to wire which is connected to a matching unit. Or two sheets of copper on both sides of a window so that i can use coax or ladder line? What about the feasability of inductive loading in the same manner?

5915. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 12:31:32 UTC
From: Nigel Molesworth <reply@thegroup.email.invalid>
Message-ID: <5gpml41pi0nut0k8j19n9egn0erqnj75ac@4ax.com>
Source record: 18639

On Mon, 29 Dec 2008 08:29:15 -0600, richardharrison@webtv.net (Richard Harrison) wrote:

>At 100 MHz, the wavelength is about 3 meters so the overall length of an
>FM broafcast antenna should be about 1.5 meters.

I've got about half of this, maximum. What can I do?

5916. Re: W6OBB Art Bell's 5-Acre Antenna Farm in Pahrump, Nevada

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 13:09:34 UTC
From: Dave <dave@dave.dave>
Message-ID: <kpadnd8X5NaT8sbUnZ2dnUVZ_h4AAAAA@earthlink.com>
Source record: 18640
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

RHF wrote:
> On Dec 29, 7:18 pm, Dave <d...@dave.dave> wrote:
>> John Smith wrote:
>>
> - - his secret
> - - location in NV.
>
> - 9041 Desert Lane
> - Pahrump, NV 89048
> -
> - http://maps.google.com
> .
> Art Bell, W6OBB, Pahrump, Nevada
> http://www.smeter.net/pahrump/art-bell.php
> http://en.wikipedia.org/wiki/Pahrump,_Nevada
> .
> Art Bell's 5-Acre Antenna Farm
> http://www.smeter.net/w6obb/antenna-farm.php
> SAT IMAGE = http://tinyurl.com/828s5d
> .
> The Art Bell W6OBB Loop Antenna Slide Show
> http://patriciaray.net/movie1.html
>
> QRZ : Art Bell [W6OBB] Pahrump, Nevada
> http://www.qrz.com/callsign.html?callsign=W6OBB
> .
> .
> KNYE-FM 95.1 MHz in Pahrump, Nevada
> http://www.knye.com/
> http://en.wikipedia.org/wiki/KNYE
> http://www.rayjanko.com/area_51/21.htm
> http://www.radio-locator.com/cgi-bin/finder?sr=Y&call=KNYE
> * From the The Kingdom of [K]NYE . . .
> http://www.kingdomofnye.com/
> http://www.co.nye.nv.us/
> http://en.wikipedia.org/wiki/Nye_County,_Nevada
> .
> KNYE-FM 95.1 MHz Transmitter Location :
> 36ï¿½ 11' 52" N -by- 116ï¿½ 02' 08" W
> http://maps.google.com/maps?f=q&hl=en&q=36.19778,+-116.03556+(KNYE-FM)&om=1
> .

http://www.fccinfo.com/MapIt5.php?lat_deg=36&lat_min=11&lat_sec=52&lat_dir=N&lon_deg=116&lon_min=2&lon_sec=8&lon_dir=W&datum=27&calls=KNYE(FM)&bubble=KNYE(FM)%3Cbr+%2F%3EPahrump%2C+NV&city=Pahrump&Button=Map+It

5917. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 13:30:49 UTC
From: Nigel Molesworth <reply@thegroup.email.invalid>
Message-ID: <0ssml4d7932obgdrkhlc5242jltda56422@4ax.com>
Source record: 18641

On Mon, 29 Dec 2008 10:51:19 -0600, "Rollie" <rollie@iowatelecom.net> wrote:

>Shakesphere makes good antennas for marine use.

In my experience, add the word "marine" and charge double the price.

I need to mount this antenna inside, so it does not have to be robust.

5918. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 14:16:57 UTC
From: Dave <dave@dave.dave>
Message-ID: <ilmdnQ2YirBH48bUnZ2dnUVZ_jYAAAAA@earthlink.com>
Source record: 18642

Nigel Molesworth wrote:
> On Mon, 29 Dec 2008 10:51:19 -0600, "Rollie" <rollie@iowatelecom.net> wrote:
>
>> Shakesphere makes good antennas for marine use.
>
> In my experience, add the word "marine" and charge double the price.
>
> I need to mount this antenna inside, so it does not have to be robust.
>

You have not stated the frequencies you need this for.

5919. FS: WORKMAN T734 base station antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 15:02:11 UTC
From: rrae <nobody@pseudo.borked.net>
Message-ID: <bf96747c4efd8aa59bae728f621b55ee@pseudo.borked.net>
Source record: 18643

http://atu.ca/WorkmanT734

5920. Re: Wire Receiving Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 15:07:59 UTC
From: ltdoc@yahoo.com
Message-ID: <6bb71a42-7749-4440-9806-abd59afed782@k36g2000pri.googlegroups.com>
Source record: 18644

Is it possible? Yes. Would it be a real good idea? Can't say. I do
know it's been done.
- 'Doc

5921. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 15:11:37 UTC
From: ltdoc@yahoo.com
Message-ID: <3e31bc1b-ff80-47a8-b110-9c6b1ac8ce35@p2g2000prn.googlegroups.com>
Source record: 18645

Predicting ground wave distances isn't exactly an 'exact' science by
any means. An 'aproximate' answer is about as good as it gets. Try
'FGQ's program with a very low and a very high efficiency number.
Average it. that'll give you a 'ball-park' figure to play with.
- 'Doc

5922. Re: Wire Receiving Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 15:21:51 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <i6M6l.11202$yr3.10882@nlpi068.nbdc.sbc.com>
Source record: 18646

Spin wrote:
> Is it possible to construct a random length receiving antenna by capactive
> loading it thru a window? Both sides of the window with a glued sheet of
> copper & random length of wire soldered to the outside copper with a strain
> relief. Inside copper soldered to wire which is connected to a matching
> unit. Or two sheets of copper on both sides of a window so that i can use
> coax or ladder line? What about the feasability of inductive loading in the
> same manner?

Please specify the frequency range.
--
73, Cecil http://www.w5dxp.com

5923. Look what I found

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 15:27:17 UTC
From: Dave <dave@dave.dave>
Message-ID: <6fCdnUXkUfLLEsbUnZ2dnUVZ_hydnZ2d@earthlink.com>
Source record: 18647
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

www.zerobeat.net/r3403c.pdf

5924. Re: Look what I found

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 15:40:05 UTC
From: msg <msg@_cybertheque.org_>
Message-ID: <962dnQpKj49_DMbUnZ2dnUVZ_t3inZ2d@posted.cpinternet>
Source record: 18648
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Dave wrote:
> www.zerobeat.net/r3403c.pdf

FWIW, MCRP 6-22D is also out there (I grabbed it 18 months ago but didn't save the URL); it is pretty much the same thing.

Michael

5925. Re: Wire Receiving Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 15:52:15 UTC
From: Art Unwin <ArthurUnwin@gmail.com>
Message-ID: <d75ccd0c-ea4e-418c-830b-d685bc205c81@i24g2000prf.googlegroups.com>
Source record: 18649

On Dec 31, 5:00 am, "Spin" <noem...@alone.invalid> wrote:
> Is it possible to construct a random length receiving antenna by capactive
> loading it thru a window? Both sides of the window with a glued sheet of
> copper & random length of wire soldered to the outside copper with a strain
> relief. Inside copper soldered to wire which is connected to a matching
> unit. Or two sheets of copper on both sides of a window so that i can use
> coax or ladder line? What about the feasability of inductive loading in the
> same manner?

Ofcourse it is feasable. The glass becomes the dielectric of a
capacitor
and there are dipoles made with a series of capacitors in line.
You can also vay the capacitance by sliding one copper sheet to one
side!
Art

5926. Re: Wire Receiving Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 15:53:43 UTC
From: Spin <noemail@alone.invalid>
Message-ID: <bAM6l.2238$BC4.1406@nwrddc02.gnilink.net>
Source record: 18650

Frequency Range (If Possible), 535-1705 Khz. & 1.8-30 Mhz.

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:i6M6l.11202$yr3.10882@nlpi068.nbdc.sbc.com...
> Spin wrote:
>> Is it possible to construct a random length receiving antenna by
>> capactive loading it thru a window? Both sides of the window with a glued
>> sheet of copper & random length of wire soldered to the outside copper
>> with a strain relief. Inside copper soldered to wire which is connected
>> to a matching unit. Or two sheets of copper on both sides of a window so
>> that i can use coax or ladder line? What about the feasability of
>> inductive loading in the same manner?
>
> Please specify the frequency range.
> --
> 73, Cecil http://www.w5dxp.com

5927. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 16:25:15 UTC
From: richardharrison@webtv.net
Message-ID: <23936-495B9CEB-6257@storefull-3171.bay.webtv.net>
Source record: 18651

Nigel M. wrote:
"What can I do?"

You are installing an FM receiving antewnna inside. Go for a twinlead dipole about 5 feet long and accept the received signals you get. Range is line of sight so the nearby stations with high antennas will probably be received satisfactorily. MFJ may sell such a dipole readymade.

Best regards, Richard Harrison, KB5WZI

5928. Re: NEC Evaluations

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 16:50:28 UTC
From: jimlux@earthlink.net
Message-ID: <e37d9eb0-3fef-4578-af64-a503ea696e47@q30g2000prq.googlegroups.com>
Source record: 18652

On Dec 23, 12:39 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Tue, 23 Dec 2008 10:29:05 -0800, Jim Lux <james.p....@jpl.nasa.gov>
> wrote:
>
> >At HF and VHF, you should be able to do power measurements to a tenth of
> > a dB, with moderate care. (obviously, you'd have to deal with
> >measuring the mismatch, etc.). A run of the mill power meter should
> >give you 5% accuracy (0.2 dB) without too much trouble. A 8902
> >measuring receiver can do substantially better.
>
> Nothing astonishes me more than the simple dash-off notes that claim
> power measurement is a snap. I can well imagine, Jim, that you don't
> do these measurements with traceability to the limits you suggest.
>

In point of fact, I *do* make measurements like that, and as I said,
it requires "moderate care" and good technique and instrumentation. A
random diode measured with your $5 Harbor Freight DMM isn't going to
hack it. Neither is most of the stuff sold to hams. It is hardly a
"snap", but it *is* within the reach of someone at home with a lot of
time and care to substitute for expensive gear and calibrations
(basically, you have to do your own calibration).

> For the other readers:
>
> We will specifically start with the 8902 measuring receiver. A
> premier instrument indeed, but it falls fall FAR short of actually
> measuring power without a considerable body of necessary
> instrumentation (well illustrated by Mac's observation found in that
> fig. 15 already cited). Most claimants peer at one line in a spec
> sheet and figure that is the end of the discussion. Glances elsewhere
> begins to build the actual accuracy obtainable through the chain of
> errors that accumulate. For instance with a 1mW input in the VHF
> band:
>
> Internal power standard: ±1.2% and we have yet to look at the
> measurement head's error contribution. The so-called "run of the mill
> power meters" are drawing close, too close to this precision set's
> expensive quality such that their estimation of 5% is already suspect
> quality.

Standard power measuring head on a Agilent power meter is better than
5% at HF, probably in the range of 1% for one head in comparison
measurements over a short time. The 8902 is sort of a special case,
but can do very accurate relative measurements. FWIW, the 8902

calibrates out the measurement head effects.

>
> Scale error demands a full-scale indication to simple keep the error
> contribution down to 0.1% (a 1/10th scale indication would jump that
> error to 1%) ±1 digit.
This oversimplifies a bit. Typically, you'll have some uncertainty that is proportional to the signal measured (e.g. mismatch will affect the signal the same way regardless of level) and some that is absolute, independent of the signal level (e.g. the analog noise in the voltmeter). As you say, bigger signals are easier to measure precisely.. the real limiting factor is the accuracy with which you know the attenuation of the attenuators you're using to get the steps.

With regard to mismatch, if you're interested in tenth dB accuracies, you're going to have to measure the mismatch and account for it. It's not that hard, just tedious. The typical power meter head doesn't change it's Z very much, so once you've measured YOUR head and keep the data around, you're good to go for the future. (and do your tests at the same temperature, don't use the head for a door stop, etc.)

As far as calculating uncertainties.. you bet.. it's not just stacking em up. But that's true of ANY precision measurement, so if one is quoting better than half dB numbers (i.e. if you give any digits to the right of the decimal point) one should be able to back it up with the uncertainty analysis (which is all described on the NIST website and in the tech notes). This isn't hard, it's just tedious. But the whole thing about high quality amateur measurements is you're trading off your time to do tedious extra measurements and analysis in exchange for not sending a cal-lab a check.

The how to do it is all out there. What was "state of the art" for a national laboratory in 1970 is fairly straightforward garage work these days, and, a heck of a lot easier because you've got inexpensive automation for making the measurements and inexpensive computer power for doing the calibration calculations and uncertainty analysis.

The slide 36 discussion refers to measuring a signal at -110dBm, which I would venture to say is well below the levels that most hams will be interested in measuring. And, they are talking about where the source Z is unconstrained. In a typical ham situation, these things probably aren't the case. If you were interested in measuring, for instance, the loss of a piece of coax or the output of a 0dBm buffer amplifier to a tenth of a dB, that's a whole lot easier than a -110dBm signal from some probe into a 8902. The context of this discussion was making measurements of antennas, and for that, one can normally arrange to have decent signal levels, etc. OR, one is interested in relative measurements, rather than absolute calibration. It's a whole lot easier to measure a 0.1 dB difference between two signals.

You suggested 5 alternatives:
ee if you can cook up a method that doesn't hammer you into the

ground. I can anticipate some:

1. Throw a box car of money at the problem;
>>> Or, throw some time at the problem.. this is the classic ham tradeoff.. "I don't have money, but I do have time" It's no different than grinding your own telescope mirrors, building your own Yagi or wire antenna, etc.

2. Buy lab time at NIST;
>>> That's the money thing (and it doesn't require boxcar loads.. perhaps a kilobuck or two.. and for some folks, it's worth it.. although I can't see any amateur radio need. I can see doing it as part of a hobby involving precision, like the folks on time-nuts who operate multiple Cs clocks and build very high performance quartz oscillators for the thrill of getting to 1E-14 or 1E-16 Allan deviation.. Folks who do home nuclear fusion also might avail themselves of pro cal services for their neutron detectors, because there isn't a convenient way of doing home cals, unlike for RF power, where it's at least possible)

3. Write a report that runs to book length (I've carried most of that
water by providing the link above) - or xerox the book that already
exists: "Microwave Theory and Applications," Stephen F. Adam;

>> Or any of a variety of sources. One doesn't need a book for this, but one does need some care in technique and some background knowledge. It's like reading John Strong's book on building scientific instruments (back in the 40s, one built one's physics experimental gear and calibrated it yourself)

4. Do it with precision components employing best practices to the
best achievable accuracy - you will need further instruction into best
practices, however;

5. Ignore reality.

5929. Re: Wire Receiving Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 16:51:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <sqN6l.12189$be.10256@nlpi061.nbdc.sbc.com>
Source record: 18653

Spin wrote:
> Frequency Range (If Possible), 535-1705 Khz. & 1.8-30 Mhz.

I hope you have a big window. :-) This technique works
well at UHF, fairly well at VHF, not well at HF because
of the necessary physical size.

There is a formula for capacitance C between two plates
given in "The ARRL Handbook".
A is the area of the plates in cm.
d is the spacing of the plates in cm.
Er is the dielectric constant of the insulating
material, in this instance glass.
E0 is the permittivity of free space.

C = A(Er)(E0)/d

The capacitive reactance needs to be relatively low,
e.g. -j10 ohms.

That would be a capacitance of about 0.02 uF at 1 MHz.
--
73, Cecil http://www.w5dxp.com

5930. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 16:58:02 UTC
From: Nigel Molesworth <reply@thegroup.email.invalid>
Message-ID: <t29nl4t20tqpvk5j6dqoo56el8vmg9tf3u@4ax.com>
Source record: 18654

On Wed, 31 Dec 2008 10:25:15 -0600, richardharrison@webtv.net (Richard Harrison) wrote:

>Go for a twinlead dipole about 5 feet long

Like I said in the post you replied to, I have about half this.

5931. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 17:04:17 UTC
From: Nigel Molesworth <reply@thegroup.email.invalid>
Message-ID: <b79nl4pnlug7s6qsqmi29p5f29au5ibjfl@4ax.com>
Source record: 18655

On Wed, 31 Dec 2008 14:16:57 +0000, Dave <dave@dave.dave> wrote:

>You have not stated the frequencies you need this for.

Is there more than one VHF FM broadcast band then? I guess 88MHz to 108MHz.

I don't think I've made my problem clear: I don't have space to mount a 1.5m antenna, hence my OP "Modern cars seem to have much shorter aerials ..."

I've got about 75cm of headroom, so I need to use a short antenna, like they have on cars. So how are they made to be short?

5932. Re: Look what I found

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 17:23:08 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <djanl4pcb90bmmgldjmn2l31ppcp9mb55g@4ax.com>
Source record: 18656
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

On Wed, 31 Dec 2008 09:40:05 -0600, msg <msg@_cybertheque.org_> wrote:

>Dave wrote:
>> www.zerobeat.net/r3403c.pdf
>
>FWIW, MCRP 6-22D is also out there (I grabbed it 18 months ago but didn't
>save the URL); it is pretty much the same thing.
>Michael

It's at:
<http://www.armymars.net/ArmyMARS/Antennas/Resources/usmc-antenna-hb.pdf>

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

5933. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 17:54:39 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <ZlO6l.15602$Ws1.2231@nlpi064.nbdc.sbc.com>
Source record: 18657

Nigel Molesworth wrote:
> On Mon, 29 Dec 2008 10:51:19 -0600, "Rollie" <rollie@iowatelecom.net> wrote:
>
>> Shakesphere makes good antennas for marine use.
>
> In my experience, add the word "marine" and charge double the price.
>
> I need to mount this antenna inside, so it does not have to be robust.
>
Most "MARINE" VHF antenna's are vertical coaxial dipoles.

5934. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 17:57:57 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <3pO6l.15603$Ws1.4817@nlpi064.nbdc.sbc.com>
Source record: 18658

Nigel Molesworth wrote:
> On Wed, 31 Dec 2008 14:16:57 +0000, Dave <dave@dave.dave> wrote:
>
>> You have not stated the frequencies you need this for.
>
> Is there more than one VHF FM broadcast band then? I guess 88MHz to 108MHz.
>
> I don't think I've made my problem clear: I don't have space to mount a 1.5m
> antenna, hence my OP "Modern cars seem to have much shorter aerials ..."
>
> I've got about 75cm of headroom, so I need to use a short antenna, like they
> have on cars. So how are they made to be short?
>
Get a copy of the ARRL Antenna book. Look up VHF antenna's. You can make
a 1/4 wave antenna directly or you can add a coil of wire to either end
or the center of a shorter length of wire. The Antenna book will give
you the details and some antenna theory at the same time.

Dave WD9BDZ

5935. Re: Antenna for shortwave reception

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 18:31:00 UTC
From: Monty Hall <HallMonitor@Hall.com>
Message-ID: <gjge22$v3a$1@news.motzarella.org>
Source record: 18659
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

"Telamon" <telamon_spamshield@pacbell.net.is.invalid> wrote in message
news:telamon_spamshield-B48730.17591628122008@newsclstr03.news.prodigy.net...
> In article <uiS5l.11444$gY5.3217@newsfe21.iad>, Dave <dave@dave.dave>
> wrote:
>
>> John Smith wrote:
>> > Dave wrote:
>> >> John Smith wrote:
>> >>
>> >>>
>> >>> I said NO such thing, indeed, I stated the EXACT opposite, it allows
>> >>> maximum power transfer to the antenna, however, the losses in the
>> >>> POOR antenna are now increased due to the losses in the matchbox--as
>> >>> heat. And, no problems which exist in the POOR antenna have been
>> >>> rectified, they are just masked ...
>> >>
>> >> That is vastly oversimplified.
>> >
>> > Absolutely, and at some point I must trust the reader has the resources
>> > to extrapolate; otherwise, all postings would soon turn in to the
>> > length, depth and completeness of a college textbook ...
>> >
>> > For example, an antenna is a two lane road, running in both
>> > directions(T/R), the same parameters which allow it to be the best
>> > choice for transmitting, also are in action when that same antenna
>> > "plucks" its' signals from the ether ... something I have pointed out
>> > in
>> > multiple ways, multiple times ...
>> >
>> > The average person must hear, read, study the same material six times
>> > before "learning" it. And, an instructor once pointed out to me, not
>> > all people respond to the same method, personality,
>> > mode-of-presentation
>> > as another or others ... so, he pointed out the importance of gathering
>> > data from multiple sources until the "epiphany" is realized ...
>> >
>>
>> You're the guy from Lost in Space!
>
> You are to kind Dave. The lost in Space Dr. Smith fooled some of the
> people some of the time where our Smith fools none of the people none of
> the time.

And who does the Telanut think he is fooling?

5936. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 19:01:54 UTC
From: dplatt@radagast.org
Message-ID: <26ss26-cqp.ln1@radagast.org>
Source record: 18660

>>Go for a twinlead dipole about 5 feet long
>
>Like I said in the post you replied to, I have about half this.

Try starting with a twinlead dipole of this length, and shape it into
a near-circle with around 6" between the ends of the arms.

This will give you a vaguely-omnidirectional pattern, using an antenna
which fits into a 2' circle.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5937. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 19:16:22 UTC
From: kb9rqz@yahoo.com
Message-ID: <f0pll4t10fgfc93moc2l3e8anm9vggpfae@4ax.com>
Source record: 18661
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

5938. Re: W6OBB Art Bell's 5-Acre Antenna Farm in Pahrump, Nevada

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 19:44:03 UTC
From: You <you@shadow.orgs>
Message-ID: <you-654CF5.10445131122008@netnews.worldnet.att.net>
Source record: 18662
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gjel2t$er9$1@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> RHF wrote:
> > On Dec 29, 7:18 pm, Dave <d...@dave.dave> wrote:
> >> John Smith wrote:
> >>
> > - - his secret
> > - - location in NV.
> >
> > - 9041 Desert Lane
> > - Pahrump, NV 89048
> > -
> > - http://maps.google.com
> > .
> > Art Bell, W6OBB, Pahrump, Nevada
> > http://www.smeter.net/pahrump/art-bell.php
> > http://en.wikipedia.org/wiki/Pahrump,_Nevada
> > .
> > Art Bell's 5-Acre Antenna Farm
> > http://www.smeter.net/w6obb/antenna-farm.php
> > SAT IMAGE = http://tinyurl.com/828s5d
> > .
> > The Art Bell W6OBB Loop Antenna Slide Show
> > http://patriciaray.net/movie1.html
> >
> > QRZ : Art Bell [W6OBB] Pahrump, Nevada
> > http://www.qrz.com/callsign.html?callsign=W6OBB
> > .
> > .
> > KNYE-FM 95.1 MHz in Pahrump, Nevada
> > http://www.knye.com/
> > http://en.wikipedia.org/wiki/KNYE
> > http://www.rayjanko.com/area_51/21.htm
> > http://www.radio-locator.com/cgi-bin/finder?sr=Y&call=KNYE
> > * From the The Kingdom of [K]NYE . . .
> > http://www.kingdomofnye.com/
> > http://www.co.nye.nv.us/
> > http://en.wikipedia.org/wiki/Nye_County,_Nevada
> > .
> > KNYE-FM 95.1 MHz Transmitter Location :
> > 36° 11' 52" N -by- 116° 02' 08" W
> > http://maps.google.com/maps?f=q&hl=en&q=36.19778,+-116.03556+(KNYE-FM)&om=1

> > .
>
> Oh yeah, that IS the dirty culprit, and if you know where to turn, in
> the 80m band, you just might hear him! <lol>
>
> Regards,
> JS

IF he isn't at his wife's ancestral home in the Philippines....

5939. Re: 2m tvi stub

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 20:19:19 UTC
From: ml <m@di.net>
Message-ID: <m-149259.15191931122008@news.optonline.net>
Source record: 18663

In article <Eyw6l.2066$Es4.310@nwrddc01.gnilink.net>,
"JB" <nospam@goofball.net> wrote:

> > > 154 MHz overloaded the antenna amp. I bought a "Midband Trap" from a TV
> > > shop downtown which fixed things. It went inline and attenuated those
> > > non-TV signals between (approx) 120 - 170 MHz. It was only a few
> dollars
> > > from one of the well-known TV reception equipment makers, Channel
> Master,
> > > I
> > > think.
> > >
> > > Unfortunately, I haven't found it from any familiar names, but I did
> > > locate
> > > this page http://www.microwavefilter.com/pdffiles/pg27.pdf. The
> > > 3367-A/I,
> > > 3367-B/G, 3367-C/G and 3367-C/H should all do what you need for 2m
> > > suppression. Prices unknown.
> > >
> > > ... and this page: http://www.atvresearch.com/overstk.pdf Find their
> > > number 5KMT-A/I-TX Midband Trap. A clearance sale bargain if they still
> > > have any left.
> > >
> > > Here's a single-frequency tunable notch;
> > > http://www.microwavefilter.com/pdffiles/pg28.pdf.
> > >
> > > Good luck.
> These are pretty common in the CATV business where they will notch channels
> to put their own access channel in place.
>
> It is likely the CATV guy came out and took all the filters out in
> preparation for the digital channel changeovers. There ought to be a High
> pass filter to cuttoff below channel 2 and likely a notch for VHF
> air/commercial?ham energy. They may have also goofed around with a cheap
> distribution amp. Many of the good setups would split up and break out
> individual channels to peak or attenuate to try to balance the lineup.

<<hi

There never w as any filters just antenna going into a master am,
that had a tone of settings but i don't think anything was build
into the amp to actually filter or notch the current one is a Pico
52 it has gain tilt attenuation fm trap going from memory i
think thats it

but previously no external filters the prev master amp was
blounder tongue seemd to have simular settings

since the reception is so poor now perhaps once they fix/ballance
out the system that might also reduce some 2m interference

good idea you had

5940. Re: 2m tvi stub radials

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 20:25:05 UTC
From: ml <m@di.net>
Message-ID: <m-AABFF8.15250531122008@news.optonline.net>
Source record: 18664

In article <PMz6l.2094$BC4.671@nwrddc02.gnilink.net>,
"Dale Parfitt" <parinc1@verizon.net> wrote:

> "Mike Coslo" <mjc5@psu.edu> wrote in message
> news:gjeg3a$co64$1@tr22n12.aset.psu.edu...
> > ml wrote:
> >
> >> I agree it is prob 'overload' but thought perhaps notching might
> >> work, i already have some really good multistage tvi filters but
> >> wanted to be ready with a notch for when the building lets me into
> >> the closet in case that is not enough. My thought was to try and
> >> make stubs cause they are 'cheep' but those links to the commercial
> >> site were pretty cool
> >
> >
> > Stubs work very well. You should try the single wire stub first.
> >
> > You'll want good low loss coax. The better, the deeper the notch.
> >
> > 1/4 wave for the middle of the 2 meter band, and open at the end should
> > take out the 2 meter overload.
> >
> > Anecdotally, I used a single stub during a contest to knock out overload
> > from 40 meters @ over a kilowatt. The antennas were around 50 feet away
> > from each other.
> >
> > - 73 de Mike N3LI -
>
> Being a 2 pole circuit, the stubs are quite broad and because they appear
> as a shunt capacity or inductance off frequency can cause major VSWR upset.
> The other drawback which may be an issue for TV is that they will also notch
> out frequencies at 2N+1 (odd multiples).
>
> Dale W4OP

thanks Mike and Dale, hmm so that is a pickle if it notches
out a TV channel hmmm that would be bad the UHF stations would
also be the most week so i guess then i would be sol

perhaps i'd have to use a commercial notch filter then

it's unsure if by coiedence if the harmonics might fall out on a
few of the unused channels or not

hmm

than again i ponder if the digital tv would simply not be effected by the 10m or 2m rigs, then again could be worse but perhaps digital tv might actually 'save me''

again i appreciate all those that responded i have a lot of good ideas to experiement and try

happy new yrs

5941. Re: Wire Receiving Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 20:41:01 UTC
From: nm5k@wt.net
Message-ID: <69daceac-f8e1-4270-92db-5ace6b734ec5@u18g2000pro.googlegroups.com>
Source record: 18665

On Dec 31, 5:00 am, "Spin" <noem...@alone.invalid> wrote:
> Is it possible to construct a random length receiving antenna by capactive
> loading it thru a window? Both sides of the window with a glued sheet of
> copper & random length of wire soldered to the outside copper with a strain
> relief. Inside copper soldered to wire which is connected to a matching
> unit. Or two sheets of copper on both sides of a window so that i can use
> coax or ladder line? What about the feasability of inductive loading in the
> same manner?

If the window can open, I would just run a length of thin magnet
wire and shut the window on it. I think most windows have enough
slack to be able to shut and lock with them down on the magnet
wire.
If the window can't open, I guess that would be a problem.. :/
I'd probably drill a tiny hole in the frame somewhere and run a wire
through.

5942. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 20:43:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <gjglhrjj1@news.albasani.net>
Source record: 18666

Nigel Molesworth wrote:
> On Wed, 31 Dec 2008 14:16:57 +0000, Dave <dave@dave.dave> wrote:
>
>> You have not stated the frequencies you need this for.
>
> Is there more than one VHF FM broadcast band then? I guess 88MHz to 108MHz.
>
> I don't think I've made my problem clear: I don't have space to mount a 1.5m
> antenna, hence my OP "Modern cars seem to have much shorter aerials ..."
>
> I've got about 75cm of headroom, so I need to use a short antenna, like they
> have on cars. So how are they made to be short?
>

The whip(s) on my FM receiver(s) seem(s) to demonstrate a complete disregard for polarization, lay it horizontal, it works well, stand it up vertically--it works well, sometimes a positive change in signal can be had, sometimes not, sometimes an improvement--sometimes not. I have not done a thorough study, but it all seems completely random, location, nearby metal objects, structures, etc., most likely, contribute to all this, also ... but, I hazard to guess, that quite often, polarization gets "screwed" up on the way to the receiving antenna.

Currently, I have a 1/2 wave DLM (distributed load monopole -- Robert Vincent) up in the attic which provides input to a homemade preamp utilizing a MMIC device. Most of the time, the preamp is not used ... however, I do kick it in because, I am in a poor location to receive NPR and it makes the difference in being able to receive a low power, local college station satisfactorily.

Of all the antennas I have tried, this just simply works the most satisfactorily for me. It would be possible to construct the DLM in a dipole configuration and run it horizontal, but, like I stated, I just don't have all that much faith in that paying all that much attention to polarization, at FM broadcast freqs, will provide a great benefit(s.)

And, of course, others' mileage may vary ...

But, for a cheap quick fix, the folded dipole, already suggested, helps.

Regards,
JS

5943. Re: VHF FM Radio Antenna Construction?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 20:56:54 UTC
From: richardharrison@webtv.net
Message-ID: <23936-495BDC96-6358@storefull-3171.bay.webtv.net>
Source record: 18667

Nigel Molesworth wrote:
"I don`t have space to mount a 1.5 m. antenna--."

In any direction? Well Nigel is in luck anyway as a quarterwave antenna worked against a counterpoise or groundplane workes about as well as a halfwave vertical antenna. Automobile antennas work as a vertical over a groundplane of sorts. If the antenna is too short, it picks up less signal but the receiver usually is quiet and has surplus gain so the problem is unimportant.

Only 75 cm or 30 inches is required for 1/4-wavelength which is resonant at 100 MHz over a good ground of the right sort.

As few as two 30-in. wires laid horizontally in opposite directions may serve as a counterpoise to a 30-in. vertical antenna.

Receiving antennas are usually very tolerant but need to be kept away from large noise sources.

Best regards, Richard Harrison, KB5WZI

5944. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 21:51:15 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-7328BE.13511531122008@newsclstr02.news.prodigy.com>
Source record: 18668
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gjdsna$eg5$3@news.albasani.net>,
"RP" <rpalino@NOSPAMmailandnews.com> wrote:

> >> You ridiculous fool. You are the most complete brain dead example of a
> >> sub-human which has ever been presented to me ...
> >
> > You dumb twit. We don't care about transmitting.
>
> We don't...?

Yeah we don't. This was posted in the shortwave group and cross posted
to the amateur group.

> >> Receiving is EQUALLY as important as the transmitting element in the
> >> above.
> >
> > Again you dumb twit, we don't care about transmitting.
>
> We don't...?

Yes we don't care.

> > Yeah, very sad of you to keep plonking and then continue to read me.
>
> I thought this was your trick?

No not mine although filters do get turned off from time to time for
various reasons.

> > What a goofball.
>
> Takes one to know one.

And that make you one now doesn't it.

--
Telamon
Ventura, California

5945. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 21:54:48 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-247F2E.13544831122008@newsclstr02.news.prodigy.com>
Source record: 18669
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gjel89$er9$2@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> RP wrote:
> >>> You ridiculous fool. You are the most complete brain dead example of a
> >>> sub-human which has ever been presented to me ...
> >> You dumb twit. We don't care about transmitting.
> >
> > We don't...?
> >
> >>> Receiving is EQUALLY as important as the transmitting element in the
> >>> above.
> >> Again you dumb twit, we don't care about transmitting.
> >
> > We don't...?
> >
> >> Yeah, very sad of you to keep plonking and then continue to read me.
> >
> > I thought this was your trick?
> >
> >> What a goofball.
> >
> > Takes one to know one.
> >
> >
>
> Hey, telemundo is a great man, in his own mind, leave him alone ...
> humor here is sparse, he provides for a needed demand ... :-)

You are just a comprehension impaired fool that talks to himself. How
you doing today? Have any nice conversations with yourself you would
like to share with the newsgroup?

--
Telamon
Ventura, California

5946. Re: Vertical Monopole Radiation Characteristics

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 22:10:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <l9adnSvzEJVVcMbUnZ2dnUVZ_jOdnZ2d@posted.easystreetonline>
Source record: 18670

Richard Fry wrote:
> Roy Lewallen's post of Dec 29, 9:45 pm generally supports the points I
> have been writing about.

That surprises me. Apparently I didn't understand your points, which seem to emphasize the importance of considering the field very close to the antenna in evaluating an antenna's performance for long-distance skip communication. The data I posted show clearly that this isn't so, because that strong field at low angles is attenuated to virtually zero well before it can reach the ionosphere. The low elevation angle field close to the antenna is of interest only if the other station is close to the antenna.

> But two observations are due:
>
>> Fortunately for the broadcasters, the surface wave component
>> doesn't detach itself from the Earth and head for the ionosphere
>> as the Earth curves away, but follows the curvature of the Earth.
>> This allows broadcasting beyond the horizon without ionospheric
>> skip, and prevents fading from the ground wave alone. It doesn't
>> reach the ionosphere as Richard has claimed.
>
> The last sentence above is incorrect in that I made no such claim. My
> post stated only that radiation from elevation angles as small as one
> degree will reach the ionosophere. See the paste below.

Sorry, I interpreted your postings to state that the surface wave was an important factor to consider in determining the strength of the field from a vertical for working skip communication. If that's not what you meant, then exactly what is the point you were trying to make regarding the importance of considering the surface wave for amateur communication?

> "But that isn't the case -- the relative field over real ground at low
> elevation angles close to the vertical radiator can be very high, and
> will continue onward to produce a long-range skywave. Even radiation
> at an elevation angle of one degree will reach the ionosphere, due to
> earth curvature."

The data I gave shows this to be incorrect. While the field at low angles close to the radiator are very high, they don't "continue outward to produce a long-range skywave". The very low angle field, as I've shown, decays rapidly with distance and is virtually gone well short of the distance needed to reach the ionosphere. From the data, at one degree elevation angle, the surface wave has decayed to nearly zero within 50 miles of the antenna (the difference between sky wave + surface wave and sky wave only is 0.8 dB), and at 7 MHz, within 10

miles. This means that the surface wave makes no contribution to the one degree elevation angle wave reaching the ionosphere. So there's no point in calculating or considering the surface wave if your interest is in ionospheric, or anything other than ground wave, communication.

> A low elevation angle does not include zero degrees (the horizontal
> plane).

Ok.

>> The reported field strengths are in dBi for easy comparison; ...
>
> The term "dBi" is not a unit of field strength. Field strength is a
> voltage existing between two points in space typically one meter
> apart, and is expressed in terms of that voltage with respect to that
> distance, as in volts/meter (V/m).

dBi is a direct expression of field strength, but normalized for power and distance. At any particular distance and power level, for any field strength in V/m there is only one corresponding value of dBi, and vice-versa. I gave the conversion equation in my posting.

> Field strengths can be compared using decibels, but such comparisons
> are referenced to the field strength shown in standard form. For
> example, a field strength of 1,000 ï¿½V/m may be expressed as 60 dBiï¿½V/m.

dBi is more than just dB. It's field strength (in dB) relative to a known standard. That enables direct calculation of field strength in V/m for any power level and distance, given the dBi value.

But that's really beside the point. Anyone with a calculator and the posted equation can quickly convert the table I gave into V/m for whatever power level you'd like. The conclusions are the same.

Roy Lewallen, W7EL

5947. Re: How to estimate groundwave distance?

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 22:13:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <l9adnSrzEJUMc8bUnZ2dnUVZ_jMAAAAA@posted.easystreetonline>
Source record: 18671

Since your operation seems to be NVIS rather than ground wave, I highly recommend _Near Vertical Incidence Skywave Communication: Theory, Techniques, and Validation_, by Fiedler and Farmer, published by Worldradio Books. Don't know if it's still in print, but it shouldn't be hard to find a copy on the web.

Roy Lewallen, W7EL

5948. Re: Shortwave Radio Listener (SWL) Antennas -versus- Amateur Radio Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 22:13:58 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-AB9BA3.14135831122008@newsclstr02.news.prodigy.com>
Source record: 18672
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gjel89$er9$2@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> RP wrote:
> >>> You ridiculous fool. You are the most complete brain dead example of a
> >>> sub-human which has ever been presented to me ...
> >> You dumb twit. We don't care about transmitting.
> >
> > We don't...?
> >
> >>> Receiving is EQUALLY as important as the transmitting element in the
> >>> above.
> >> Again you dumb twit, we don't care about transmitting.
> >
> > We don't...?
> >
> >> Yeah, very sad of you to keep plonking and then continue to read me.
> >
> > I thought this was your trick?
> >
> >> What a goofball.
> >
> > Takes one to know one.
> >
> >
>
> Hey, telemundo is a great man, in his own mind, leave him alone ...
> humor here is sparse, he provides for a needed demand ... :-)

For entertainment we defer to the anonymous Mr. Assembly-wizard and his
cowardly anonymous side kick RP.

--
Telamon
Ventura, California

5949. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 22:22:16 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-639A53.14221631122008@newsclstr02.news.prodigy.com>
Source record: 18673
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gjdt11erq1@news.albasani.net>,
"RP" <rpalino@NOSPAMmailandnews.com> wrote:

> "Telamon" <telamon_spamshield@pacbell.net.is.invalid> wrote in message
> news:telamon_spamshield-A065FE.20383728122008@newsclstr03.news.prodigy.net...
> > In article <gj9ei3$rl1$1@news.albasani.net>,
> > John Smith <assemblywizard@gmail.com> wrote:
> >
> >> RHF wrote:
> >>
> >> [stuff]
> >>
> >> RHF, I have no bone to pick with you, don't fall victim to trolls here
> >> which just wish to "stir up chit", to mask their ignorance ...
> >
> > < SNIP >
> >
> > Now that is funny. One Trolling idiot posting a response to another
> > trolling idiot "don't fall victim to the Trolls".
>
> And the hobo of s.r.sw Teleamon, the biggest troll here....is telling other
> trolls how to act!
>
> Hillarious!

You are just a two bit anonymous posting moron that does not contribute
to the news group in any meaningful way. None care what you post.

--
Telamon
Ventura, California

5950. Re: The Difference Between : Shortwave Radio Listener (SWL) -and- Amateur Radio Operators (Hams)

Newsgroup: rec.radio.amateur.antenna
Date: 2008-12-31 22:23:49 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-EBF860.14234931122008@newsclstr02.news.prodigy.com>
Source record: 18674
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <gjeldf$er9$3@news.albasani.net>,
John Smith <assemblywizard@gmail.com> wrote:

> RP wrote:
>
> > ...
> > And the hobo of s.r.sw Teleamon, the biggest troll here....is telling other
> > trolls how to act!
> >
> > Hillarious!
> >
> >
>
> Hmmm, I can see how you are mistaken; but, brother you are mistaken.
> telemundo would not even amount to a pimple of a decent trolls hoary old
> butt ... indeed, I can't imagine the lifeform he could make a pimple on
> ... <grin>
>
> But then, you know, he already knows that ... :-(

Having conversations with yourself on Usenet will not endear you to the
normal readers you goofball.

--
Telamon
Ventura, California